Monday, May 5, 2025
College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)

5:00 PM
In-Person at College Place City Hall, 625 S College Avenue, College Place Washington

Agenda: https://go.boarddocs.com/wa/cocp/Board.nsf/goto?open&id=DFQT8M762772
Meeting may be viewed at: Live Stream on City of College Place, Washington YouTube at https://www.youtube.com/channel/UCbx3qrqzLDL_05NusReSl-g/featured

Zoom Attendee Link: https://us06web.zoom.us/j/83253656791
Or you may call this number to listen: 1-669-900-9128 ID# 832 5365 6791
Phone controls: *6 - toggle mute/un-mute and *9 - raise hand

1. Opening Items

Subject :	1.01 Call To Order
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	1. Opening Items
Type :	Procedural
Subject :	1.02 Roll Call
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	1. Opening Items
Type :	Information

Public Content

Voting Members
Position 1 - Tracy Warner - term expires 12/31/2026
Position 2 - Kelli Leen - term expires 12/31/2028
Position 3 - Doug Case - term expires 12/31/2026 - Vice Chair
Position 4 - Teri Lesmeister -term expires 12/31/2028
Position 5 - Allison Peck - term expires 12/31/2026 - Chair
Position 6 - Kirk Amick - term ends 12/31/2028
Ex-Officio - Arlene Alen - WW Valley Chamber of Commerce Representative
Advisory Members
Mike Rizzitiello - City Administrator
Brian Carleton - Finance Director
Maryelizabeth E. Garcia - City Clerk

Subject :	1.03 Public Comment
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	1. Opening Items

Type :	Procedural

Public Content

Commission meetings are primarily structured to permit Membersto arrive at the decisions necessary to make recommendations to the City Council.

Meeting Protocol for Public Comment:

When submitting public comments, include the following information regardless of the manner you are using: Note that there are deadlines for writtencomments to be included in the meeting documents.

- Your Name
- Your Address

WrittenPublic comments may be provided by submitting comment to Clerk@cpwa.usno later than 4:30PMon the meeting date to be included in the record.(If typewritten, no less than 11 pt font).

VerbalPublic Comments may be made during the meeting:

- In-person at the meeting location - provided at the beginning of each agenda.
- Telephone comment - Call1-669-900-9128, entering the meeting ID (provided at beginning of agenda) and raise your hand (*9 to raise hand, *6 to mute/un-mute) when comments are requested.
- Virtual comment -Join using theZoom Attendee link (provided at beginning of agenda) and raise your hand when comments are requested.

Once recognized, you will have five minutes to speak on any subject that is under the control of the Commission.

2. Consent Agenda

Subject :	2.01 Approve Agenda for May 5, 2025.
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	2. Consent Agenda
Type :	Action (Consent)

Consent

Our adopted rules of Parliamentary Procedure, The Standard Code of Parliamentary Procedure by Alice Sturgis, 4th Edition, provide for a consent agenda listing several items for approval of the Board by a single motion. Most of the items listed under the consent agenda have gone through Board subcommittee review and recommendation. Documentation concerning these items has been provided to all board members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any board member.

Subject :	2.02 Approve Minutes from April 7, 2025.
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	2. Consent Agenda
Type :	Action (Consent), Minutes

File Attachments

2025-4-7 EDTEC Minutes.pdf (702 KB)

Consent

Our adopted rules of Parliamentary Procedure, The Standard Code of Parliamentary Procedure by Alice Sturgis, 4th Edition, provide for a consent agenda listing several items for approval of the Board by a single motion. Most of the items listed under the consent agenda have gone through Board subcommittee review and recommendation. Documentation concerning these items has been provided to all board members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any board member.

Subject :	2.03 Excusing the Absence of Commission Member Leen.
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	2. Consent Agenda
Type :	Action (Consent)
Recommended Action :	Motion to excuse the Absence of Commission Member Leen.

Consent

Our adopted rules of Parliamentary Procedure, The Standard Code of Parliamentary Procedure by Alice Sturgis, 4th Edition, provide for a consent agenda listing several items for approval of the Board by a single motion. Most of the items listed under the consent agenda have gone through Board subcommittee review and recommendation. Documentation concerning these items has been provided to all board members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any board member.

Subject :	2.04 Approve Consent Agenda - Our adopted rules of Parliamentary Procedure, The Standard Code of Parliamentary Procedure, provide for a consent agenda listing items for approval of the Commission by a single motion. Typically the items listed under the consent agenda are the minutes from previous meetings and the agenda for the current meeting. Documentation concerning these items has been provided to all Commission Members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any Commission Member.
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	2. Consent Agenda
Type :	Action (Consent)
Recommended Action :	Motion to approve the consent agenda

Consent

Our adopted rules of Parliamentary Procedure, The Standard Code of Parliamentary Procedure by Alice Sturgis, 4th Edition, provide for a consent agenda listing several items for approval of the Board by a single motion. Most of the items listed under the consent agenda have gone through Board subcommittee

review and recommendation. Documentation concerning these items has been provided to all board members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any board member.

3. Guest Presentations

4. Action Agenda

Subject :	4.01 Martin Airfield Area Planning Study - Mr. Rizzitiello
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	4. Action Agenda
Type :	Action
Preferred Date :	May 05, 2025
Absolute Date :	May 05, 2025
Fiscal Impact :	No
Recommended Action :	Motion to recommend the Martin Airfield Planning Study to Council for adoption to the Comprehensive Plan as an Appendix.

Public Content

Historical Perspective:

The City obtained a State Community Economic Revitalization Board grant for $100,000 to conduct a site development plan for around the Martin Airfield area back in January 2024.

Information for Consideration:

Mr. Rizzitiello will present the final iteration of the Martin Airfield Planning Study created by J-U-B Engineers.

File Attachments

MartinAirfieldMP_March2025_Final.pdf (21,413 KB)
MartinAirfieldMP_March2025_Final_reduced.pdf (12,715 KB)

5. Staff Reports

Subject :	5.01 Lions Park Dedication Ceremony - Ms. Garcia
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	5. Staff Reports
Type :	Reports

Public Content

Historical Perspective:

The Lions Park renovation project has been in the works for 8 years. Thanks to the people and staff of the City of College Place, granting organizations, and many community partners, this project is now nearing completion.

Information for Consideration:

Mr. Rizzitiello and Ms. Garcia are planning a special opening day at Lions Park which will include a Ribbon Cutting by the WW Valley Chamber of Commerce, swag bags with gift certificates for Kettle Corn and The Soda Stop, a dessert grazing table from Lennie Loo, a beautiful balloon arch by De Colores, and a Land Welcome from Tribal leader, Jeanine Gordon. Council Member Espinoza is sponsoring $1000 worth of tacos at the Happy Wanderer Food Truck.

File Attachments

General Invite.png (1,348 KB)
All events Espanol.png (1,032 KB)
All events.png (1,006 KB)
Invite Espanol.png (634 KB)
Invite.png (629 KB)

Subject :	5.02 Sister City Committee with Jungapeo, Mexico - Ms. Garcia
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	5. Staff Reports
Type :	Discussion, Information

Public Content

Historical Perspective:

In February 2025, the Youth Advisory Commission opted to create a Sister City relationship with Jungapeo, Mexico as their project this year.

Information for Consideration:

Individuals and officials from Jungapeo have sent us pictures and a lovely video inviting us to formally establish a relationship.

The current Mayor of Jungapeo is Norma Angelica Yanez Sierra. The community of Jungapeo prepared an inspiring video for the Youth Advisory Commission which can be viewed on YouTube:https://youtu.be/_51kAUwY8HM?si=AaBHJ76eygf0mHgv
Mr. Isaac Chakis prepared for the Commission photos of Jungapeo which are attached. Mr. Chakis can be reached at cervechakis@hotmail.com

The Youth Advisory Commission would like to pursue creating a Sister City Committee, open to the public, establishing a strong connection between College Place and Jungapeo youth, mutual

art exchanges, regularly sending gifts, and completing a sports & recreation activity together via zoom.

Possible Action Plan:

1. Objectives
- Mutual cultural exchanges, a pen pal program, youth art exchanges and displays, gift giving, tourism/economic development, and completing recreational activities together using Zoom or other technology.
- Strong connection between youth in schools and adults who love to visiteach other's cities.

2. Form a "Steering" Committee
- Have City Council create and sanction Sister City Committee- assign a budget for supporting this program in years going forward.
- Include stakeholders such as all College Place schools including Walla Walla University, local businesses, and nonprofits in the area.
- Assign roles and responsibilities.

3. Engage Stakeholders and the Public
- Host informal community meetingsto gain support and input, and invite stakeholders to the meetings.

4. Reciprocate Contact with Jungapeo
- Propose an initial meeting to discuss mutual interests to determine compatibility.
- Write formal letters, send an official gift, and/or make a video.

5. Draft a Memorandum of Understanding (MOU)
- Outline mutual goals, areas of cooperation, and expected commitments.
- Include provisions for governance, funding, and evaluation.

6. Formalize the Relationship
- Sign an official agreement in a public ceremony. It would be amazing if someone from Jungapeo could join us virtually or physically!

7. Develop Exchange Programs and Initiatives
- Launch projects in areas like the pen pal program, virtual youth gathering, art exchange, youth exchange, and gift giving.
- Plan and executereciprocal visits, joint events, and virtual exchanges.

8. Monitor and Sustain
- Sister City Committee consists of at least 3 individuals thatincludes the public who executes the program.
- Committee sets metrics for success and conducts annual reviews.
- Committee secures sustaining funding and community involvement; City commits to supporting the group(including fiscally).

File Attachments

DSC_0342.jpg (511 KB)
DSC_0343.jpg (475 KB)
DSC_0348.jpg (469 KB)
DSC_0350.jpg (406 KB)
DSC_0351.jpg (562 KB)
DSC_0352.jpg (540 KB)
DSC_0355.jpg (577 KB)
DSC_0357.jpg (447 KB)
DSC_0359.jpg (412 KB)
DSC_0363.jpg (404 KB)
DSC_0378.jpg (475 KB)

Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	5. Staff Reports
Type :	Information

Public Content

Historical Perspective:

Information for Consideration:

Notes from a Community Charette about local governments that the Walla Walla Valley Chamber of Commerce hosted. In general City of College Place had the most aggregated accolades for going the right direction and being a good place to live.

File Attachments

Charrette Report.pdf (103 KB)
Charrettee Agregated Scriber Data HERO.pdf (119 KB)
Executive Summary Hero.pdf (43 KB)

Subject :	5.04 Proposed College Place Code 10.18 - Truck Routes - Mr. Rizzitiello
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	5. Staff Reports
Type :	Information

Public Content

Historical Perspective:

The City doesn't have established freight routes.

Information for Consideration:

This came up during the Martin Airfield study. Roads that are designated freight routes qualify for capital funds from the State Freight Mobility Strategic Investment Board.

Freight Routes proposed are as follows:

1. State Route 125
2. Myra Rd

3. West Whitman Drive (Western City Limits to NW Evans Avenue)
4. SW Mojonnier Rd (Western City Limits to S College Avenue)
5. S College Avenue (SW Mojonnier Rd to State Route 125)
6. NW Evans Avenue (Blalock to West Whitman Drive)
7. Wallula Avenue
8. NE Rose Street (Lambert to Eastern City Limits)
9. SW Meadowbrook Blvd (Sydnee Lane to State Route 125)

File Attachments

Proposed Freight Route Code.pdf (121 KB)

Subject :	5.05 Downtown Association Formation Update- Ms. Garcia
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	5. Staff Reports
Type :	Discussion, Information

Public Content

Historical Perspective:

The downtown group has been meeting biweekly since the first meeting on November 22, 2025. At the meeting on 1/22/2025, the group had their first official Board Meeting, agreed on a name, elected Officers, adopted bylaws, approved Articles of Incorporation, adopted an official logo, and an organizational structure.

Information for Consideration:

In the last two months, Downtown College Place Association has Incorporated, received an EIN, applied for the federal 501 (c)3 designation, and will open a bank account after Community Bank officially transitions to STCU. A 3-year Action Plan has been adopted and the group has received its first grant award from the City of College Place for General Operating Expenses; DCPA hopes to hire an Executive Director this year. DCPA is in the process of creating a launch plan which includes topics from social media and website to a community wide event.

DCPA has several projects in the works: 2 (maybe 3) murals in the downtown district of College Place to be completed this summer, and a flower basket program which is scheduled to launch next year. Committees related to community beautification, grant writing, event planning, and shop local campaigns are beginning to emerge. The Board is also beginning to plan out long-term community beautification projects such as benches and providing shade for bus stops, slated for the coming years.

Name: Downtown College Place Association (DCPA)

Officers:

- President: Chloe Congleton, Enable Art
- Vice President: Jim Fry, CPPS
- Secretary: Maryelizabeth, City of College Place
- Treasurer: David Lopez, WWU
- Board Members At Large: Vicki Zanes, Andy's Market;DeLona Bell, CMBell Company; Kirk Amick, Community Bank

File Attachments

Welcome DCPA.png (314 KB)

Subject :	5.06 Development Activity (May 2025) - Mr. Rizzitiello
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	5. Staff Reports
Type :	Discussion, Information

Public Content

Historical Perspective:

Information for Consideration:

Development Activity for May 2025.

File Attachments

DevelopmentTrackSheetMay2025.pdf (133 KB)

6. Closing Items

Subject :	6.01 Next Meeting: June 2, 2025
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	6. Closing Items
Type :	Information
Subject :	6.02 Conclude
Meeting :	May 5, 2025 - College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic)
Category :	6. Closing Items
Type :	Procedural

College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic (Monday, April 7, 2025)
Generated by Maryelizabeth Garcia on Monday, March 31, 2025

1. Opening Items

Procedural: 1.01 Call To Order

Commission Chair Peck called the meeting to order at 5:03 PM.

Information: 1.02 Roll Call

PRESENT:		
	Commission Members	Tracy Warner; Doug Case; Teri Lesmeister; Allison Peck; Kelli Leen;
	Ex - Officio	Arlene Alen - Walla Walla Valley Chamber of Commerce
	Staff	City Administrator, Michael Rizzitiello Deputy City Clerk, Rhett Beardemphl
Also Present:		Paul Saldana, Economic Growth Strategies; Stradd Herrera, Economic Growth Strategies
MEMBERS EXCUSED:		Kirk Amick;
MEMBERS ABSENT:		

Procedural: 1.03 Public Comment - None.

2. Consent Agenda

Action (Consent): 2.01 Approve Agenda for April 7, 2025.
Action (Consent), Minutes: 2.02 Approve Minutes from March 3, 2025.
Action (Consent): 2.03 Excusing the Absence of Commission Member Amick.
Action (Consent): 2.04 Approve Consent Agenda - Our adopted rules of Parliamentary Procedure, The Standard Code of Parliamentary Procedure, provide for a consent agenda listing items for approval of the Commission by a single motion. Typically the items listed under the consent agenda are the minutes from previous meetings and the agenda for the current meeting. Documentation concerning these items has been provided to all Commission Members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any Commission Member.

Commission Member Lesmeister made a motion to approve the Consent Agenda. Second by Commission Member Alen and the motion passed 6-0.

3. Guest Presentations

Discussion, Information: 3.01 Update on Comprehensive Economic Development Strategy (CEDS) Update - Mr. Saldana
Mr. Saldana said that we are at the 70% mark in terms of the strategy. After Mr. Hoppe does his presentation & they get their final report then they can incorporate the final report into the final strategy and wrap the strategic processes up in the next few days. The draft will be sent to staff for internal review and Mr. Saldana hopes that this committee will review and make a recommendation at the next meeting.

Discussion, Information: 3.02 Martin Airfield Planning Study - Mr. Hoppe
Mr. Hoppe presented that 64.5 acres of the 240-acre study area is good developable area. Expansion of utilities to this good developable area would be necessary as it currently does not have any utilities. Building out the necessary infrastructure would cost an estimated $24.2 million. Mr. Hoppe suggested grant and loan opportunities could pay for a considerable amount of these improvements.

4. Action Agenda - None.

5. Staff Reports

DRAFT

Discussion, Information: 5.01 Development Activity: April 2025 - Mr. Rizzitiello
Mr. Rizzitiello provided a brief overview of development activity in the month of March 2025, regarding commercial and residential developments within the City of College Place.

Discussion, Information: 5.02 Community Events Update - Mr. Beardemphl

Mr. Beardemphl presented on all of College Place's free public events that will be starting May 18th with Block Party. After Block Party, in order, the public can attend the Market in the Park, Movies at the Park, Freedom Festival, Truck-or-Treat, and Winterfest. Mr. Beardemphl then showcased the new banners for College Avenue.

6. Closing Items
Information: 6.01 Next Meeting: May 5, 2025

Procedural: 6.02 Conclude

Commission Member Lesmeister made a motion to conclude the meeting at 5:30 PM. Second by Commission Member Case and with no objection, the meeting concluded.

Approved:

_____
Allison Peck – Chair

Attest:

_____
Rhett Beardemphl – Deputy
City Clerk

The foregoing minutes are the official record of the Economic Development, Tourism, and Events Commission meeting that occurred April 7, 2025. Further detail may be obtained by reviewing the actual audio recording made during this session.

DRAFT

MARTIN AIRFIELD AREA PLANNING STUDY 2025

CP
COLLEGE PLACE
WALLA WALLA VALLEY

J·U·B ENGINEERS, INC.

OTHER J-U-B COMPANIES

THE LANGDON GROUP

GATEWAY MAPPING INC.

TheMettsGroup

EXECUTIVE SUMMARY

The City of College Place has retained J-U-B ENGINEERS, Inc. to conduct a planning study evaluating the feasibility and site readiness to establish industrial development on approximately 64.5 acres of property near Martin Airfield. The City desires to attract light industrial development at Martin Airfield, which will create new jobs and private investment in growing market sectors to support the community.

Currently, the City lacks sufficient light industrial and employment lands to meet demand, making this area an essential and increasingly scarce resource for future economic development. Given this limitation, maximizing the potential of Martin Airfield for industrial use is a strategic priority.

This planning study serves as a strategic roadmap, reviewing the area's history and objectives, evaluating current infrastructure, and envisioning future scenarios necessary to draw the desired development. It offers a thorough analysis of site due diligence, highlighting both challenges and opportunities ahead. Ultimately, the aim is to assess the viability and readiness of Martin Airfield as a hub for light industrial use.

A review of existing infrastructure highlights necessary improvements to support development. These improvements include upgrades to transportation facilities, earthwork, and utility infrastructure. The study also presents preliminary cost estimates for these enhancements.
The following sections provide a detailed breakdown of each critical development component:

- **Conceptual Layout** – Overview of the planned site configuration and land use.
- **Transportation Facilities** – Assessment of existing and required road networks.
- **Earthwork** – Site grading and preparation requirements.
- **Utility Requirements** – Infrastructure needs for water, electricity, and other essential services.
- **Preliminary Cost Estimate** – Estimated financial investment for proposed improvements.

By addressing these factors, this document provides a framework for informed decision-making in the development of the study area, ensuring long-term success and sustainability.

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Appendix 5 Economic Analysis
Appendix 6 Detailed Cost Estimates

INTRODUCTION

Background

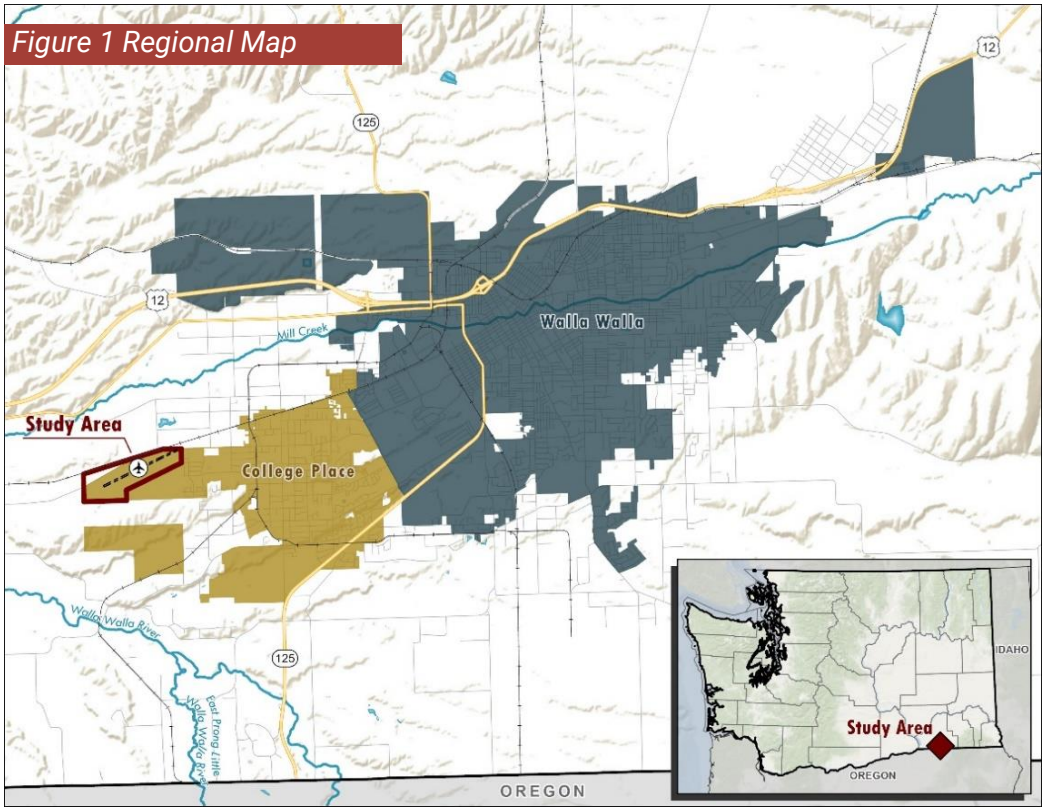
The Martin Airfield Area includes approximately 64.5 acres surrounding the Martin Airfield Airport. In March 2024, the Washington State Community Economic Revitalization Board (CERB) awarded College Place funding for economic development and research to identify infrastructure improvements needed to spur business growth and job creation.

Martin Airfield is a privately owned, public-use airport in College Place, a city in Walla Walla County. Today, Martin Airfield is a general aviation airport for private, student, and experimental aircraft pilots. Martin Airfield was historically developed as a training ground for U.S. Navy aviators. Following World War II, the airport returned to civilian use. Since returning to civilian use, the airport has been underutilized, and the city is excited to take action to identify proactive development opportunities.

Purpose of the Plan

The City of College Place has initiated the Martin Airfield Feasibility Study to assess on-site infrastructure needs, evaluate the development layout options, and provide guidelines for future development. This Feasibility Study examines the opportunities and challenges of developing the site. The Study identifies a long-term vision of Martin Airfield with flexible plan implementation approaches that respect market conditions and interests within the Study's anticipated build-out period.

Figure 1 Regional Map



EXISTING CONDITIONS

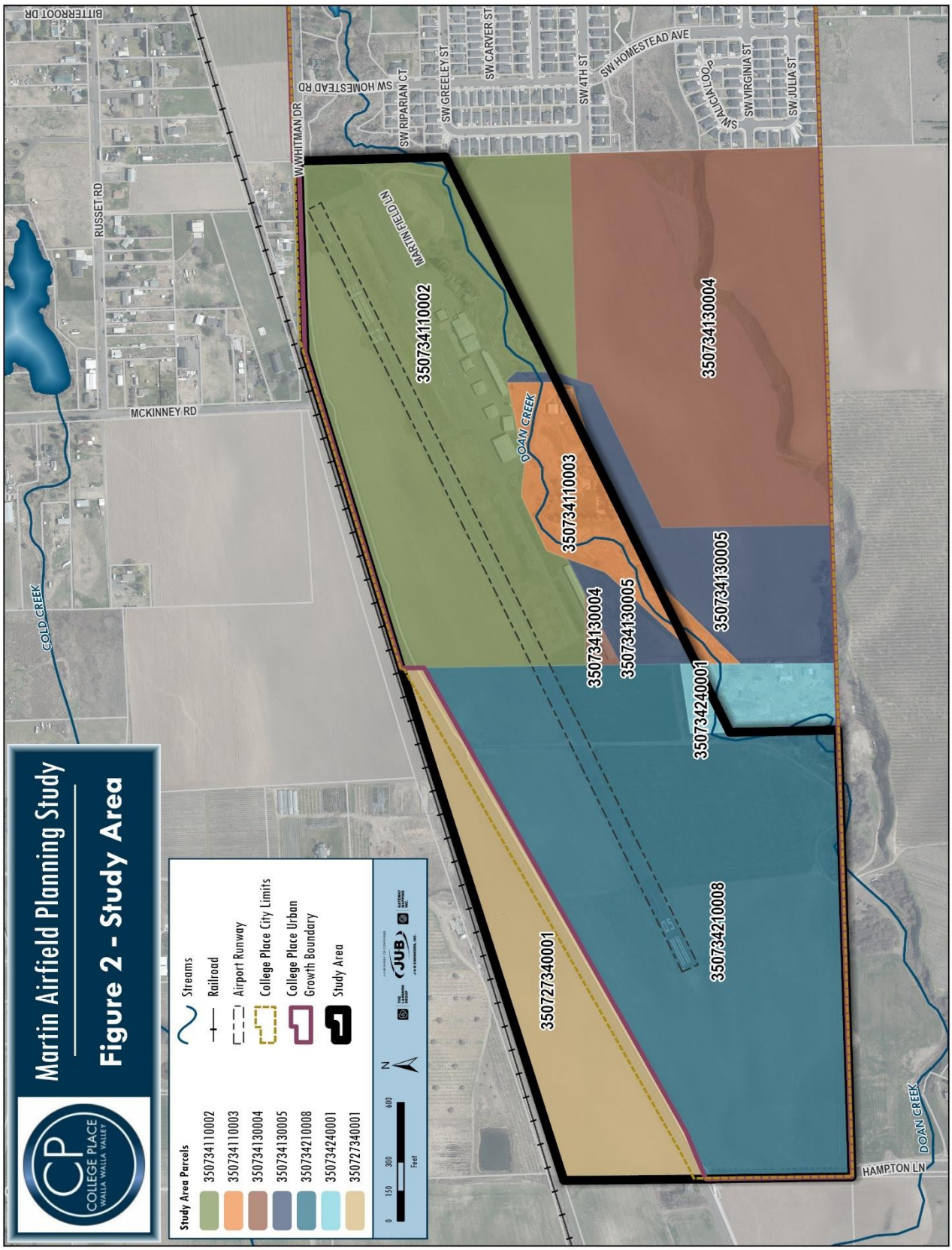
The Existing Conditions chapter provides an overview of the current state of various aspects relevant to the planning process and project development. It gives a detailed description of a wide range of topics within Martin Airfield.

The Existing Conditions chapter is arranged in the following sections:

- Existing Property Description
- Land Use and Planning
- Airport Requirements
- Environmental Overview
- FAA Airspace Analysis
- Transportation
- Utility Availability
- Economic Analysis

Existing Property Description

The land being evaluated for the Martin Airfield Master Plan consists of seven parcels, totaling nearly 180 acres, located in the City of College Place and Walla Walla County. The study area is situated on the western edge of the City of College Place. The Columbia Walla Walla (CWW) Railroad bounds the study area to the north, Doan Creek to the south, Homestead Village to the east, and Hampton Lane to the west, as shown in the Study Area Figure 2 below.


Martin Airfield Planning Study
Figure 2 - Study Area
COLLEGE PLACE
WALLA WALLA VALLEY
Study Area Parcels
350734110002
350734110003
350734130004
350734130005
350734210008
350734240001
350727340001
Streams
Railroad
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
BUTTERCUP DR
RUSSET RD
MCKINNEY RD
COLD CREEK
W WHITMAN DR
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTINFIELD LN
DOAN CREEK
HAMPTON LN
350734110002
350734110003
350734130004
350734130005
350734210008
350734240001
350727340001

Land Use and Planning

Land Use Evaluation

Current Land Uses

The property is owned by a private entity and is farmed under a lease agreement. In addition to farming activities, Martin Airfield accommodates a variety of aviation-related uses including:

- Landside facilities – Elements supporting aviation use at an airport include terminals, hangars, tie-down spaces, fuel systems, signs, fencing, and automobile parking.
- Airside facilities – Elements at an airport that enable the safe movement and operation of aircraft between the air and ground include runways, taxiways, taxi lanes, aprons, visual aids, and weather reporting.

These facilities are depicted in the Landside and Airside Facilities (Figure 3) below.

Zoning Districts

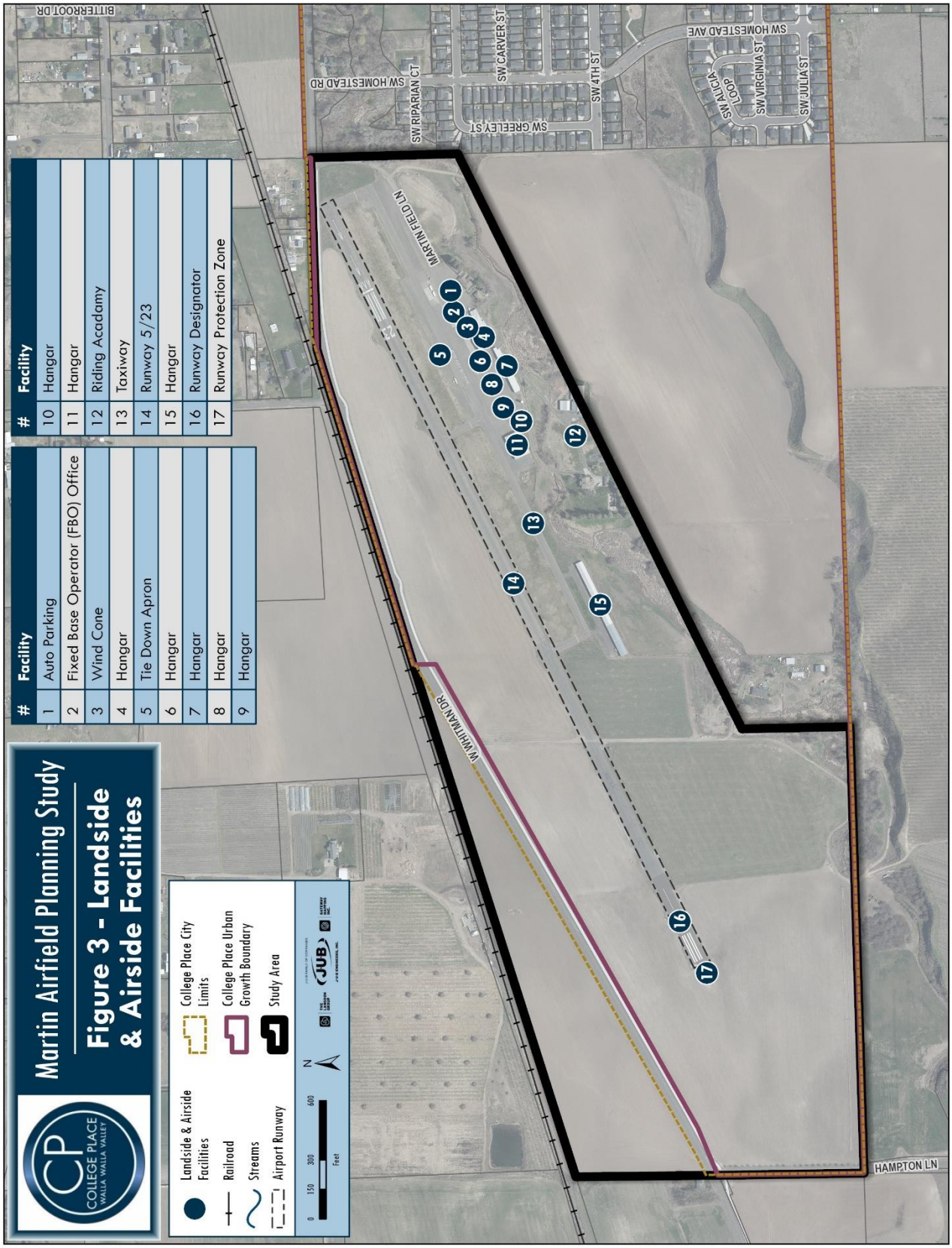
Martin Airfield has two zoning districts within the study area (see Figure 4):

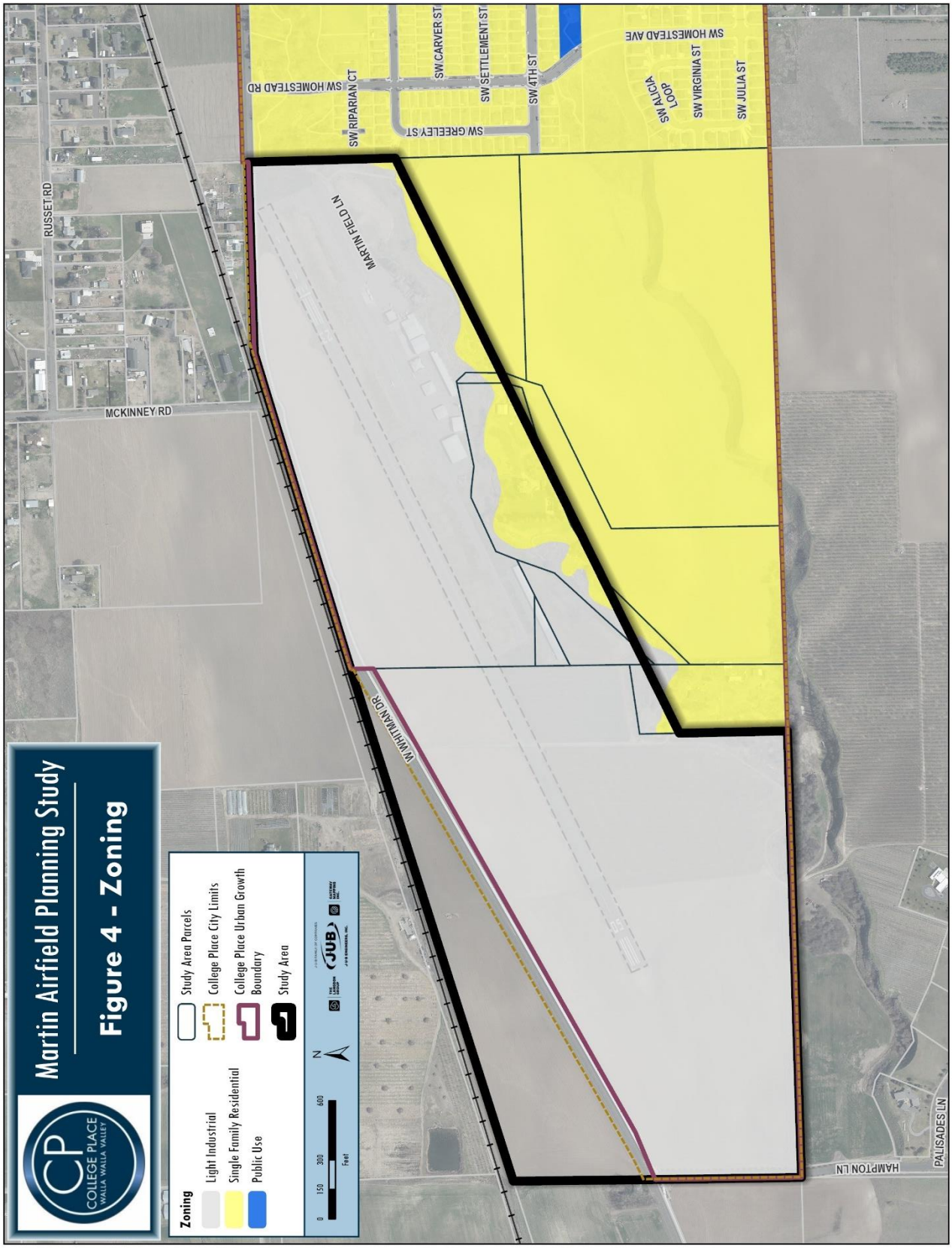
- City Zoning Districts
  - Light Industrial (LI)
- County Zoning District
  - Agriculture Residential 10 (AR-10).

The purpose of the LI and AR-10 zoning districts are described in College Place Municipal Code (CPMC) 14.50.020 or Walla Walla County Code (WWCC) 17.12.030 and summarized below.

- Light Industrial (LI) – The purpose of the light industrial activities that do not generate offensive external impacts such as excessive noise, pollution or emissions, involve limited assembly, fabrication and handling of products, include research and technological processes and do not create exceptional demands upon public facilities and services. A further purpose is to afford protection to the industries so located by prohibiting the intrusion of incompatible influences.
- Agriculture Residential-10 (AR-10) – All lands in this district are lands of long-term commercial significance. The purpose of this district is to maintain the viability of agricultural uses. Land in this district is located adjacent to existing rural lands, rural activity centers, and urban growth areas. Uses are distinctive of the agricultural sector. Large-scale natural resource processing industry is discouraged. Limited commercial-tourism and businesses that support agriculture are permitted. Residences are an allowed use and clustering to preserve large tracts of resource land is the preferred method of residential land development.

The City of College Place does not have an Airport Overlay Zone with additional requirements. Code recommendations for an Airport Overlay Zone are described in the Airport Requirements section.


Martin Airfield Planning Study
Figure 3 - Landside & Airside Facilities
COLLEGE PLACE
WALLA WALLA VALLEY
Landside & Airside Facilities
Railroad
Streams
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
Facility
1 Auto Parking
2 Fixed Base Operator (FBO) Office
3 Wind Cone
4 Hangar
5 Tie Down Apron
6 Hangar
7 Hangar
8 Hangar
9 Hangar
10 Hangar
11 Hangar
12 Riding Academy
13 Taxiway
14 Runway 5/23
15 Hangar
16 Runway Designator
17 Runway Protection Zone
BITTERROOT DR
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
SW HOMESTEAD AVE
MARTIN FIELD LN
W WHITMAN DR
HAMPTON LN


Martin Airfield Planning Study
Figure 4 - Zoning
COLLEGE PLACE
WALLA WALLA VALLEY
Zoning
Light Industrial
Single Family Residential
Public Use
Study Area Parcels
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
MARTIN FIELD LN
W WHITMAN DR
MCKINNEY RD
RUSSET RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW SETTLEMENT ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
HAMPTON LN
PALISADES LN

Allowed Uses

The permitted uses for the LI and AR-10 zones are listed below.

Light Industrial

- Appliance repair shop
- Automobile service/repair(1)
- Bakery
- Business park
- Communications center/facility
- Contractor/construction yard
- Electric vehicle infrastructure
- Industry, light
- Manufactured home
- Manufacturing/assembly, light
- Master planned development
- Mini-storage
- Mobile vendor
- Nursery/greenhouse
- Parking lot
- Public utility
- Salvage/wrecking operations
- School, vocational/trade
- Shipping/receiving center
- Storage of flammable material/liquid
- Storage, outdoor
- Technology center
- Warehouse/shipping
- Winery
- Wireless communication facility, academic
- Wireless communication facility, minor

Agriculture Residential 10

- Dwelling Units (One Family, Mobile Home, Manufactured Home)
- Adult Family Home
- Bed & Breakfast Type I
- Produce Stand
- Commercial Greenhouses
- Day Care, Family
- Distillery, production facility
- Storage/Packing agricultural produce
- Crop Maze
- Park
- Growing of Crops
- Hatcheries
- Timber Harvesting
- Airports and Aircraft Landing Field—Agricultural
- Helistops
- Railroad Terminals

Development Standards

The City of College Place and Walla Walla County have adopted zoning regulations and development standards (CPMC Title 14 and WWCC Title 17, respectively) that are consistent with and serve to implement the City's and County's Comprehensive Plan (2018). Below is a summary of the development standards identified in CPMC Chapter 14.60 and WWCC Chapter 17.18.

Table 1 Development Standards

Zone	Lot Size (min.)	Lot Width (min.)	Density (dwelling units/Acre)	Building Height	Front Yard	Side Yard	Rear Yard
LI	No minimum[1]	50'	-	None	None	None[2]	None[2]
AR-10	10 AC	330'	0.10	35'[3]	30'[3]	10'[3]	-

Notes

1. On corner lots, the exterior side yard setback shall be at least 15 feet from the property line.
2. No setback required except when abutting a SFR, MFR, or PUD then a landscaped buffer equal to the height of the building at eave shall be required in accordance with the provisions of Section 14.60.040, landscaping, fences and visibility standards.
3. Buildings housing domestic animals or any use that produces offensive noise, vibration, smoke, dust, odors, heat or glare shall maintain a seventy-five feet front yard setback and fifty feet side and rear yard setbacks.

Planning Process

The City of College Place has jurisdiction over the Martin Airfield and will process all permitting and entitlements necessary for development. The City (or its representative) will initiate the permit review and send it to the Airport Engineer for additional review and comment. The City of College Place will respond and provide a review following the College Place Municipal Code.

SEPA

Any future development of the property will require environmental review. College Place will be the lead agency for the State Environmental Policy Act (SEPA) Process. SEPA is a State of Washington policy intended to ensure that state and local agencies consider environmental values during decision-making. SEPA requires state and local agencies to consider the potential environmental consequences of a proposal before approving or denying the proposal. Once the City receives a SEPA Checklist, a public notice will be sent out for a 14-day public comment period and a 14-day appeal period. Notices are sent out to the following:

- The Department of Ecology
- All agencies with jurisdiction (state, local, and federal)
- Affected tribes; and
- All local agencies whose public services would be affected by the proposal.

Because Martin Airfield is a privately owned airport, it is exempt from following federal regulations, such as the National Environmental Policy Act (NEPA), unless a federal nexus is triggered otherwise during development.

Platting Process

The City has three options for the division, redivision, or alternating lots within the Martin Airfield Study Area. These options are discussed briefly below. The complete Permitting Classification Table can be found in **Appendix 1**. CPMC Chapter 14.90 Subdivisions contains the standards and procedures for dividing land in accordance with the City of College Place Municipal Code.

- Subdivision/Short Plat
- Binding Site Plans
- Lot Line Adjustments (Boundary Line Adjustments)

Subdivision/Short Plat

A subdivision or short plat is used when an applicant desires to subdivide land. This process is guided by the number of lots the applicant wants to create. A subdivision is used when ten or more lots will be created. A short plat is used when nine or fewer lots will be created.

Binding Site Plans

The binding site plan process is an alternative to the subdivision process to divide property for sale, lease, or transfer of ownership as an alternative method of land division into two or more lots, parcels, or tracts in a commercial or industrial zoning district.

Lot Line Adjustments (Boundary Line Adjustments)

A boundary line adjustment is a mechanism by which the city may approve the alteration of a boundary line between legally created lots, provided that:

1. Such an adjustment shall not create any additional lot, tract, parcel, site, or division, nor create lots which are nonconforming or more nonconforming than exists; and
2. A boundary line adjustment may consolidate lots under common ownership.

Environmental Overview

Water Resources

Wetlands

The Clean Water Act (CWA) defines wetlands as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Wetlands include swamps, marshes, bogs, and similar areas.

The U.S. Fish and Wildlife National Wetlands Inventory identifies one wetland within the study area. It is a 3.96-acre Freshwater Emergent Wetland habitat classified as a PEM1C. A Freshwater Emergent Wetland habitat classified as PEM1C refers to a specific type of wetland in the United States National Wetland Classification System. The following is an outline of the classification:

- PEM: Stands for "Palustrine Emergent," which indicates a wetland characterized by non-woody plants (emergent vegetation) such as grasses, sedges, and reeds.
- 1: This number typically denotes the subclass of the wetland, indicating it is dominated by persistent emergent vegetation.
- C: This letter signifies a specific community type within the subclass, often indicating factors like hydrology or the dominant plant species present.

In summary, a PEM1C wetland is a type of freshwater wetland dominated by persistent emergent vegetation, usually found in seasonally or permanently flooded areas. These habitats are vital in biodiversity, water quality, and flood regulation. Before any development activities in the vicinity, a field verification of this area should be completed.

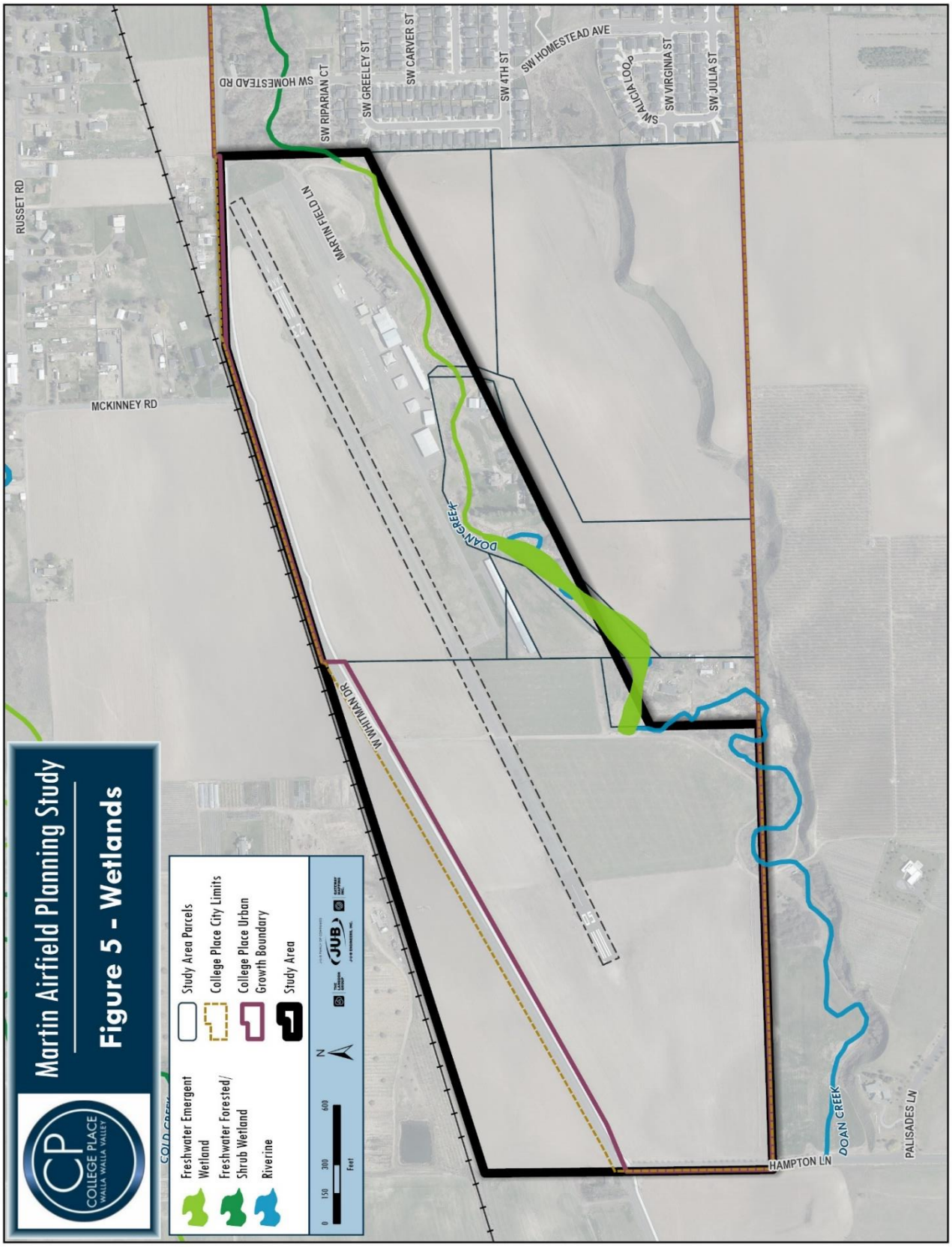
The appropriate regulatory agencies have final authority regarding jurisdictional determinations and acceptance of wetland delineations. If proposed development would permanently impact federal and/or state jurisdictional wetlands, permitting with the U.S. Army Corps of Engineers (USACE) and the Washington State Department of Ecology (WDOE) would be required, and compensatory mitigation may be required.

Floodplains

Floodplains are defined as lowland areas adjoining inland and coastal waters which are periodically inundated by floodwater. Floodplains are discussed in terms of the 100-year flood, 500-year flood, coastal flood, or underdetermined/undesignated areas. The study area is in Zone C (areas of minimal flooding), per the FEMA FIRM (Flood Insurance Rate Map) 530194 0440 B.

Surface Waters

Rivers, streams, lakes, oceans, ponds, and estuaries are examples of surface waters. The study area has one primary surface water feature: Doan Creek. Doan Creek is a small freshwater stream that flows through a mix of residential and natural areas. It typically features riparian zones with diverse vegetation, which support local wildlife. The creek plays a vital role in the local ecosystem, providing habitat for various species and helping with water drainage.


Martin Airfield Planning Study
Figure 5 - Wetlands
COLLEGE PLACE
WALLA WALLA VALLEY
Study Area Parcels
College Place City Limits
College Place Urban Growth Boundary
Study Area
Freshwater Emergent Wetland
Freshwater Forested/ Shrub Wetland
Riverine
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTIN FIELD LN
DOAN CREEK
W WHITMAN DR
HAMPTON LN
DOAN CREEK
PALISADES LN

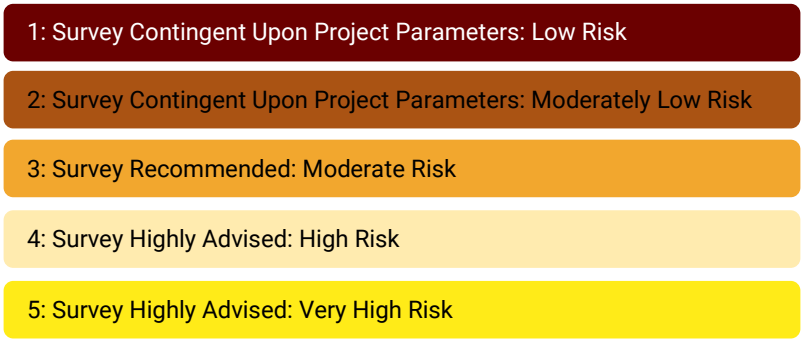
Critical Areas Ordinance

Per City of College Place Municipal Code 14.070.030.A, "The entire City of College Place is hereby designated as a critical aquifer recharge area, and the provisions of this chapter shall apply to all proposed development activities unless specifically exempted or otherwise provided.

Cultural Resources

This study does not include a cultural resource report, but it should be considered before development.

Using the predictive model, the Washington State Department of Archaeology & Historic Preservation (DAHP) mapping system, WISAARD (Washington Information System for Architectural and Archeological Records Data) identifies the study area with a value of 3, 4, and 5. The values are defined below:



Because the site is identified as Moderate to Very High Risk for survey recommendations, consulting with a cultural resource specialist or archaeologist before development is advised.

In addition to the WISAARD mapping and its recommendation for a cultural resource survey prior to development, it is also important to note that the Whitman Monument is approximately 2 miles west of the study area. The Whitman Mission National Historic Site preserves the site of the 19th-century mission established by Marcus and Narcissa Whitman to convert the Cayuse people to Christianity. The mission became a point of cultural conflict, culminating in the 1847 Whitman Massacre, in which the Whitmans and several others were killed by Cayuse members following an outbreak of measles that devastated the Native population. Today, the site includes a visitor center, interpretive trails, and a memorial, offering insight into the complex history of early missionary efforts, westward expansion, and Native resistance.

Air Quality

The Clean Air Act (CAA) sets the general policy for regulating air quality throughout the U.S. Under the CAA, the Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) to protect human health and the environment against the detrimental effects of outdoor air pollution. NAAQS exists for the following criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), sulfur dioxide (SO2), particulate matter (PM¬2.5 and PM10), and lead (Pb).

Under the CAA, the EPA assesses air quality conditions within all areas of a state based on NAAQS. Areas that exceed NAAQS are considered "nonattainment" areas. Areas once considered nonattainment but currently meet NAAQS and CAA requirements are designated as

"maintenance" areas. As of July 2024, Walla Walla County is not in nonattainment or maintenance for any criteria pollutants (EPA 2024).

Soils Assessment

The National Resource Cooperative Service (NRCS) online web soil survey was used to identify Martin Airfield Properties soil types, see Figure 6 below. Complete mapping and soil details are contained in **Appendix 2**.

Table 2 Soil Assessment

Soil Type	Map Unit Symbol	% of Area of Interest	Acres
Pedigo silt loam, 0 to 3 percent slopes	PmA	11.4%	20.2
Umapine silt loam, 0 to 3 percent slopes	UmA	86.5%	153.2
Umapine silt loam, leached surface, 0 to 3 percent slopes	UpA	2.1%	3.8
	Total	100%	177.2

Airport Requirements

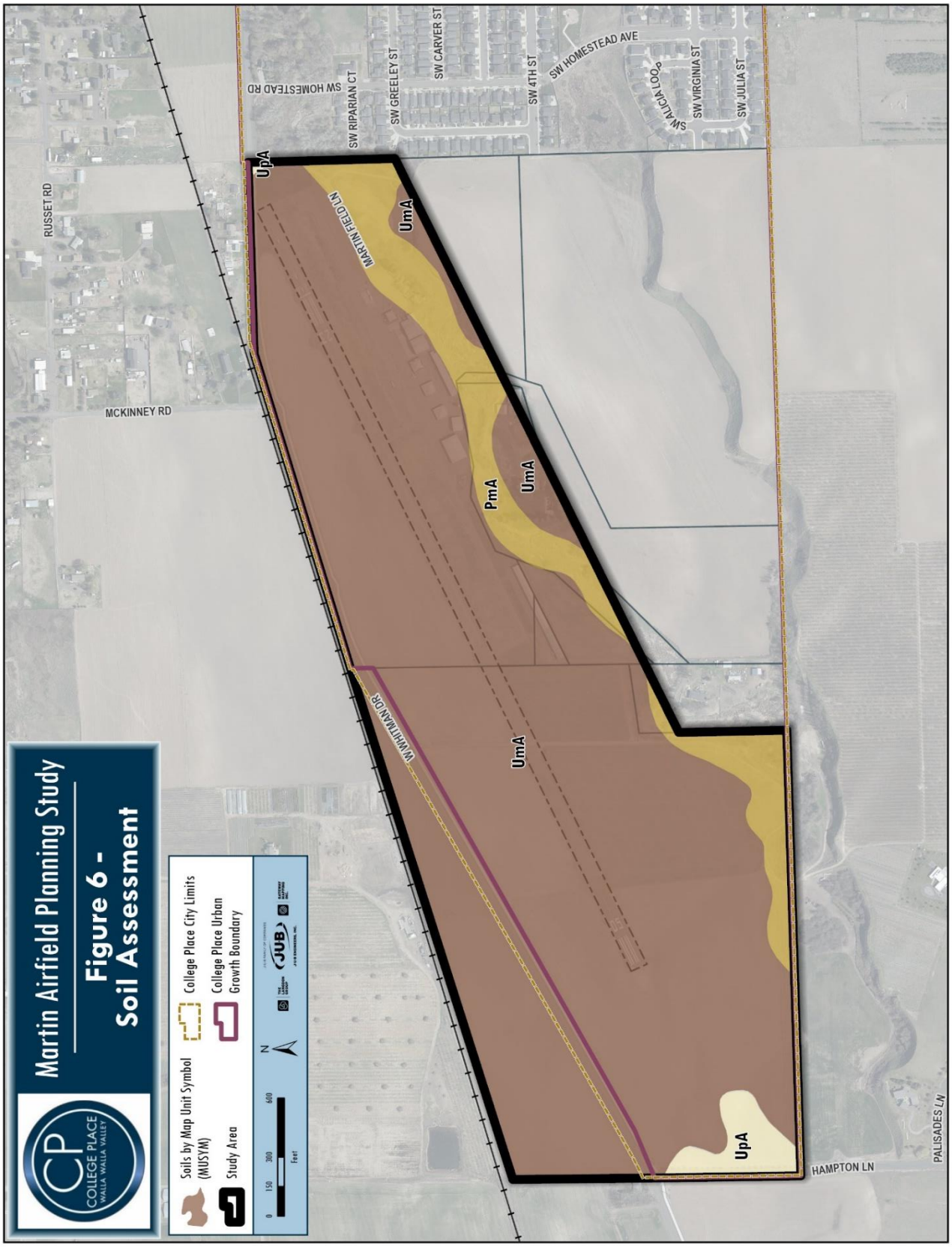
The best approach to promoting land use compatibility at and around an airport is using a combination of regulatory tools. There are two types of zoning overlays that are designed to achieve different purposes.

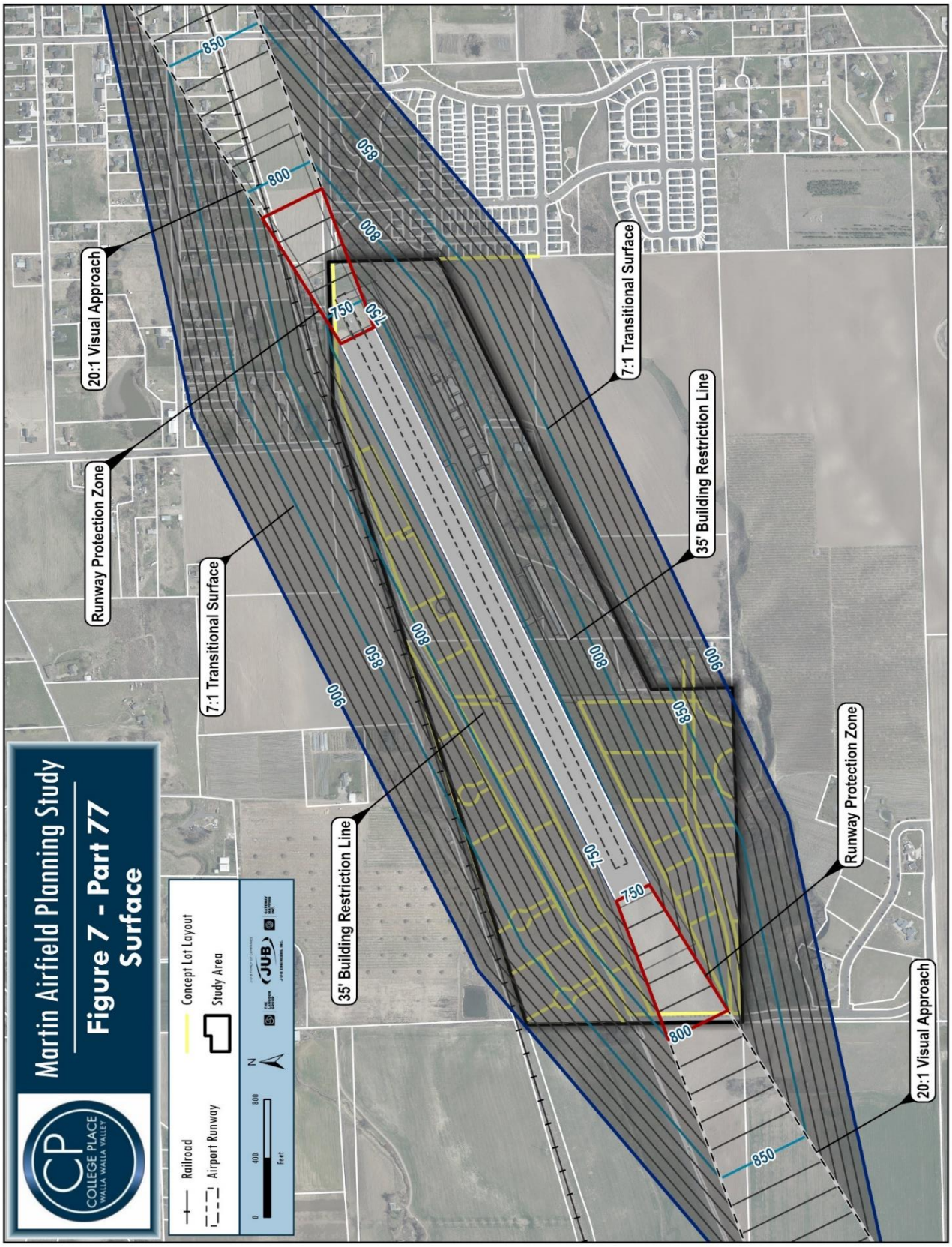
1. One that is designed and shaped to address critical air space surfaces depicted in federal regulations FAA Part 77 Imaginary Surfaces.
2. The other addresses land use compatibility zones or the general operating environment of the airport.

Key Features of an Airport Compatibility Overlay Zone:

- **Height Restrictions** – Limits the height of buildings, towers, and other structures to prevent hazards to aircraft.
- **Noise Compatibility** – Regulates land uses to minimize conflicts, such as restricting residential developments near high-noise areas.
- **Land Use Restrictions** – Controls activities that could pose risks, such as wildlife attractants (e.g., landfills, bodies of water) or emissions that could affect visibility.
- **Approach and Safety Zones** – Establishes buffer areas where certain developments or uses are restricted to protect aircraft on takeoff and landing.

Local governments often establish these regulations in coordination with the Federal Aviation Administration (FAA) or relevant aviation authorities.


Martin Airfield Planning Study
Figure 6 -
Soil Assessment
COLLEGE PLACE
WALLA WALLA VALLEY
Soils by Map Unit Symbol (MUSYM)
Study Area
College Place City Limits
College Place Urban Growth Boundary
0 150 300 600
feet
N
JUB
RUSSET RD
MCKINNEY RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW VALICA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTINFIELD LN
W WHITMAN DR
HAMPTON LN
PALISADES LN
UpA
UmA
PmA
UmA
UmA
UpA


Martin Airfield Planning Study
Figure 7 - Part 77 Surface
COLLEGE PLACE
WALLA WALLA VALLEY
Railroad
Airport Runway
Concept Lot Layout
Study Area
0
400
800
Feet
N
JUB
20:1 Visual Approach
Runway Protection Zone
7:1 Transitional Surface
35' Building Restriction Line
850
800
750
600
900

Land Use Compatibility Zones

In a 2018 Walla Walla County Staff Report, WSDOT requested that the County begin working with the City to propose, at some later date, the establishment of an Airport Compatibility Zoning structure and development guidelines around Martin Field, per the Martin Field Airport Layout Plan (2020). Currently, the Martin Field Airport Layout Plan conforms with the *WSDOT Airports and Compatible Land Use Guidebook* for compatibility criteria and design.

Six land use compatibility/safety zones are identified below:

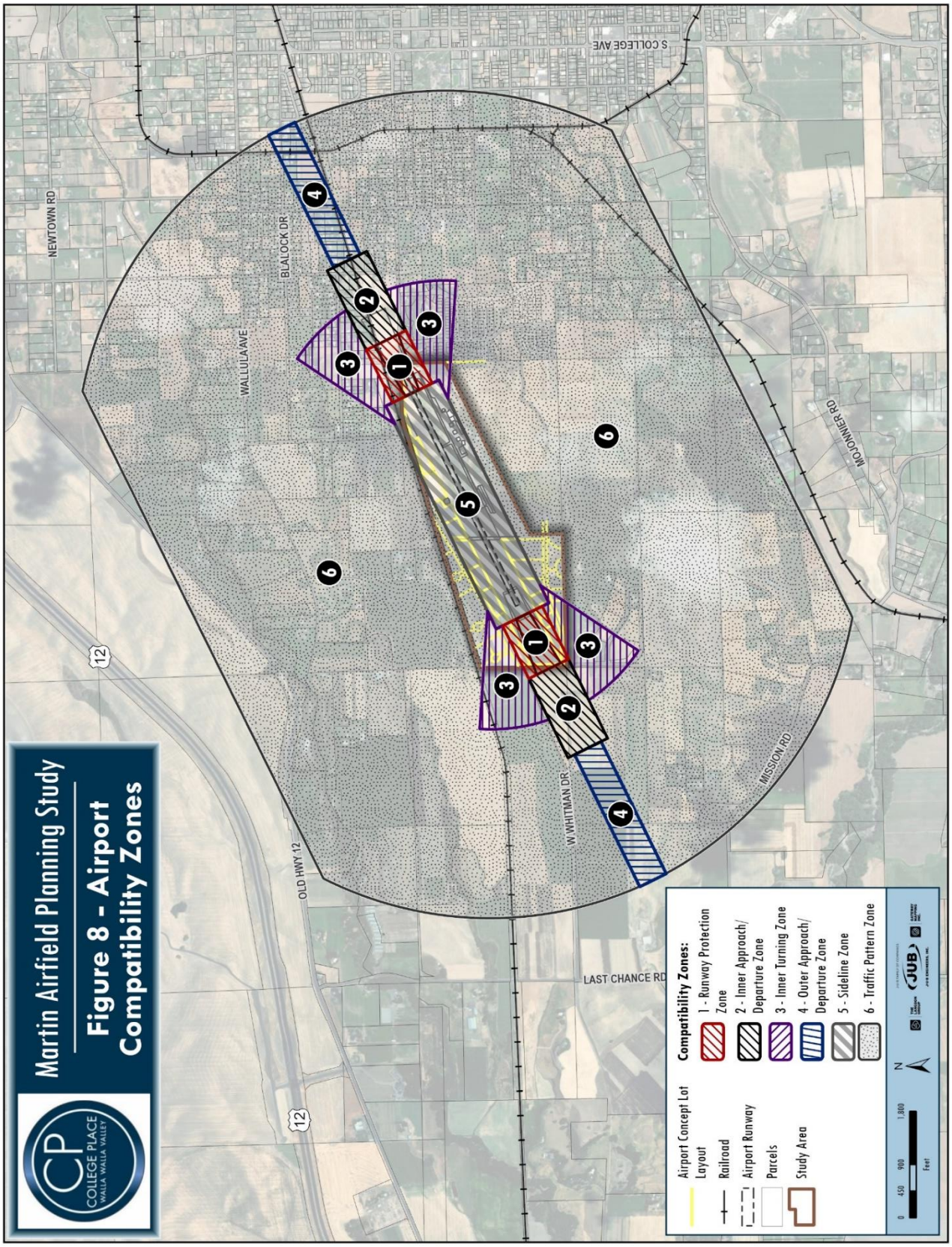
- **Zone 1, Runway Protection Zone**—This zone encompasses the runway protection zone (RPZ) at each end of the runway and should use the RPZ dimensions established in accordance with FAA standards. Also included in the zone are the strips of land immediately adjacent to the runway where FAA standards preclude structures.
- **Zone 2, Inner Approach/Departure Zone—**This zone wraps around and extends beyond Zone 1 along the runway centerline. Next to the RPZ, it represents the area where the risk of aircraft accidents is the greatest. On departure, aircraft are typically at full power in the initial phase of climb. On approach, they are at low altitude as they prepare for landing.
- **Zone 3, Inner Turning Zone**—This zone is a wedge-shaped area lying along the sides of Zone 2. When operating visually, departing aircraft may begin turning over this area to fly toward their destination or to remain in the traffic pattern. Arriving aircraft often overfly this area as well, especially if they are flying a tight pattern.
- **Zone 4, Outer Approach/Departure Zone—**This area lies beyond Zone 3 along the extended runway centerline. Aircraft flying straight out or in overfly this area at low altitude.
- **Zone 5, Sideline Zone—**Lying in narrow bands along each side of the runway, aircraft do not normally fly over the sideline zone. The principal risk is from aircraft that lose directional control while landing or just after take off.
- **Zone 6, Traffic Pattern Zone**—The final zone contains the remainder of the airport environment where aircraft fly as they approach and depart the airport or are engaged in flight training. In area, Zone 6 is typically larger than the other zones combined.

Figure 8 is a graphic depiction of land use compatibility/ safety zones surrounding Martin Field.

Permitted land uses within these zones are consistent with the criteria described by the WSDOT Airports and Compatible Land Use Criteria located in **Appendix 3**.

Importance of these Overlays

Implementing these overlays is vital for the new development around Martin Field. They ensure that land use is compatible with airport operations, thereby protecting the public from potential hazards and minimizing conflicts between airport activities and surrounding developments. By coordinating with local governments and the FAA, these measures help maintain a safe airport environment while supporting sustainable growth in the area.


Martin Airfield Planning Study
Figure 8 - Airport Compatibility Zones
COLLEGE PLACE
WALLA WALLA VALLEY
NEWTOWN RD
BLALOCK DR
WALLULA AVE
S COLLEGE AVE
MOJONNIER RD
MISSION RD
W WHITMAN DR
LAST CHANCE RD
OLD HWY 12
12
Compatibility Zones:
1 - Runway Protection Zone
2 - Inner Approach/ Departure Zone
3 - Inner Turning Zone
4 - Outer Approach/ Departure Zone
5 - Sideline Zone
6 - Traffic Pattern Zone
Airport Concept Lot Layout
Railroad
Airport Runway
Parcels
Study Area
0 450 900 1,800
Feet
N

Transportation

Roadway Network

The roadway network surrounding Martin Airfield is consistent with a rural agricultural area. Whitman Drive is an east-west minor collector roadway adjacent to Martin Field on the north. The roadway was rebuilt by the county in 2020, incorporating a multi-use path and a gravel stormwater area between the roadway and the airfield. There are only local roads and driveways to the west of the airfield. To the east is the City of College Place, which has urban characteristics and a network of local and collector streets. Table 3 shows the study area roadways and their characteristics. The Existing Roadway Network Figure shows the roadway network, intersection traffic control, lane configurations at the nine study area intersections, and the existing PM Peak Hour Traffic Volumes at the study intersections (see Figure 9).

Traffic Volumes

All-day traffic counts for the City were collected in October 2024. All-day volumes on Whitman Drive range from under 700 west of Martin Field to nearly 4,700 west of College Avenue. College Avenue all-day traffic volumes are approximately 6,000 vehicles per day near Whitman Drive. Intersection turning movement volumes were collected on October 8, 2024, at the nine study intersections from 4:00 – 6:00 PM. The PM peak hour traffic varies at each intersection, but generally the east end of the Whitman Drive corridor occurred from 4:45 – 5:45 with the west end occurring from 4:15 – 5:15. The PM peak hour traffic volumes for the study intersections are shown in the figure below and in **Appendix 4**.

Traffic Operations

The Level-of-Service (LOS) analysis quantitatively describes 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 (MOEs) are used to quantify the LOS of a roadway element. For intersections, the MOE used is the 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 unsignalized intersections are: A < 10 seconds of average vehicle delay, B is 10 – 15 seconds, C is 15 – 25 seconds, D is 25 – 35 seconds, E is 35 – 50 seconds, and F is more than 50 seconds of average vehicle delay.

For unsignalized intersections, the 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 College Place is LOS "D".

An evaluation of existing traffic operations was performed for the PM peak hour using the Highway Capacity Software for unsignalized intersections. The analysis results indicate that each of all eight unsignalized study intersections currently function with good Level of Service (LOS) "A" or "B" with each intersection having less than 13 seconds of average vehicle delay during the PM peak hour. The one signalized intersection at Whitman Dr/College Avenue functions with LOS "C" which is also acceptable. The capacity analysis worksheets are included in **Appendix 4**.

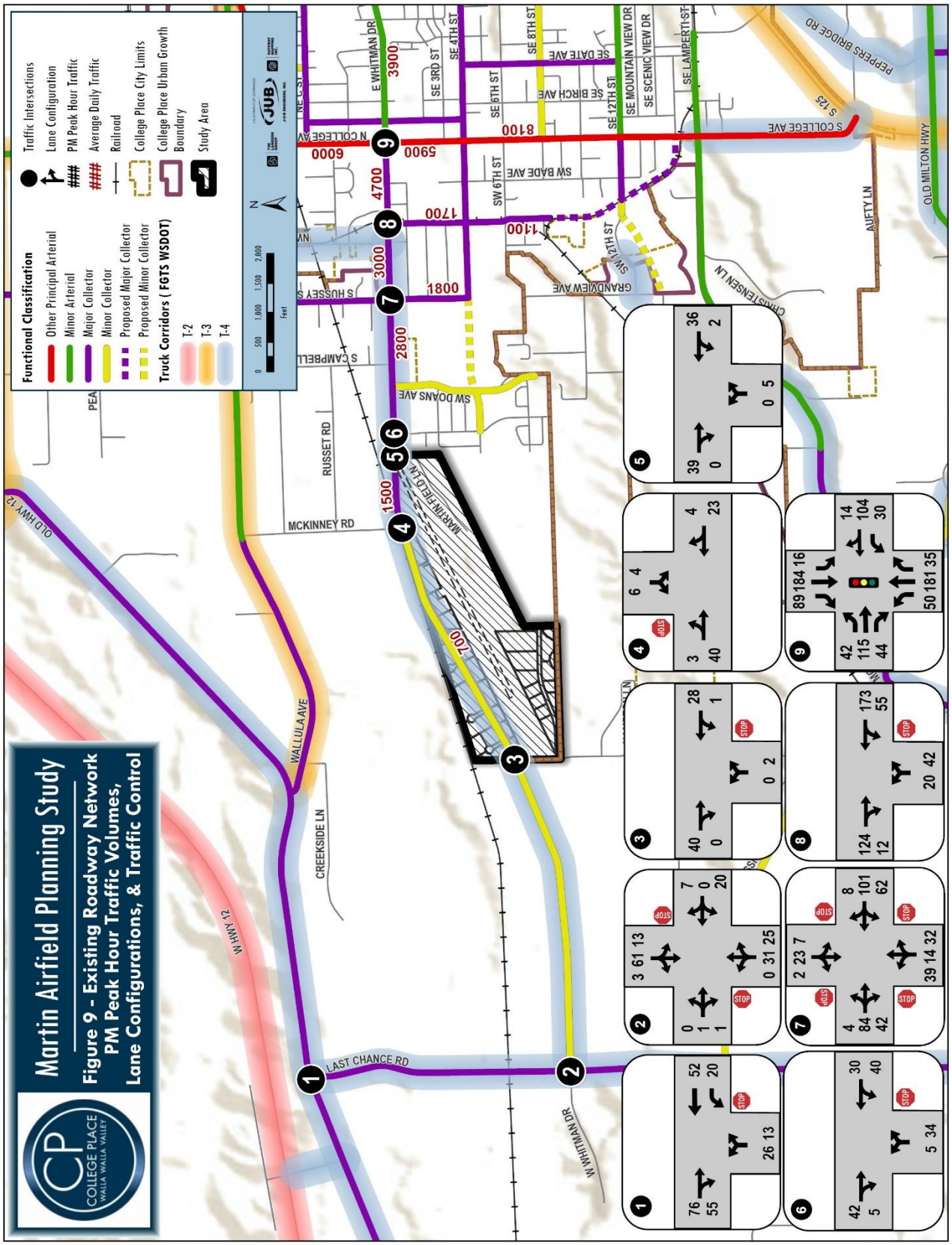

Martin Airfield Planning Study
Figure 9 - Existing Roadway Network
PM Peak Hour Traffic Volumes,
Lane Configurations, & Traffic Control
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Truck Corridors (FGTS WSDOT)
T-2
T-3
T-4
Traffic Intersections
Lane Configuration
PM Peak Hour Traffic
Average Daily Traffic
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
Feet
LAST CHANCE RD
MCKINNEY RD
RUSSET RD
WALLULA AVE
CREEKSIDE LN
MARIN FIELD LN
SW DOANS AVE
S CAMPBELL
S HUSSEY S
E WHITMAN DR
W WHITMAN DR
N COLLEGE AVE
S COLLEGE AVE
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE 12TH ST
SE DATE AVE
SE BIRCH AVE
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
SW 6TH ST
SW BADE AVE
SW 12TH ST
GRANDVIEW AVE
CHRISTENSEN LN
AUETY LN
PEPPERS BRIDGE RD
OLD MILTON HWY
OLD HWY 12
W HWY 12
6000
5900
8100
4700
1700
1100
3900
3000
1800
2800
1500
700

Table 3 Existing Transportation Network

Roadway	Functional Classification	Roadway Characteristics	Posted Speed
Whitman Drive *	**Major Collector east of McKinney Rd, Minor Collector west of McKinney Rd**	**College to Academy = ~ 36' wide with two lanes, allows parking has sidewalk on north and most of south. Academy to Martin Field Lane is ~30' wide with 2 lanes and asphalt path on south side. West of Martin Field Lane has 2 12' lanes with 4' shoulders and a separated concrete pathway on south side.**	**25 MPH College to Academy,30 MPH to Martin Field, 35 MPH to McKinney, 50 MPH west of McKinney**
Old US 12 *	Major Collector	two 12' lanes and 6' - 8' shoulders, turn lanes at most intersections.	50 MPH
Last Chance Road *	Major Collector	10'-12' lanes with minimal gravel shoulders. Has weight restrictions on a bridge.	Not posted
Hampton Lane *	**Local street**	**~20' wide with no pavement markings**	**Not posted**
McKinney Road *	Local street	~20' wide with no pavement markings, minimal gravel shoulders	25 MPH
Martin Field Lane	Local street	18' - 20' with no pavement markings	Not posted
Homestead Ave	**Local street**	**~22' - 36' wide no pavement markings, allows parking in some places, sidewalk on west side.**	**25 MPH**
Academy Street	**Major Collector**	**South of Whitman has ~36' wide with 2 lanes and a buffered two-directional bike lane on the west side, sidewalks on both sides and school zone. North of Whitman is ~22' with no pavement markings or sidewalks.**	**25 MPH, with 20 MPH school zone south of Whitman**
Davis Avenue	**Major Collector**	**~30' - 36' wide with no pavement markings, sidewalk on the east side.**	**Not posted**
College Avenue	**Principal Arterial**	**~36' wide with 4' painted median in places, allows parking in places, sidewalks on both sides, has pedestrian crossings**	**25 MPH**

City roadways are indicated in **bold** text, county roadways are marked with an (*), privately owned roadways are in regular text. Roadways that are **bold** and have an (*) are both city/county owned roadways.

Table 4 Summary of Existing Delay/LOS

Intersection	2024 Existing Delay (seconds)/ Level of Service	
	Overall Intersection	Worst Movement
Old US 12/Last Chance	*	NB--9.7/A
Whitman/Last Chance	*	WB--9.4/A
Whitman/Hampton	*	NB--8.5/A
Whitman/McKinney	*	SB--8.7/A
Whitman/Martin Field	*	NB--8.5/A
Whitman/Homestead	*	NB--8.9/A
Whitman/Hussey	*	SB--12.5/B
Whitman/Davis	*	NB--10.6/B
Whitman/College	23.8/C	WB--50.1/D

Legend
EB = Eastbound, WB = Westbound NB = Northbound, SB = Southbound
32.6/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled

Rail

The study area is immediately adjacent to a rail line owned by Columbia Walla Walla (CWW) Railroad. At this time, no rail spurs exist within the study area. No additional crossings or improvements are planned for the railroad. Two crossings exist near the study area at Last Chance Road and McKinney Road, but fall outside of the study area.

Other Modes

Valley Transit provides fixed-route bus services in the Walla Walla Valley, with two College Place routes. The College Place Circulator, Route 2, provides the closest service to Martin Field, with half-hour service throughout the day as far west on Whitman Drive as Academy Way. Existing sidewalks and pathways in the study area were described above in the description of the street network.

Utility Availability

The Utility Availability section will describe the existing utilities and capacities in and near the study area. Research was completed by coordinating directly with utility providers, reviewing online mapping, and researching existing system plans. The summary below is of the utility availability and whether additional coordination and/or expansion may be required/planned for future development.

Information reported in this Feasibility Study was sourced from several planning documents from the City of College Place, including:

- *City of College Place Comprehensive Water System Plan Update*, prepared by RH2 Engineering, Inc., December 2021.
- *City of College Place General Sewer Plan*, prepared by J-U-B ENGINEERS, Inc., March 2022.
- *City of College Place Wastewater Treatment Facility Plan*, prepared by J-U-B ENGINEERS, Inc., September 2018.
- *Technical Memorandum: Reservoir No. 4 Storage Capacity Evaluation*, prepared by RH2 Engineering, Inc., August 2023.

Sanitary Sewer Service

Existing on-site sewage systems (OSS) or septic systems serve existing users within the Martin Airfield study area. The Walla Walla County Health District (WWCHD) is the primary one responsible for permitting and policing residential and small-flow commercial discharges using OSS within the city's urban growth area (UGA).

The City of College Place owns a sanitary sewer collection system and Wastewater Treatment Plant (WWTP) that serves properties within the City limits and a neighboring Walla Walla Housing Authority property. Jacobs has been contract operating the collection system and WWTP facilities since April 2016.

Sanitary sewage generated in the City is collected and transported to the WWTP via gravity collection sewers and pump stations. The City's public collection system has expanded from an initial series of pipelines serving the old downtown area to a system containing over 40 miles of gravity pipelines, 960 manholes, and 5 active pumping stations providing public sanitary sewer service to a residential population of approximately 9,780. The total area that can be provided with public sanitary sewer service totals approximately 1,907 acres or about 3.0 square miles. The existing wastewater collection system consists of gravity pipelines ranging in size from 6 inches in diameter up to 30 inches in diameter, of which a majority are over 30 years old.

The City's existing collection system extends to the eastern boundary of the study area. The City's Sewer Basin B, adjacent to the east of the study area, consists of existing 8-inch collector piping that serves the Homestead Village residential development. Sewer Basin B flows are collected at an existing pump station (Lift Station No. 3) at the west end of SW 4th Street, and then pumped to the east along SW 4th Street. Existing 8-inch collector pipe terminates at the eastern boundary of the study area at SW 4th Street and SW Virginia Street. A preliminary analysis of the Martin Airfield study area was conducted in the City's 2022 General Sewer Plan (GSP). The preliminary analysis indicated the Martin Airfield study area would require new infrastructure to be served by gravity flow to a low point to the southwest. Later in this report, the buildout infrastructure analysis will evaluate the optimal location, depth, and capacity required to serve the study area.

The City's activated sludge WWTP is located approximately one mile southwest of city limits, and approximately 5,000 feet south of Martin Airfield. The WWTP currently discharges to a land treatment system during the critical periods (May through October) and to Garrison Creek during the non-critical periods (November through April). The City's WWTP operates under National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit No. WA-0020656. The permit was effective on March 1, 2014, and expired on February 28, 2019, the City is currently working with the Department of Ecology to update the permit. The existing NPDES permit has the following limitations:

Table 5 NPDES Permit Limitations

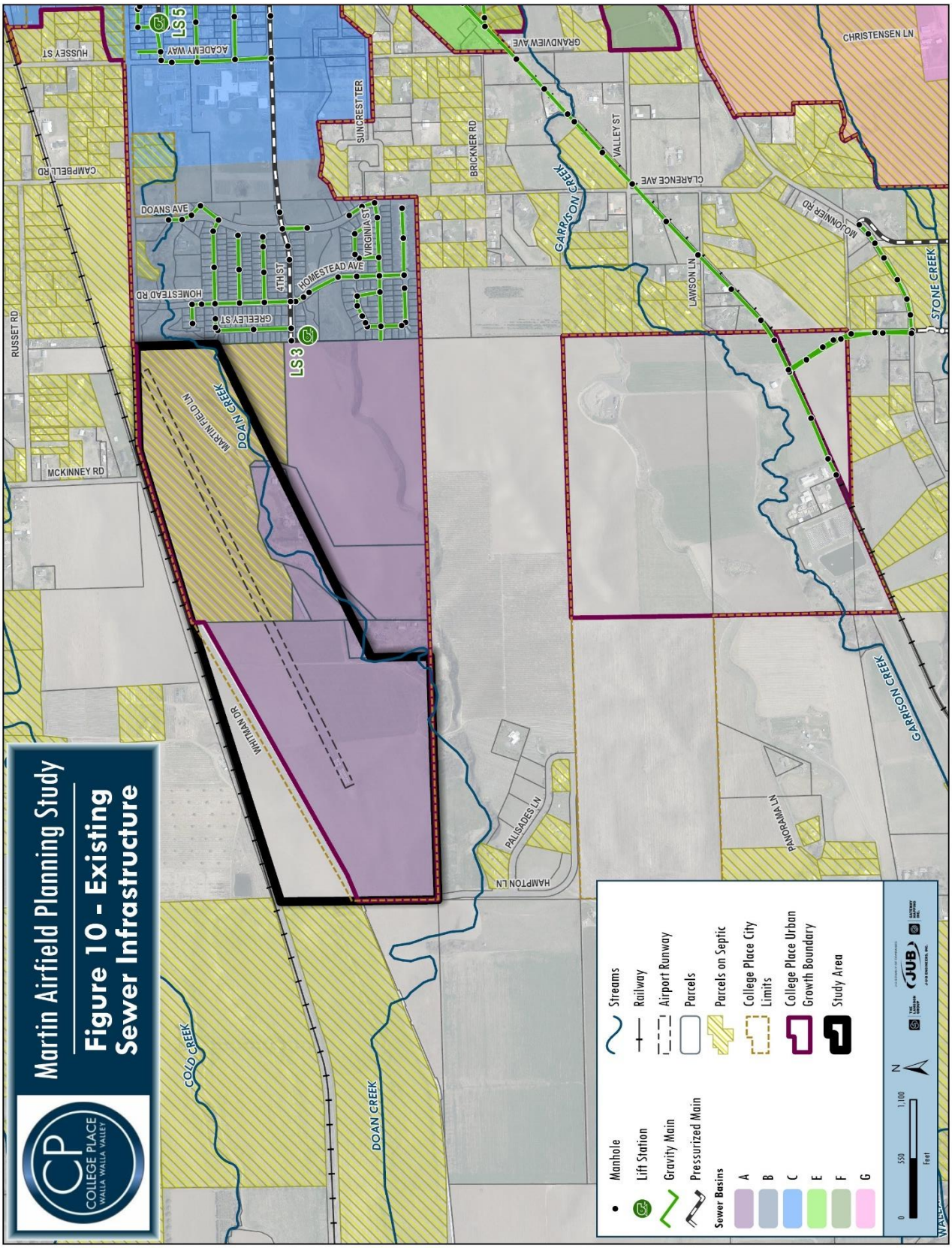
Category	Limit
Annual Average Flow	1.5 MGD
Maximum Month Design Flow	1.65 MGD
Peak Instantaneous Design Flow	5.7 MGD
Irrigation Discharge for Maximum Month	1.65 MGD
BOD_5 Influent Loading for Maximum Month	4,500 lb/day
TSS Influent Loading for Maximum Month	3,400 lb/day
Influent Ammonia-nitrogen Max Month	500 lb/day
Design Population Equivalents (People)	11,813

The City's 2018 Wastewater Treatment Plant Facility Plan (Facility Plan) has the following flows and loads (from 2015 to 2016):

Table 6 WTP Flows and Loads (2015 to 2016)

Category	Limit
Maximum Month Flow	1.55 MGD
Peak Instantaneous Flow	3.16 MGD
BOD_5 Influent Loading for Maximum Month	1,997 lb/day
TSS Influent Loading for Maximum Month	2,086 lb/day

Existing sanitary sewer infrastructure can be seen on the exhibit below.


Martin Airfield Planning Study
Figure 10 - Existing Sewer Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
LS 5
LS 3
ACADEMY WAY
HUSSEY ST
CAMPBELL RD
RUSSET RD
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
CHRISTENSEN LN
MCDONNIER RD
STONE CREEK
GARRISON CREEK
LAWSON LN
DOANS AVE
VIRGINIA ST
4TH ST
HOMESTEAD AVE
HOMESTEAD RD
GREELEY ST
MARTIN FIELD LN
DOAN CREEK
MCKINNEY RD
WHITMAN DR
COLD CREEK
PALISADES LN
HAMPTON LN
PANORAMA LN
Manhole
Lift Station
Gravity Main
Pressurized Main
Sewer Basins
A
B
C
E
F
G
Streams
Railway
Airport Runway
Parcels
Parcels on Septic
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
550
1,100
Feet
N

Industrial Wastewater Service

In accordance with the City's 2018 Wastewater Treatment Plant Facility Plan (Facility Plan); the City does not currently have any significant industrial users (SIUs) that are permitted with the Department of Ecology. Additionally, there is currently no separate industrial wastewater collection system in the City to convey flows to the Wastewater Treatment Plant (WWTP). The Facility Plan did not consider additions of any SIUs in the 20-year planning period and assumed the growth of the WWTP demands to match the general service population growth rate. The impact of the addition of an SIU to the City's wastewater collection system and WWTP will require careful evaluation and planning as the flows and loads of industrial users vary based on the proposed industry.

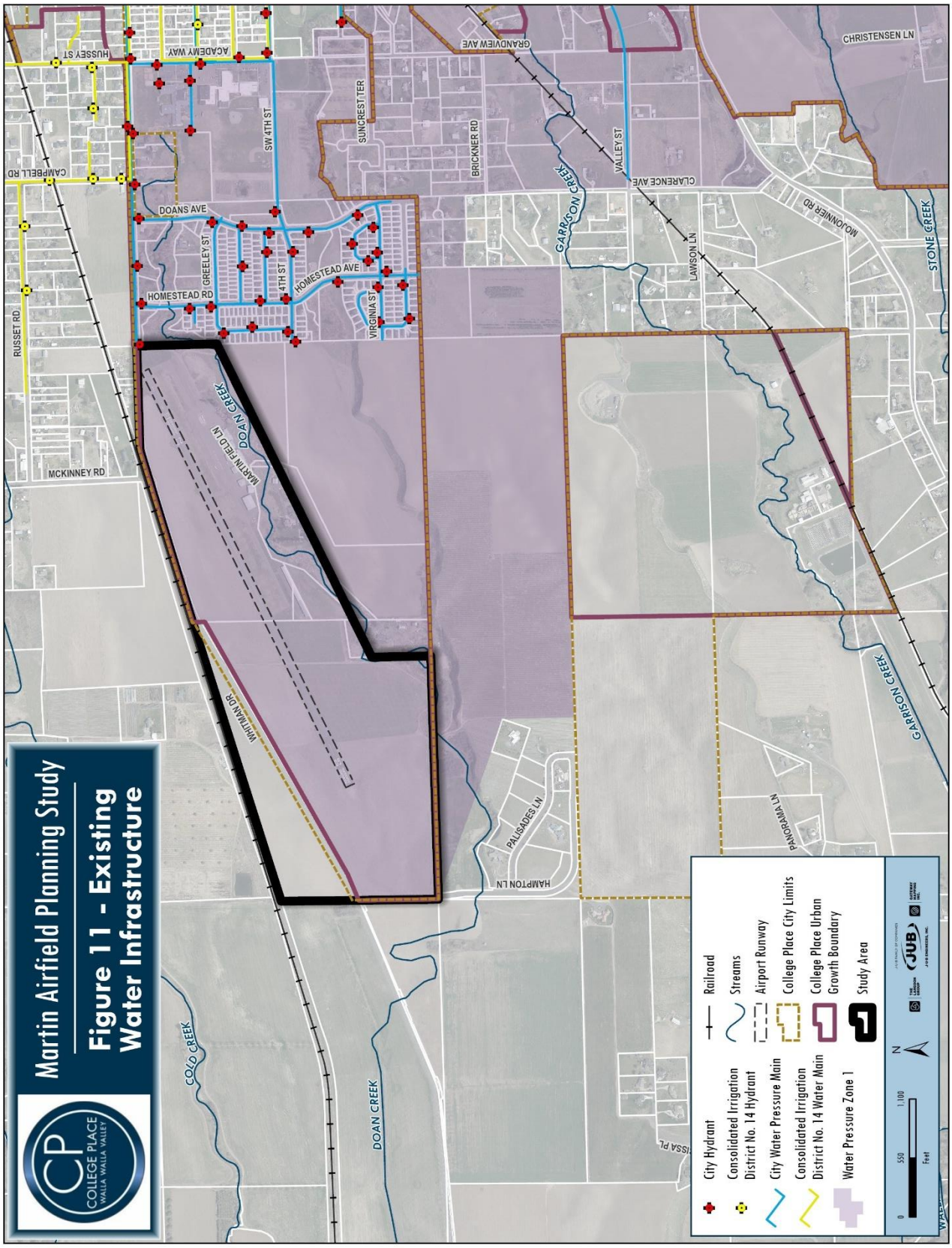
Potable Water Service

Privately owned wells currently serve the airport and residences in the study area. The nearest publicly owned water system, City of College Place, is adjacent to the study area. The College Place Water Department, public water system (PWS) ID 14050K, is a group A community water system publicly owned and managed by the City of College Place. As reported in the 2021 Comprehensive Water System Plan (WSP), the City provides water service to approximately 3,639 customer connections within the City's water service area. The City limits encompass approximately 3.0 square miles, and the existing retail water service area is approximately 3.6 square miles. In accordance with the WSP, in 2019 the system served a population of 8,302 residents.

The City's system includes three pressure zones (Zone 1, 2, and 3), four wells (Wells No. 2, 3, 4, and 6), three reservoirs (Reservoir No. 1, 2, and 3), one booster station (East Side Booster), and various pressure reducing valves. In addition to the City's water system, there are several other water purveyors within the City limits and surrounding areas that the City has intertie agreements with. The City's system contains over 48 miles of water main, ranging in size from 2 inches in diameter to 24 inches in diameter. Approximately 68% of all distribution piping is either 8-inch or 12-inch pipe.

In accordance with the WSP, the Martin Airfield study area partially lies within the City's retail service area and lies fully within the City's future service area. The study area is within the Zone 1 pressure zone, approximately ranging in elevation from 695 feet to 790 feet. The Zone 1 pressure zone serves elevations lower than 935 feet in elevation and is served by Wells No. 3 (2,400 gpm), 4 (1,700 gpm), and 6 (2,750 gpm) for a total capacity of 6,850 gpm. Well No. 2 (1,500 gpm) is an emergency back-up well only. Reservoir No. 1 provides storage for Zone 1, and is a 500,000-gallon elevated steel multi-column tank. The nearest waterlines are east of the study area, see Figure 11. The City's existing 12-inch water mains terminate at the west end of SW 4th Street and at the northeast study area boundary on W Whitman Drive. Additionally, there is existing 8-inch distribution pipe at the intersection of SW Virginia Street and SW Alicia Loop, approximately 100 feet east of the study area boundary.

Existing potable water infrastructure can be seen on the exhibit below Figure 10.


Martin Airfield Planning Study
Figure 11 - Existing Water Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
City Hydrant
Consolidated Irrigation District No. 14 Hydrant
City Water Pressure Main
Consolidated Irrigation District No. 14 Water Main
Water Pressure Zone 1
Railroad
Streams
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
550
1,100
Feet
N
JUB
DOAN CREEK
COLD CREEK
GARRISON CREEK
STONE CREEK
MARTIN FIELD LN
WHITMAN DR
MCKINNEY RD
RUSSET RD
CAMPBELL RD
HUSSEY ST
ACADEMY WAY
SW 4TH ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
CHRISTENSEN LN
MOUNTAIN RD
LAWSON LN
DOANS AVE
GREELEY ST
4TH ST
HOMESTEAD AVE
HOMESTEAD RD
VIRGINIA ST
PALISADES LN
HAMPTON LN
PANORAMA LN

Surface and Storm Water Management

This area has no known formal drainage facilities or flooding issues. The area south of Martin Airfield generally drains to Doan Creek, which runs south of the study area and flows northeast to southwest before eventually joining Mill Creek. Doan Creek also contains some wetlands, as noted previously. High groundwater is assumed to be present in low-lying areas near the creek. The areas north of Martin Airfield drain east to west and infiltrate runoff in low-lying areas onsite, such as the ditches associated with Whitman Drive, the railroad, and Hampton Lane, which forms the western border.

Other Utilities

Power

Columbia Rural Electric Association (Columbia REA) provides power to Martin Airfield with underground, 3-phase available. The study area is located off an express feed on the south side of Whitman Drive that can provide ample power to future development. Pacific Power can also provide service with both single-phase and 3-phase power.

Natural Gas

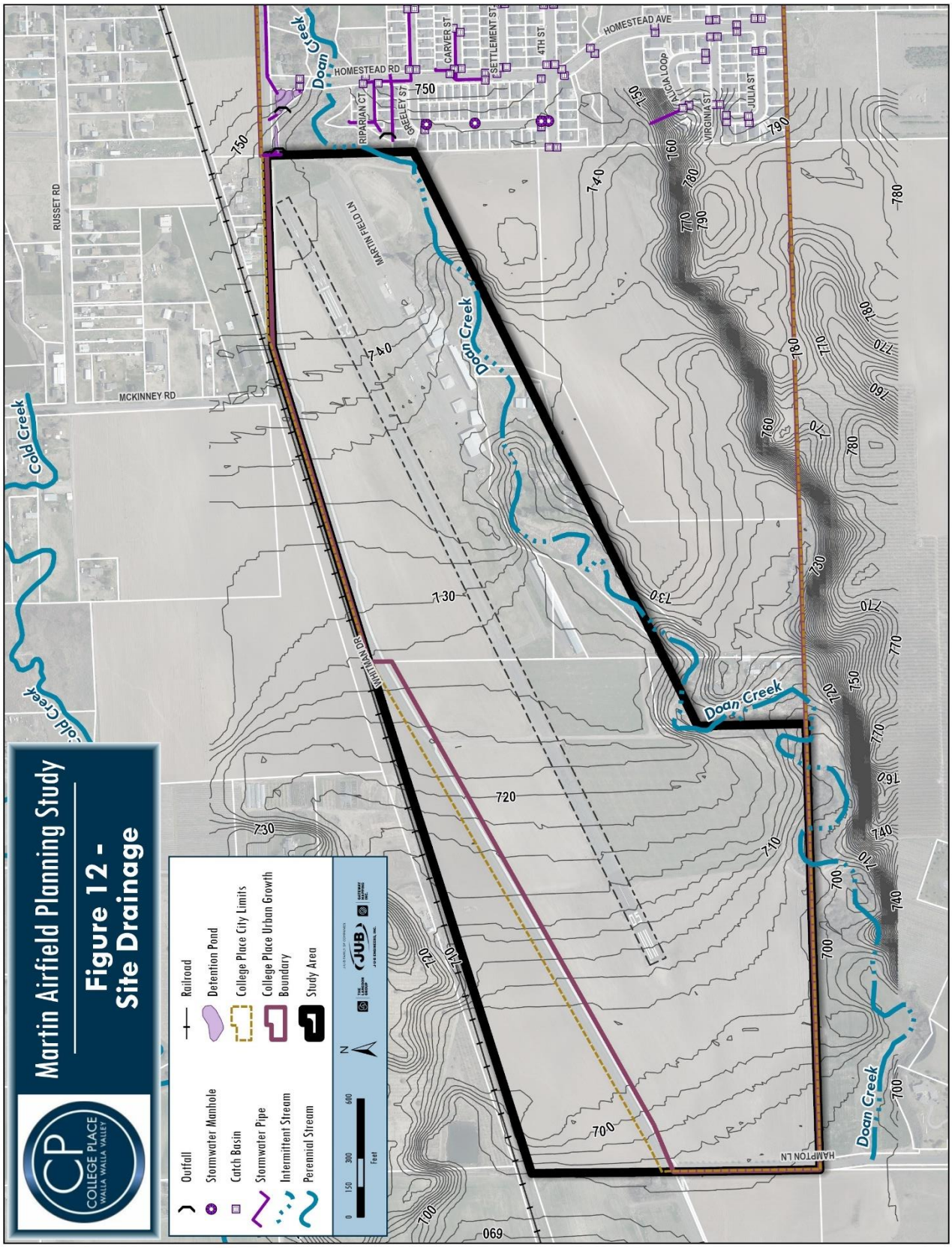
Cascade Natural Cas Corporation (CNGC) has gas service to the Martin Field hangar buildings, including a recent extension west to serve all of the eastern airport building cluster. This 2-inch line could be extended as needed to serve future needs in some capacity, but the 2-inch line is not looped and its capacity is currently limited. There are looping and line upsizing options available if sufficient need is anticipated.

Telecommunications and Fiber Optic Communication

There are a variety of telecommunication services available in the area, including national satellite carriers. Century Link has cable internet immediately available to the site and Spectrum appears to have good coverage nearby, as well as PocketiNet, Columbia iConnect, and 360 Communications.

Irrigation

Irrigation water from an irrigation district or the City is not currently available at the site, but there appear to be five wells and a surface diversion off of Doan Creek within or near the study area that may be tied to the study parcels. The assessor lists all of the parcels except the hangar parcel as “irrigated” in various forms. One of the water rights is listed to Martin H. L. and is for 400 gpm of irrigation over 60 acres, so this water right could potentially be transferred to a new area of use for irrigation of proposed landscape areas. Additionally, these water rights should have existing pumps (or a diversion structure) that could be put into use with varying levels of improvement required.


Martin Airfield Planning Study
Figure 12 -
Site Drainage
COLLEGE PLACE
WALLA WALLA VALLEY
Outfall
Stormwater Manhole
Catch Basin
Stormwater Pipe
Intermittent Stream
Perennial Stream
Railroad
Detention Pond
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
Doan Creek
Cold Creek
HOMESTEAD RD
HOMESTEAD AVE
RUSSET RD
MCKINNEY RD
MARTIN FIELD LN
HAMPTON LN
RIPARIAN CT
GREELEY ST
CARVER ST
SETTLEMENT ST
4TH ST
ALICIA LOOP
VIRGINIA ST
JULIA ST

Economic Analysis

The Metts Group conducted an Economic Analysis for the Feasibility Study. The following is a summary of the results. The full report can be found in Appendix 5.

The Martin Airfield Economic Feasibility analysis focuses on the potential for growth and development at Martin Airfield. College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.

Jobs

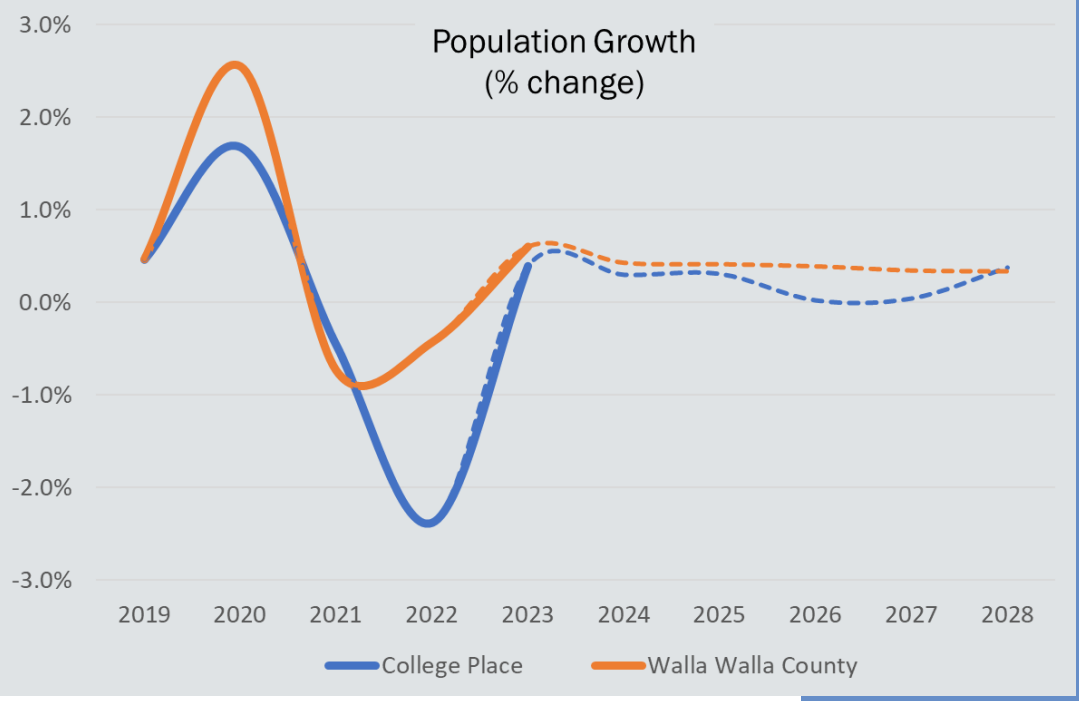
3,900

14% ⇧

(2018-2023)

Largest Contributing Industries:

- Government (Higher Ed)
- Retail
- Accom. & Food Svcs
- Health Care
- Finance & Insurance



A target industry analysis was conducted in order to narrow down the types of uses most suitable for the project site. The target industry analysis was assessed by four critical factors and conducted at the county level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

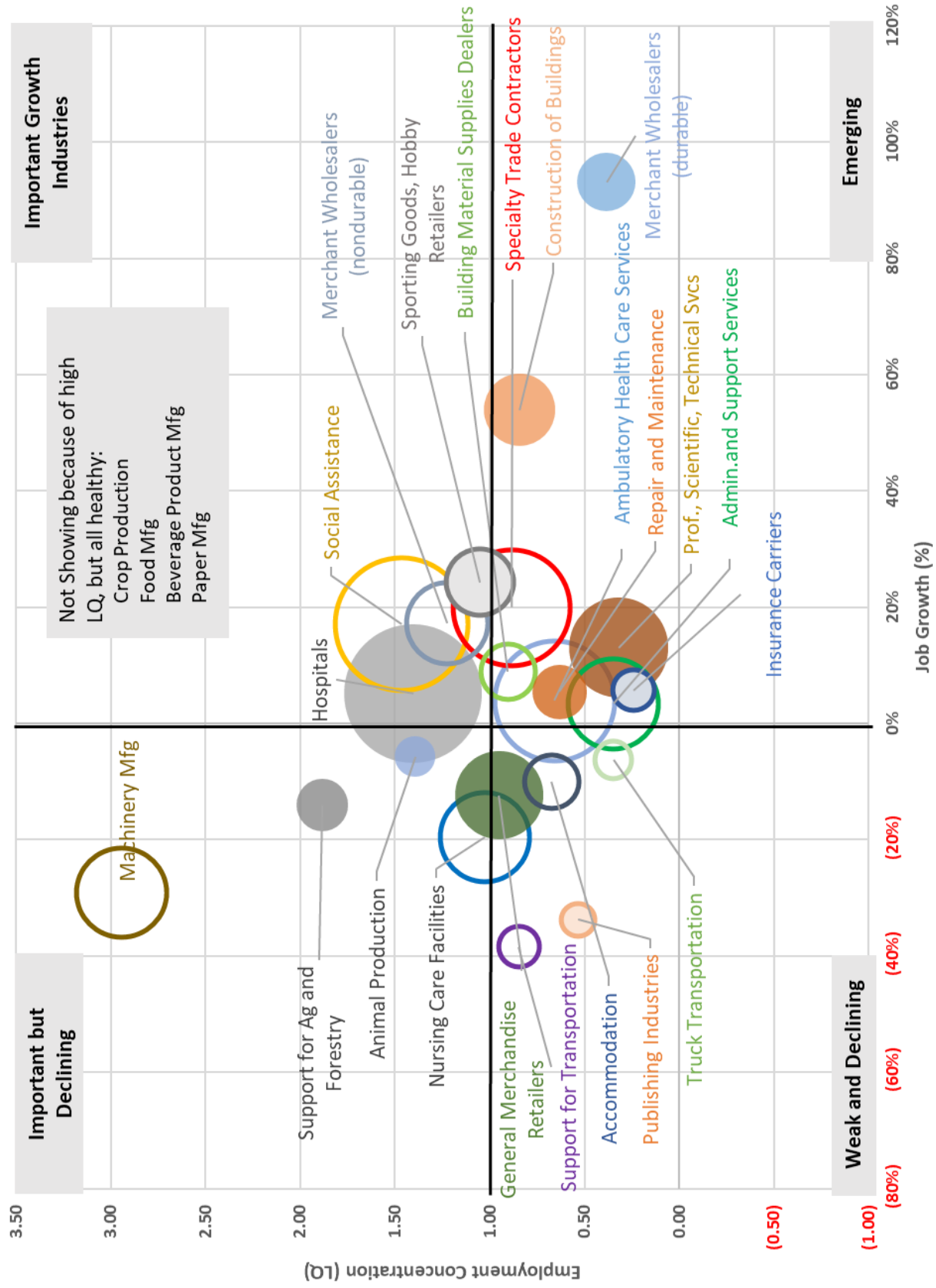
Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 marks but showing job loss, were deemed "Important and Requiring Attention," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Key industries identified within the region that exhibit both strength and growth potential include crop production, food and beverage manufacturing, hospitals, social assistance, and merchant wholesalers, while emerging industries such as specialty trade contractors, construction, professional services, and insurance carriers show promise. On the other hand, sectors like general merchandise retail, truck transportation, publishing, and accommodations are on the decline.


Important Growth Industries
Emerging
Important but Declining
Weak and Declining
Not Showing because of high LQ, but all healthy:
Crop Production
Food Mfg
Beverage Product Mfg
Paper Mfg
Machinery Mfg
Support for Ag and Forestry
Animal Production
Nursing Care Facilities
General Merchandise Retailers
Support for Transportation
Accommodation
Publishing Industries
Truck Transportation
Insurance Carriers
Admin.and Support Services
Prof., Scientific, Technical Svcs
Repair and Maintenance
Ambulatory Health Care Services
Construction of Buildings
Specialty Trade Contractors
Building Material Supplies Dealers
Sporting Goods, Hobby Retailers
Merchant Wholesalers (nondurable)
Social Assistance
Hospitals
Merchant Wholesalers (durable)
Employment Concentration (LQ)
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
(0.50)
(1.00)
Job Growth (%)
120%
100%
80%
60%
40%
20%
0%
(20%)
(40%)
(60%)
(80%)

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

The following table outlines the key industries or areas of the economy that are central to the operations and growth of major area employers. These sectors typically provide the foundation for job creation, innovation, and economic stability, influencing the competitive advantages of businesses within them.

Table 7 Major Employers

Key Sectors Driving Major Employers' Success
Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

The commercial real estate market is healthy across the region, with a current industrial space inventory of 4.6 million square feet, a low vacancy rate of 5.6%, and stable rental rates around $8.71 per square foot. Future development includes the construction of 223,720 square feet of industrial space, slated for completion by 2025. Approximately 3,070 acres of industrial land are available in the region. A list of competing sites is summarized in the following table.

Table 8 Competing Sites

Address	City	Year Built	Bldg. SF	Acres (Land Only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Martin Airfield is viewed as a prime location for a variety of potential uses, including light industrial development such as wholesaling, truck transportation, and food manufacturing, as well as aerospace-related services, aircraft maintenance, and testing. Emerging technologies like sustainable aviation fuels, hydrogen research, and advanced air mobility offer further opportunities for innovation. The site's strategic location also lends itself to agricultural technology advancements, including an ag-logistics testing hub. The site has the potential for a logistics hub to ease congestion from Seattle and Tacoma ports. However, infrastructure improvements will be essential to support future development and maximize job creation and economic impact, as outlined in the main report.

Potential Light Industrial Uses

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
    - R&D or Professional & Technical Services
    - Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
    - Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

The following recommendations are designed to promote sustainable long-term growth and development at Martin Airfield, capitalizing on its unique assets and strategic location to drive economic expansion and foster collaborative opportunities across public and private sectors.

- **Strategic Development**: Focus on aligning industry recruitment efforts with current market trends and growth sectors.
- **Leveraging Assets**: Capitalize on Martin Airfield's strategic proximity to major transportation networks, including highways, rail, and ports, as well as its location within an Opportunity Zone.
- **Public-Private Partnerships**: Engage with both public and private stakeholders to foster collaboration and support long-term growth and development.

DEVELOPMENT CONSIDERATIONS

This section outlines the essential components required to fully develop the study area, including necessary improvements to support its growth. It covers the conceptual layout, existing and proposed transportation and utility networks, and cost estimates. These elements are crucial for ensuring the area is properly equipped for future development.

The Development Considerations are arranged in the following Sections:

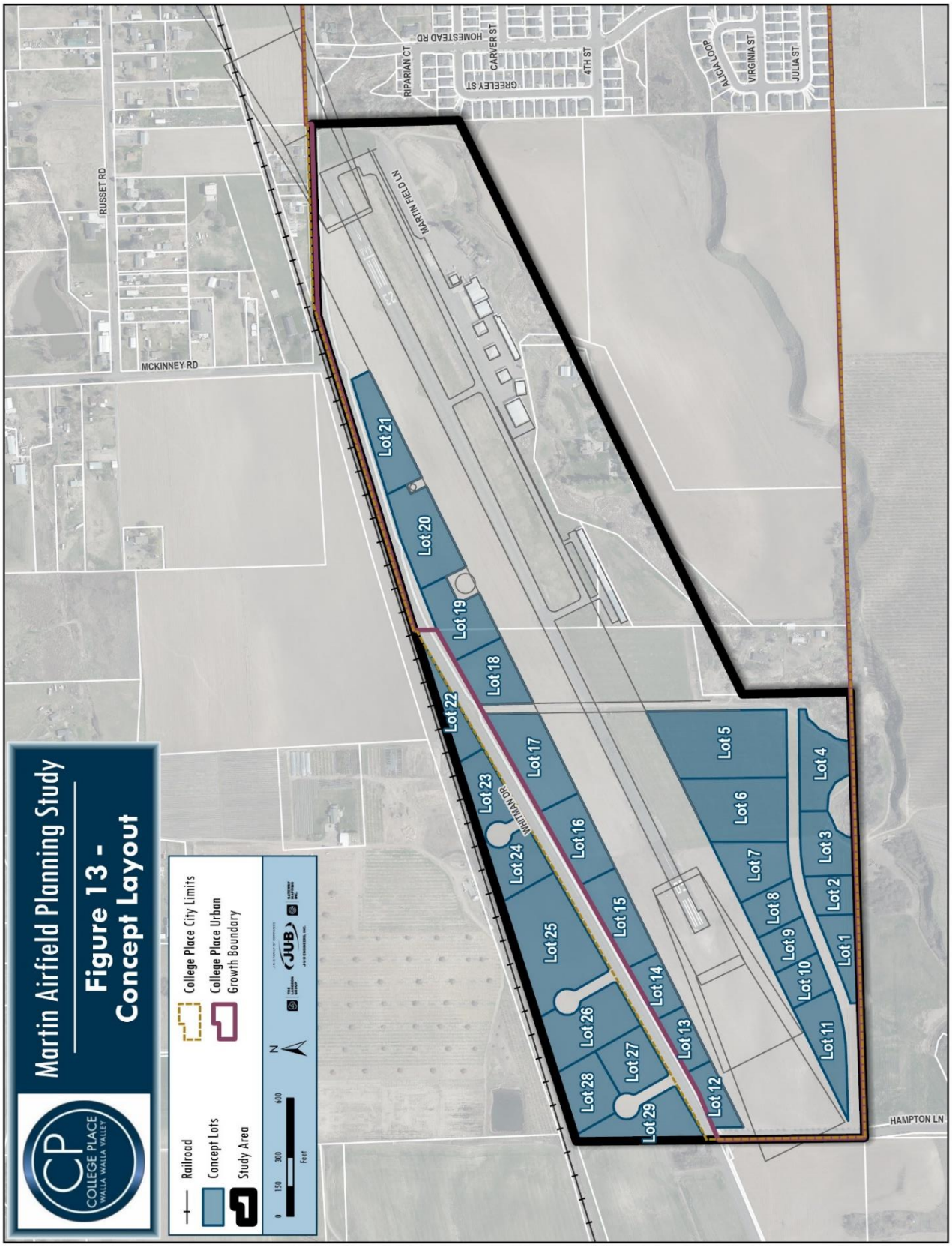
- Conceptual Layout
- Transportation Facilities
- Rail
- Earthwork
- Utility Requirements
- Preliminary Cost Estimate

Conceptual Layout

The Martin Airfield Study Area are designed to support medium and large industrial users, with parcel sizes ranging from approximately 1 to 5 acres. The preliminary lot layout includes 29 lots in total. 18 lots with access from Whitman Drive use cul-de-sacs or shared driveways to limit the number of direct access points to Whitman Drive. The remaining 11 lots will have access off of Hampton Lane with a future access point crossing Doan's Creek to the east to the residentially zoned land. The estimated roadway improvement costs for roadway, grading, pavement, curb and gutter, streetlights, and storm drainage systems is located **Appendix 6**.

The proposed lot layout is preliminary and flexible, allowing adjustments to meet the needs of future developers. As development progresses, existing parcel boundaries will be reviewed, and modifications such as boundary line adjustments (BLAs), lot consolidations (LCs), or preliminary plat may be required to accommodate different lot sizes. The preliminary lot layout was informed by a site analysis of existing conditions, input from the City of College Place and a general understanding of the project area's needs. Rail spurs are not proposed at this time, but can be incorporated into the concept layout if there is a need from a future developer.

The exhibit below depicts the preliminary lot layout.


Martin Airfield Planning Study
Figure 13 - Concept Layout
COLLEGE PLACE
WALLA WALLA VALLEY
Railroad
Concept Lots
Study Area
College Place City Limits
College Place Urban Growth Boundary
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
MARTIN FIELD LN
RIPARIAN CT
HOMESTEAD RD
CARVER ST
GREELEY ST
4TH ST
ALDA LOOP
VIRGINIA ST
JULIA ST
WHITMAN DR
HAMPTON LN
Lot 1
Lot 2
Lot 3
Lot 4
Lot 5
Lot 6
Lot 7
Lot 8
Lot 9
Lot 10
Lot 11
Lot 12
Lot 13
Lot 14
Lot 15
Lot 16
Lot 17
Lot 18
Lot 19
Lot 20
Lot 21
Lot 22
Lot 23
Lot 24
Lot 25
Lot 26
Lot 27
Lot 28
Lot 29

Transportation Facilities

Planned Internal Roadway Network

As mentioned above, future industrial lots created between Martin Field and the railroad tracks to the north will be served by cul-de-sacs that access Whitman Drive. These cul-de-sacs should meet city standards and should be constructed opposite each other so as to minimize turning conflicts.

Access to lots south of Martin Field will be provided by a new east-west road that will connect to Hampton Lane south of Whitman Drive. A future extension of this new road is planned that would connect to land zoned residential to the east that could give secondary access to the area.

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.

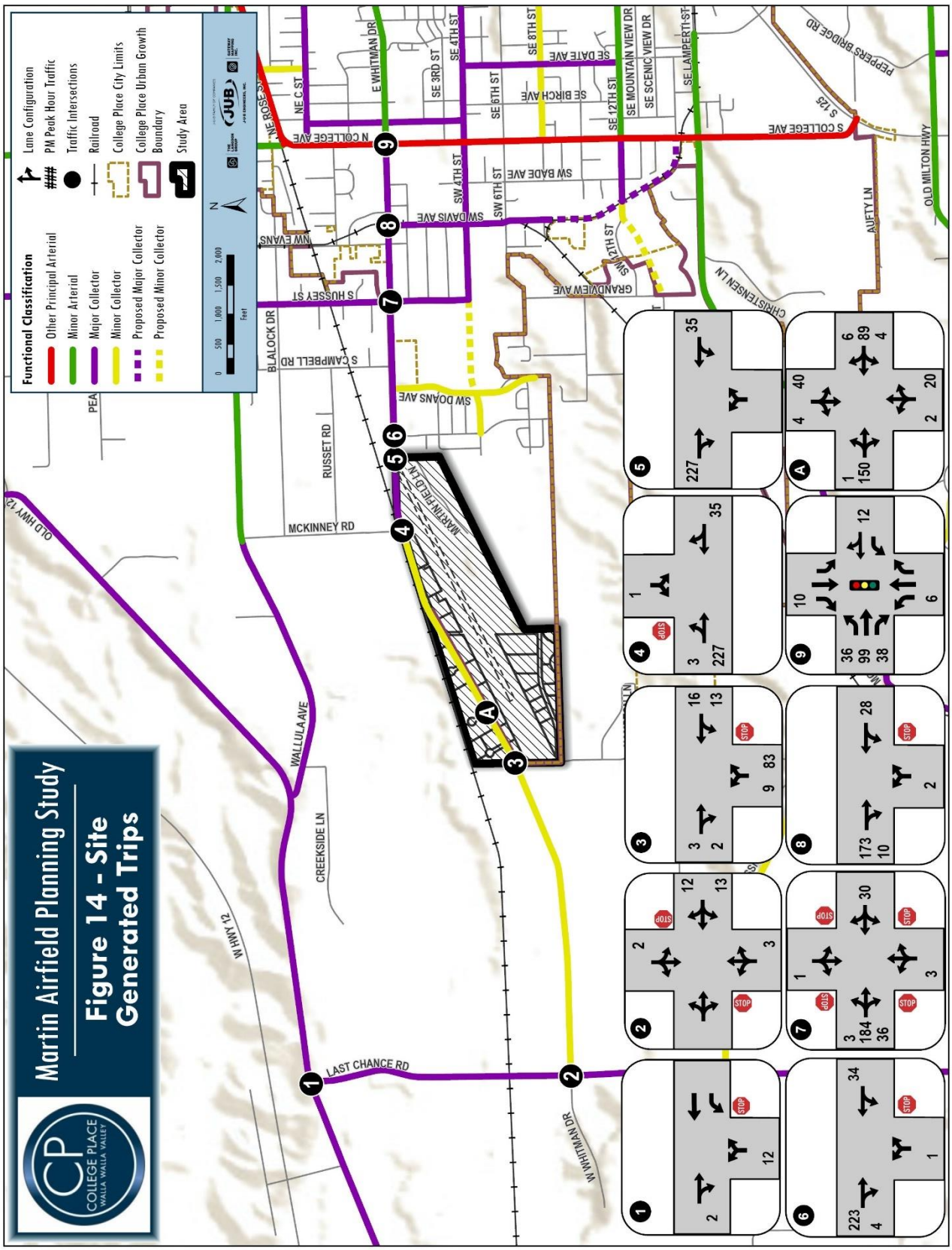
Traffic growth in College Place is typically 1.5% per year. To be conservatively high, a growth rate of 2% per year was assigned to traffic volumes shown in Figure 9 for all study intersections to represent growth occurring in the region that is not within the study for 20-year analysis.

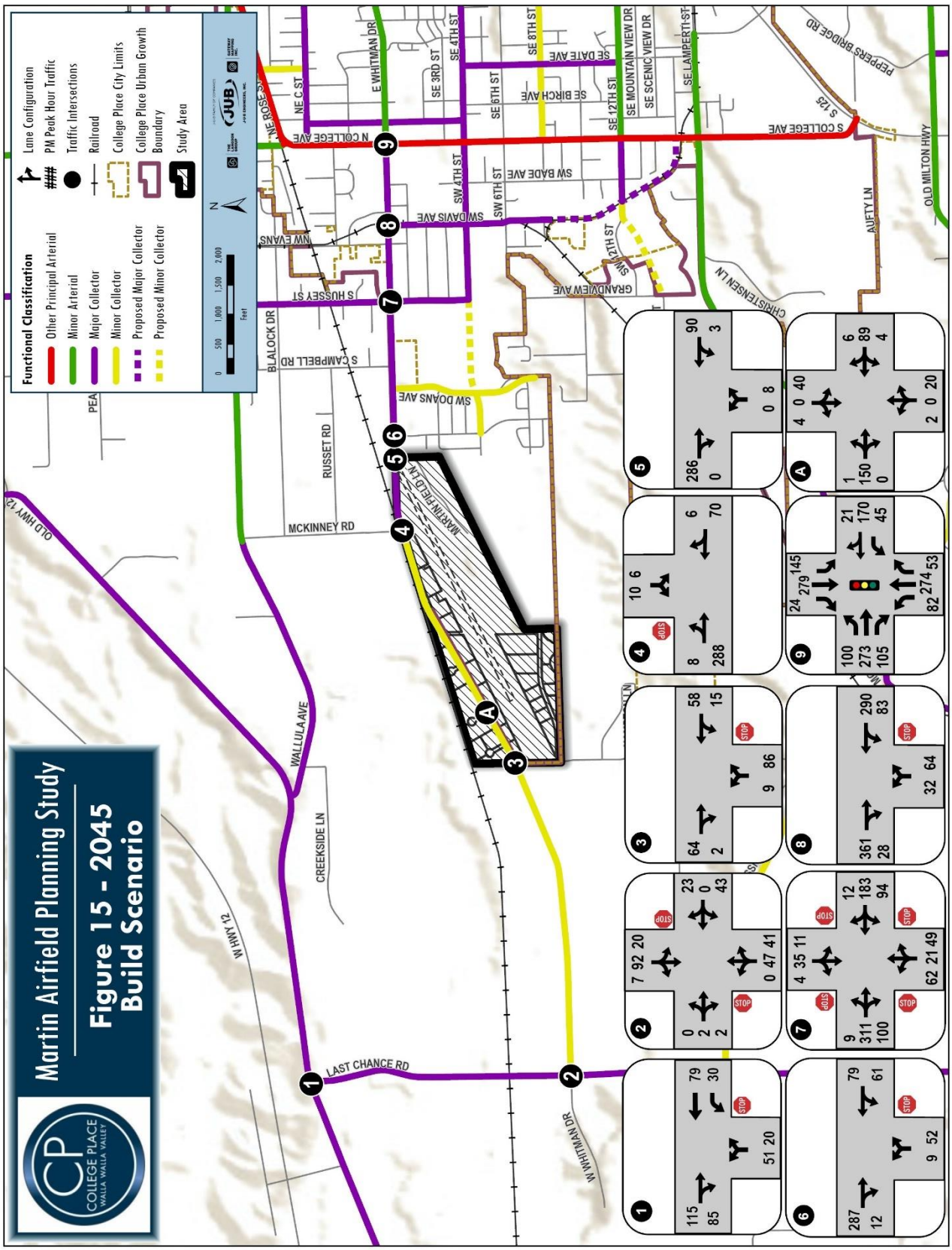
Trip Generation and Trip Distribution

To estimate the new trips that could be added to the transportation network the development concept shown in Figure 13 that shows approximately 59.43 acres of industrial land that could be developed after roads are constructed. The Institute of Transportation Engineers *Trip Generation Manual* 11th Edition was used to estimate the number of trips that could be generated using Land Use 110 General Light Industrial. The fitted curve equation was used and the building size was estimated by using Floor Area Ratio of 40% of the acreage, totaling over 1 million square feet of industrial development. The PM peak hour trips were calculated for four areas, including the worst driveway off of Whitman Drive to be able to ensure that driveways would function acceptably, with the resulting trips shown below.

- Worst Driveway, north side – 51 trips (7 inbound, 44 outbound)
- Worst Driveway, south side – 26 trips (4 inbound, 22 outbound)
- Whitman Drive (includes the worst driveway) – 189 trips (26 inbound, 163 outbound)
- Hampton Drive – 107 trips (15 inbound, 92 outbound)

These trips were added to the roadway network using existing traffic patterns to estimate the percentages of trips throughout the roadway network. This evaluation indicated that approximately 13% of traffic in the Whitman Drive Corridor turned westbound and 87% turned eastbound, which was used for the purposes of this study. The resulting new trips at each study intersection are shown in Figure 14. The new trips were added to the 2045 No-Build Scenario volumes with the resulting Build Scenario volumes shown in Figure 15. Trip Generation and trips for all scenarios at all intersections are included in **Appendix 4**.


Martin Airfield Planning Study
Figure 14 - Site Generated Trips
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Lane Configuration
PM Peak Hour Traffic
Traffic Intersections
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
LAST CHANCE RD
W HWY 12
WALLULA AVE
CREEKSIDE LN
MCKINNEY RD
RUSSET RD
BLALOCK DR
S CAMPBELL RD
S HUSSEY ST
NW EVANS
NE ROSE ST
NE C ST
N COLLEGE AVE
E WHITMAN DR
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE DATE AVE
SE BIRCH AVE
SE 12TH ST
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
S COLLEGE AVE
S 125
PEPPERS BRIDGE RD
OLD MILTON HWY
AUFTY LN
CHRISTENSEN LN
SW 4TH ST
SW 6TH ST
SW 12TH ST
SW DAVIS AVE
SW BADE AVE
GRANDVIEW AVE
SW DOANS AVE
MARTIN FIELD LN
W WHITMAN DR
OLD HWY 12


Martin Airfield Planning Study
Figure 15 - 2045 Build Scenario
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Lane Configuration
PM Peak Hour Traffic
Traffic Intersections
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
LAST CHANCE RD
MCKINNEY RD
RUSSET RD
BLALOCK DR
WALLULA AVE
CREEKSIDE LN
W HWY 12
W WHITMAN DR
OLD HWY 12
MARTIN FIELD LN
S HUSSEY ST
S CAMPBELL RD
SW DOANS AVE
NW EVANS
NE ROSE ST
NE C ST
N COLLEGE AVE
E WHITMAN DR
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE DATE AVE
SE BIRCH AVE
SE 12TH ST
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
S COLLEGE AVE
S 125
PEPPERS BRIDGE RD
OLD MILTON HWY
AUFTY LN
CHRISTENSEN LN
SW 4TH ST
SW 6TH ST
SW DAVIS AVE
SW BADE AVE
SW 12TH ST
GRANDVIEW AVE

Traffic Operations and Mitigation Summary

Capacity analysis of the 2045 No-Build and Build scenarios was performed. A few seconds of delay is observed at each intersection in the No-Build Scenario with two intersections dropping one Level of Service (LOS) and all intersections functioning with acceptable LOS. For the Build Scenario, additional delay is anticipated, with five intersections dropping one LOS, the most notable being the intersection of Whitman/Hussey/Academy which falls to LOS "D", but is still an acceptable LOS. Interestingly, the only signalized intersection of Whitman Drive/College Ave actually improves, which is counter-intuitive, but this is the result of the intersection working more efficiently because of the addition of traffic to movements that were underutilized which influences the average delay. These capacity analysis is summarized in Table 9 with detailed capacity worksheets included in Appendix 4. No mitigation for the purposes of traffic operations is anticipated.

Table 9 Summary of 2045 Delay (seconds)/Level Of Service

Movement	2045 No-Build		2045 Build	
	Overall Intersection	Worst Movement	Overall Intersection	Worst Movement
Old US 12/Last Chance	*	NB--10.5/B	*	NB--10.8/B
Whitman/Last Chance	*	WB--9.9/A	*	WB--10.0/B
Whitman/Hampton	*	NB--8.6/A	*	NB--9.2/A
Whitman/McKinney	*	SB--8.8/A	*	SB--9.7/A
Whitman/Martin Field	*	NB--8.7/A	*	NB--10.2/B
Whitman/Homestead	*	NB--9.3/A	*	NB--11.5/B
Whitman/Hussey/Academy	*	SB--16.2/C	*	NB--17.9/D
Whitman/Davis	*	NB--12.9/B	*	NB--17.4/C
Whitman/College	25.9/C	WB--54.7/D	27.6/C	WB--44.3/D
Whitman/new driveway	N/A	N/A	*	10.9/B

Legend
EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound
25.9/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled Intersections
25.9/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled Intersections

Rail

The study area includes rail; however, it does not encompass rail spurs or connections to the rail, owned by Columbia Walla Railroad. No recommendations are made to extend or develop a spur as part of this study. Any future spur development would be at the discretion of an individual developer seeking rail access for their specific parcel. Existing rail crossings were evaluated based on existing traffic capacity and deemed suitable. No improvements are recommended.

Earthwork

The existing site topography slopes at approximately 1-3% from northeast to southwest and is generally planar. Minimal grading will be required to construct the new access roads and will consist primarily of stripping and removing topsoil and importing crushed rock and pavement. No site mass grading is recommended.

Utility Requirements

Sanitary Sewer Service

For the purposes of this study, it is assumed that the airport will continue being served by the existing privately owned septic system. The infrastructure in this section is specifically sized to serve the lots shown in the concept lot layout, see Figure 15. Additionally, there are known parcels outside of the study area that may be developed in the future, such as the Walla Walla University properties, that would rely on the sanitary sewer infrastructure in this study. The sanitary sewer infrastructure discussed in this section or any previous analysis, did not accommodate any growth outside the study area. Further evaluation of the study area and any growth outside of it will need to be analyzed independently of this study.

Sanitary sewer flows for prospective users include domestic discharges such as onsite toilets, sinks, and floor drains and industrial demands such as process, washdown, or other sewer needs. The Average Daily Flows (ADF) and Peak Hour Flows (PHF) for domestic sanitary sewer flows were estimated based on acreage and unit flows designated in the City's 2022 General Sewer Plan. The General Sewer Plan's domestic sanitary sewer unit demand for Commercial/Light Industrial is 520 gallons per acre per day (GPAD).

The sanitary sewer infrastructure will accommodate the domestic sanitary sewer flows and the industrial sanitary sewer flows anticipated by users in the study area. This is contingent on all industrial wastewater being pretreated within typical sanitary sewer strength before entering the sanitary sewer system. Pretreatment requirements and regulations are provided in Chapter 13.12 of the City's municipal code.

Typically, the industrial sanitary sewer flows are dependent on the type of light industrial facility. Since the exact kinds of facilities that could develop are unknown, the industrial sanitary sewer flows were estimated based on acreage unit flows defined in *Wastewater Engineering: Treatment and Reuse*, Fourth Edition by Metcalf & Eddy. Industrial flows are categorized as either light industrial or medium industrial. Light industrial water demands range from 1,000 to 1,500 GPAD, and medium industrial water demands range from 1,500 to 3,000 GPAD. Industrial wastewater flows are typically no more than 95% of water demands; therefore, light industrial flows range from 950 to 1,425 GPAD and medium industrial flows range from 1,425 to 2,850 GPAD (Metcalf & Eddy, 2003). To be conservative, the highest end of each range was used when estimating flows in the study area. Since the exact location of each type of use within the study area is unknown, a weighted average of the potential industrial sanitary sewer unit flows was determined and applied to all lots within the study area. The estimated industrial sanitary sewer flows by anticipated land use are summarized in Table 9.

Table 9 Industrial Sanitary Sewer Unit Flows

Land Use[1]	Portion of Study Area[1]	Industrial Wastewater Type	Industrial Wastewater Unit Flow (GPAD)	Weighted Industrial Wastewater Unit Flow (GPAD)
Wholesalers	25%	None	0	0.0 GPAD
Truck Transportation	15%	None	0	0.0 GPAD
Manufacturing	20%	Light	1,425	285.0 GPAD
Food Processing	15%	Medium	2,850	427.5 GPAD
Lab & Testing Facilities	10%	Light	1,425	142.5 GPAD
R & D	15%	None	0	0.0 GPAD
Total	**100%**			**855.0 GPAD**

1. Land use determinations in accordance with Figure 13.

The estimated sanitary sewer unit flows are summarized in Table 10 and the estimated sanitary sewer flows per lot are summarized in Table 11.

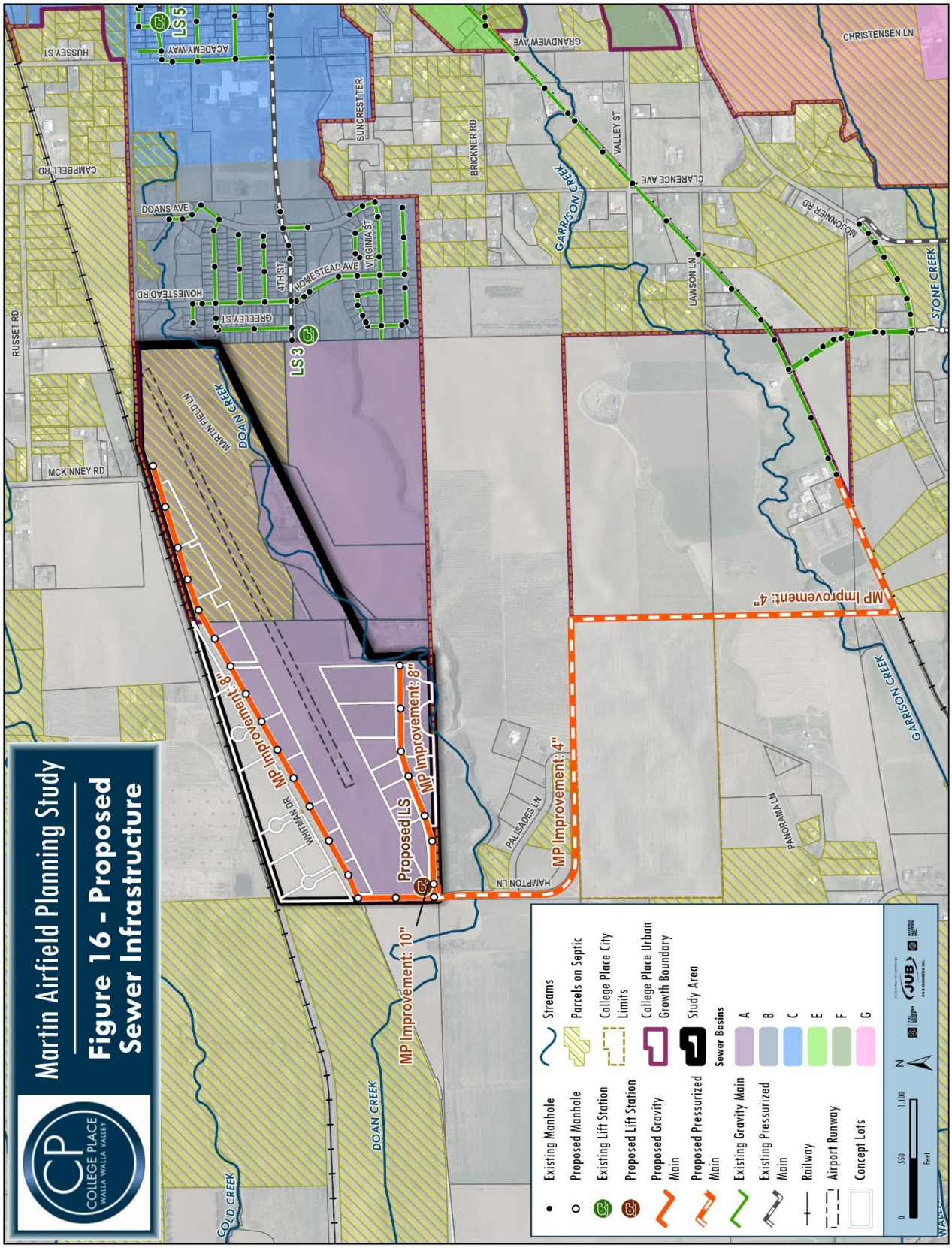
Table 10 Sanitary Sewer Unit Flows

Domestic ADF[1] (GPAD)	Industrial ADF[2] (GPAD)	Total Potable ADF (GPAD)	Total PHF[3] (GPAD)
520.0	855.0	1,375.0	5,362.5

1. Based on Commercial/Light Industrial unit flow of 520 gallons per acre per day (2022 General Sewer Plan).
2. Based on Weighted Industrial Wastewater Unit Flow from Table 9.
3. Based on Peak Hour Flow peaking factor of 3.90 (2022 General Sewer Plan).

Lot	ADF (gpm)[1]	PHF (gpm)[2]	Lot	ADF (gpm)[1]	PHF (gpm)[2]
1	1.27	4.96	**16**	1.92	7.49
2	1.06	4.14	**17**	2.61	10.17
3	1.70	6.63	**18**	1.78	6.93
4	2.04	7.94	**19**	2.00	7.79
5	4.78	18.63	**20**	2.51	9.80
6	3.35	13.08	**21**	1.98	7.71
7	1.88	7.34	**22**	1.30	5.07
8	1.18	4.58	**23**	1.70	6.63
9	1.09	4.25	**24**	1.70	6.63
10	1.02	3.99	**25**	4.76	18.56
11	1.86	7.27	**26**	2.71	10.58
12	1.00	3.91	**27**	1.69	6.60
13	0.97	3.76	**28**	1.83	7.15
14	1.05	4.10	**29**	2.12	8.27
15	1.92	7.49			
			Total	**56.78**	**221.46**

1. Based on Commercial/Light Industrial unit flow of 855 gallons per acre per day (Table 9).
2. Based on Peak Hour Flow peaking factor of 3.90 (2022 General Sewer Plan).


Martin Airfield Planning Study
Figure 16 - Proposed Sewer Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
LS 5
LS 3
Proposed LS
MP Improvement: 8"
MP Improvement: 8"
MP Improvement: 4"
MP Improvement: 4"
MP Improvement: 10"
DOAN CREEK
COLD CREEK
GARRISON CREEK
STONE CREEK
MARTIN FIELD LN
MCKINNEY RD
RUSSET RD
CAMPBELL RD
HUSSEY ST
ACADEMY WAY
DOANS AVE
HOMESTEAD RD
GREELEY ST
4TH ST
HOMESTEAD AVE
VIRGINIA ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
LAWSON LN
MOJONNIER RD
CHRISTENSEN LN
WHITMAN DR
PALISADES LN
HAMPTON LN
PANORAMA LN
Existing Manhole
Proposed Manhole
Existing Lift Station
Proposed Lift Station
Proposed Gravity Main
Proposed Pressurized Main
Existing Gravity Main
Existing Pressurized Main
Railway
Airport Runway
Concept Lots
Streams
Parcels on Septic
College Place City Limits
College Place Urban Growth Boundary
Study Area
Sewer Basins
A
B
C
E
F
G
N
0
550
1,100
Feet
JUB

Potable Water Service

For the purposes of this study, it is assumed that the airport will continue being served by the existing privately owned wells. The infrastructure in this section is specifically sized to serve the lots shown in the concept lot layout, see Figure 17. Additionally, there are known parcels outside of the study area that may also be developed in the future, such as the Walla Walla University properties, that would rely on the potable water infrastructure sized in this study. The potable water infrastructure discussed in this section or any previous source or storage analysis, did not accommodate any growth outside of the study area. Further evaluation of the study area and any growth outside of it will need to be analyzed independently of this study.

Potable water demands for prospective users include both domestic demands such as sinks, toilets, drinking water, as well as industrial demands such as process, washdown, or other water needs. Since these values are not known at this time, the Average Day Demand (ADD), Maximum Daily Demand (MDD) and Peak Hour Demand (PHD) were estimated based on acreage and unit flows designated in the City's 2022 General Sewer Plan. The General Sewer Plan's domestic sanitary sewer unit demand for Commercial/Light Industrial is 520 gallons per acre per day (GPAD), it was assumed that domestic potable water demands would be 5% higher than the domestic sanitary sewer flows for a potable water unit demand of 546 GPAD. The unit demands from the City's 2021 Water System Plan, 854 gallons per day per connection (GPD) for Commercial users, were also considered, however, the General Sewer Plan unit demands were considered more conservative in regard to the planned Light Industrial use anticipated within the study area.

In addition to the domestic potable water demands, the potable water infrastructure will also accommodate the industrial potable water demands anticipated by users in the study area. Typically, the demand of industrial potable water is dependent on the type of light industrial facility. Since the exact types of facilities that could develop are unknown the industrial potable water demands were estimated based on acreage unit flows defined in *Wastewater Engineering: Treatment and Reuse*, Fourth Edition by Metcalf & Eddy. As noted in the industrial wastewater section, industrial demands are categorized as either light industrial or medium industrial. Light industrial potable water demands range from 1,000 to 1,500 gallons per acre per day (GPAD), and medium industrial water demands range from 1,500 to 3,000 GPAD (Metcalf & Eddy, 2003). To be conservative, the highest end of each range was used when estimating flows in the study area. Since the exact location of each type of use within the study area is unknown, a weighted average of the potential industrial potable water unit demands was determined and applied to all lots within the study area. The estimated industrial potable water demands by anticipated land use are summarized in Table 12.

Table 12 Industrial Potable Water Unit Demands

Land Use[1]	Portion of Study Area[1]	Industrial Potable Water Type	Industrial Potable Water Unit Demand (GPAD)	Weighted Industrial Potable Water Unit Demand (GPAD)
Wholesalers	25%	None	0	0
Truck Transportation	15%	None	0	0
Manufacturing	20%	Light	1,500	300
Food Processing	15%	Medium	3,000	450
Lab & Testing Facilities	10%	Light	1,500	151
R & D	15%	None	0	0
Total	**100%**			**901**

1. Land use determinations in accordance with Figure 13.

The estimated unit potable water demands are summarized in Table 13 and the estimated potable water demands per lot are summarized in Table 14.

Table 13 Potable Water Unit Demands

Domestic ADD[1] (GPAD)	Industrial ADD[1] (GPAD)	Total Potable ADD[1] (GPAD)	Total Potable MDD[2] (GPAD)[4]	Total Potable PHD[3] (GPAD)[4]
546	901	1,447	5,165	8,626

1. ADD = Average Day Demand.
2. MDD = Maximum Day Demand.
3. PHD = Peak Hourly Demand.
4. In accordance with the City's 2021 Water System Plan the potable water peaking factors are 3.57 (MDD/ADD) and 1.67 (PHD/MDD) respectively.

Table 14 Estimated Potable Water Demands

Lot	ADD[1] (GPM)	MDD[2] (GPM)	PHD[3] (GPM)	Lot	ADD[1] (GPM)	MDD[2] (GPM)	PHD[3] (GPM)
1	1.00	3.59	5.99	**16**	2.02	7.21	12.04
2	1.12	3.98	6.65	**17**	2.74	9.79	16.35
3	1.79	6.39	10.66	**18**	1.87	6.67	11.14
4	2.14	7.64	12.76	**19**	2.10	7.50	12.52
5	5.02	17.94	29.95	**20**	2.64	9.43	15.76
6	3.53	12.59	21.03	**21**	2.08	7.43	12.40
7	1.98	7.07	11.80	**22**	1.37	4.88	8.15
8	1.24	4.41	7.37	**23**	1.79	6.39	10.66
9	1.15	4.09	6.83	**24**	1.79	6.39	10.66
10	1.08	3.84	6.41	**25**	5.00	17.86	29.83
11	1.96	6.99	11.68	**26**	2.85	10.19	17.01
12	1.06	3.77	6.29	**27**	1.78	6.35	10.60
13	1.01	3.62	6.05	**28**	1.93	6.89	11.50
14	1.11	3.95	6.59	**29**	2.23	7.96	13.30
15	2.02	7.21	12.04				
				Total	**59.38**	**212.00**	**354.04**

1. ADD = Average Day Demand.
2. MDD = Maximum Day Demand.
3. PHD = Peak Hourly Demand.

In addition to the domestic and industrial water demands, the City's potable water system also provides fire flow. Fire flow demand is the amount of water required during firefighting as defined by applicable codes. Fire flow requirements are nationally established for individual buildings and expressed in terms of flow rate (gpm) and flow duration (hours). The City's planning-level fire flow requirement for Light Industrial land uses is 4,000 gpm for a duration of 4 hours.

The rate at which development occurs and the type of users added may have an impact on the City's ability and responsiveness in providing services related to fire and EMS. While this study did not evaluate details of these impacts in terms of response time, it does consider the ability to provide potable water for fire flow purposes. It is recommended that the City continue to work closely with the emergency services authorities to understand impacts to responsiveness, capacity, and service as development expands.

The study area is estimated to increase the City's Pressure Zone 1 Average Day Demands (ADD) by 59 gallons per minute (GPM) or 85,513 gallons per day (GPD). In accordance with the 2021 WSP, the City's Equivalent Residential Unit (ERU) demand is 325 GPD per connection. An ERU is defined as the approximate potable water demand of a single-family residential connection, ERUs are used to evaluate a system's capacity using a common unit of measurement. The proposed study area is estimated to add approximately 263 ERUs of growth to the City's system. In 2023,

the City retained RH2 Engineers to evaluate the impact of the increased growth rate of the Martin Airfield area compared to the 0.6% growth rate that had been anticipated in the 2021 WSP. In the 2023 technical memorandum (RH2 Engineers), the City's potable water demands were assumed to grow by 2,400 ERUs compared to the City's 2020 baseline demands with a majority of the growth being within the Martin Airfield study area. The 2023 memo indicated the additional demand to the Martin Airfield area would not require additional source improvements apart from those already indicated in the 2021 WSP. However, the increased demands to the Martin Airfield area did require additional storage capacity, thus increasing the capacity of the proposed Reservoir No. 4 from 0.50 MG to 1.0 MG. Reservoir No. 4 and the connecting transmission main are currently under design.

For the purposes of this study, the potable water infrastructure required to provide service to the study area will be limited to transmission water mains required to connect to the adjacent City distribution system, onsite distribution piping, service connections, fire hydrants and related appurtenances. Preliminary alignments for the potable water infrastructure were based on the proposed layout of lots and roadways within the study area. In accordance with the City's Water System Plan, the City's Standard Specifications, and common industry hydraulic criteria the following assumptions were made for the proposed infrastructure:

- Mains were assumed to be no smaller than 8-inches in diameter,
- Mains were sized to maintain a velocity of less than 8-feet per second during PHD conditions,
- Mains were sized to maintain a velocity of less than 10-feet per second during MDD plus Fire Flow conditions,
- Mains were looped, where practical, to increase liability and water quality,
- Fire hydrants were placed at all street intersections, at 350-foot spacings in the study area, or at 1,000-foot spacings in sections where hydrants were not needed for the protection of structures, in accordance with the International Fire Code Table C102.1,
- Isolation valves were placed at all legs of mainline tees, not including hydrants, or at 1,000-foot spacings elsewhere, and,
- Service connections were assumed to be 2-inch water meters

The proposed improvements can be seen in Figure 17. As shown in Figure 17, the proposed 16-inch water main loop will need to connect to the existing distribution system to server prospective users in the study area. As mentioned above, the system was looped to increase water system reliability by connecting to existing 12-inch water mains near the intersection of Whitman Drive and Martin Field Lane as well as at SW 4th Street. In addition to the 16-inch water main loop, connection to Reservoir No. 4, which is currently under design, is necessary to meet the storage demands of the study area. With the phasing/subdivision timing of the study area unknown, the proposed improvements will need to be evaluated as development occurs. If the study area develops in phases, further analysis of each phase will be required to evaluate a partial system's ability to meet the operational criteria for the development and for the long-term planning of the water system outside of the development. This includes meeting the City's Water system operational goals for minimum pressure, maximum pressure, and fire flows.

Surface and Storm Water Management

Minimal surface and stormwater improvements will be required to prepare the site for individual parcel development. The proposed roadways will require roadside swales and some small ponds

or swales at the low areas near the intersections to infiltrate roadway runoff. Culverts across the proposed shared driveways will also be required. Individual parcels will provide stormwater infiltration facilities for each site as they are developed. Stormwater improvements will need to be designed according to the Ecology Stormwater Management Manual for Eastern Washington and City Standards.

Other Utilities

Power

Electrical improvements will include running conduits and wires along the proposed roadways and shared driveways, which includes pull boxes and termination cabinets. Pacific Power has single-phase available, and both Pacific Power and Columbia REA have three-phase power available. Transformers will be required at each lot to serve the sites with their desired voltage.

Natural Gas

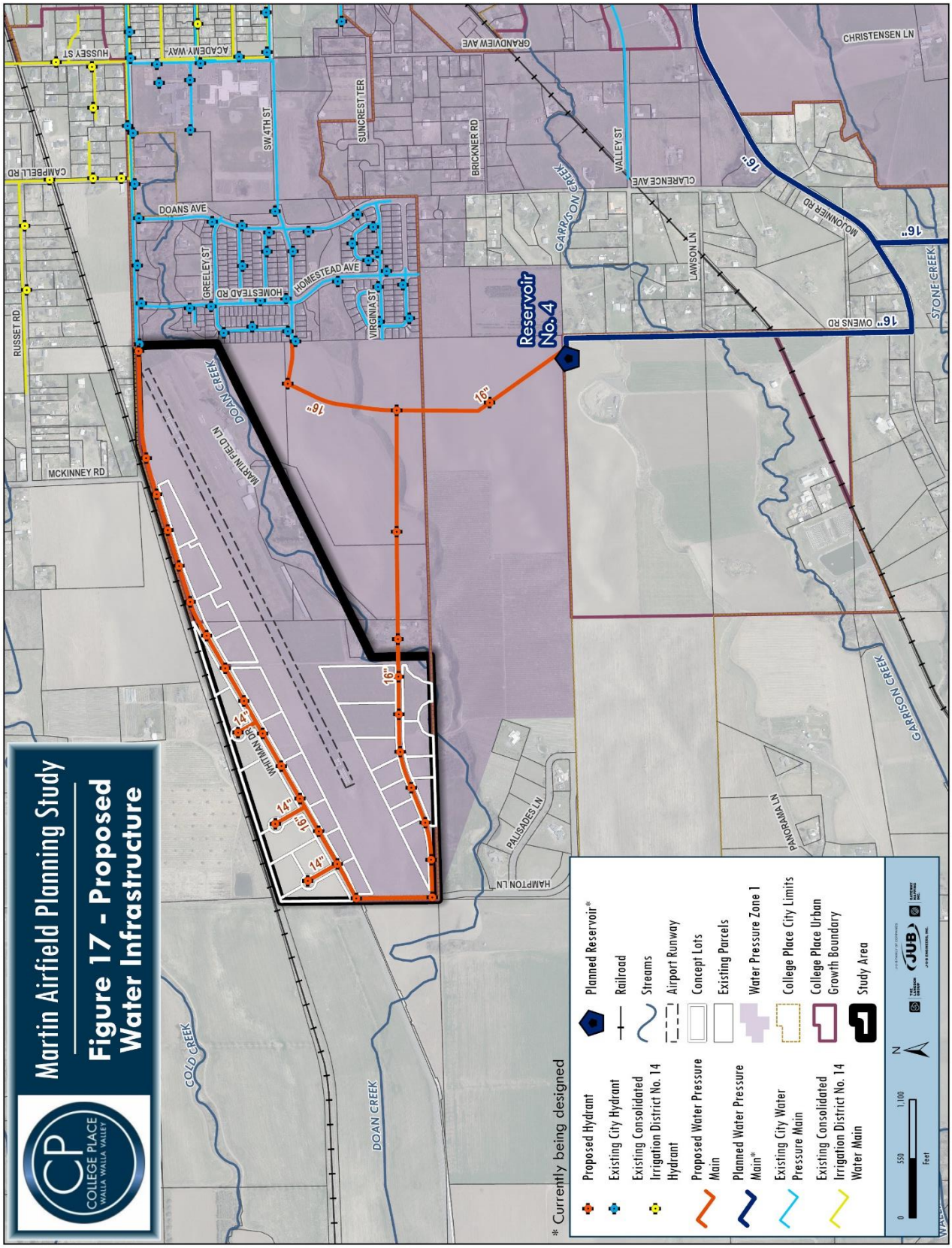
Natural gas improvements will depend on whether or not the project decides to provide gas service as part of the master development. If gas service is desired, proposed improvements will include increasing the gas line size east of the project and extending it to the site. It is assumed that a 4-inch gas line will be sufficient to serve the assumed customer base. Gas demands can vary significantly, so high-demand users may need to partner with CNGC to bring additional capacity to their site.

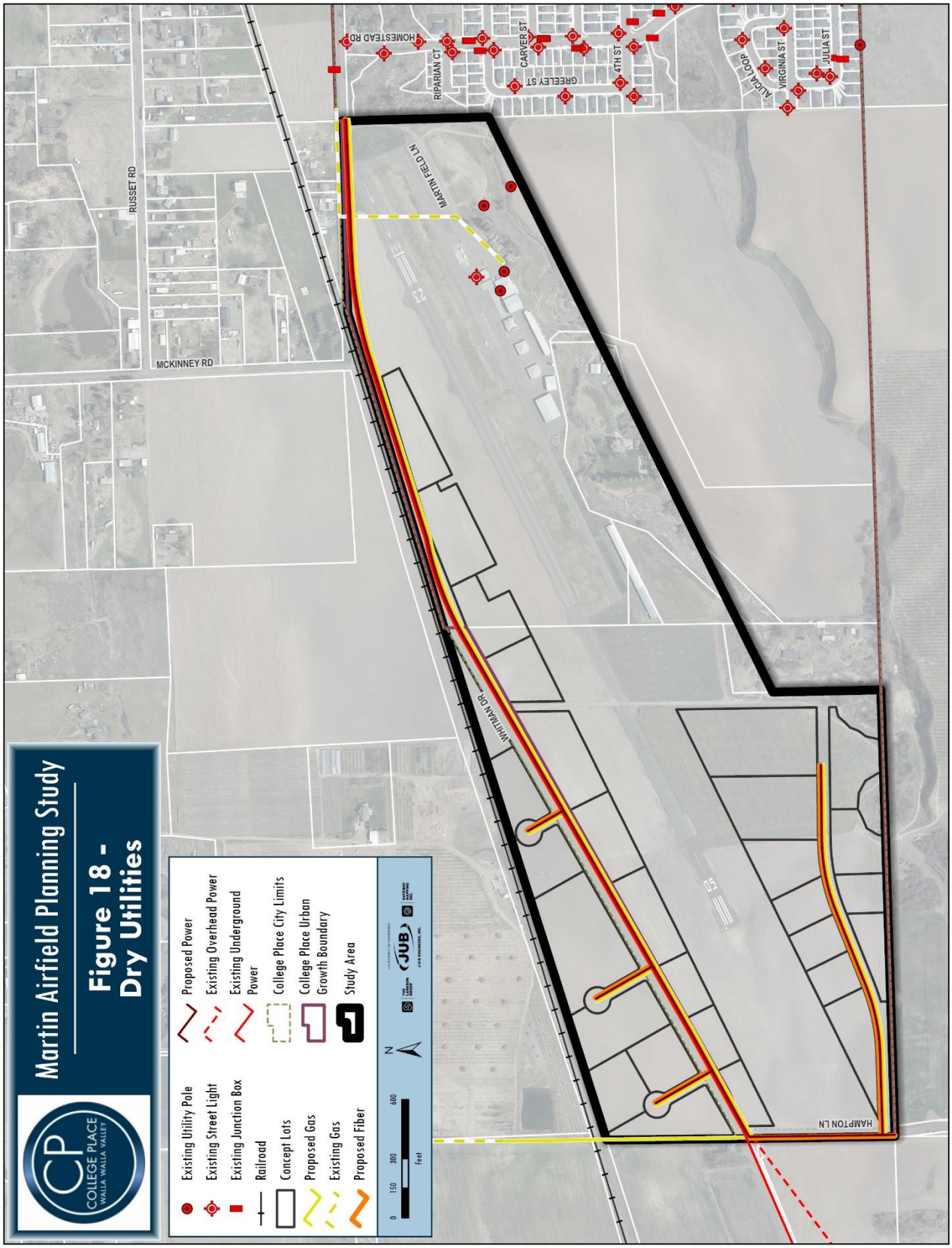
Telecommunications and Fiber Optic Communications

Communications improvements will include installation of new fiber optic lines along the proposed roadways by Century Link and/or Spectrum. Depending on the level of demand that the development can generate as it builds out, additional infrastructure improvements would be required to bring higher speed internet and communications to the project area. Development of the nearby housing will help generate the demand required to make this financially viable for communications providers.

Irrigation

No proposed irrigation improvements are anticipated. Light industrial users typically have minimal irrigation demand that does not justify the additional infrastructure cost. Additionally, unless the irrigation water rights that are tied to the existing airport parcels are transferred to the proposed industrial lots, no irrigation water is readily available. Irrigation lines could be installed, if desired, for future use of reclaimed water or irrigation via the existing water rights.


Martin Airfield Planning Study
Figure 17 - Proposed Water Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
Reservoir No. 4
16"
14"
DOAN CREEK
COLD CREEK
GARRISON CREEK
STONE CREEK
MARTIN FIELD LN
WHITMAN DR
MCKINNEY RD
RUSSET RD
CAMPBELL RD
HUSSEY ST
ACADEMY WAY
SW 4TH ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
CHRISTENSEN LN
MOJONNIER RD
OWENS RD
LAWSON LN
DOANS AVE
GREELEY ST
HOMESTEAD RD
HOMESTEAD AVE
VIRGINIA ST
PALISADES LN
HAMPTON LN
PANORAMA LN
* Currently being designed
Proposed Hydrant
Existing City Hydrant
Existing Consolidated Irrigation District No. 14 Hydrant
Proposed Water Pressure Main
Planned Water Pressure Main*
Existing City Water Pressure Main
Existing Consolidated Irrigation District No. 14 Water Main
Planned Reservoir*
Railroad
Streams
Airport Runway
Concept Lots
Existing Parcels
Water Pressure Zone 1
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
550
1,100
Feet
N


Martin Airfield Planning Study
Figure 18 -
Dry Utilities
COLLEGE PLACE
WALLA WALLA VALLEY
Existing Utility Pole
Existing Street Light
Existing Junction Box
Railroad
Concept Lots
Proposed Gas
Existing Gas
Proposed Fiber
Proposed Power
Existing Overhead Power
Existing Underground Power
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
HOMESTEAD RD
RIPARIAN CT
CARVER ST
GREELEY ST
4TH ST
ALICIA LOOP
VIRGINIA ST
JULIA ST
MARTIN FIELD LN
WHITMAN DR
HAMPTON LN

Preliminary Cost Estimate

Development Costs

The following is a summary of infrastructure improvement costs in 2025 dollars. Detailed reports on improvement costs are shown in Appendix 6. These costs generally include engineering, construction administration, sales tax, and 30% contingency.

Table 15 Summary of Capital Improvement Costs

Description	Dollars
Internal Road Network	$4,385,000
Earthwork	$550,000
Sanitary Sewer Infrastructure	$7,214,000
Potable Water Infrastructure	$9,075,000
Surface and Storm Water Management	$785,000
Dry Utilities	$2,194,000
Total	**$24,203,000**

NEXT STEPS

The Next Steps Section provides an overview of what is recommended to be initiated to continue momentum and progress for development at Martin Airfield.

The Next Steps is arranged in the following sections:

- Airport Recommendations
- Transportation Recommendations
- Ongoing Communications with Utility Providers
- Funding and Revenue Sources

Airport Recommendations

A combination of regulatory rules can be used to establish and implement land use compatibility at and around Martin Airfield. Below is a list of items, recommendations to improve land use compatibility:

- **Establish Zoning Overlays** – Consider establishing the following regulations to address land use compatibility in the airport influence area: 1) Traditional or performance-based zoning regulations; 2) Compatible land use overlay; and 3) Height hazard overlay.
- **Utilize Building Restriction Line Map** – Utilize the included BRL map showing the maximum building heights for developable lands with contours.
- **Identify Part 77 Surface** – Use the airspace definitions provided in federal law to identify FAR Part 77 Surfaces for your airport and include in the development regulations language that prohibits penetration of these surfaces. Provide a map and instructions to assist community members, airport managers, and planning staff in implementing the regulations. The FAA relies on local jurisdictions with land use authority to keep critical airspace clear of obstructions. Washington State Legislature RCW 14.12 Airport Zoning gives local jurisdictions the authority to develop and adopt airspace regulations.
- **Establish Airport Compatibility Zones** – Each airport is unique. Thus, adjusting these safety zones to fit the airfield configuration is essential. Establishing an airport compatibility zone tailored to Martin Field's needs is recommended. Use the WSDOT Airports and Compatible Land Use Criteria to follow the suggested permitted land uses for each safety zone to guide recommended development around Martin Field.

Transportation Recommendations

Geotechnical Survey

Conducting a geotechnical survey to evaluate the subsurface conditions to determine soil stability, bearing capacity, and other geologic factors for roadways or rail crossings in the study area vicinity will aid the city in identifying if mitigation measures are needed as future development occurs.

Roadway Conditions Analysis

A roadway conditions analysis will determine the ability of roadways near the study area to accommodate industrial traffic as development occurs. If roadway upgrades are recommended, this analysis will identify necessary upgrades such as resurfacing, widening or new construction.

Ongoing Communications with Utility Providers

Sewer

It will be critical to have ongoing communication between developers and the City of College Place for the sanitary sewer improvements needed to serve the Martin Airfield Study Area. Design and construction of the lift station and forcemain will be required before any development in the study area can begin. Gravity sewer pipe to the lift station will need to be evaluated as development occurs and can be constructed in phases depending on the timing and rate of development. All improvements will need to be coordinated with the City of College Place to ensure the necessary infrastructure and capacity is available for each stage of development. It is also recommended that the City further develops a Pretreatment Code and places it in effect prior to development in the study area.

Water

As noted in the Utility Requirements section, connection to the City of College Place's existing water system is required to serve the Martin Airfield Study Area. Design and construction of transmission and distribution mains will need to be evaluated as development occurs. Phased system construction will be dependent on the timing and rate of development and will need to be coordinate with the City of College Place for conformance with the operational criteria of the on-site development as well as the long-term planning of the water system.

Funding and Revenue Sources

The following is a summary of the various revenue sources available to the City to help offset the site's development cost. It is intended that a variety of funding sources will be used to implement the master plan. A range of ways to fund the basic infrastructure, with the site-specific infrastructure connections being the responsibility of the developer of the individual sites, could be available, for example:

Department of Ecology Grants

The State of Washington supplies grants for various solid waste programs, including Remedial Action Grants to assist with local hazardous waste sites, Moderate Risk/Hazardous Waste Implementation Grants to manage local hazardous waste, and Food and Yard Waste Composting Grants.

Economic Development Administration (EDA)

The Economic Development Administration (EDA) has various programs and funding opportunities available. Through the competitive grant process, EDA evaluates all projects to determine the extent in which they align with EDA's investment priorities, effectively address the creation and/or retention of high-quality jobs, and provide a clear scope of work with specific, measurable project outputs. EDA's investment priorities provide an overarching framework to ensure its grant investment portfolio – from planning to infrastructure construction – contributes

to local efforts to build, improve, or better leverage economic assets that allow businesses to succeed and regional economies to prosper and become more resilient.

Federal Congressionally Directed Spending (CDS) and Community Project Funding (CPF)

In November 2021, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was passed. This established the Congressionally Directed Spending (CDS) program (as known in the Senate) and the Community Project Funding (CPF) program (as known in the House). These two terms are synonymous and created to support specific community projects as part of the annual appropriations process. For every year of funding, the CDS/CPF projects are solicited and selected by the members of the U.S. Congress and U.S. Senate. Once selected, the individual scope and funding amount for each of the selected projects is then written into law via the Annual Appropriations Bill. The CDS/CPF program is authorized through the 2026 Federal Fiscal Year (FFY).

Infrastructure Assistance Coordinating Council (IACC)

IACC is a nonprofit organization helping Washington communities identify and obtain infrastructure funding resources. It sponsors an annual statewide conference (typically in Wenatchee, WA) where state and federal programs convene to share funding information. Technical assistance is available for individual projects as part of this.

Local Improvement District (LID)

The City can work with purchasers/developers to establish a local improvement district that includes an agreed-upon repayment schedule based on agreed-upon equitable criteria. The City or County sells bonds to cover the costs of infrastructure to be built within the district, and the owners/developers pay off the bonds through regular payments, usually over a 10-20-year period.

Office of Economic Development & Competitiveness (OEDC)

The Office of Economic Development & Competitiveness (OEDC) is committed to providing businesses large and small with the specific solutions they need, wherever they are in the lifecycle, from conceptualization to an exit strategy. OEDC has a suite of services and programs that include Business Recruitment, Retention and expansion, Site Selection, foreign direct investment, Key Sector Support, Small Business Export Assistance, and Entrepreneurship and rural Business Assistance.

Public/Private Development Agreements

New development agreements between the county and/or city and a developer specify financing needs and responsibilities for infrastructure needs that serve a wider area than the developer is contemplating.

Public Works Board (PWB) Funding

In partnership with local governments, the Public Works Board (PWB) addresses infrastructure needs. PWB uses a dedicated funding pool to offer low-interest financing (interest rates as low as 0.5% over 20 years) in a revolving loan program to finance up to 85% of a project's cost. Applicants must have a capital facilities plan, be levying the 1/4% real estate excise tax, and comply with UGA requirements. Capital improvement planning projects are limited to planning for streets and utilities. PWB provides traditional financing and broadband specific financing. Ports are not eligible to apply for these funds and will be required to partner with the City when applying.

Tax Increment Financing (TIF)

Tax increment financing (TIF) is a tool that local governments in Washington State (cities, towns, counties, port districts, or any combination thereof) can use to fund public infrastructure in targeted areas to encourage private development and investment. A local government wishing to utilize TIF will designate an "increment area" surrounding the site of the public improvements. The property tax portion of increases in the assessed value of properties within the increment area is allocated toward paying for the public improvement costs.

Washington State Department of Commerce – Community Economic Revitalization Board (CERB) Grants

Department of Commerce funds are available via low-interest loans and grants to finance domestic and industrial water, stormwater, wastewater, public buildings, telecommunications, and port facilities.

Washington State Department of Commerce – Industrial Site Readiness Grant

This program offers grants of up to $500,000 to public entities such as counties, cities, port districts, or tribal governments. The funding supports pre-development planning for large manufacturing sites, including engineering studies, permitting, and site due diligence.

Washington State Transportation Improvement Board (TIB)

TIB funds high-priority transportation projects in communities throughout the state to enhance the movement of people, goods, and services. TIB is an independent state agency created by the Legislature that distributes and manages street construction and maintenance grants. Funding for TIB's grant programs comes from revenue generated by three cents of the statewide gas tax. This funding may be appropriate for transportation improvements such as the widening and frontage of Road 36.

Public Works Trust Fund (PWTF)

The PWTF provides low-interest loans to local governments for infrastructure projects, including those related to industrial development. The fund aims to assist municipalities in addressing infrastructure needs through a dedicated funding pool. (wacities.org)

Better Utilizing Investments to Leverage Development (BUILD) grant

A program administered by the U.S. Department of Transportation (DOT). It provides federal funding to support investments in infrastructure that enhance economic development and improve safety, mobility, and quality of life. The BUILD program is designed to support projects that have a significant impact on communities, especially in terms of regional economic growth, access to opportunities, and overall public welfare.

Appendix 1

Permit Classification Table

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 1 Review	• ADU Permit • Administrative Interpretation • Boundary Line Adjustment • Building Permit • Certificate of Occupancy • Certificate of Appropriateness (and waiver)(1) • Certificate of Design Review • Certificate of Zoning Compliance • Clearing and Grading Permit • Code Enforcement Action • Critical Area Authorization • Landscaping Plan Approval • Permit, Minor Amendment • Plats, Final (10+ lots)	None	None	Community Development Director or designee (unless otherwise noted)	Hearing Examiner

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
	• SEPA Action (no public notice required) • Sign Permit • Site Plan Approval • Special Property Tax Valuation [1] • Special Use Permit				
Type 2 Review	• Binding Site Plan • Critical Area Permit • SEPA Action (public notice required) • Short plat (9 lots or less) • Variance with Type 1/2 Permit	Yes	None, but written comments may be submitted	Community Development Director	Hearing Examiner

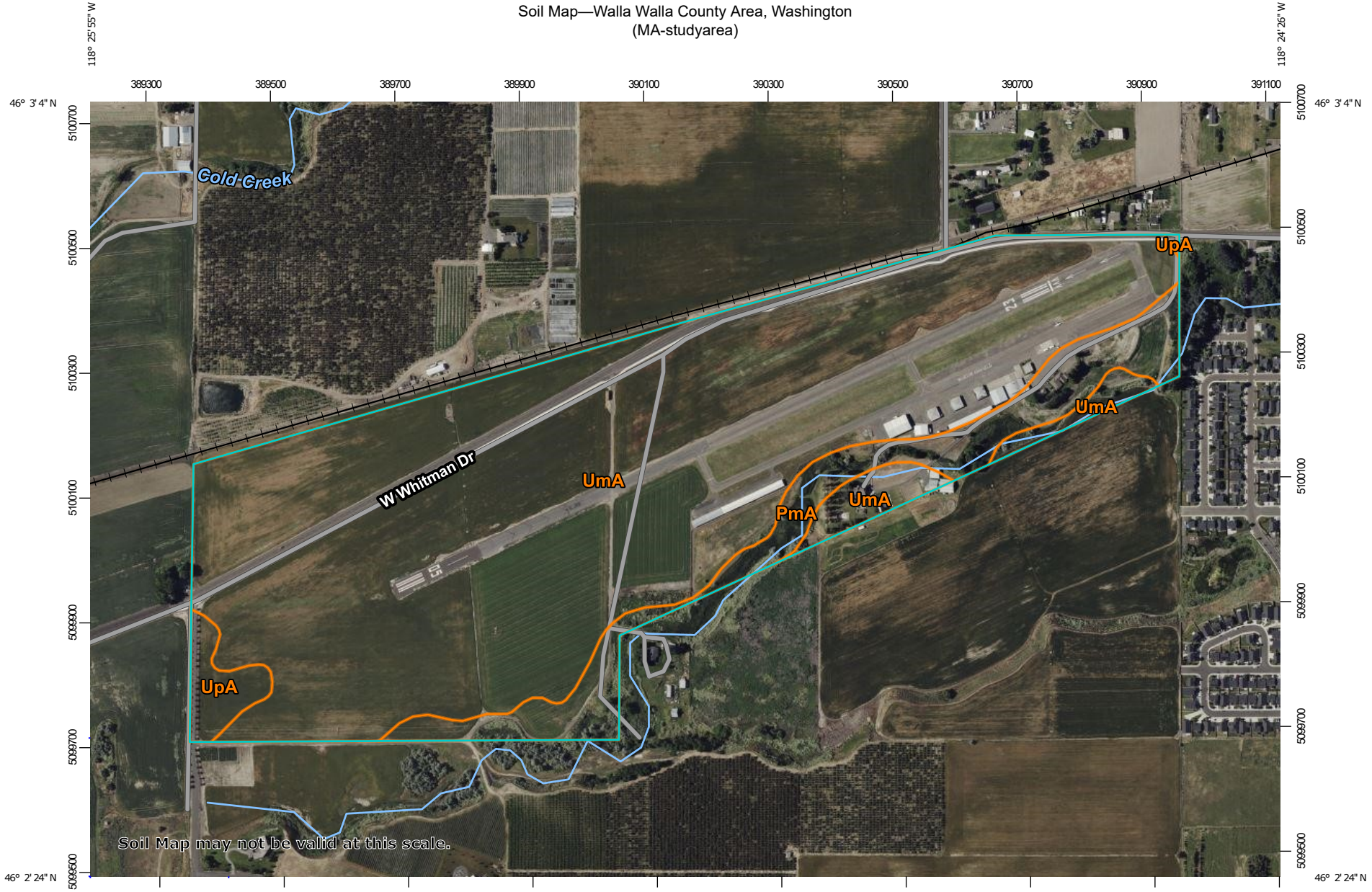
	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 3 Review	• Conditional Use Permit • Master Planned Development • Plat, Preliminary (10+ lots) • Permit, Major Amendment • Reasonable Use Exception • Rezone, Site Specific • Variance with Type 3 Permit	Yes	Hearing Examiner	Hearing Examiner	Superior Court

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 4 Review	• Comprehensive Plan Text Amendment • Development Agreement [5] • Future Land Use Map Amendment • Rezone, General • Shoreline Master Program Amendment [2] • Unified Development Code Amendment [4]	Yes	Planning Commission	City Council	Superior Court [3]

Appendix 2

Soil Assessment

Soil Map—Walla Walla County Area, Washington
(MA-studyarea)



Map Scale: 1:8,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:31,700.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walla Walla County Area, Washington
Survey Area Data: Version 9, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 25, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PmA	Pedigo silt loam, 0 to 3 percent slopes	20.4	11.5%
UmA	Umapine silt loam, 0 to 3 percent slopes	152.7	86.3%
UpA	Umapine silt loam, leached surface, 0 to 3 percent slopes	3.8	2.1%
Totals for Area of Interest		**176.8**	**100.0%**

Appendix 3

WSDOT Airports and Compatible Land Use Criteria

Table F-1

Maximum Residential Density						
Compatibility Zones	**Zone 1**	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
Maximum Residential Density						
	Average Number of Dwelling Units Per Gross Acre					
Agricultural (farmland/forest)	0	Maintain current comprehensive plan designation and zoning designation				
Rural (outside an urban growth boundary)	0	1 d.u. per 10 acres	1 d.u. per 10 acres[A]	1 d.u. per 5 acres[A]	1 d.u. per 10 acres[A]	1 d.u. per 5 acres
Urban (within the urban growth boundary)	0	0	B	C	B	C
Maximum Intensities for Nonresidential Uses (Commercial, Industrial, Offices, and Activities)						
	Average Number of People Units Per Gross Acre					
Agricultural (farmland/forest)	1-5[E]	D, E	D, E	D, E	D, F	D
Rural (outside an urban growth boundary)	1-5[E]	10-25[E]	10-25[E]	40-60[E]	100-150[E]	100-150[G]
Urban (within the urban growth boundary)	1-5[E]	50-75[E]	80-120[E]	100-150[E]	100-150[E]	No Limit[G]

Notes:

A Cluster to preserve open space to maintain open approach corridor at and near runway ends.

B Infill development up to average of surrounding residential area is allowed, but is appropriate only if nonresidential uses are not feasible

C Promote high density and intensity mixed use development (15 or more d.u. per acre)

D Maintain current comprehensive plan designation and zoning designation.

E Special Function Land uses should be prohibited.

F 50-100 people per acre allowed if on airport and aviation-related.

G Special Function Land uses should be avoided.

Table F-2
Airport Land Use Matrix

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
A. Resource Operations						
1. Agricultural (Commercial)						
Agriculture, horticulture, general farming (crops only, not feedlots and stockyards)	P	P	P	P	P	P
Agricultural building	L	L	P	P	P	P
Agricultural chemical sales/storage	X	L	P	P	P	P
Agricultural Housing/Farm labor	X	X	L	P	L	P
Agricultural housing/farm labor	X	X	L	P	L	P
Agricultural market	X	X	P	P	X	P
Agricultural related industries	X	L	P	P	P	P
Animal husbandry	X	L	L	L	X	P
Agricultural feeding operation or stockyards	X	X	X	X	X	X
Agriculture or food processing facility	X	L	P	P	L	P
Livestock auction	X	X	X	L	X	P
Fairgrounds	X	X	X	X	X	P
Floriculture, aquaculture	X	L	P	P	P	P
Fruit bin sales/storage	X	L	P	P	P	P
2. Forest (Commercial)						
General forest silver culture	L	L	P	P	P	P
Forest product processing	X	L	P	P	P	P
3. Mining/Refining/Offsite Hazardous Waste Treatment						
Asphalt paving and roofing materials, rock crushing	X	X	L	L	L	P
Mining including sand and gravel pits	X	L	L	L	X	P
Stockpiling of earthen materials	X	L	L	L	X	P
B. Rural Development						
1. Rural Residential						
Single-family dwelling (large lot, 5 acres or greater*)	X	L	L	P	X	P
Single-family dwelling, rural centers	X	X	L	L	X	L
Residential Cluster Development, 40% open	X	X	LSC	X	X	P
Multi-family dwelling	X	X	X	X	X	P
Temporary farm housing	X	X	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
2. Rural Centers						
Single-family dwelling; up to 12 dwelling units/acre	X	X	L	L	X	L
Two - Four family dwelling (duplex) (*)	X	X	X	X	X	L
Multi-family dwelling; 12-20 units/acre	X	X	L	X	X	P
21+ units/acre	X	X	P	P	X	P
Agriculture/forest/mineral resources or industry (see item A)						
Community services (see item D2)						
Retail and commercial service (see items D4 & D5)						
Industrial/manufacturing (see item D4s & D5)						
C. Education Facilities						
1. Education Facilities						
Junior or community college	X	X	L	L	L	P
Schools, K-12 elementary, middle, senior high	X	X	X	X	X	X
Business school	X	L	L	L	L	P
Vocational schools	X	L	L	L	L	P
D. Urban Development						
1. Residential						
Single-family dwelling; up to 12 dwelling units/acre	X	X	X	X	X	L
Two - four-family dwelling (duplex)(*)	X	X	X	X	X	L
Multi-family dwelling(*): 15 or more	X	X	LSC	X	X	P
Mixed-use office/commercial/residential use	X	X	P	P	X	P
Residential development cluster 40% > open space	X	X	L	L	X	L
Residential infill	X	X	L	L	L	P
Mobile home parks	X	X	L	L	X	L
Boarding house	X	X	L	L	L	L
Retirement homes	X	X	X	X	X	L

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
2. Community Services						
Cemetery	P	P	P	P	L	P
Churches, synagogues, temples	X	X	L	L	X	L
Community center meeting halls, fraternal organizations	X	X	L	L	X	P
Convalescent, nursing home and group homes	X	X	X	X	X	L
Day care facilities, family in-home	X	X	L	L	X	L
Day care center	X	X	L	L	X	L
Funeral home	X	X	P	P	X	P
Police, fire stations, ambulance service	X	L	P	P	P	P
Hospital	X	X	X	X	X	X
Medical clinic	X	X	L	L	X	P
Correction facilities	X	L	L	L	L	L
Libraries	X	X	P	P	X	P
Museums and art galleries	X	X	L	P	P	P
Zoo	X	X	P	P	X	P
3. Amusement and Recreation						
Amusement park (permanent)	X	X	L	L	X	L
Bowling alleys	X	X	P	P	X	P
Campground	X	L	L	P	L	P
Recreational vehicle parks; short term	X	L	L	P	L	P
Drive-in theatres	X	X	L	L	X	P
Fairgrounds	X	X	P	L	L	P
Golf courses	X	L	P	P	X	P
Gymnasiums, exercise facilities	X	L	L	L	L	P
Horse racing tracks, speedways	X	X	X	X	X	X
Miniature golf courses	X	X	P	P	X	P
Movie theatres, auditoriums exhibition halls	X	X	L	L	X	P
Parks	L	L	P	P	L	P
Roller skating rink	X	X	L	L	X	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
4. Retail Trade and Service						
Addressing, mailing, and stenographic services	X	L	P	P	L	P
Advertising agencies	X	L	P	P	L	P
Airport uses and activities commercial/industrial	L	P	P	P	P	P
Animal clinic/hospital	L	P	P	P	P	P
Antique stores	X	L	P	P	X	P
Automobile, truck, manufactured home, and travel trailer sales	L	P	P	P	P	P
Automobile and recreational vehicle (RV) sales; weekend	L	P	P	P	L	P
Automotive: car wash	L	P	P	P	L	P
Sales lot/auto center	L	P	P	P	P	P
Parking lots and garages	L	P	P	P	P	P
Maintenance and repair shops	X	P	P	P	P	P
Paint and body repair shops	L	P	P	P	P	P
Parts and accessories (tires, batteries, etc.)	X	P	P	P	P	P
Specialized repair shops (radiator, etc.)	L	P	P	P	P	P
Towing services	L	P	P	P	P	P
Wrecking and dismantling yard	L	P	P	P	L	P
Bakery	X	P	P	P	L	P
Beauty and barber shops	X	L	P	P	X	P
Bed and breakfast inn	X	X	L	L	X	P
Boats and marine accessories	X Except storage L	P	P	P	P	P
Books, stationery, office supplies	Storage only	P	P	P	L	P
Building and trade (plumbing, heating, electrical, painting, etc.)	Storage only	P	P	P	L	P
Clothing and accessories	X	L	P	P	L	P
Communication towers	X	X	L	L	L	L
Computer and electronic stores	X	L	P	P	L	P
Department, discount, variety stores	X	X	P	P	X	P
Drug stores (optical goods, orthopedic supplies)	X	L	P	P	L	P
Employment agencies (private)	X	P	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Farm and implements, tools and heavy construction equipment	X	L	P	P	P	P
Farm supplies	L	P	P	P	P	P
Financial institutions	X	P	P	P	L	P
Food store	X	P	P	P	L	P
Furniture, home furnishings, appliances	X	P	P	P	L	P
General hardware, garden equipment and supplies	X	P	P	P	L	P
Grocery and convenience stores	X	L	P	P	L	P
Heavy equipment storage, maintenance and repair	X	L	P	P	L	P
Insurance agents, brokers, and service agencies	X	P	P	P	L	P
Kennels	L	P	P	P	L	P
Laundries, laundromats, and dry cleaning plants	X	P	P	P	L	P
Liquor stores	X	P	P	P	L	P
Lumber yards	L	P	P	P	L	P
Medical and dental laboratory, offices and clinic	X	X	L	P	x	P
Mini Storage	L	P	P	P	P	P
Motels and Hotels	X	X	P	P	P	P
Motorcycles sales/repair (including maintenance)	X	P	P	P	L	P
Paint, glass, and wallpaper stores	X	P	P	P	L	P
Pet stores, pet supplies, and dog grooming	X	L	P	P	L	
Professional office buildings for architects, attorneys, government, etc.	X	L	P	P	P	P
Rental: auto, truck, trailer, fleet leasing services	L	P	P	P	L	P
Repairs: small appliances, tv, business machines, watches, etc.	L	P	P	P	L	P
Restaurant, cafe and drive-in eating facilities	X	L	P	P	P	P
Service station	X	L	P	P	L	P
Sporting goods, bicycle shops	X	P	P	P	P	P
Taverns, bars, dance establishments	X	L	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
5. Industry/Manufacturing						
Aircraft parts	Storage only	L	P	P	P	P
Aircraft industrial	Storage only	L	P	P	P	P
Apparel and accessories	X	L	P	P	X	P
Bakery products (wholesale)	Storage only	L	P	P	X	P
Beverage industry	Storage only	L	P	P	X	P
Canning, preserving, and packaging fruits, vegetables, and other foods	X	L	L	L	X	P
Cement and concrete plants	X	L	L	L	X	P
Chemicals (industrial, agricultural, wood, etc.)	X	X	L	L	X	L
Concrete, gypsum, and plaster products	Storage only	L	P	L	L	P
Confectionery and related products (wholesale)	Storage only	P	P	P	L	P
Mini storage	P	P	P	P	P	P
Product assembly	Storage only	L	P	P	L	P
Prefabricated structural wood products and containers	Storage only	P	P	P	L	P
Printing, publishing, and binding	Storage only	P	P	P	L	P
Rendering plants, slaughter houses	X	X	X	X	X	L
Rubber products	X	L	P	P	L	P
Sawmills and planing mills	Storage only	L	P	P	L	P
Sheet metal and welding shops	Storage only	P	P	P	L	P
Stone products (includes finishing of monuments for retail sale)	Storage only	P	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
6. Wholesale Trade-Storage						
Warehouses	Storage only	P	P	P	P	P
Wholesale trade	Storage only	P	P	P	P	P
Storage facilities; bulk	L	P	P	P	P	P
commercial	L	P	P	P	P	P
mini-storage	L	P	P	P	P	P
E. Transportation and Utilities						
1. Transportation						
Bus terminals	X	L	P	P	L	P
Transportation storage and maintenance facilities	Storage only	P	P	P	P	P
Transportation brokerage offices; without truck parking	X	P	P	P	P	P
with truck parking	L	P	P	P	P	P
Contract truck hauling, rental of trucks with drivers	L	P	P	P	P	P
Rail, truck terminals (for short-term storage, office)	L	P	P	P	P	P
Air storage and office use	Storage only	P	P	P	P	P
Railroad switch yards, maintenance, and repair facilities, etc.	X	P	P	P	P	P
Taxicab terminals, maintenance, and dispatching centers, etc.	X	P	P	P	P	P
2. Utilities						
Power generating facilities	L	L	L	L	L	L
Utility services (substations, etc.)	L	L	L	L	L	P
Wholesale trade	L	P	P	P	L	P
Storage facilities; bulk	L	P	P	P	P	P
Commercial	L	P	P	P	P	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

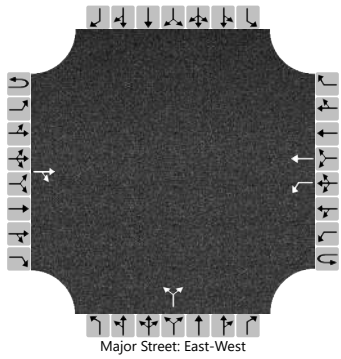
Appendix 4

Traffic Counts and Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

General Information		Site Information	Existing Conditions Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	11/4/2024	East/West Street	Old US 12
Analysis Year	2024	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			76	55		20	52			26		13				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22					42					
Capacity, c (veh/h)						1434					813					
v/c Ratio						0.02					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.5					9.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						2.1				9.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

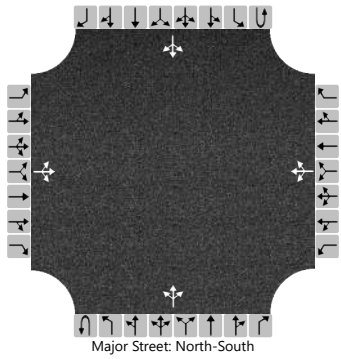
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	1		20	0	7		0	31	25		13	61	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				30			0				14		
Capacity, c (veh/h)			837				857			1524				1535		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
Control Delay (s/veh)			9.3				9.4			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)	9.3				9.4				0.0				1.3			
Approach LOS	A				A				A							

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HCS7 Two-Way Stop-Control Report

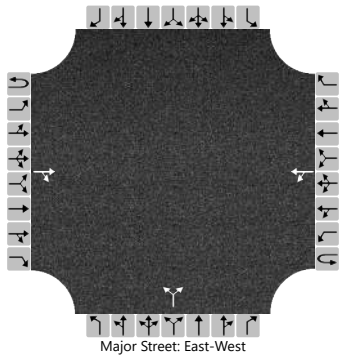
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			40	0		1	28			0		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					2					
Capacity, c (veh/h)						1557					1022					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.3				8.5							
Approach LOS					A											

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HCS7 Two-Way Stop-Control Report

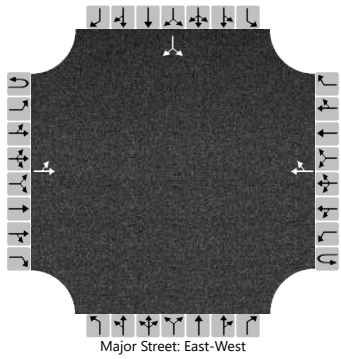
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	40				23	4						4		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													11	
Capacity, c (veh/h)		1577													991	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.3													8.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.5												8.7		
Approach LOS		A					A							A		

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HCS7 Two-Way Stop-Control Report

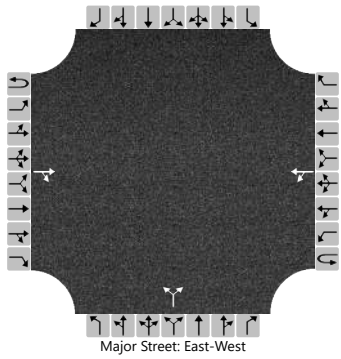
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			39	0		2	36			0		5				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					6					
Capacity, c (veh/h)						1556					1021					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.5						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

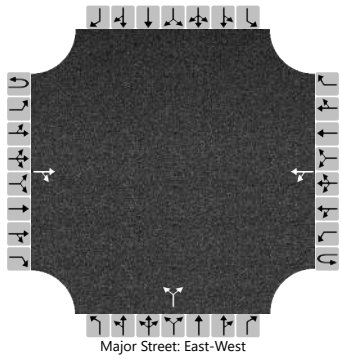
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			42	5		40	30			5		34				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						49					48					
Capacity, c (veh/h)						1540					970					
v/c Ratio						0.03					0.05					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.4					8.9					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.3				8.9						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

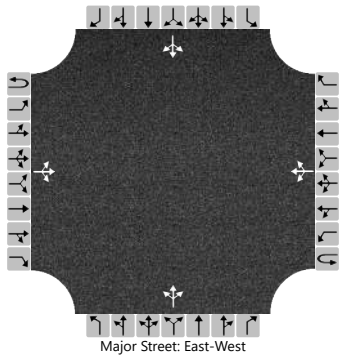
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	84	43		62	101	8		39	14	32		7	23	2
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				69					94				36	
Capacity, c (veh/h)		1460				1436					622				518	
v/c Ratio		0.00				0.05					0.15				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.2					0.5				0.2	
Control Delay (s/veh)		7.5				7.6					11.8				12.5	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.3				3.0				11.8				12.5			
Approach LOS	A				A				B				B			

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HCS7 Two-Way Stop-Control Report

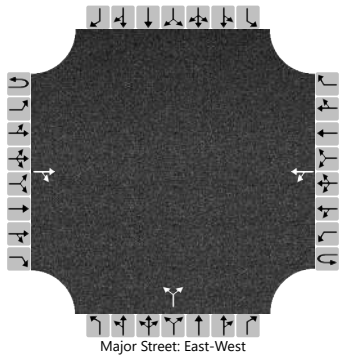
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			124	12		55	173			20		42				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						65					74					
Capacity, c (veh/h)						1411					715					
v/c Ratio						0.05					0.10					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.6					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.2				10.6						
Approach LOS										B						

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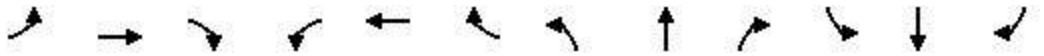
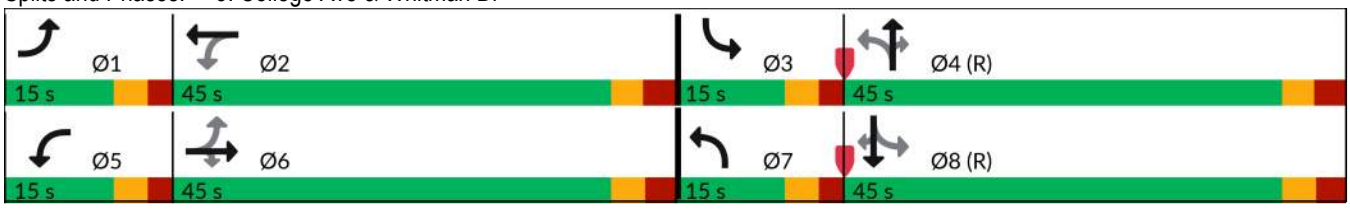


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Future Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.503			0.671			0.602			0.634		
Satd. Flow (perm)	937	1863	1583	1250	1829	0	1121	1863	1583	1181	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	125	48	33	113	15	54	197	38	17	200	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	125	48	33	128	0	54	197	38	17	200	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	22.3	16.4	16.4	20.2	13.4		83.2	79.4	79.4	79.6	74.3	74.3
Actuated g/C Ratio	0.19	0.14	0.14	0.17	0.11		0.69	0.66	0.66	0.66	0.62	0.62
v/c Ratio	0.20	0.49	0.15	0.14	0.61		0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
LOS	D	D	A	D	E		A	B	A	A	B	A
Approach Delay (s/veh)		38.9			55.1			8.7			9.1	
Approach LOS		D			E			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



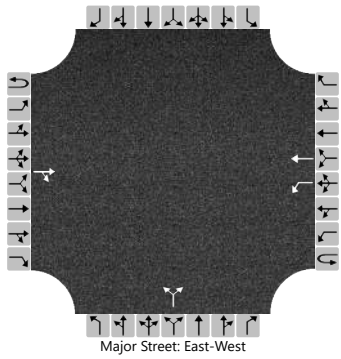
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	125	48	33	128	54	197	38	17	200	97
v/c Ratio	0.20	0.49	0.15	0.14	0.61	0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Length 50th (ft)	28	93	0	20	91	12	49	0	4	68	0
Queue Length 95th (ft)	56	150	0	45	150	31	122	0	14	128	18
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	272	601	837	1233	1088	861	1154	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.20	0.08	0.12	0.21	0.06	0.16	0.03	0.02	0.17	0.09

Intersection Summary

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 No-Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour No-Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	83		30	79			39		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					64					
Capacity, c (veh/h)						1349					714					
v/c Ratio						0.02					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

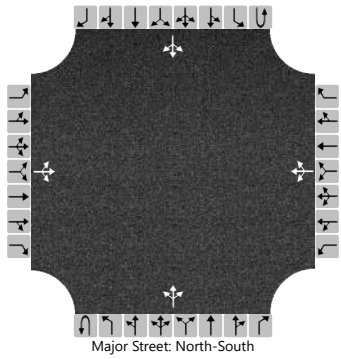
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		30	0	11		0	47	38		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				45			0				22		
Capacity, c (veh/h)			770				775			1478				1495		
v/c Ratio			0.01				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.0		
Control Delay (s/veh)			9.7				9.9			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.7				9.9				0.0				1.4		
Approach LOS		A				A										

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HCS7 Two-Way Stop-Control Report

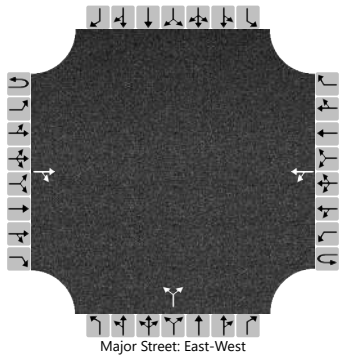
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			61	0		2	42			0		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					3					
Capacity, c (veh/h)						1526					992					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.6					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.3				8.6						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

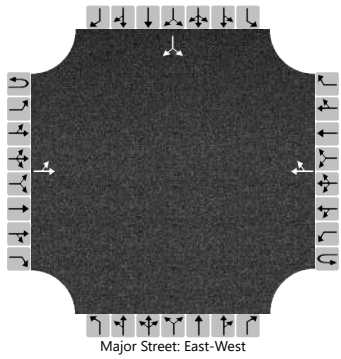
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	61				35	6						6		9
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													16	
Capacity, c (veh/h)		1557													958	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.3													8.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.6												8.8		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

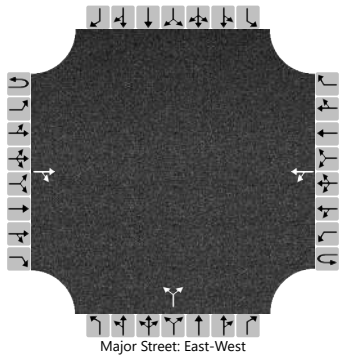
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			59	0		3	55			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1525					991					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

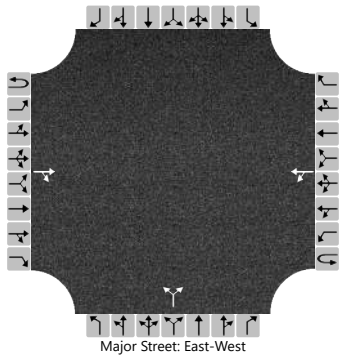
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	8		61	45			8		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					74					
Capacity, c (veh/h)						1500					915					
v/c Ratio						0.05					0.08					
95% Queue Length, Q_{95} (veh)						0.2					0.3					
Control Delay (s/veh)						7.5					9.3					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.5				9.3						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

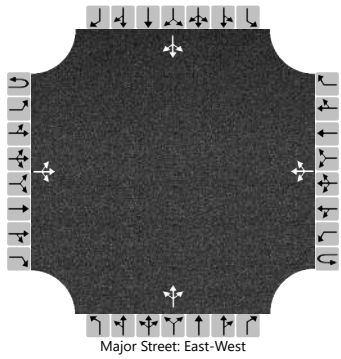
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	127	64		94	153	12		59	21	49		11	35	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				104					143				54	
Capacity, c (veh/h)		1386				1352					463				374	
v/c Ratio		0.00				0.08					0.31				0.15	
95% Queue Length, Q_{95} (veh)		0.0				0.3					1.3				0.5	
Control Delay (s/veh)		7.6				7.9					16.2				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				3.3				16.2				16.2			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

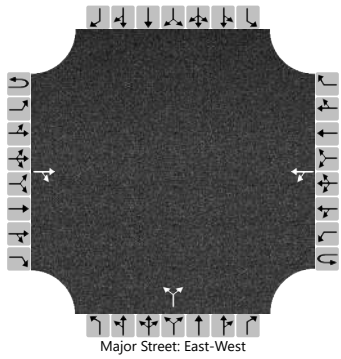
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			188	18		83	262			30		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					112					
Capacity, c (veh/h)						1315					565					
v/c Ratio						0.08					0.20					
95% Queue Length, Q_{95} (veh)						0.2					0.7					
Control Delay (s/veh)						8.0					12.9					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.5				12.9						
Approach LOS										B						

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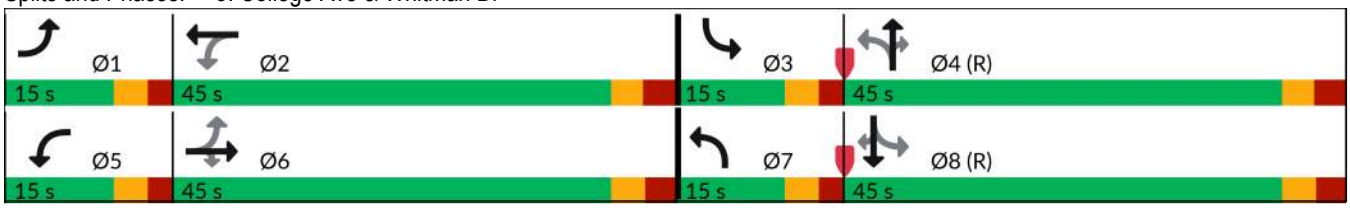
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Future Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.387			0.443			0.510			0.563		
Satd. Flow (perm)	721	1863	1583	825	1829	0	950	1863	1583	1049	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	189	73	49	172	23	83	298	58	26	303	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	189	73	49	195	0	83	298	58	26	303	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	26.5	18.6	18.6	25.2	17.9		77.7	71.9	71.9	74.0	68.4	68.4
Actuated g/C Ratio	0.22	0.16	0.16	0.21	0.15		0.65	0.60	0.60	0.62	0.57	0.57
v/c Ratio	0.30	0.65	0.21	0.21	0.70		0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
LOS	D	E	A	C	E		A	B	A	A	B	A
Approach Delay (s/veh)		41.0			54.7			12.3			13.2	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	70	189	73	49	195	83	298	58	26	303	147
v/c Ratio	0.30	0.65	0.21	0.21	0.70	0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Length 50th (ft)	41	138	0	28	141	23	121	0	7	127	10
Queue Length 95th (ft)	73	207	9	55	209	50	209	0	21	222	49
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	258	601	688	1116	996	729	1061	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.31	0.12	0.19	0.32	0.12	0.27	0.06	0.04	0.29	0.15

Intersection Summary

Martin Field Trip Generation

Area	Total Acres	Bldg. SF (1,000 SF)	PM Peak Hour Trips Generated		
			Total	Inbound	Outbound
North Driveway	18.65	325	95	13	82
South Driveway	18.56	323	94	13	81
Total Whitman	37.21	648	189	26	163
Total Hampton	22.22	387	107	15	92
TOTAL	59.43	1,036	296	41	255

Notes

Assumes 40% FAR

ITE Trip Generation Manual 11th Edition

Land Use 110 - General Light Industrial

Fitted equation =(ROUNDUP(EXP(0.72*LN(X)+0.38),0))

where X is the sq ft of the development

Worst Driveway - included in Total Whitman trips above

North Driveway	7.82	136	51	7	44
South Driveway	3.11	54	26	4	22

Martin Airfield Feeasibility Study

PM Peak Hour Turning Movement Volumes

Old US 12/Last Chance

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	26	0	13	0	0	0	0	76	55	20	52	0	242
2045 No-Build	39	0	20	0	0	0	0	115	83	30	79	0	366
20-year New Trips	12	0	0	0	0	0	0	0	2	0	0	0	14
2045 Build	51	0	20	0	0	0	0	115	85	30	79	0	380

Last Chance/Whitman Dr

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	31	25	13	61	3	0	1	1	20	0	7	162
2045 No-Build	0	47	38	20	92	5	0	2	2	30	0	11	247
20-year New Trips	0	0	3	0	0	2	0	0	0	13	0	12	30
2045 Build	0	47	41	20	92	7	0	2	2	43	0	23	277

Whitman Dr/Hampton

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	2	0	0	0	0	40	0	1	28	0	71
2045 No-Build	0	0	3	0	0	0	0	61	0	2	42	0	108
20-year New Trips	9	0	83	0	0	0	0	3	2	13	16	0	126
2045 Build	9	0	86	0	0	0	0	64	2	15	58	0	234

Whitman Dr/McKinney

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	4	0	6	3	40	0	0	23	4	80
2045 No-Build	0	0	0	6	0	9	5	61	0	0	35	6	122
20-year New Trips	0	0	0	0	0	1	3	227	0	0	35	0	266
2045 Build	0	0	0	6	0	10	8	288	0	0	70	6	388

Whitman Dr/Martin Field

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	5	0	0	0	0	39	0	2	36	0	82
2045 No-Build	0	0	8	0	0	0	0	59	0	3	55	0	125
20-year New Trips	0	0	0	0	0	0	0	227	0	0	35	0	262
2045 Build	0	0	8	0	0	0	0	286	0	3	90	0	387

Whitman Dr/Homestead

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	5	0	34	0	0	0	0	42	5	40	30	0	156
2045 No-Build	8	0	52	0	0	0	0	64	8	61	45	0	238
20-year New Trips	1	0	0	0	0	0	0	223	4	0	34	0	262
2045 Build	9	0	52	0	0	0	0	287	12	61	79	0	500

Whitman Dr/Hussey/Academy

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	39	14	32	7	23	2	4	84	42	62	101	8	418
2045 No-Build	59	21	49	11	35	3	6	127	64	94	153	12	634
20-year New Trips	3	0	0	0	0	1	3	184	36	0	30	0	257
2045 Build	62	21	49	11	35	4	9	311	100	94	183	12	891

Whitman Dr/Davis

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	20	0	42	0	0	0	1	124	12	55	173	1	428
2045 No-Build	30	0	64	0	0	0	2	188	18	83	262	2	649
20-year New Trips	2	0	0	0	0	0	1	173	10	0	28	0	214
2045 Build	32	0	64	0	0	0	3	361	28	83	290	2	863

Whitman Dr/College Ave

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	50	181	35	16	184	89	42	115	44	30	104	14	904
2045 No-Build	76	274	53	24	279	135	64	174	67	45	158	21	1370
20-year New Trips	6	0	0	0	0	10	36	99	38	0	12	0	201
2045 Build	82	274	53	24	279	145	100	273	105	45	170	21	1571

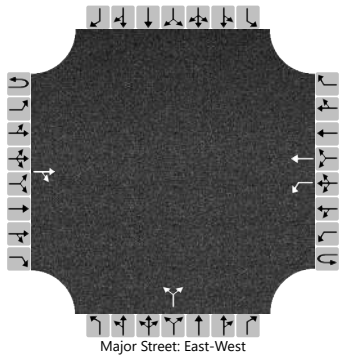
Whitman/New Driveway (busiest one)

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	0	0	0	0	43	0	0	42	0	85
2045 No-Build	0	0	0	0	0	0	0	65	0	0	64	0	129
20-year New Trips	2	0	20	40	0	4	1	85	0	4	25	6	187
2045 Build	2	0	20	40	0	4	1	150	0	4	89	6	316

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	85		30	79			51		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					77					
Capacity, c (veh/h)						1346					702					
v/c Ratio						0.02					0.11					
95% Queue Length, Q_{95} (veh)						0.1					0.4					
Control Delay (s/veh)						7.7					10.8					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.8						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

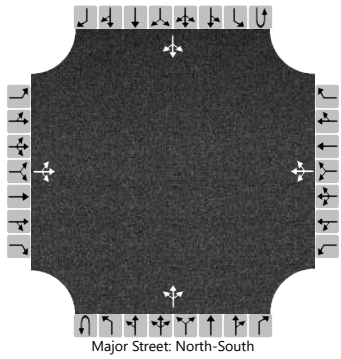
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		43	0	23		0	47	41		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				73			0				22		
Capacity, c (veh/h)			768				792			1478				1490		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
Control Delay (s/veh)			9.7				10.0			7.4				7.5		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.7				10.0				0.0				1.4		
Approach LOS		A				B										

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HCS7 Two-Way Stop-Control Report

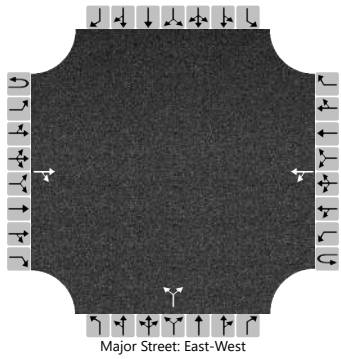
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	2		15	58			9		86				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						17					107					
Capacity, c (veh/h)						1519					966					
v/c Ratio						0.01					0.11					
95% Queue Length, Q_{95} (veh)						0.0					0.4					
Control Delay (s/veh)						7.4					9.2					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						1.6				9.2						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

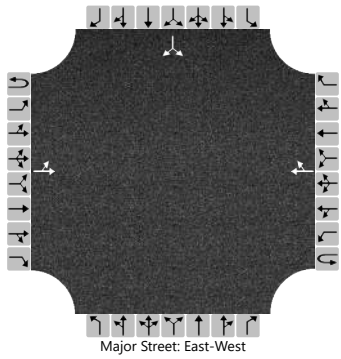
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	288				70	6						6		10
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9													18	
Capacity, c (veh/h)		1507													783	
v/c Ratio		0.01													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.4													9.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.3												9.7		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

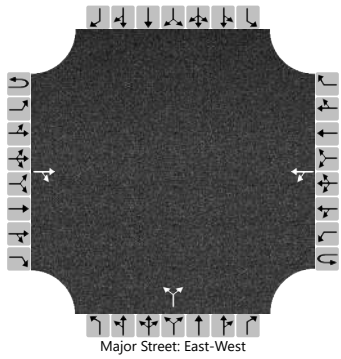
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			286	0		3	90			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1217					703					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						8.0					10.2					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						0.3				10.2						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

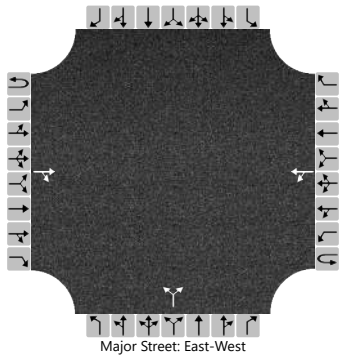
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			287	12		61	79			9		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					75					
Capacity, c (veh/h)						1184					625					
v/c Ratio						0.06					0.12					
95% Queue Length, Q_{95} (veh)						0.2					0.4					
Control Delay (s/veh)						8.2					11.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						3.9				11.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

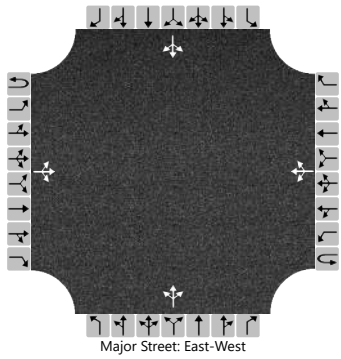
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	311	100		94	183	12		62	21	49		11	35	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				104					147				56	
Capacity, c (veh/h)		1347				1099					301				250	
v/c Ratio		0.01				0.10					0.49				0.22	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.5				0.8	
Control Delay (s/veh)		7.7				8.6					27.9				23.5	
Level of Service (LOS)		A				A					D				C	
Approach Delay (s/veh)	0.2				3.4				27.9				23.5			
Approach LOS									D				C			

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HCS7 Two-Way Stop-Control Report

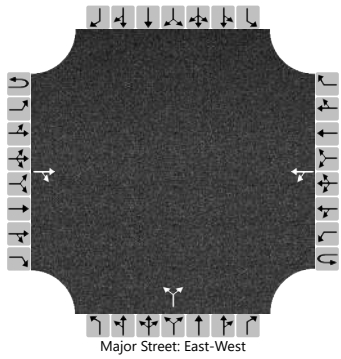
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			361	28		83	290			32		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					114					
Capacity, c (veh/h)						1093					405					
v/c Ratio						0.09					0.28					
95% Queue Length, Q_{95} (veh)						0.3					1.1					
Control Delay (s/veh)						8.6					17.4					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)						2.7				17.4						
Approach LOS										C						

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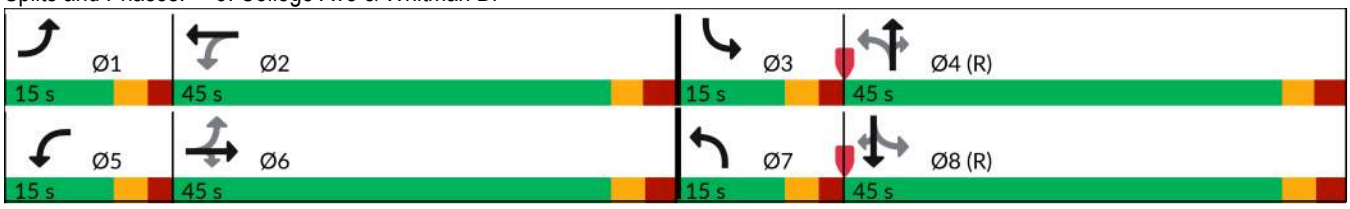
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Future Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.983				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1831	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.408			0.334			0.468			0.560		
Satd. Flow (perm)	760	1863	1583	622	1831	0	872	1863	1583	1043	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	297	114	49	185	23	89	298	58	26	303	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	297	114	49	208	0	89	298	58	26	303	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	35.0	26.7	26.7	31.3	22.9		70.0	63.8	63.8	64.4	57.6	57.6
Actuated g/C Ratio	0.29	0.22	0.22	0.26	0.19		0.58	0.53	0.53	0.54	0.48	0.48
v/c Ratio	0.36	0.72	0.26	0.21	0.59		0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
LOS	C	D	A	C	D		B	C	A	B	C	A
Approach Delay (s/veh)		38.4			44.3			16.1			17.6	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	297	114	49	208	89	298	58	26	303	158
v/c Ratio	0.36	0.72	0.26	0.21	0.59	0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Length 50th (ft)	61	219	0	26	144	28	135	0	8	142	15
Queue Length 95th (ft)	92	290	40	48	199	64	244	0	25	261	66
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	304	610	599	266	602	587	989	897	649	894	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.19	0.18	0.35	0.15	0.30	0.06	0.04	0.34	0.19

Intersection Summary

HCS7 Two-Way Stop-Control Report

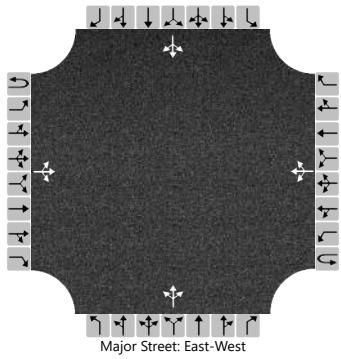
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	3/5/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/New Driveway
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	New Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	150	0		4	89	6		2	0	20		40	0	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				4					24				49	
Capacity, c (veh/h)		1479				1405					850				660	
v/c Ratio		0.00				0.00					0.03				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.4				7.6					9.4				10.9	
Level of Service (LOS)		A				A					A				B	
Approach Delay (s/veh)		0.1				0.3				9.4				10.9		
Approach LOS										A				B		

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Appendix 5

Economic Analysis

2025

Market Feasibility

MARTIN AIRFIELD

An analysis conducted by: TheMettsGroup

Prepared for: CP COLLEGE PLACE WALLA WALLA VALLEY

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Purpose

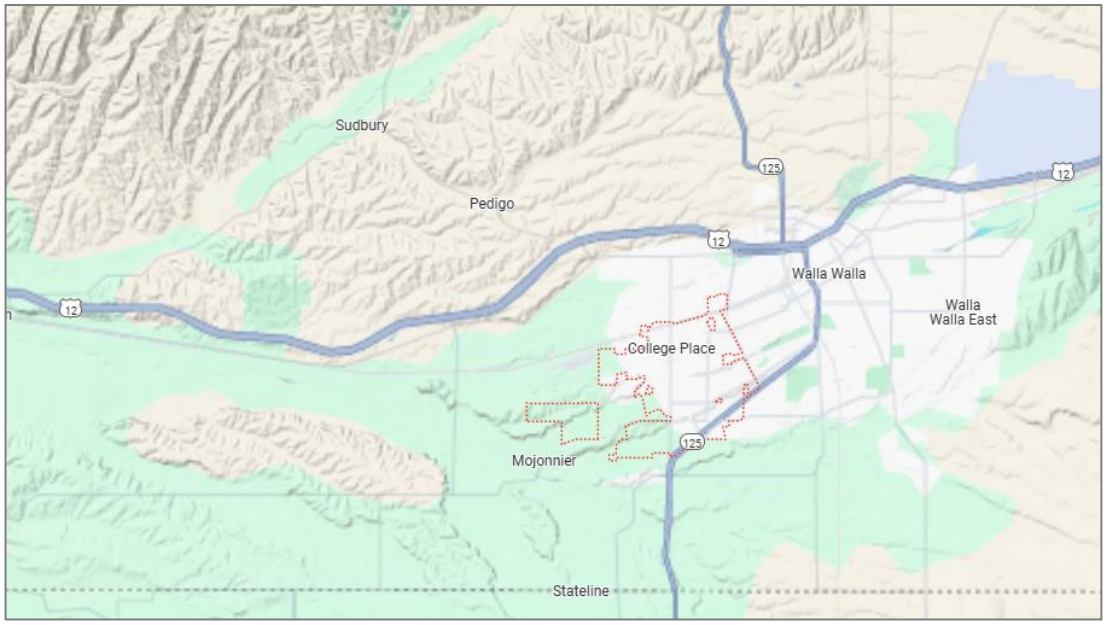
The purpose of this study is to analyze market feasible light industrial uses for the 233-acre site around Martin Airfield and bordered by Whitman Drive to the north, Hampton Lane to the west, Homestead Acres Subdivision to the east, and a bluff to the south. This study conforms to the minimum threshold criteria established by the Washington State Community and Economic Revitalization Board for potential grant funding opportunities.

The following outlines the scope within the above objectives:

1. Interview key stakeholders to gather and review pertinent project background data.
2. Assess the locational characteristics of the site relative to the industrial market.
3. Perform Market analysis for the site
4. Perform Job Benefit Analysis
5. Evaluate the overall City of College Place area economic outlook for industrial real estate development.
6. Conduct interviews with selected key persons in the College Place catchment area knowledgeable of demand potentials by various industrial uses (e.g. complementary agricultural processing/supplier needs, light manufacturing, warehouse distribution, flex space, etc.).
7. Identify and evaluate potentially competing sites and corresponding industrial uses.
8. Analyze which target industries may be located at the site.
9. Recommend specific companies that should be targeted to prospective tenants.
10. Forecast the economic impacts to the City of College Place if the site is fully tenanted with the prescribed potential industrial users.
11. Recommend a project marketing strategy for the site.
12. Prepare a corresponding Economic Feasibility Analysis and marketing strategy for the site.

Location

College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.



Economy Overview

The population of College Place is estimated at 9,945, reflecting a modest growth of 0.4% from 2020 to 2024. Population growth trends for both College Place and Walla Walla County show similar growth trends, with a sharp decline around 2022 in College Place, followed by gradual stabilization. Workforce characteristics indicate a labor force participation rate of 59%, which is below the national average of 63.5%. Additionally, 10% of the workforce consists of remote workers, and 71% of residents have some college education or higher, suggesting a relatively educated workforce.

Population

9,945

0.4% ⇧

(2020-2024 est.)

Workforce Characteristics

59%

Labor Force Participation Rate
(63.5% U.S.)

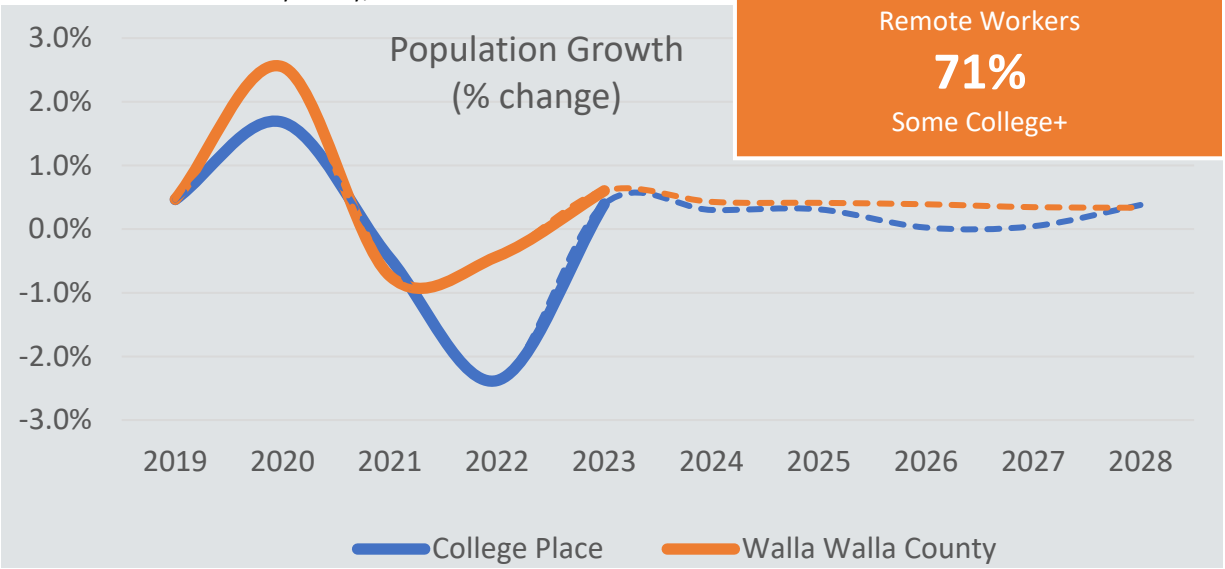
10%

Remote Workers

71%

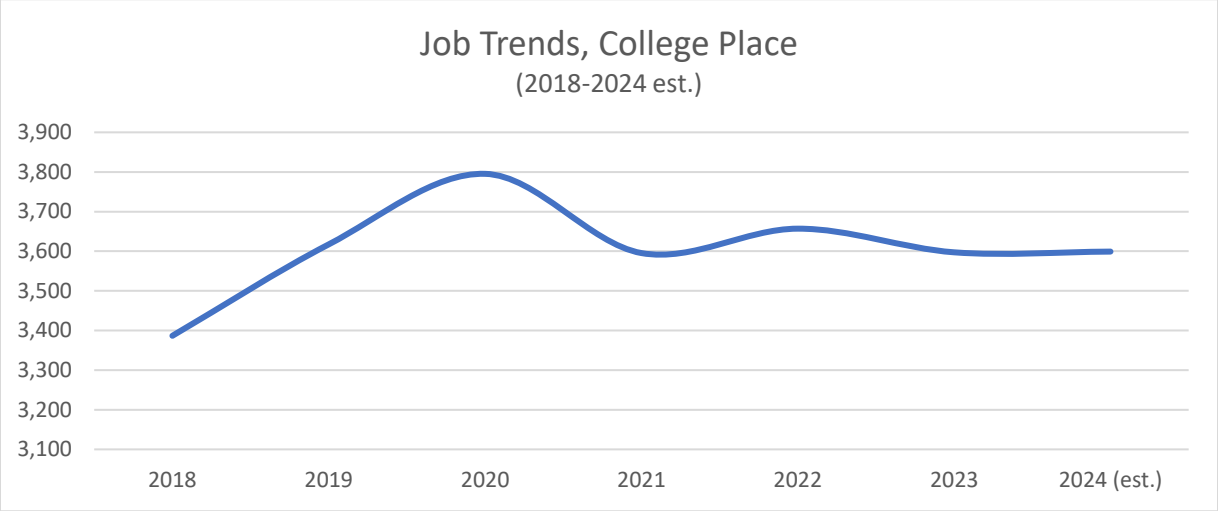
Some College+

Source: American Community Survey, 5-Year Estimates

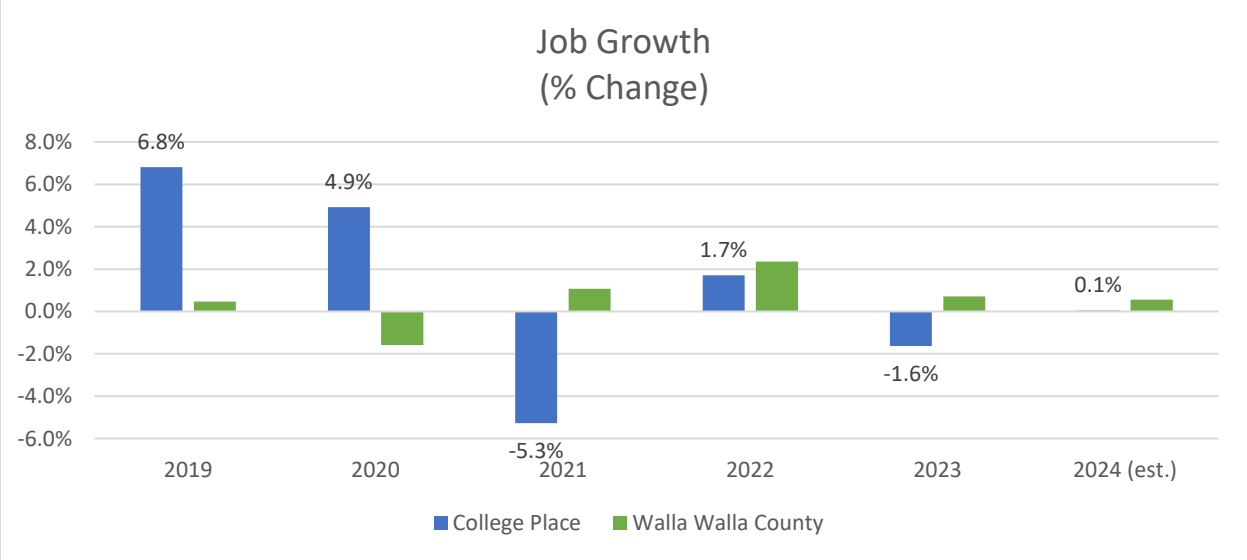


TheMettsGroup

The job market in College Place is still recovering from the pandemic. Between the peak in 2020 and the trough in late 2021, approximately 200 jobs were lost within the 99324 ZIP code, representing a 5.3% decline.



Source: Lightcast, QCEW, Non-QCEW, Self-employed



Source: Lightcast, QCEW, Non-QCEW, Self-employed

The largest contributing industries include government (primarily higher education), retail trade, accommodation and food services, health care, and finance and insurance. Government employment dominates the local labor market, followed by educational services, indicating the area's strong ties to public institutions and higher education. Retail and health care also play significant roles, supporting both local consumption and essential services.

The region's Gross Regional Product (GRP) stands at $417 million, accounting for 10% of the County's total economic output. The primary industries driving GRP are government, finance and insurance, retail, educational services, and health care. The data suggests a stable economy with growth in key service-oriented sectors, reinforcing the importance of education, health care, and retail as economic pillars.

GRP

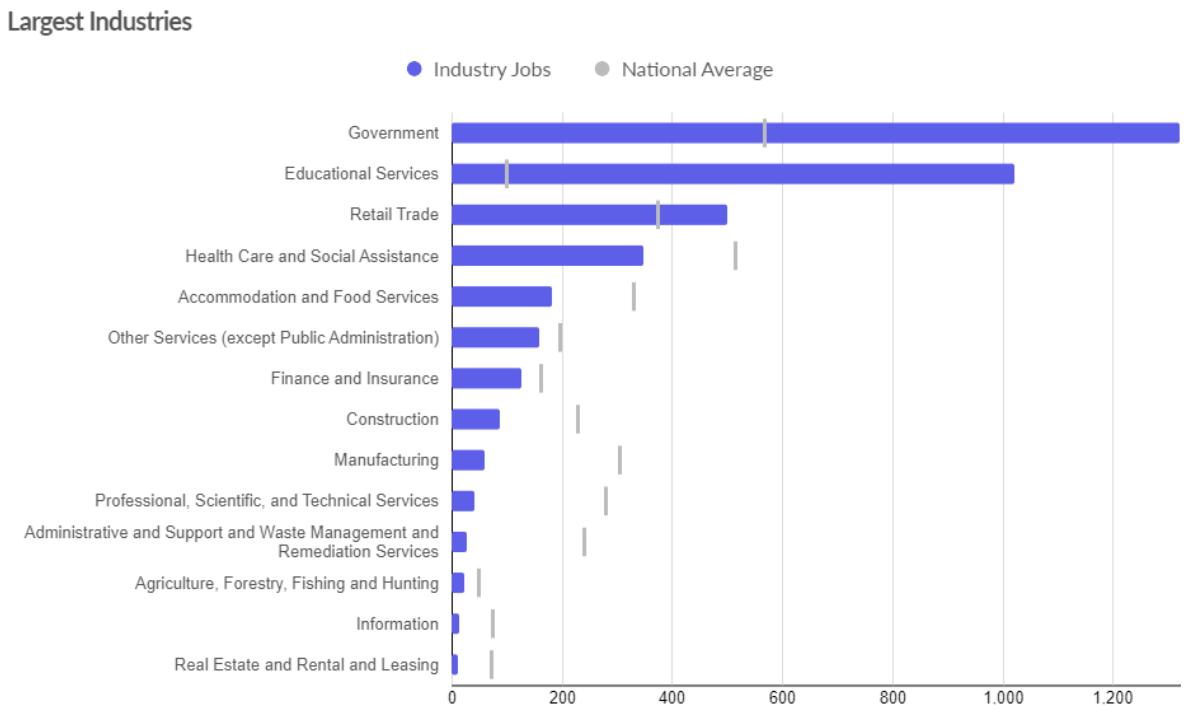
$417M

(10% of County)

Largest Contributing Industries:

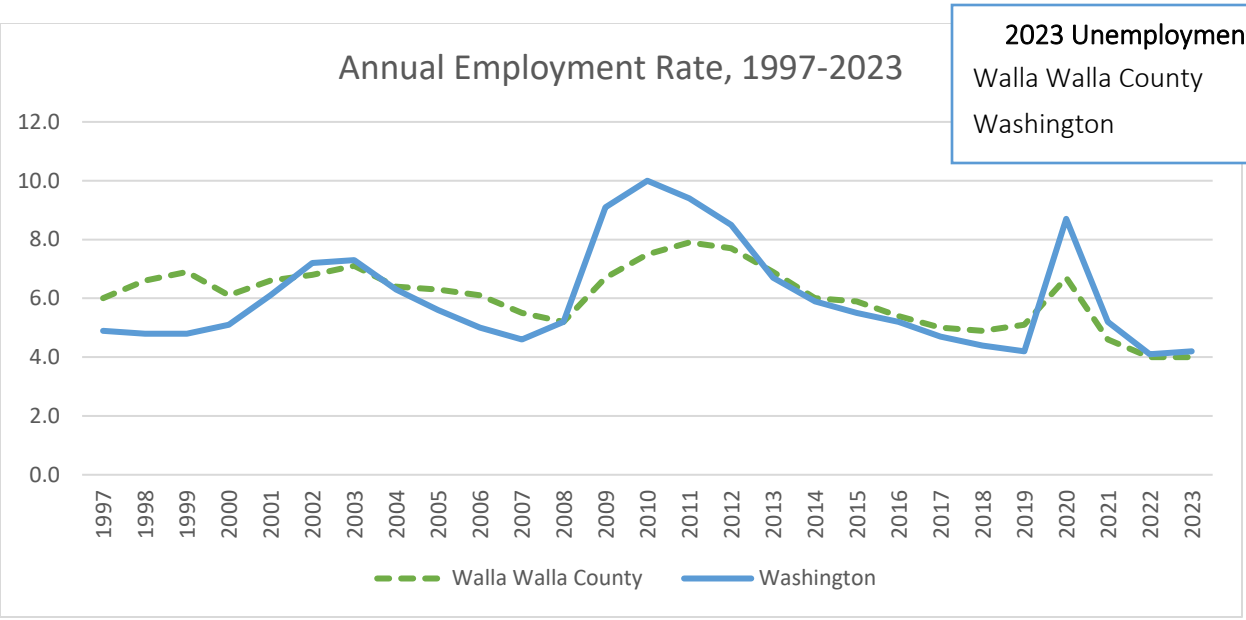
- Government
- Finance & Insurance
- Retail
- Educational Svcs
- Health Care

Source: Lightcast, College Place (zip code 99324)



Source: Lightcast, QCEW, Non-QCEW, Self-employed for College Place (zip code 99324)

The unemployment rate in Franklin County remains higher than the state, by 2.1 percentage points. The 2019 annual unemployment rate—the most recent annual number at the time of this report—in Franklin County was 6.4%, compared to 4.3% statewide and 3.7% for the nation.



2023 Unemployment Rate	
Walla Walla County	4.0%
Washington	4.2%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics program

According to the Bureau of Labor Statistics' Occupational Employment and Wage Statistics, the median hourly wage in Walla Walla County was $23.04 as of the latest available data (May 2023). Walla Walla County continues to trail the state in wages—20% below the state average.

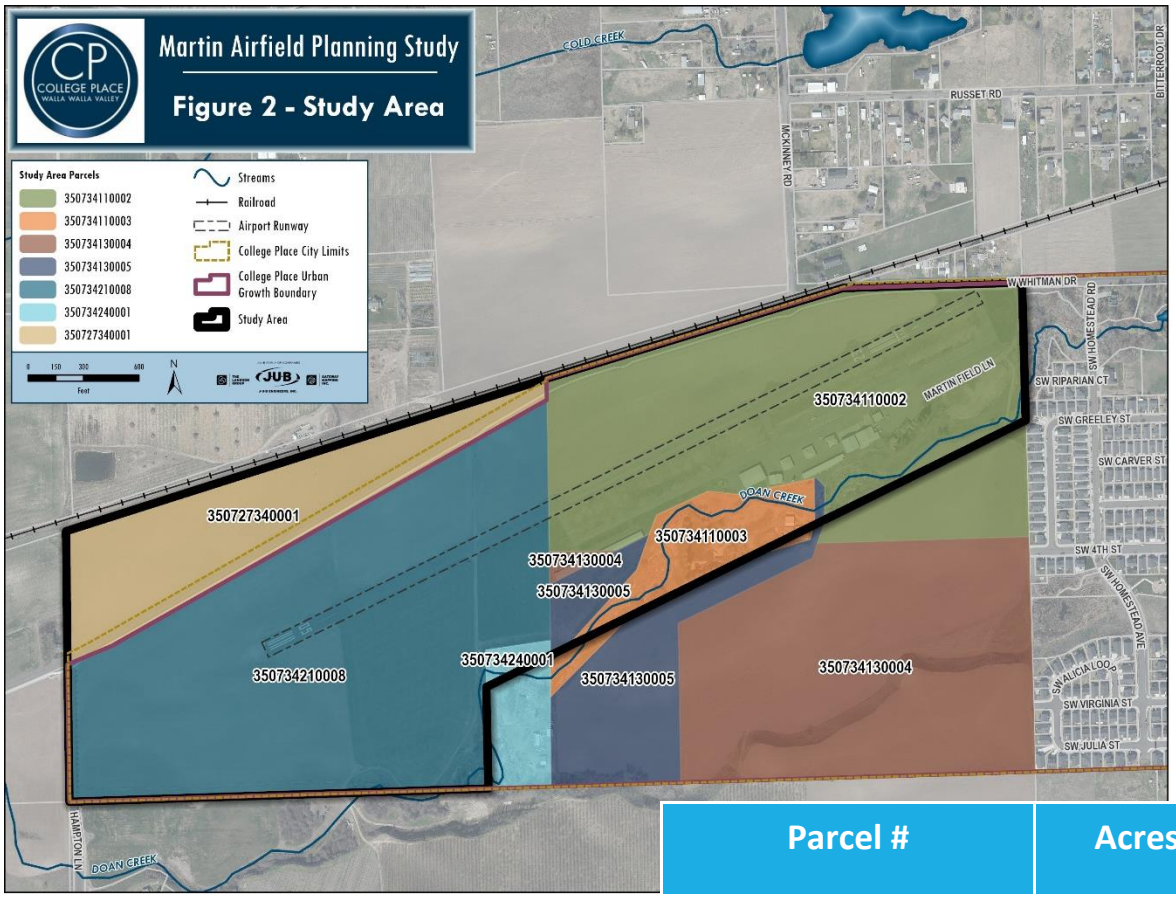
Median Hourly Wage

$23.04
(Walla Walla County)

$28.81
(Washington)

Commercial Real Estate Snapshot

The City of College Place only has three acres of active light industrial land. The project area consists of six (6) light industrial zoned parcels, totaling 233 acres.



Parcel #	Acres
350734210008	79.83
350734240001 (private)	6.61
350734130005	19.82
350734130004	54.58
350734110002	62.60
350734110003	10.00
Total	233.44

Industrial Inventory

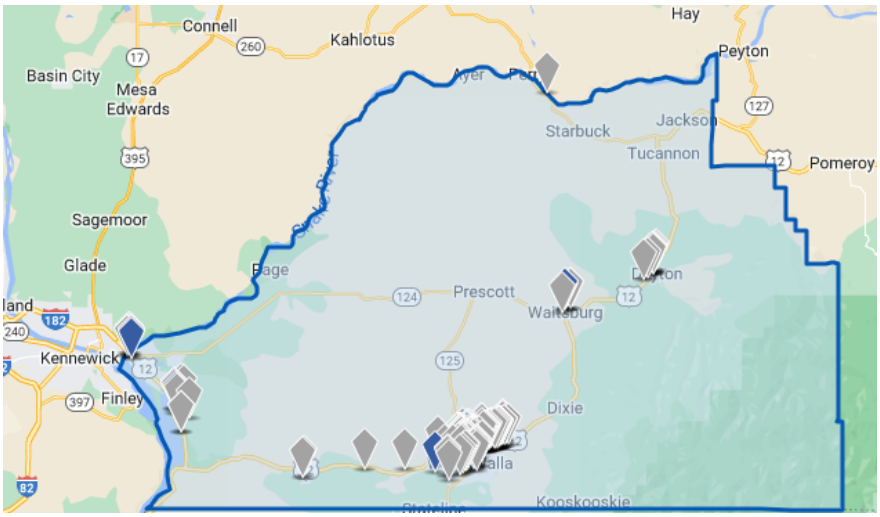
Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

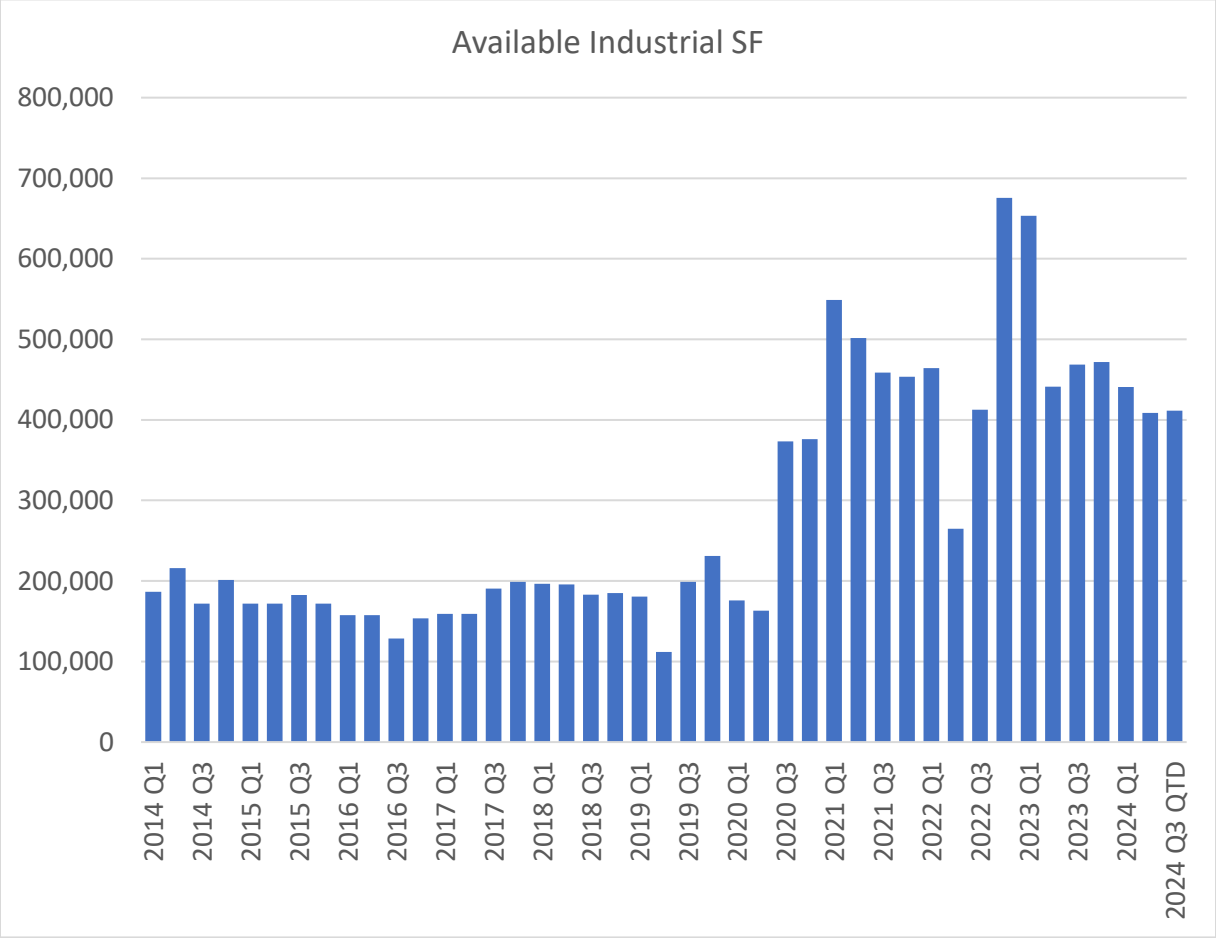
4.6M SF
inventory

411,260 SF
available space

5.6%
vacancy rate

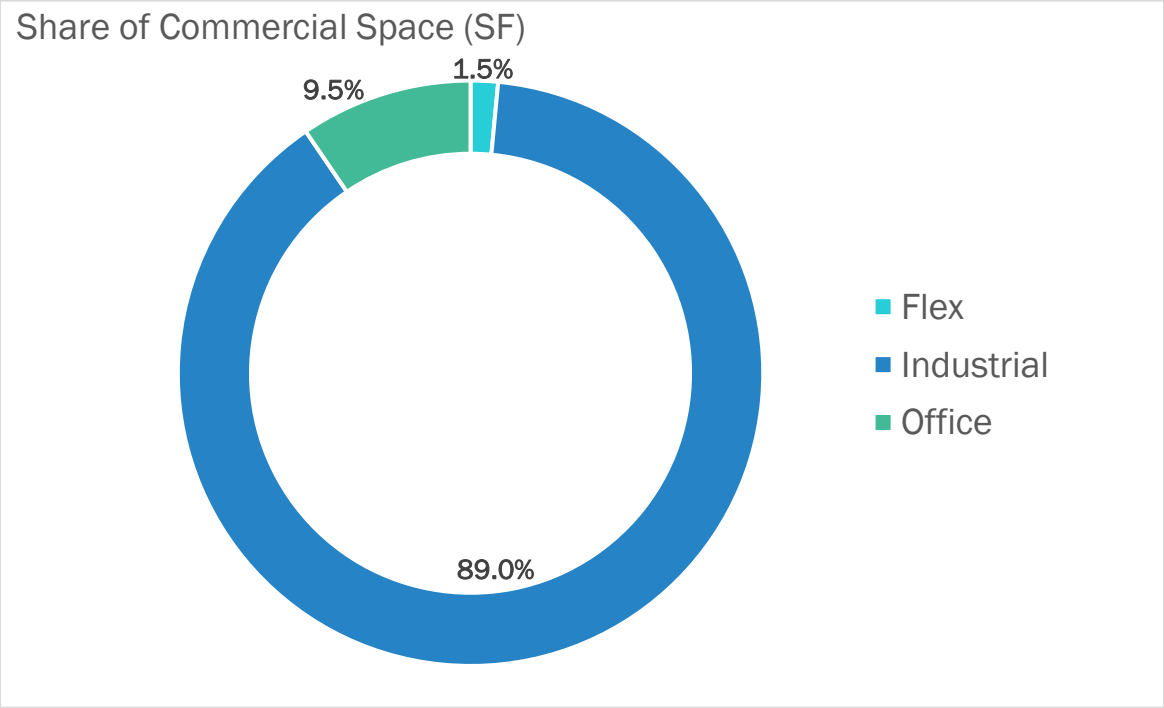
$8.71/SF
rental rate

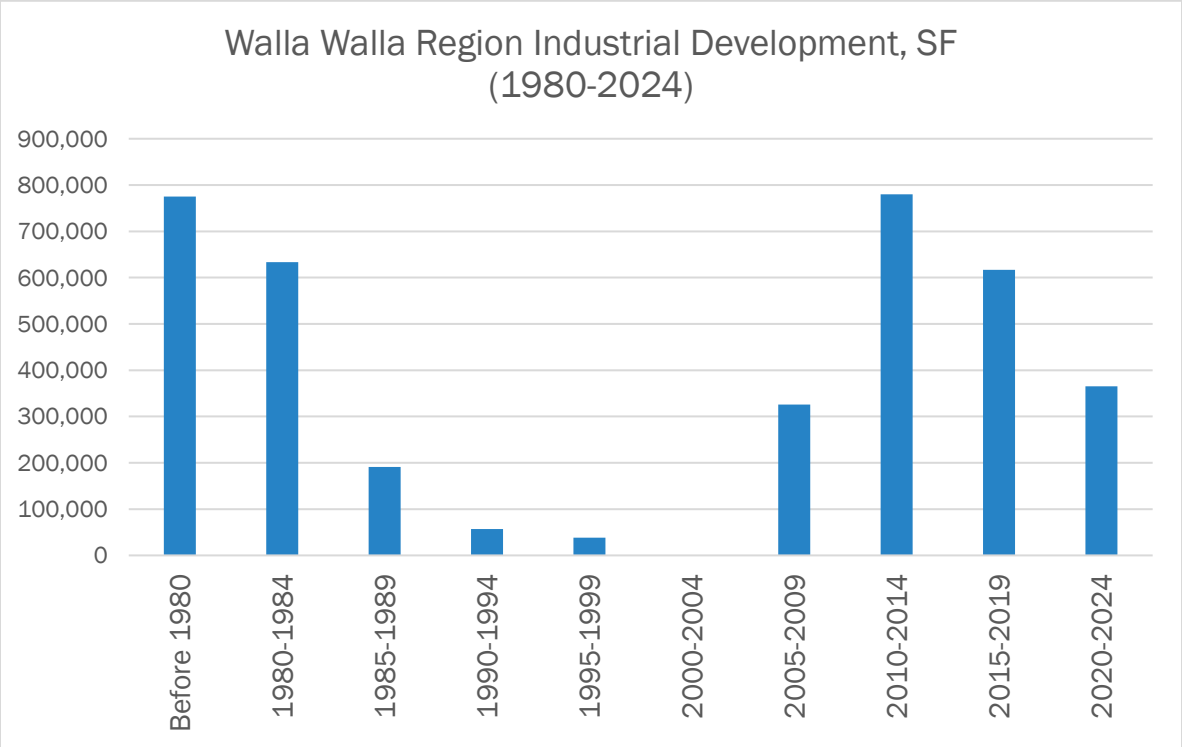




Source: Costar

Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

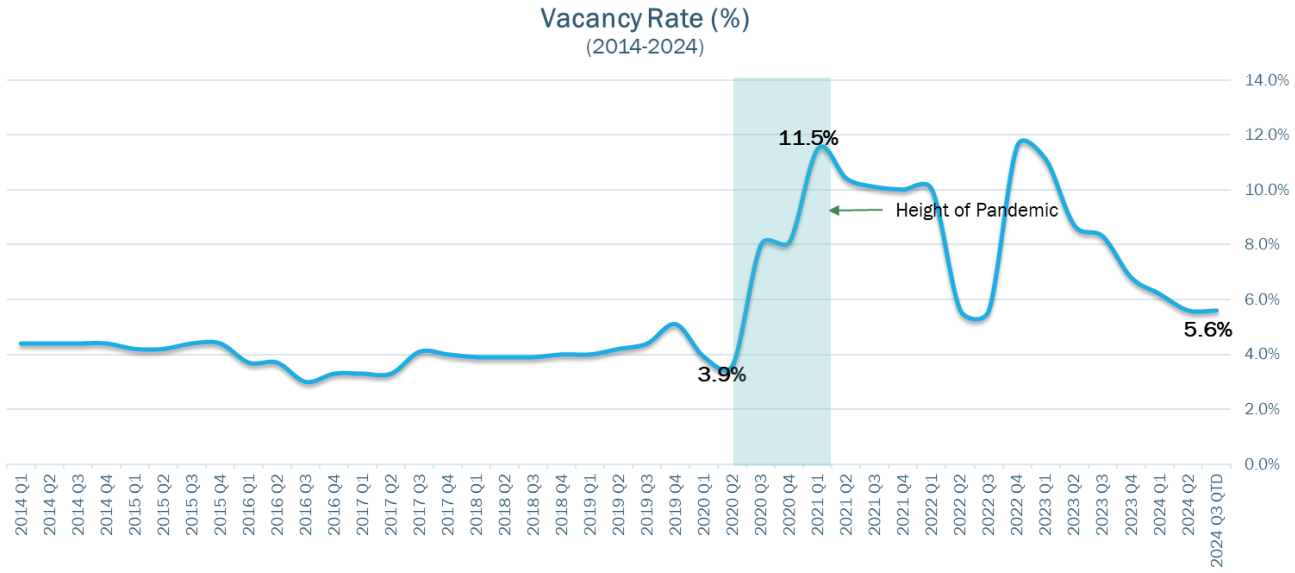




Source: Costar

Industrial Performance

Vacancy rates in the Walla Walla region are currently slightly above average at 5.6%. However, this is a significant improvement from the pandemic peak of 11.5%. Before the pandemic, vacancy rates typically ranged between 3% and 4%.

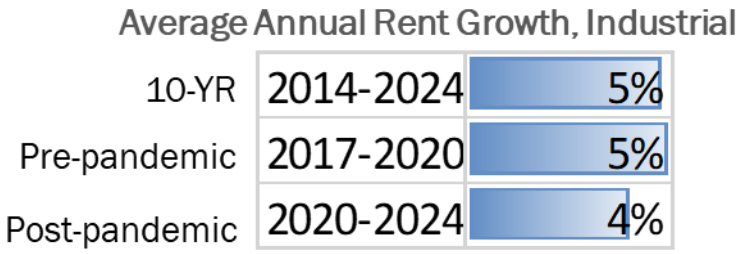


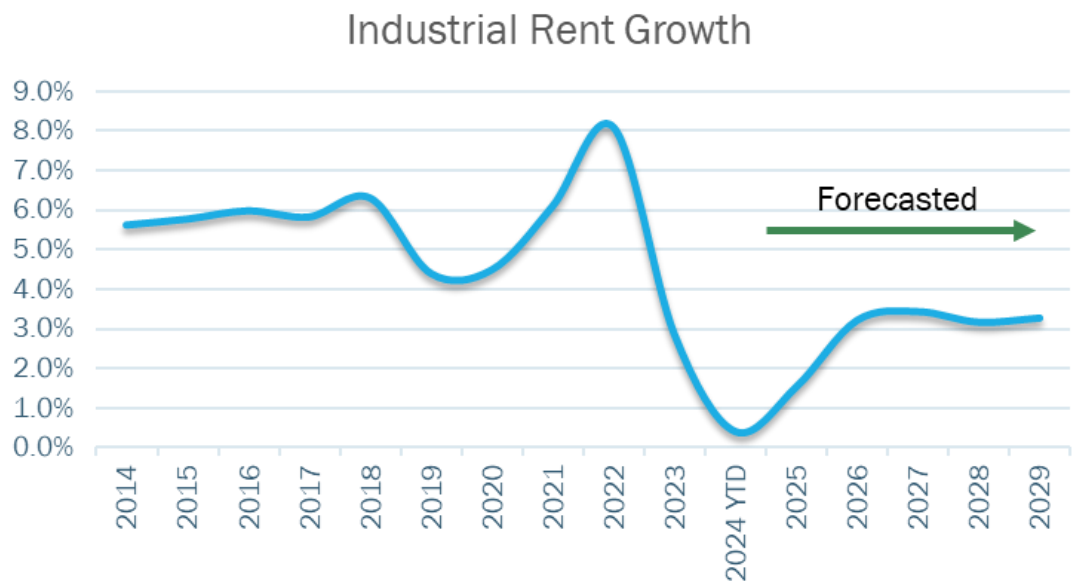
Source: Costar, Authors calculations

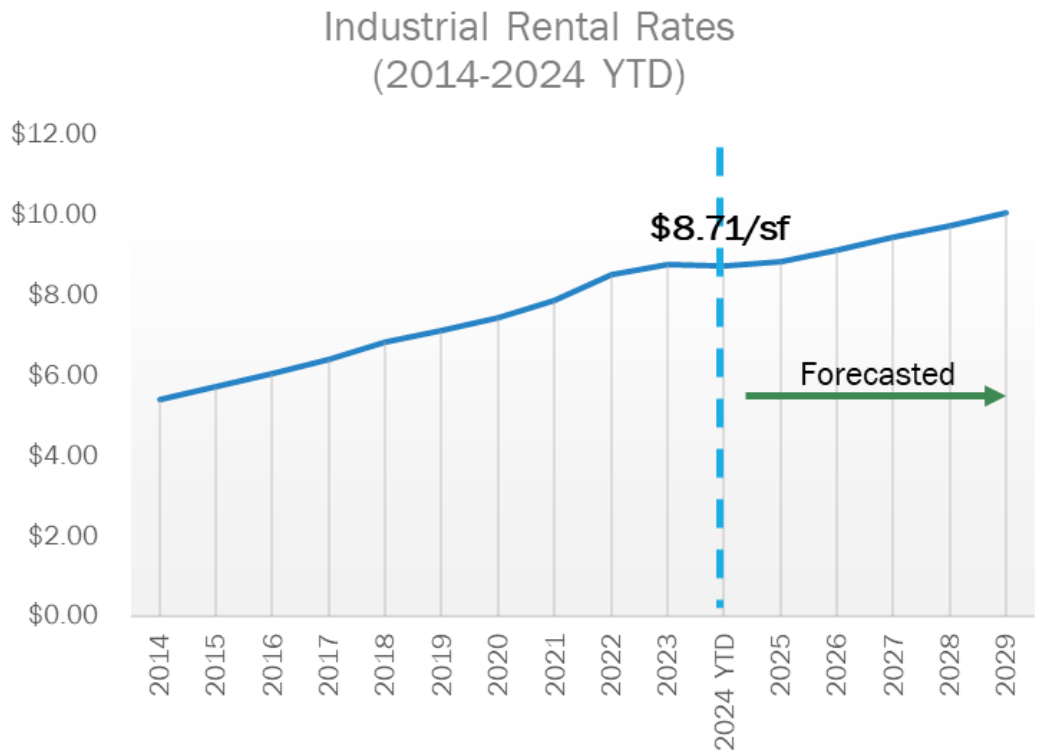
Rent growth for both industrial and office space has maintained a steady trajectory, defying the challenges posed by the pandemic.

While there was a slight deceleration in rent growth for office space during the pandemic, it managed to persevere and return to pre-pandemic levels of growth. In contrast, industrial rental rates continued their upward trend at a commendable pace.

This sustained growth, coupled with the constrained supply of new commercial inventory and low vacancy rates, underscores the demand for commercial space in Ellensburg.



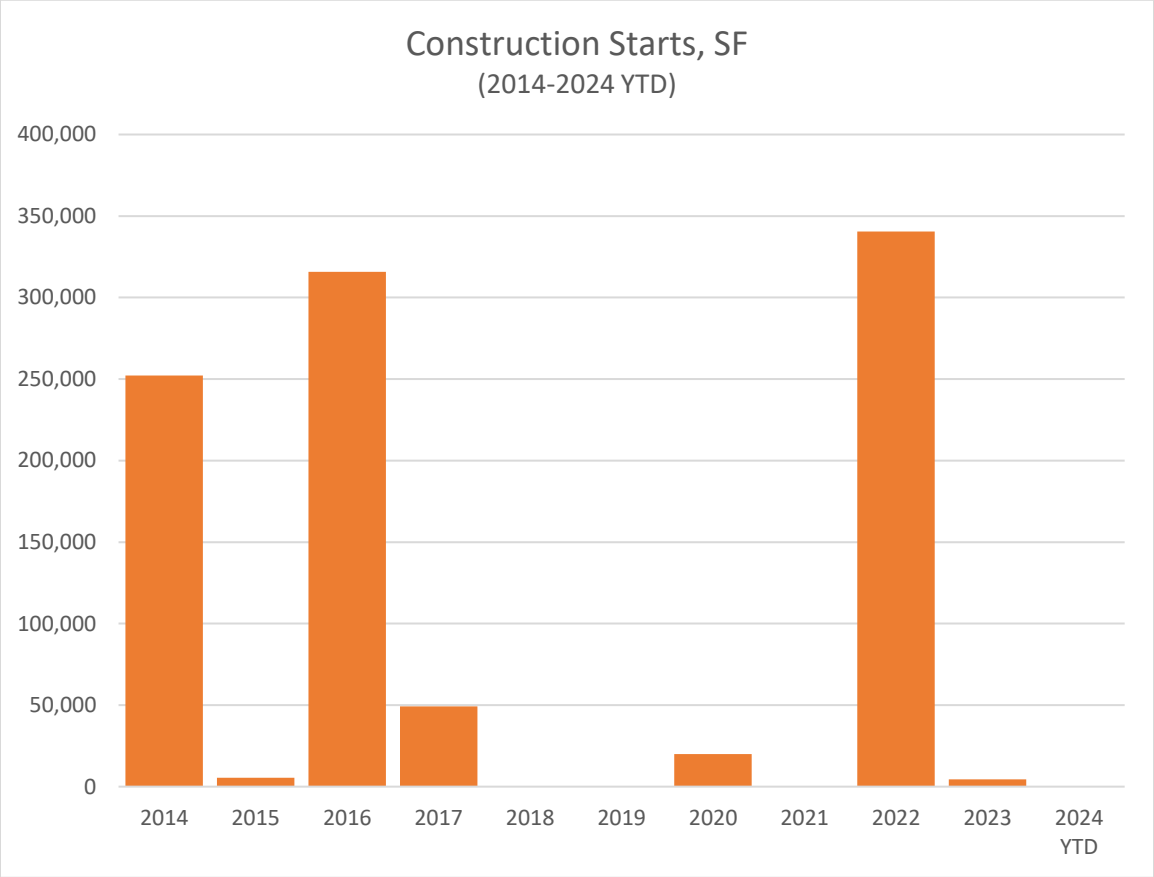




Source: Costar, Authors calculations

Industrial Pipeline

Based on information from Costar, there is 223,720 SF of industrial space under construction in the Walla Walla region. Majority of this activity started in 2022 and is anticipated to hit the market by 2025.



Source: Costar

Competing Sites

Address	City	Year Built	Building SF	Acres (Land only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Industrial Market Potential

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

Industry and Supply Chain Gap Analysis

An industry and supply chain gap analysis was conducted to determine the businesses and industry sectors that offer the most potential for growth around the region. This data was then ground-truthed with interviews from major businesses in the area, potential businesses, and other industry experts and stakeholders.

This analysis was assessed by four critical factors and conducted at the MSA level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 mark but showing job loss, were deemed "*Important and Requiring Attention*," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Industry Health Check

Agriculture and food processing remain central to the local economy, with crop production, food manufacturing, and beverage product manufacturing serving as core industries. The presence of these sectors suggests strong opportunities for value-added agriculture, food processing, and supply chain expansions such as packaging, cold storage, and distribution. Additionally, the region's healthcare sector, led by hospitals and social assistance, indicates an ongoing demand for medical services, elder care, and workforce training in healthcare-related fields. Retail and trade are also significant, with merchant wholesalers (nondurable goods) and sporting goods and hobby retailers playing a role in the local economy, pointing to potential growth in specialty retail and recreational markets.

To capitalize on these strengths, strategic investments should focus on targeted food and beverage processing infrastructure, support for healthcare workforce development, and logistics and wholesale distribution enhancements. Expanding retail and recreation offerings could further stimulate economic activity, particularly in outdoor and lifestyle industries.

Several industries are gaining traction in College Place, indicating new opportunities in construction, healthcare, professional services, and logistics. The construction sector, including building material supply dealers, specialty trade contractors, and construction of buildings, reflects increased demand for residential and commercial development. This growth underscores the need for real estate investment, workforce training in skilled trades, and green building technologies.

The expansion of ambulatory healthcare services points to a growing need for urgent care facilities, specialized outpatient clinics, and home health services, while repair and maintenance services highlight demand for auto repair, equipment servicing, and facility management. The rise of professional, scientific, and technical services, including computer systems design, engineering, custom programming, and R&D, suggests an increasing focus on technology-driven economic diversification. Encouraging the growth of tech startups, cybersecurity firms, and engineering consultancies could strengthen the region's innovation ecosystem.

Additionally, insurance carriers and durable goods wholesalers signal potential for expanded finance and logistics services, supporting regional supply chains and commercial trade. Investing in warehouse and distribution infrastructure could further position College Place as a logistics hub, particularly for durable goods related to agriculture, construction, and manufacturing.

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

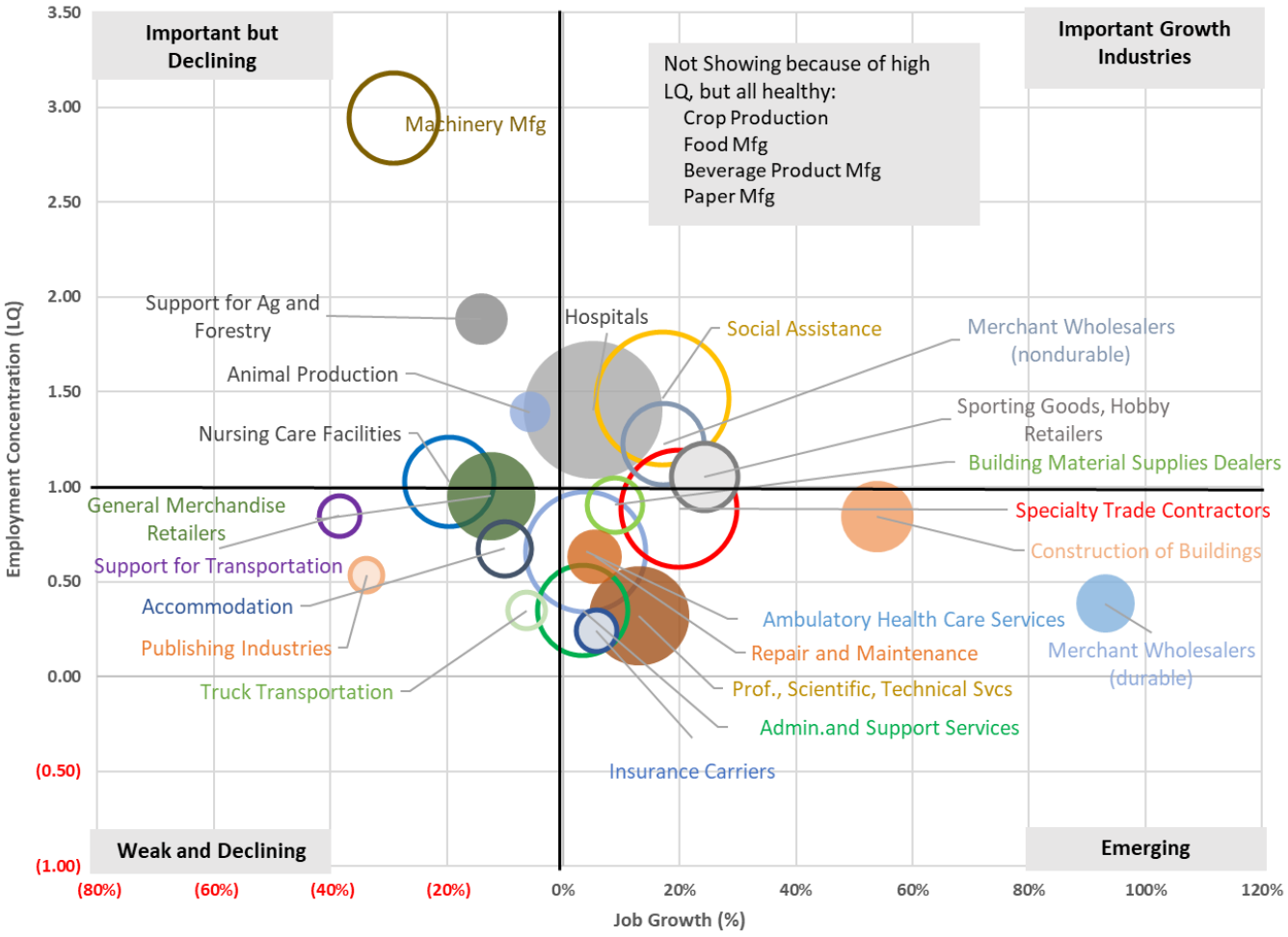
- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

Industry Health Check



Additionally, the following key sectors are driving the success of major employers in the region. By leveraging these industries, there is an opportunity to strengthen and expand local supply chains, attract complementary businesses, and enhance regional competitiveness through targeted infrastructure investments and workforce development.

Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

Potential Uses

Following the industry and supply chain gap analysis, we conducted interviews with local and regional businesses, higher education institutions, and key stakeholders to gather input on potential uses and validate the summarized data.

Based on the above analysis and insights gathered from interviews, the following uses were identified as having the greatest potential for the 233-acre site.

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
- R&D or Professional & Technical Services
- Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
- Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

Site Building Capacity

The following potential buildout scenario was estimated based on the potential uses identified in the analysis above, combined with industry standards for land requirements for different types of industrial facilities, focusing on site usage, building size, and ground coverage ratios. For each industry, the data outlines the percentage of the site utilized, the typical building square footage, and the corresponding potential number of buildings that could be accommodated on a given site. The total acreage potential across all industries is roughly 28 acres, with an average of 4 acres per building.

Use	% of Site	Ground Coverage Ratio	Typical Building SF (industry standard)	Potential Number of Buildings	Acres per Bldg	Typical Range (small to medium)
Wholesalers	25%	50%	50,000	6.7	4.6	2-5 acres
Truck Transportation	15%	30%	25,000	2.9	6.4	2-5 acres
Manufacturing	20%	50%	50,000	5.3	4.6	2-5 acres
Food Processing	15%	40%	50,000	2.6	7.2	2-5 acres
Lab & Testing Facilities	10%	30%	15,000	3.2	3.8	0.5-2 acres
R&D	15%	30%	10,000	7.2	2.6	0.5-2 acres
Total	100%			28	4	

Impacts

Economic impact analyses are used to estimate the overall economic activity, including spill-over and multiplier impacts, which occurs as a result of a particular business, development or event.

The economic activity related to the Martin Airfield site is the millions of dollars of goods and services purchased from local vendors and the wages and benefits paid to local workers. This initial injection of funds circulates to the business owners and employees that supply the materials, goods and services needed for the development. These contractors, businesses and households continue the economic ripple effect by hiring workers and buying goods and services to facilitate their business.

This analysis breaks down the overall project based on the results from the industry analysis and interviews. The project site layout will be further vetted by JUB Engineers based on infrastructure needs and requirements.

Once the development is completed and occupied, commercial activity and new residential households will spend millions of dollars annually in the course of their daily activities. This recirculation of the original expenditures multiplies their impact through these indirect and induced effects.

The extent to which the initial expenditures multiply is estimated using economic models that depict the relationships between industries and firms and their employees. These models are built upon expenditure patterns that are reported to the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Bureau of Economic Analysis. Data is regionalized so that it reflects and incorporates local conditions such as average wages, expenditure patterns and resource availability and costs.

The multipliers used in this analysis were generated by IMPLAN in coordination with the U.S. Bureau of Economic Analysis' RIMS II multipliers. Where appropriate, conservative estimates were used.

To further delineate, below are brief definitions of the three typical types of impacts.

> ***Direct impacts***: derive directly from an activity or event (first round supply chain)
>
> ***Indirect impacts***: generated as a result of business-to-business transactions (second tier supply chain)
>
> ***Induced impacts***: generated as a result of consumer-to-business transactions (a result from consumer spending)

Direct impacts are those economic impacts that occur as a consequence of direct activity and employment provided by the businesses that support the area, other businesses and government agencies that provide a range of related support services.

Indirect impacts are generated as a result of business-to-business transactions and induced impacts are a result of consumer-to-business transactions.

The economic impact results should be interpreted as those that are *attributable* to the proposed development at the subject site rather than assuming the new development will *generate* such new activities.

Given the desirable industries that have the potential of fulfilling existing business supply chain needs and interviews from industry experts, there is potential for several different users at this site. The impacts summarized below are indicative of different users in the identified industries, as outlined in the section above. The median wage for proposed jobs in these industries is $40.36 per hour in Walla Walla County, driven upward by manufacturing, lab and R&D positions. This is **72% higher than the CERB median hourly wage** of $23.04 for the County. Truck transportation and warehousing average $30.56 per hour, still above the median hourly wage for the County.

The 687 direct jobs estimated to be created at full build-out is expected to increase the labor force in Walla Walla County—assuming that some workers will reside in Walla Walla County. A small portion will most likely reside outside the area and, therefore, positively impacting their labor force numbers as well.

Impact on Jobs						
Impact on Jobs	Buildout Scenario					Total
	MFG	Truck Transp.	Wholesalers	Lab & Testing Facilities	R&D	
TOTAL JOBS	494	33	239	124	228	1,118
Direct	317	23	107	96	144	687
Indirect + Induced	177	10	132	28	84	430
SUBTOTAL	***494***	***33***	***239***	***124***	***228***	***1,118***

Source: Author's calculations using multipliers from IMPLAN; rounds to nearest thousand

Table 1. Labor Force Impacts as a result of Jobs Directly Created (687 new direct jobs)

Walla Walla County	Current	Impact from Direct Jobs	Percent Change
Labor Force	27,255	28,373	4.1%
Unemployed	1,357	239	-82.4%

[1]assuming that people that fill these jobs will reside in Walla Walla County (labor force data is based on "place of residence" and not place of work). Based on the current 5.0% unemployment rate (Jan 2025)
Source: Author's calculations based on BLS data

Conclusion

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

To support these emerging industries, incentives and policy strategies should focus on workforce development, business incubation, and infrastructure investment. Strengthening construction and trade workforce training programs can address the rising demand for skilled labor. Tech and business services growth could be encouraged through business incubators, coworking spaces, and startup funding for IT and cybersecurity firms. Expanding healthcare services and insurance offerings will be crucial in meeting the needs of a growing population. Finally, the development of logistics and wholesale trade infrastructure could enhance College Place's role as a regional distribution center.

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 City track the metrics set forth, and required by CERB, to determine if the desired outcomes are achieved and to help guide future development projects.

Overall, College Place is well-positioned for economic expansion through a combination of industrial diversification, strategic investments, and workforce development initiatives. By leveraging its strong agricultural base, growing healthcare sector, and emerging technical and construction industries, the region can sustain long-term economic growth and resilience.

Appendix 6

Detailed Cost Estimates

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Roads**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$176,000
2.00	**Traffic Control**			5.0%	$110,000
3.00	Crushed Surface Base Course	6,121	Tons	$35	$214,235
4.00	Crushed Surface Top Course	5,226	Tons	$35	$182,910
5.00	HMA CL 1/2" PG 64-28	3,983	Tons	$150	$597,450
6.00	Cement Conc. Traffic Curb and Gutter	8,138	LF	$25	$203,450
7.00	Cement Conc. Sidewalk	5,424	SY	$60	$325,440
8.00	Streetlights (includes wiring, J-Boxes, etc.)	27	EA	$7,500	$202,500
9.00	Street Trees	136	EA	$500	$68,000
10.00	Irrigation	1	LS	$100,000	$100,000
11.00	Stream Crossing - Does Not Include Row Acquisition For House	1	LS	$250,000	$250,000
12.00	Paint & Signage	1	LS	$50,000	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 2,480,000**
	Contingency [1]				**$ 744,000**
	City of College Place Sales Tax (8.8%)				**$ 284,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 877,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 4,385,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Earthwork**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$22,000
2.00	**Traffic Control**			5.0%	$14,000
3.00	Earthwork, Grading Site	8,000	CY	$30	$240,000
4.00	Clearing and Grubbiong	5	ACRE	$5,000	$25,000
5.00	Asphalt Pavement Restoration		SY	$70	$0
6.00	Hydroseeding	2	ACRE	$5,000	$10,000
7.00	Silt Fence		LF	$5	$0
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 311,000**
	Contingency [1]				**$ 93,000**
	City of College Place Sales Tax (8.8%)				**$ 36,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 110,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 550,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	2/11/2025 30-24-031
ITEM:	Sewer Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$302,000
2.00	**Construction Traffic Control**			0.0%	$0
3.00	**Gravity Sewer Pipe**				
3.01	4" PVC Gravity Sewer Service Lateral	1,165	LF	$27	$31,455
3.02	8" PVC Gravity Sewer Service Lateral		LF	$41	$0
3.03	6" PVC Gravity Sewer Pipe		LF	$40	$0
3.04	8" PVC Gravity Sewer Pipe	7,400	LF	$47	$347,800
3.05	10" PVC Gravity Sewer Pipe		LF	$56	$0
3.06	12" PVC Gravity Sewer Pipe		LF	$67	$0
3.07	16" PVC Gravity Sewer Pipe		LF	$81	$0
3.08	18" PVC Gravity Sewer Pipe		LF	$98	$0
3.09	21" PVC Gravity Sewer Pipe		LF	$127	$0
3.10	24" PVC Gravity Sewer Pipe		LF	$152	$0
3.11	30" PVC Gravity Sewer Pipe		LF	$188	$0
3.12	36" PVC Gravity Sewer Pipe		LF	$238	$0
3.13	Bedding and Foundation Material	8,565	LF	$15	$128,475
3.14	Sewer Service Line Connection	29	EA	$500	$14,500
4.00	**Gravity Trench Excavation/Backfill**				
4.01	4-10 ft.	3,450	LF	$43	$148,350
4.02	10-16 ft.	5,115	LF	$74	$378,510
4.03	16-20 ft.		LF	$104	$0
4.04	20-24 ft.		LF	$135	$0
4.05	24-28 ft.		LF	$168	$0
4.06	28-30 ft.		LF	$207	$0
4.07	Import Backfill and Foundation Material	16,597	CY	$40	$663,880
5.00	**Surface Repair**				
5.01	Hydroseed		LF	$15	$0
5.02	Natural Ground	8,565	LF	$25	$214,125
5.03	Gravel Roadway		LF	$30	$0
5.04	Asphalt - Trench Patch Width per City Standards (Required for 4-16' Depth Sewer)		LF	$39	$0
5.05	Asphalt - 1/2 Street Width per City Standards (Required for 16-20' Depth Sewer)		LF	$160	$0
5.06	Asphalt - Full Street Width per City Standards (Required for 20-30' Depth Sewer)		LF	$319	$0
6.00	**Manholes**				
6.01	48" Manholes, 4-10 ft.	10	EA	$5,400	$54,000
6.02	48" Manholes, 10-16 ft.	14	EA	$5,900	$82,600
6.03	48" Manholes, 16-20 ft.		EA	$6,400	$0
6.04	60" Manholes, 20-24 ft.		EA	$12,650	$0
6.05	60" Manholes, 24-28 ft.		EA	$13,400	$0
6.06	60" Manholes, 28-30 ft.		EA	$13,750	$0
7.00	**Lift Stations**				
7.01	Site Work	1	LS	$154,000	$154,000
7.02	Yard Piping	1	LS	$134,000	$134,000
7.03	Lift Station - Structural	1	LS	$158,000	$158,000
7.04	Lift Station - Mechanical	1	LS	$716,000	$716,000
7.05	Lift Station - Electrical	1	LS	$452,000	$452,000
8.00	**Project Specific Considerations**				
8.01	Dewatering	1	LS	$8,000	$8,000
9.00	**Miscellaneous Other**				
9.01	Bypass Pumping			0.0%	$0
9.02	Bonding / Admin			2.5%	$92,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$**	**4,080,000**
Contingency [1]	**$**	**1,224,000**
City of College Place Sales Tax (8.8%)	**$**	**467,000**
Planning, Engineering, & Administrative Costs [2]	**$**	**1,443,000**
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$**	**7,214,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/6/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	Water Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8%	$380,000
2.00	**Construction Survey**	1	LS	$10,000	$10,000
3.00	**Erosion Control and Water Pollution Prevention**	1	LS	$10,000	$10,000
4.00	**Materials Testing**	1	LS	$5,000	$5,000
5.00	**Project Temporary Traffic Control**	1	LS	$5,000	$5,000
6.00	**Shoring and Trench Safety Systems**	1	LS	$2,500	$2,500
7.00	**Surface Repair**				
7.01	Removing Asphalt Concrete Pavement	625	SY	$5	$3,125
7.02	HMA Sawcut and Seal	4,070	LF	$2	$8,140
7.03	HMA Restoration	625	SY	$47	$29,375
8.00	**Water Pipe and Appurtenances**				
8.01	Connect to Existing Water Main 12 In. Diam.	2	EA	$5,000	$10,000
8.02	DI Pipe for Water Main 6 In. Diam.	1,500	LF	$90	$135,000
8.03	DI Pipe for Water Main 14 In. Diam.	830	LF	$186	$154,380
8.04	DI Pipe for Water Main 16 In. Diam.	14,395	LF	$221	$3,181,295
8.05	DI Tee 14 In. x 6 In.	3	EA	$2,300	$6,900
8.06	DI Tee 16 In. x 6 In.	27	EA	$3,500	$94,500
8.07	DI Tee 16 In. x 12 In.	1	EA	$4,600	$4,600
8.08	DI Tee 16 In. x 14 In.	3	EA	$4,800	$14,400
8.09	DI Tee 16 In.	1	EA	$11,500	$11,500
8.10	DI Cross 16" In.	1	EA	$4,400	$4,400
8.11	DI Reducer 16 In. x 12 In.	1	EA	$3,700	$3,700
8.12	DI 45° Bend 16 In.	4	EA	$3,100	$12,400
8.13	DI Cap 12 In.	2	EA	$710	$1,420
8.14	DI Cap 14 In.	3	EA	$890	$2,670
8.15	DI Cap 16 In.	3	EA	$1,550	$4,650
8.16	Blowoff Assembly 2 In.	8	EA	$2,500	$20,000
8.17	Butterfly Valve 12 In.	2	EA	$4,000	$8,000
8.18	Butterfly Valve 14 In.	3	EA	$5,400	$16,200
8.19	Butterfly Valve 16 In.	34	EA	$6,100	$209,810
8.20	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	2	EA	$11,000	$22,000
8.21	Hydrant Assembly	30	EA	$6,500	$195,000
8.22	Bollard	60	EA	$1,000	$60,000
8.23	Service Connection 2 In. Diam.	29	EA	$3,400	$98,600
8.24	Water Meter 2 In. Diam.	29	EA	$6,500	$188,500
9.00	**Project Specific Considerations**				
9.01	Doan Creek Crossing	1	LS	$100,000	$100,000
10.00	**Miscellaneous Other**				
10.01	As-Built Drawings	1	LS	$2,500	$2,500
10.02	Bonding / Admin			2.5%	$116,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$5,132,000**
Contingency [1]	$1,540,000
City of College Place Sales Tax (8.8%)	$588,000
Planning, Engineering, & Administrative Costs [2]	$ 1,815,000
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$9,075,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Storm Drain**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$31,000
2.00	**Traffic Control**			5.0%	$20,000
3.00	Catch Basin Type 1		EA	$2,500	$0
4.00	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	500	LF	$85	$42,500
5.00	Stormwater Treatment Device (CDS or Aquaswirl)		EA		$0
6.00	Swales	6,000	LF	$50	$300,000
7.00	Pond excavation, mulch, seeding	1,000	CY	$50	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 444,000**
	Contingency [1]				**$ 133,000**
	City of College Place Sales Tax (8.8%)				**$ 51,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 157,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 785,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Utilities**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$88,000
2.00	**Traffic Control**			5.0%	$55,000
	Electrical				$0
3.00	Primary Electrical Vaults	15	EA	$10,000	$150,000
4.00	Primary Electrical Conduit & Wire	8,500	LF	$40	$340,000
5.00	Transformer for Primary Service	0	EA	$100,000	$0
	Fiber Optic				$0
6.00	Fiber Optic	1.6	MI	$100,000	$160,000
7.00	Fiber Service Vaults	29	EA	$2,000	$58,000
	Gas				$0
8.00	4" Natural Gas Main	12,000	LF	$20	$240,000
9.00	Natural Gas Regulator	1	EA	$150,000	$150,000
				ESTIMATED CONSTRUCTION SUBTOTAL	**$ 1,241,000**
				Contingency [1]	**$ 372,000**
				City of College Place Sales Tax (8.8%)	**$ 142,000**
				Planning, Engineering, & Administrative Costs [2]	**$ 439,000**
				TOTAL PROBABLE COST IN 2025 DOLLARS[3]	**$ 2,194,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

Appendix 1

Permit Classification Table

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 1 Review	• ADU Permit • Administrative Interpretation • Boundary Line Adjustment • Building Permit • Certificate of Occupancy • Certificate of Appropriateness (and waiver)(1) • Certificate of Design Review • Certificate of Zoning Compliance • Clearing and Grading Permit • Code Enforcement Action • Critical Area Authorization • Landscaping Plan Approval • Permit, Minor Amendment • Plats, Final (10+ lots)	None	None	Community Development Director or designee (unless otherwise noted)	Hearing Examiner

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
	• SEPA Action (no public notice required) • Sign Permit • Site Plan Approval • Special Property Tax Valuation [1] • Special Use Permit				
Type 2 Review	• Binding Site Plan • Critical Area Permit • SEPA Action (public notice required) • Short plat (9 lots or less) • Variance with Type 1/2 Permit	Yes	None, but written comments may be submitted	Community Development Director	Hearing Examiner

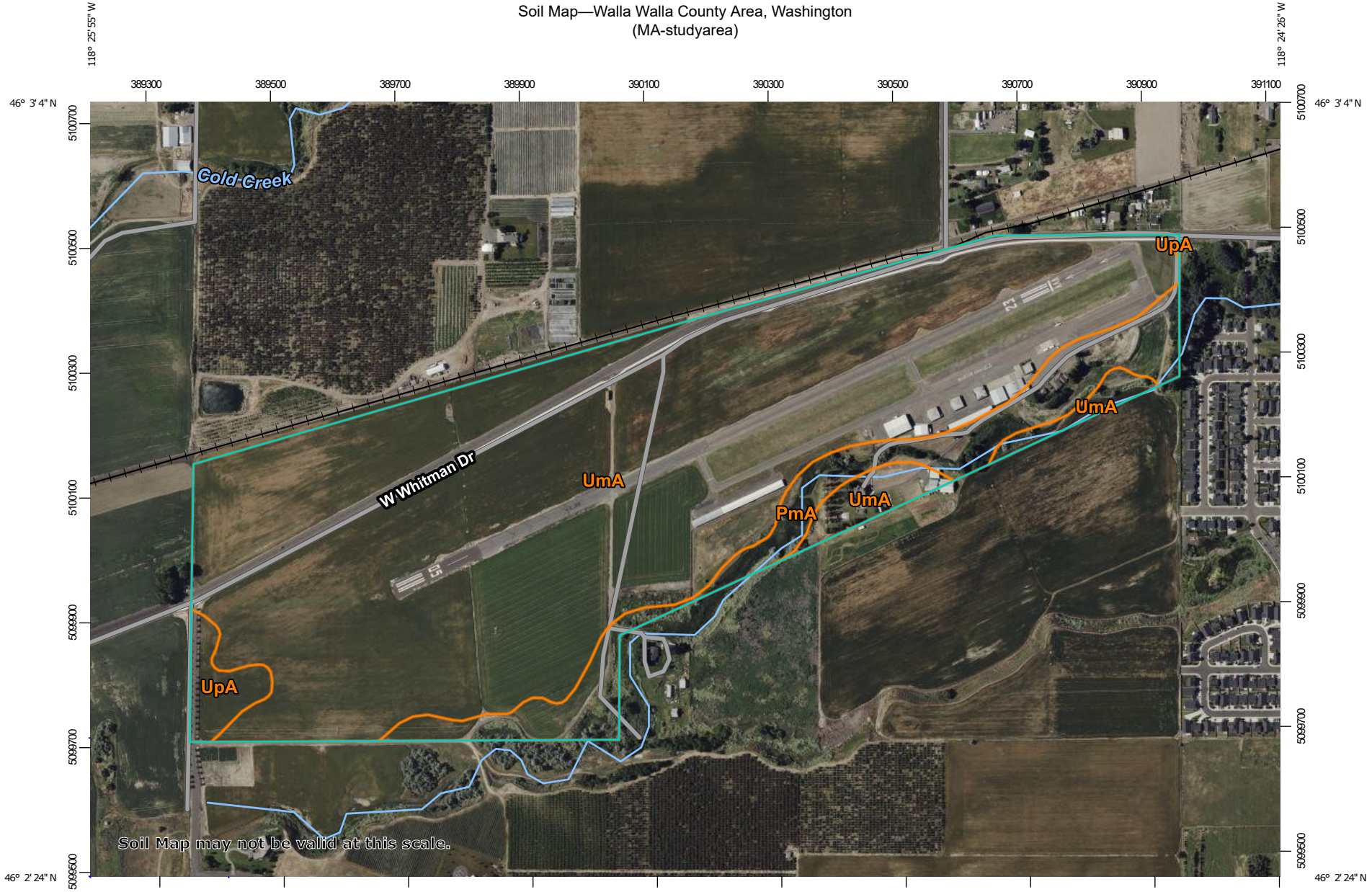
	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 3 Review	• Conditional Use Permit • Master Planned Development • Plat, Preliminary (10+ lots) • Permit, Major Amendment • Reasonable Use Exception • Rezone, Site Specific • Variance with Type 3 Permit	Yes	Hearing Examiner	Hearing Examiner	Superior Court

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 4 Review	• Comprehensive Plan Text Amendment • Development Agreement [5] • Future Land Use Map Amendment • Rezone, General • Shoreline Master Program Amendment [2] • Unified Development Code Amendment [4]	Yes	Planning Commission	City Council	Superior Court [3]

Appendix 2

Soil Assessment

Soil Map—Walla Walla County Area, Washington
(MA-studyarea)



Map Scale: 1:8,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:31,700.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walla Walla County Area, Washington
Survey Area Data: Version 9, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 25, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PmA	Pedigo silt loam, 0 to 3 percent slopes	20.4	11.5%
UmA	Umapine silt loam, 0 to 3 percent slopes	152.7	86.3%
UpA	Umapine silt loam, leached surface, 0 to 3 percent slopes	3.8	2.1%
Totals for Area of Interest		**176.8**	**100.0%**

Appendix 3

WSDOT Airports and Compatible Land Use Criteria

Table F-1

Maximum Residential Density						
Compatibility Zones	**Zone 1**	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
Maximum Residential Density						
	Average Number of Dwelling Units Per Gross Acre					
Agricultural (farmland/forest)	0	Maintain current comprehensive plan designation and zoning designation				
Rural (outside an urban growth boundary)	0	1 d.u. per 10 acres	1 d.u. per 10 acres[A]	1 d.u. per 5 acres[A]	1 d.u. per 10 acres[A]	1 d.u. per 5 acres
Urban (within the urban growth boundary)	0	0	B	C	B	C
Maximum Intensities for Nonresidential Uses (Commercial, Industrial, Offices, and Activities)						
	Average Number of People Units Per Gross Acre					
Agricultural (farmland/forest)	1-5[E]	D, E	D, E	D, E	D, F	D
Rural (outside an urban growth boundary)	1-5[E]	10-25[E]	10-25[E]	40-60[E]	100-150[E]	100-150[G]
Urban (within the urban growth boundary)	1-5[E]	50-75[E]	80-120[E]	100-150[E]	100-150[E]	No Limit[G]

Notes:

A Cluster to preserve open space to maintain open approach corridor at and near runway ends.

B Infill development up to average of surrounding residential area is allowed, but is appropriate only if nonresidential uses are not feasible

C Promote high density and intensity mixed use development (15 or more d.u. per acre)

D Maintain current comprehensive plan designation and zoning designation.

E Special Function Land uses should be prohibited.

F 50-100 people per acre allowed if on airport and aviation-related.

G Special Function Land uses should be avoided.

Table F-2
Airport Land Use Matrix

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
A. Resource Operations						
1. Agricultural (Commercial)						
Agriculture, horticulture, general farming (crops only, not feedlots and stockyards)	P	P	P	P	P	P
Agricultural building	L	L	P	P	P	P
Agricultural chemical sales/storage	X	L	P	P	P	P
Agricultural Housing/Farm labor	X	X	L	P	L	P
Agricultural housing/farm labor	X	X	L	P	L	P
Agricultural market	X	X	P	P	X	P
Agricultural related industries	X	L	P	P	P	P
Animal husbandry	X	L	L	L	X	P
Agricultural feeding operation or stockyards	X	X	X	X	X	X
Agriculture or food processing facility	X	L	P	P	L	P
Livestock auction	X	X	X	L	X	P
Fairgrounds	X	X	X	X	X	P
Floriculture, aquaculture	X	L	P	P	P	P
Fruit bin sales/storage	X	L	P	P	P	P
2. Forest (Commercial)						
General forest silver culture	L	L	P	P	P	P
Forest product processing	X	L	P	P	P	P
3. Mining/Refining/Offsite Hazardous Waste Treatment						
Asphalt paving and roofing materials, rock crushing	X	X	L	L	L	P
Mining including sand and gravel pits	X	L	L	L	X	P
Stockpiling of earthen materials	X	L	L	L	X	P
B. Rural Development						
1. Rural Residential						
Single-family dwelling (large lot, 5 acres or greater*)	X	L	L	P	X	P
Single-family dwelling, rural centers	X	X	L	L	X	L
Residential Cluster Development, 40% open	X	X	LSC	X	X	P
Multi-family dwelling	X	X	X	X	X	P
Temporary farm housing	X	X	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
2. Rural Centers						
Single-family dwelling; up to 12 dwelling units/acre	X	X	L	L	X	L
Two - Four family dwelling (duplex) (*)	X	X	X	X	X	L
Multi-family dwelling; 12-20 units/acre	X	X	L	X	X	P
21+ units/acre	X	X	P	P	X	P
Agriculture/forest/mineral resources or industry (see item A)						
Community services (see item D2)						
Retail and commercial service (see items D4 & D5)						
Industrial/manufacturing (see item D4s & D5)						
C. Education Facilities						
1. Education Facilities						
Junior or community college	X	X	L	L	L	P
Schools, K-12 elementary, middle, senior high	X	X	X	X	X	X
Business school	X	L	L	L	L	P
Vocational schools	X	L	L	L	L	P
D. Urban Development						
1. Residential						
Single-family dwelling; up to 12 dwelling units/acre	X	X	X	X	X	L
Two - four-family dwelling (duplex)(*)	X	X	X	X	X	L
Multi-family dwelling(*): 15 or more	X	X	LSC	X	X	P
Mixed-use office/commercial/residential use	X	X	P	P	X	P
Residential development cluster 40% > open space	X	X	L	L	X	L
Residential infill	X	X	L	L	L	P
Mobile home parks	X	X	L	L	X	L
Boarding house	X	X	L	L	L	L
Retirement homes	X	X	X	X	X	L

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
2. Community Services						
Cemetery	P	P	P	P	L	P
Churches, synagogues, temples	X	X	L	L	X	L
Community center meeting halls, fraternal organizations	X	X	L	L	X	P
Convalescent, nursing home and group homes	X	X	X	X	X	L
Day care facilities, family in-home	X	X	L	L	X	L
Day care center	X	X	L	L	X	L
Funeral home	X	X	P	P	X	P
Police, fire stations, ambulance service	X	L	P	P	P	P
Hospital	X	X	X	X	X	X
Medical clinic	X	X	L	L	X	P
Correction facilities	X	L	L	L	L	L
Libraries	X	X	P	P	X	P
Museums and art galleries	X	X	L	P	P	P
Zoo	X	X	P	P	X	P
3. Amusement and Recreation						
Amusement park (permanent)	X	X	L	L	X	L
Bowling alleys	X	X	P	P	X	P
Campground	X	L	L	P	L	P
Recreational vehicle parks; short term	X	L	L	P	L	P
Drive-in theatres	X	X	L	L	X	P
Fairgrounds	X	X	P	L	L	P
Golf courses	X	L	P	P	X	P
Gymnasiums, exercise facilities	X	L	L	L	L	P
Horse racing tracks, speedways	X	X	X	X	X	X
Miniature golf courses	X	X	P	P	X	P
Movie theatres, auditoriums exhibition halls	X	X	L	L	X	P
Parks	L	L	P	P	L	P
Roller skating rink	X	X	L	L	X	P

Chart Symbols

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All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
4. Retail Trade and Service						
Addressing, mailing, and stenographic services	X	L	P	P	L	P
Advertising agencies	X	L	P	P	L	P
Airport uses and activities commercial/industrial	L	P	P	P	P	P
Animal clinic/hospital	L	P	P	P	P	P
Antique stores	X	L	P	P	X	P
Automobile, truck, manufactured home, and travel trailer sales	L	P	P	P	P	P
Automobile and recreational vehicle (RV) sales; weekend	L	P	P	P	L	P
Automotive: car wash	L	P	P	P	L	P
Sales lot/auto center	L	P	P	P	P	P
Parking lots and garages	L	P	P	P	P	P
Maintenance and repair shops	X	P	P	P	P	P
Paint and body repair shops	L	P	P	P	P	P
Parts and accessories (tires, batteries, etc.)	X	P	P	P	P	P
Specialized repair shops (radiator, etc.)	L	P	P	P	P	P
Towing services	L	P	P	P	P	P
Wrecking and dismantling yard	L	P	P	P	L	P
Bakery	X	P	P	P	L	P
Beauty and barber shops	X	L	P	P	X	P
Bed and breakfast inn	X	X	L	L	X	P
Boats and marine accessories	X Except storage L	P	P	P	P	P
Books, stationery, office supplies	Storage only	P	P	P	L	P
Building and trade (plumbing, heating, electrical, painting, etc.)	Storage only	P	P	P	L	P
Clothing and accessories	X	L	P	P	L	P
Communication towers	X	X	L	L	L	L
Computer and electronic stores	X	L	P	P	L	P
Department, discount, variety stores	X	X	P	P	X	P
Drug stores (optical goods, orthopedic supplies)	X	L	P	P	L	P
Employment agencies (private)	X	P	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Farm and implements, tools and heavy construction equipment	X	L	P	P	P	P
Farm supplies	L	P	P	P	P	P
Financial institutions	X	P	P	P	L	P
Food store	X	P	P	P	L	P
Furniture, home furnishings, appliances	X	P	P	P	L	P
General hardware, garden equipment and supplies	X	P	P	P	L	P
Grocery and convenience stores	X	L	P	P	L	P
Heavy equipment storage, maintenance and repair	X	L	P	P	L	P
Insurance agents, brokers, and service agencies	X	P	P	P	L	P
Kennels	L	P	P	P	L	P
Laundries, laundromats, and dry cleaning plants	X	P	P	P	L	P
Liquor stores	X	P	P	P	L	P
Lumber yards	L	P	P	P	L	P
Medical and dental laboratory, offices and clinic	X	X	L	P	x	P
Mini Storage	L	P	P	P	P	P
Motels and Hotels	X	X	P	P	P	P
Motorcycles sales/repair (including maintenance)	X	P	P	P	L	P
Paint, glass, and wallpaper stores	X	P	P	P	L	P
Pet stores, pet supplies, and dog grooming	X	L	P	P	L	
Professional office buildings for architects, attorneys, government, etc.	X	L	P	P	P	P
Rental: auto, truck, trailer, fleet leasing services	L	P	P	P	L	P
Repairs: small appliances, tv, business machines, watches, etc.	L	P	P	P	L	P
Restaurant, cafe and drive-in eating facilities	X	L	P	P	P	P
Service station	X	L	P	P	L	P
Sporting goods, bicycle shops	X	P	P	P	P	P
Taverns, bars, dance establishments	X	L	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
5. Industry/Manufacturing						
Aircraft parts	Storage only	L	P	P	P	P
Aircraft industrial	Storage only	L	P	P	P	P
Apparel and accessories	X	L	P	P	X	P
Bakery products (wholesale)	Storage only	L	P	P	X	P
Beverage industry	Storage only	L	P	P	X	P
Canning, preserving, and packaging fruits, vegetables, and other foods	X	L	L	L	X	P
Cement and concrete plants	X	L	L	L	X	P
Chemicals (industrial, agricultural, wood, etc.)	X	X	L	L	X	L
Concrete, gypsum, and plaster products	Storage only	L	P	L	L	P
Confectionery and related products (wholesale)	Storage only	P	P	P	L	P
Mini storage	P	P	P	P	P	P
Product assembly	Storage only	L	P	P	L	P
Prefabricated structural wood products and containers	Storage only	P	P	P	L	P
Printing, publishing, and binding	Storage only	P	P	P	L	P
Rendering plants, slaughter houses	X	X	X	X	X	L
Rubber products	X	L	P	P	L	P
Sawmills and planing mills	Storage only	L	P	P	L	P
Sheet metal and welding shops	Storage only	P	P	P	L	P
Stone products (includes finishing of monuments for retail sale)	Storage only	P	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
6. Wholesale Trade-Storage						
Warehouses	Storage only	P	P	P	P	P
Wholesale trade	Storage only	P	P	P	P	P
Storage facilities; bulk	L	P	P	P	P	P
commercial	L	P	P	P	P	P
mini-storage	L	P	P	P	P	P
E. Transportation and Utilities						
1. Transportation						
Bus terminals	X	L	P	P	L	P
Transportation storage and maintenance facilities	Storage only	P	P	P	P	P
Transportation brokerage offices; without truck parking	X	P	P	P	P	P
with truck parking	L	P	P	P	P	P
Contract truck hauling, rental of trucks with drivers	L	P	P	P	P	P
Rail, truck terminals (for short-term storage, office)	L	P	P	P	P	P
Air storage and office use	Storage only	P	P	P	P	P
Railroad switch yards, maintenance, and repair facilities, etc.	X	P	P	P	P	P
Taxicab terminals, maintenance, and dispatching centers, etc.	X	P	P	P	P	P
2. Utilities						
Power generating facilities	L	L	L	L	L	L
Utility services (substations, etc.)	L	L	L	L	L	P
Wholesale trade	L	P	P	P	L	P
Storage facilities; bulk	L	P	P	P	P	P
Commercial	L	P	P	P	P	P

Chart Symbols

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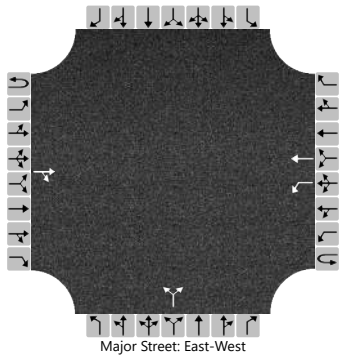
Appendix 4

Traffic Counts and Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

General Information		Site Information	Existing Conditions Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	11/4/2024	East/West Street	Old US 12
Analysis Year	2024	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			76	55		20	52			26		13				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22					42					
Capacity, c (veh/h)						1434					813					
v/c Ratio						0.02					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.5					9.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						2.1				9.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

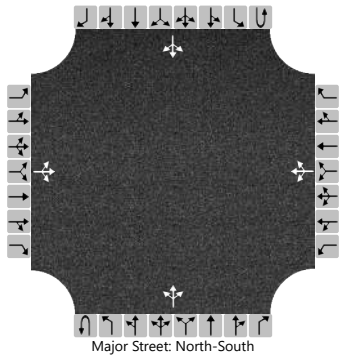
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	1		20	0	7		0	31	25		13	61	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				30			0				14		
Capacity, c (veh/h)			837				857			1524				1535		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
Control Delay (s/veh)			9.3				9.4			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)	9.3				9.4				0.0				1.3			
Approach LOS	A				A				A							

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HCS7 Two-Way Stop-Control Report

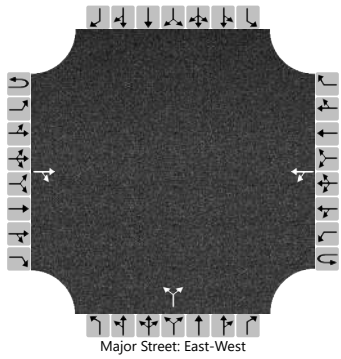
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			40	0		1	28			0		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					2					
Capacity, c (veh/h)						1557					1022					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.3				8.5							
Approach LOS					A											

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HCS7 Two-Way Stop-Control Report

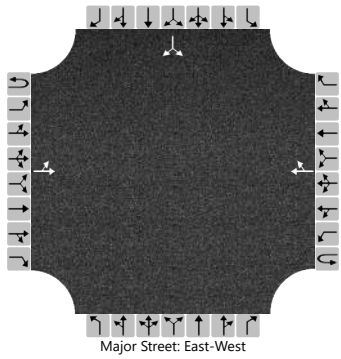
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	40				23	4						4		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													11	
Capacity, c (veh/h)		1577													991	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.3													8.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.5												8.7		
Approach LOS		A					A							A		

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HCS7 Two-Way Stop-Control Report

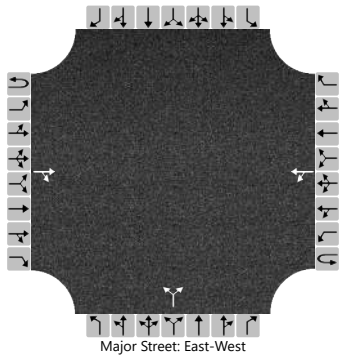
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			39	0		2	36			0		5				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					6					
Capacity, c (veh/h)						1556					1021					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.5						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

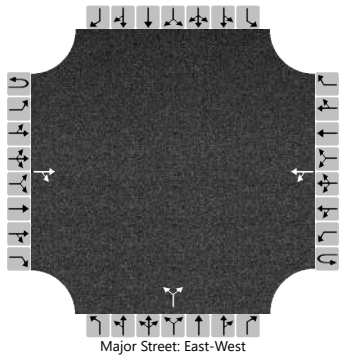
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			42	5		40	30			5		34				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						49					48					
Capacity, c (veh/h)						1540					970					
v/c Ratio						0.03					0.05					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.4					8.9					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.3				8.9						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

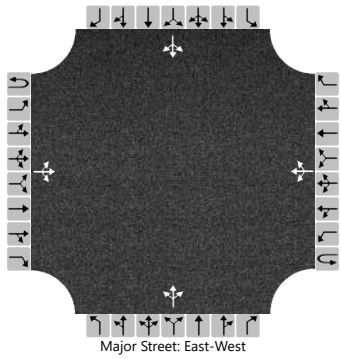
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	84	43		62	101	8		39	14	32		7	23	2
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				69					94				36	
Capacity, c (veh/h)		1460				1436					622				518	
v/c Ratio		0.00				0.05					0.15				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.2					0.5				0.2	
Control Delay (s/veh)		7.5				7.6					11.8				12.5	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.3				3.0				11.8				12.5			
Approach LOS	A				A				B				B			

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HCS7 Two-Way Stop-Control Report

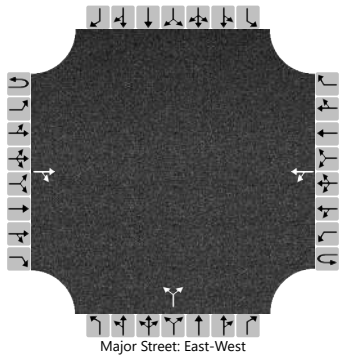
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			124	12		55	173			20		42				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						65					74					
Capacity, c (veh/h)						1411					715					
v/c Ratio						0.05					0.10					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.6					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.2				10.6						
Approach LOS										B						

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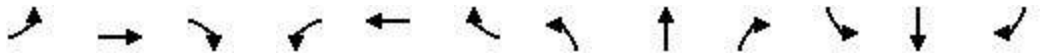
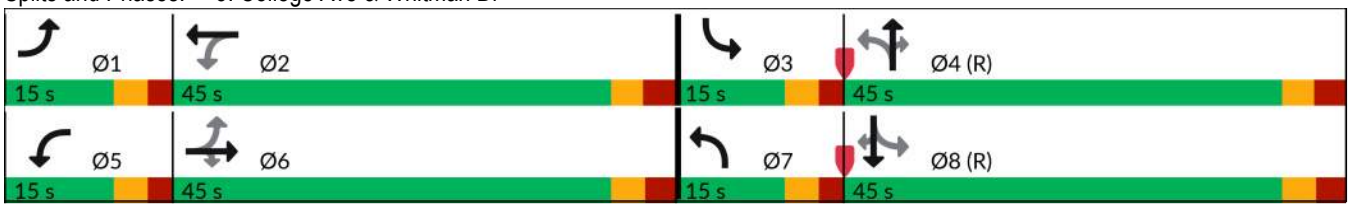


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Future Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.503			0.671			0.602			0.634		
Satd. Flow (perm)	937	1863	1583	1250	1829	0	1121	1863	1583	1181	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	125	48	33	113	15	54	197	38	17	200	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	125	48	33	128	0	54	197	38	17	200	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	22.3	16.4	16.4	20.2	13.4		83.2	79.4	79.4	79.6	74.3	74.3
Actuated g/C Ratio	0.19	0.14	0.14	0.17	0.11		0.69	0.66	0.66	0.66	0.62	0.62
v/c Ratio	0.20	0.49	0.15	0.14	0.61		0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
LOS	D	D	A	D	E		A	B	A	A	B	A
Approach Delay (s/veh)		38.9			55.1			8.7			9.1	
Approach LOS		D			E			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



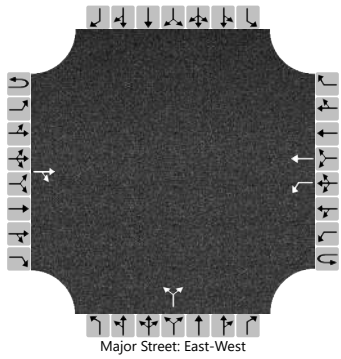
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	125	48	33	128	54	197	38	17	200	97
v/c Ratio	0.20	0.49	0.15	0.14	0.61	0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Length 50th (ft)	28	93	0	20	91	12	49	0	4	68	0
Queue Length 95th (ft)	56	150	0	45	150	31	122	0	14	128	18
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	272	601	837	1233	1088	861	1154	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.20	0.08	0.12	0.21	0.06	0.16	0.03	0.02	0.17	0.09

Intersection Summary

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 No-Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour No-Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	83		30	79			39		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					64					
Capacity, c (veh/h)						1349					714					
v/c Ratio						0.02					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

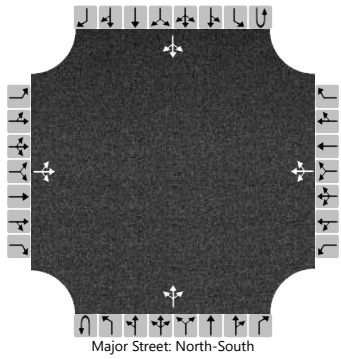
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		30	0	11		0	47	38		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				45			0				22		
Capacity, c (veh/h)			770				775			1478				1495		
v/c Ratio			0.01				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.0		
Control Delay (s/veh)			9.7				9.9			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.7				9.9				0.0				1.4		
Approach LOS		A				A										

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HCS7 Two-Way Stop-Control Report

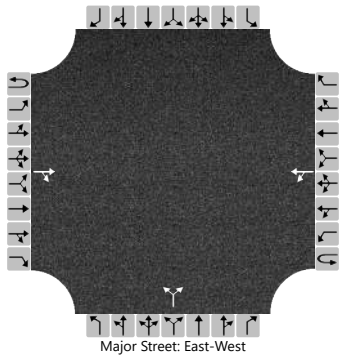
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			61	0		2	42			0		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					3					
Capacity, c (veh/h)						1526					992					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.6					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.3				8.6						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

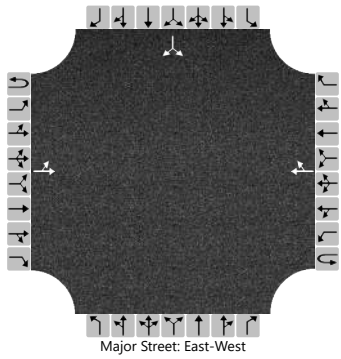
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	61				35	6						6		9
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													16	
Capacity, c (veh/h)		1557													958	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.3													8.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.6												8.8		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

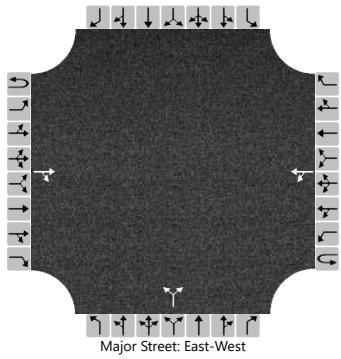
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			59	0		3	55			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1525					991					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

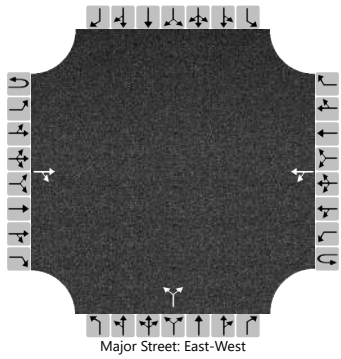
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	8		61	45			8		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					74					
Capacity, c (veh/h)						1500					915					
v/c Ratio						0.05					0.08					
95% Queue Length, Q_{95} (veh)						0.2					0.3					
Control Delay (s/veh)						7.5					9.3					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.5				9.3						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

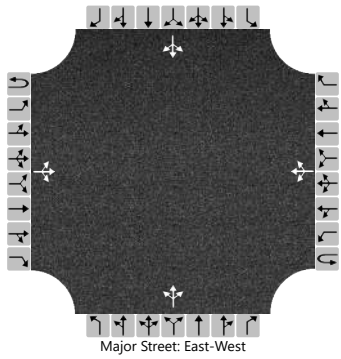
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	127	64		94	153	12		59	21	49		11	35	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				104					143				54	
Capacity, c (veh/h)		1386				1352					463				374	
v/c Ratio		0.00				0.08					0.31				0.15	
95% Queue Length, Q_{95} (veh)		0.0				0.3					1.3				0.5	
Control Delay (s/veh)		7.6				7.9					16.2				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				3.3				16.2				16.2			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

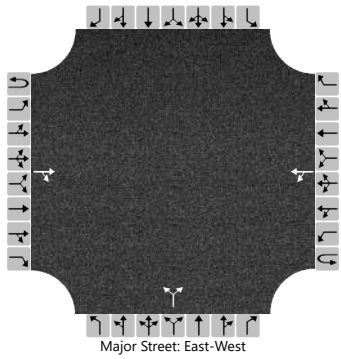
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			188	18		83	262			30		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					112					
Capacity, c (veh/h)						1315					565					
v/c Ratio						0.08					0.20					
95% Queue Length, Q_{95} (veh)						0.2					0.7					
Control Delay (s/veh)						8.0					12.9					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.5				12.9						
Approach LOS										B						

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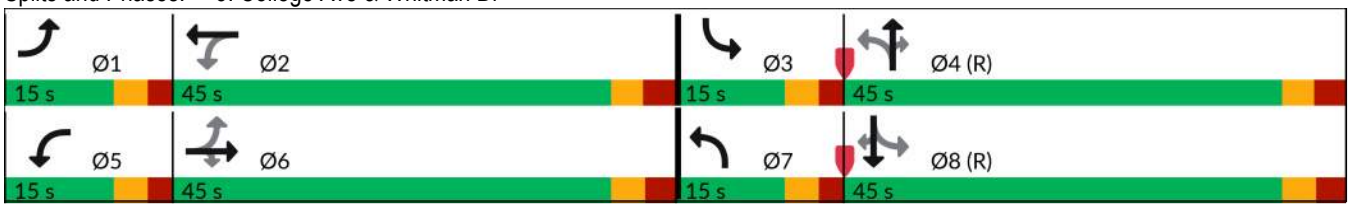
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Future Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.387			0.443			0.510			0.563		
Satd. Flow (perm)	721	1863	1583	825	1829	0	950	1863	1583	1049	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	189	73	49	172	23	83	298	58	26	303	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	189	73	49	195	0	83	298	58	26	303	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	26.5	18.6	18.6	25.2	17.9		77.7	71.9	71.9	74.0	68.4	68.4
Actuated g/C Ratio	0.22	0.16	0.16	0.21	0.15		0.65	0.60	0.60	0.62	0.57	0.57
v/c Ratio	0.30	0.65	0.21	0.21	0.70		0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
LOS	D	E	A	C	E		A	B	A	A	B	A
Approach Delay (s/veh)		41.0			54.7			12.3			13.2	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	70	189	73	49	195	83	298	58	26	303	147
v/c Ratio	0.30	0.65	0.21	0.21	0.70	0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Length 50th (ft)	41	138	0	28	141	23	121	0	7	127	10
Queue Length 95th (ft)	73	207	9	55	209	50	209	0	21	222	49
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	258	601	688	1116	996	729	1061	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.31	0.12	0.19	0.32	0.12	0.27	0.06	0.04	0.29	0.15

Intersection Summary

Martin Field Trip Generation

Area	Total Acres	Bldg. SF (1,000 SF)	PM Peak Hour Trips Generated		
			Total	Inbound	Outbound
North Driveway	18.65	325	95	13	82
South Driveway	18.56	323	94	13	81
Total Whitman	37.21	648	189	26	163
Total Hampton	22.22	387	107	15	92
TOTAL	59.43	1,036	296	41	255

Notes

Assumes 40% FAR

ITE Trip Generation Manual 11th Edition

Land Use 110 - General Light Industrial

Fitted equation =(ROUNDUP(EXP(0.72*LN(X)+0.38),0))

where X is the sq ft of the development

Worst Driveway - included in Total Whitman trips above

North Driveway	7.82	136	51	7	44
South Driveway	3.11	54	26	4	22

Martin Airfield Feeasibility Study

PM Peak Hour Turning Movement Volumes

Old US 12/Last Chance

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	26	0	13	0	0	0	0	76	55	20	52	0	242
2045 No-Build	39	0	20	0	0	0	0	115	83	30	79	0	366
20-year New Trips	12	0	0	0	0	0	0	0	2	0	0	0	14
2045 Build	51	0	20	0	0	0	0	115	85	30	79	0	380

Last Chance/Whitman Dr

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	31	25	13	61	3	0	1	1	20	0	7	162
2045 No-Build	0	47	38	20	92	5	0	2	2	30	0	11	247
20-year New Trips	0	0	3	0	0	2	0	0	0	13	0	12	30
2045 Build	0	47	41	20	92	7	0	2	2	43	0	23	277

Whitman Dr/Hampton

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	2	0	0	0	0	40	0	1	28	0	71
2045 No-Build	0	0	3	0	0	0	0	61	0	2	42	0	108
20-year New Trips	9	0	83	0	0	0	0	3	2	13	16	0	126
2045 Build	9	0	86	0	0	0	0	64	2	15	58	0	234

Whitman Dr/McKinney

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	4	0	6	3	40	0	0	23	4	80
2045 No-Build	0	0	0	6	0	9	5	61	0	0	35	6	122
20-year New Trips	0	0	0	0	0	1	3	227	0	0	35	0	266
2045 Build	0	0	0	6	0	10	8	288	0	0	70	6	388

Whitman Dr/Martin Field

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	5	0	0	0	0	39	0	2	36	0	82
2045 No-Build	0	0	8	0	0	0	0	59	0	3	55	0	125
20-year New Trips	0	0	0	0	0	0	0	227	0	0	35	0	262
2045 Build	0	0	8	0	0	0	0	286	0	3	90	0	387

Whitman Dr/Homestead

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	5	0	34	0	0	0	0	42	5	40	30	0	156
2045 No-Build	8	0	52	0	0	0	0	64	8	61	45	0	238
20-year New Trips	1	0	0	0	0	0	0	223	4	0	34	0	262
2045 Build	9	0	52	0	0	0	0	287	12	61	79	0	500

Whitman Dr/Hussey/Academy

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	39	14	32	7	23	2	4	84	42	62	101	8	418
2045 No-Build	59	21	49	11	35	3	6	127	64	94	153	12	634
20-year New Trips	3	0	0	0	0	1	3	184	36	0	30	0	257
2045 Build	62	21	49	11	35	4	9	311	100	94	183	12	891

Whitman Dr/Davis

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	20	0	42	0	0	0	1	124	12	55	173	1	428
2045 No-Build	30	0	64	0	0	0	2	188	18	83	262	2	649
20-year New Trips	2	0	0	0	0	0	1	173	10	0	28	0	214
2045 Build	32	0	64	0	0	0	3	361	28	83	290	2	863

Whitman Dr/College Ave

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	50	181	35	16	184	89	42	115	44	30	104	14	904
2045 No-Build	76	274	53	24	279	135	64	174	67	45	158	21	1370
20-year New Trips	6	0	0	0	0	10	36	99	38	0	12	0	201
2045 Build	82	274	53	24	279	145	100	273	105	45	170	21	1571

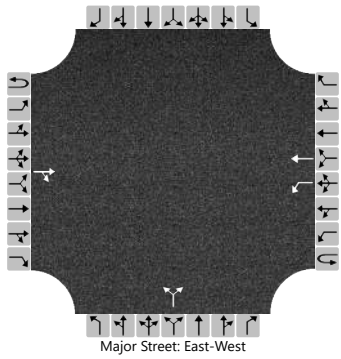
Whitman/New Driveway (busiest one)

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	0	0	0	0	43	0	0	42	0	85
2045 No-Build	0	0	0	0	0	0	0	65	0	0	64	0	129
20-year New Trips	2	0	20	40	0	4	1	85	0	4	25	6	187
2045 Build	2	0	20	40	0	4	1	150	0	4	89	6	316

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	85		30	79			51		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					77					
Capacity, c (veh/h)						1346					702					
v/c Ratio						0.02					0.11					
95% Queue Length, Q_{95} (veh)						0.1					0.4					
Control Delay (s/veh)						7.7					10.8					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.8						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

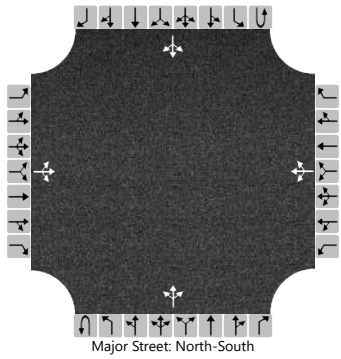
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		43	0	23		0	47	41		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				73			0				22		
Capacity, c (veh/h)			768				792			1478				1490		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
Control Delay (s/veh)			9.7				10.0			7.4				7.5		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.7				10.0				0.0				1.4		
Approach LOS		A				B										

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HCS7 Two-Way Stop-Control Report

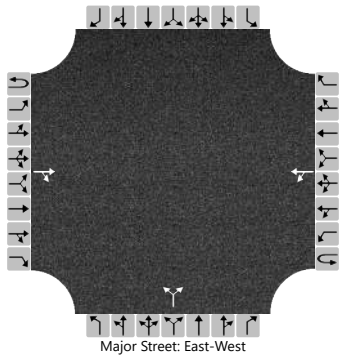
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	2		15	58			9		86				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						17					107					
Capacity, c (veh/h)						1519					966					
v/c Ratio						0.01					0.11					
95% Queue Length, Q_{95} (veh)						0.0					0.4					
Control Delay (s/veh)						7.4					9.2					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						1.6				9.2						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

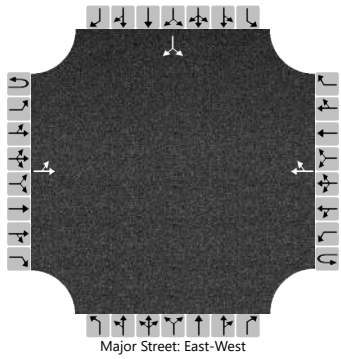
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	288				70	6						6		10
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9													18	
Capacity, c (veh/h)		1507													783	
v/c Ratio		0.01													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.4													9.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.3												9.7		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

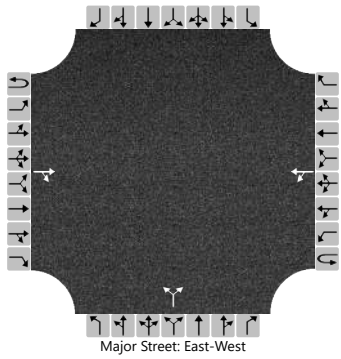
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			286	0		3	90			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1217					703					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						8.0					10.2					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						0.3				10.2						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

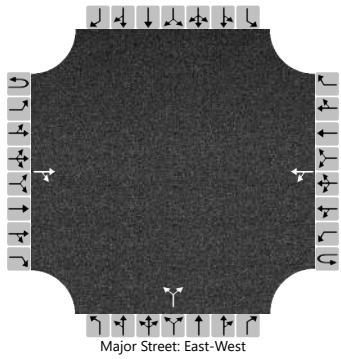
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			287	12		61	79			9		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					75					
Capacity, c (veh/h)						1184					625					
v/c Ratio						0.06					0.12					
95% Queue Length, Q_{95} (veh)						0.2					0.4					
Control Delay (s/veh)						8.2					11.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						3.9				11.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

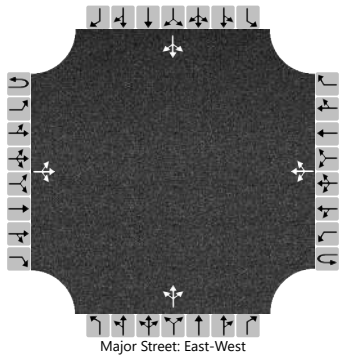
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	311	100		94	183	12		62	21	49		11	35	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				104					147				56	
Capacity, c (veh/h)		1347				1099					301				250	
v/c Ratio		0.01				0.10					0.49				0.22	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.5				0.8	
Control Delay (s/veh)		7.7				8.6					27.9				23.5	
Level of Service (LOS)		A				A					D				C	
Approach Delay (s/veh)	0.2				3.4				27.9				23.5			
Approach LOS									D				C			

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HCS7 Two-Way Stop-Control Report

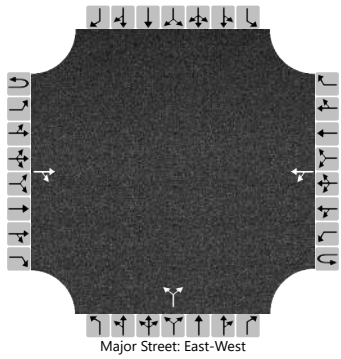
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			361	28		83	290			32		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					114					
Capacity, c (veh/h)						1093					405					
v/c Ratio						0.09					0.28					
95% Queue Length, Q_{95} (veh)						0.3					1.1					
Control Delay (s/veh)						8.6					17.4					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)						2.7				17.4						
Approach LOS										C						

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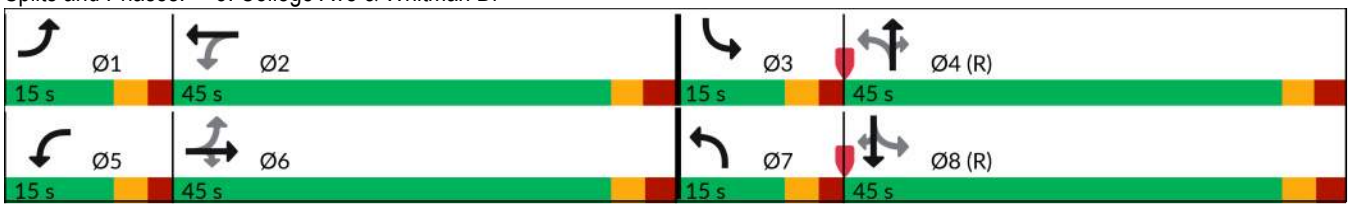
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Future Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.983				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1831	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.408			0.334			0.468			0.560		
Satd. Flow (perm)	760	1863	1583	622	1831	0	872	1863	1583	1043	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	297	114	49	185	23	89	298	58	26	303	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	297	114	49	208	0	89	298	58	26	303	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	35.0	26.7	26.7	31.3	22.9		70.0	63.8	63.8	64.4	57.6	57.6
Actuated g/C Ratio	0.29	0.22	0.22	0.26	0.19		0.58	0.53	0.53	0.54	0.48	0.48
v/c Ratio	0.36	0.72	0.26	0.21	0.59		0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
LOS	C	D	A	C	D		B	C	A	B	C	A
Approach Delay (s/veh)		38.4			44.3			16.1			17.6	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	297	114	49	208	89	298	58	26	303	158
v/c Ratio	0.36	0.72	0.26	0.21	0.59	0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Length 50th (ft)	61	219	0	26	144	28	135	0	8	142	15
Queue Length 95th (ft)	92	290	40	48	199	64	244	0	25	261	66
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	304	610	599	266	602	587	989	897	649	894	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.19	0.18	0.35	0.15	0.30	0.06	0.04	0.34	0.19

Intersection Summary

HCS7 Two-Way Stop-Control Report

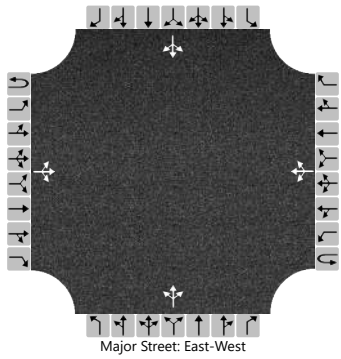
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	3/5/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/New Driveway
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	New Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	150	0		4	89	6		2	0	20		40	0	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				4					24				49	
Capacity, c (veh/h)		1479				1405					850				660	
v/c Ratio		0.00				0.00					0.03				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.4				7.6					9.4				10.9	
Level of Service (LOS)		A				A					A				B	
Approach Delay (s/veh)		0.1				0.3				9.4				10.9		
Approach LOS										A				B		

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Appendix 5

Economic Analysis

2025

Market Feasibility

MARTIN AIRFIELD

An analysis conducted by: TheMettsGroup

Prepared for: CP COLLEGE PLACE WALLA WALLA VALLEY

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Purpose

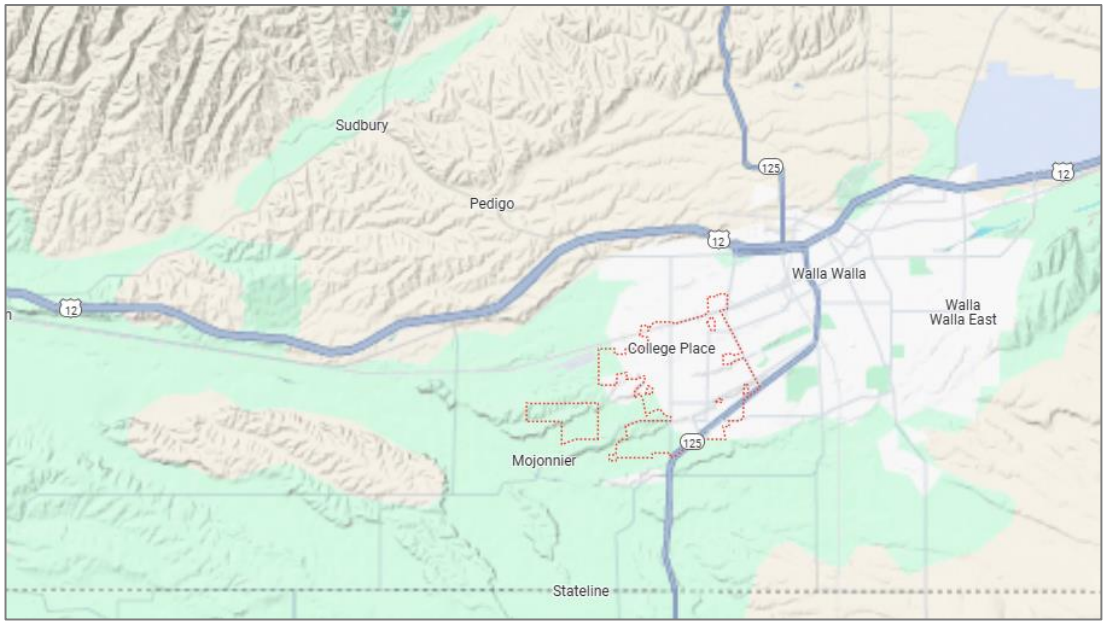
The purpose of this study is to analyze market feasible light industrial uses for the 233-acre site around Martin Airfield and bordered by Whitman Drive to the north, Hampton Lane to the west, Homestead Acres Subdivision to the east, and a bluff to the south. This study conforms to the minimum threshold criteria established by the Washington State Community and Economic Revitalization Board for potential grant funding opportunities.

The following outlines the scope within the above objectives:

1. Interview key stakeholders to gather and review pertinent project background data.
2. Assess the locational characteristics of the site relative to the industrial market.
3. Perform Market analysis for the site
4. Perform Job Benefit Analysis
5. Evaluate the overall City of College Place area economic outlook for industrial real estate development.
6. Conduct interviews with selected key persons in the College Place catchment area knowledgeable of demand potentials by various industrial uses (e.g. complementary agricultural processing/supplier needs, light manufacturing, warehouse distribution, flex space, etc.).
7. Identify and evaluate potentially competing sites and corresponding industrial uses.
8. Analyze which target industries may be located at the site.
9. Recommend specific companies that should be targeted to prospective tenants.
10. Forecast the economic impacts to the City of College Place if the site is fully tenanted with the prescribed potential industrial users.
11. Recommend a project marketing strategy for the site.
12. Prepare a corresponding Economic Feasibility Analysis and marketing strategy for the site.

Location

College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.



Economy Overview

The population of College Place is estimated at 9,945, reflecting a modest growth of 0.4% from 2020 to 2024. Population growth trends for both College Place and Walla Walla County show similar growth trends, with a sharp decline around 2022 in College Place, followed by gradual stabilization. Workforce characteristics indicate a labor force participation rate of 59%, which is below the national average of 63.5%. Additionally, 10% of the workforce consists of remote workers, and 71% of residents have some college education or higher, suggesting a relatively educated workforce.

Population

9,945

0.4% ⇧

(2020-2024 est.)

Workforce Characteristics

59%

Labor Force Participation Rate
(63.5% U.S.)

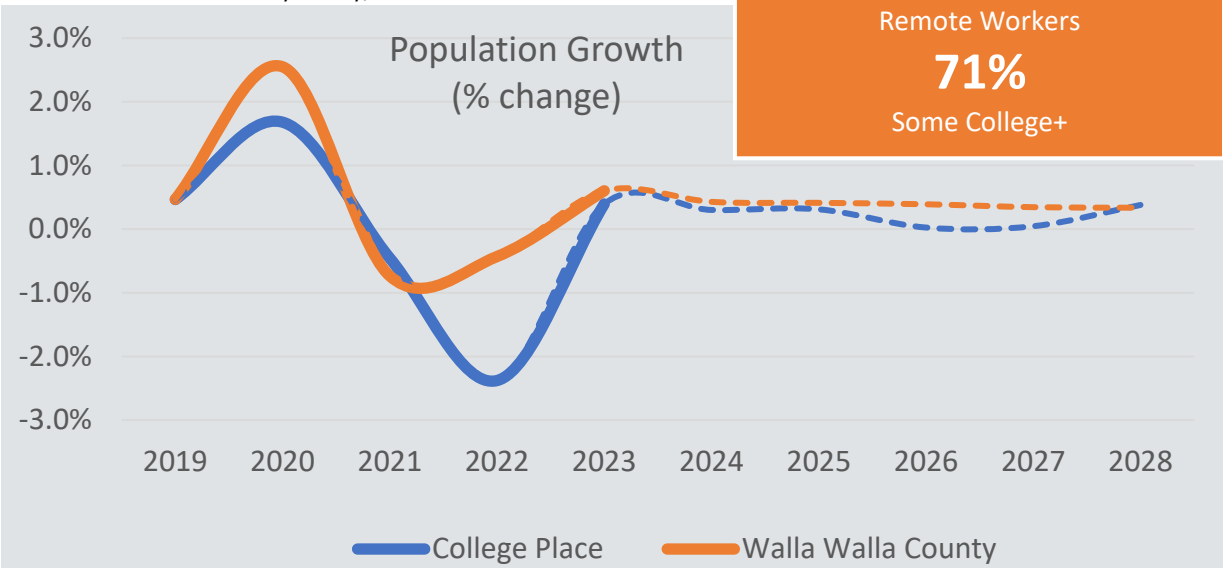
10%

Remote Workers

71%

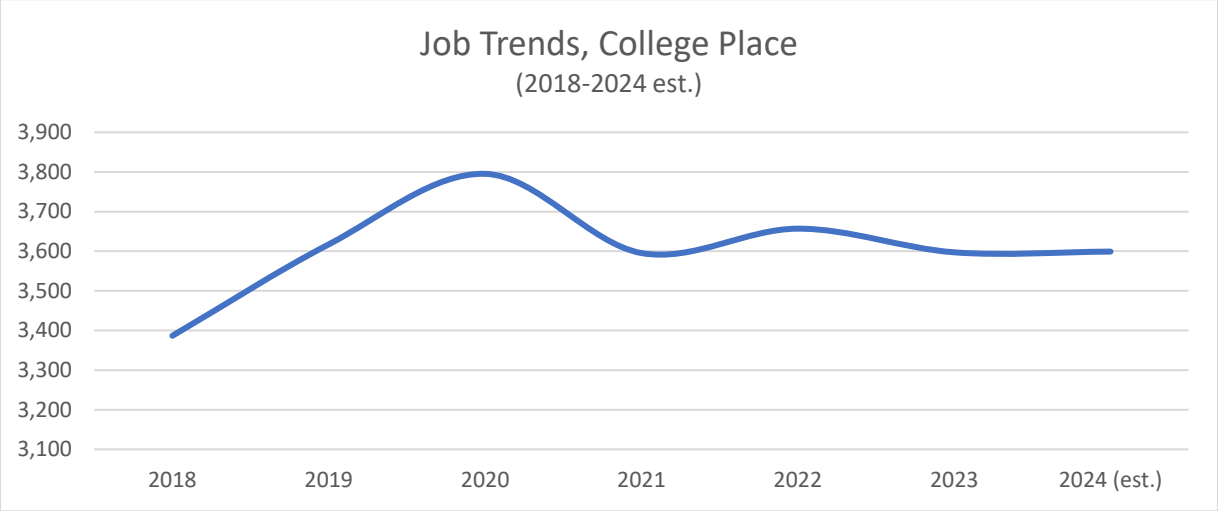
Some College+

Source: American Community Survey, 5-Year Estimates

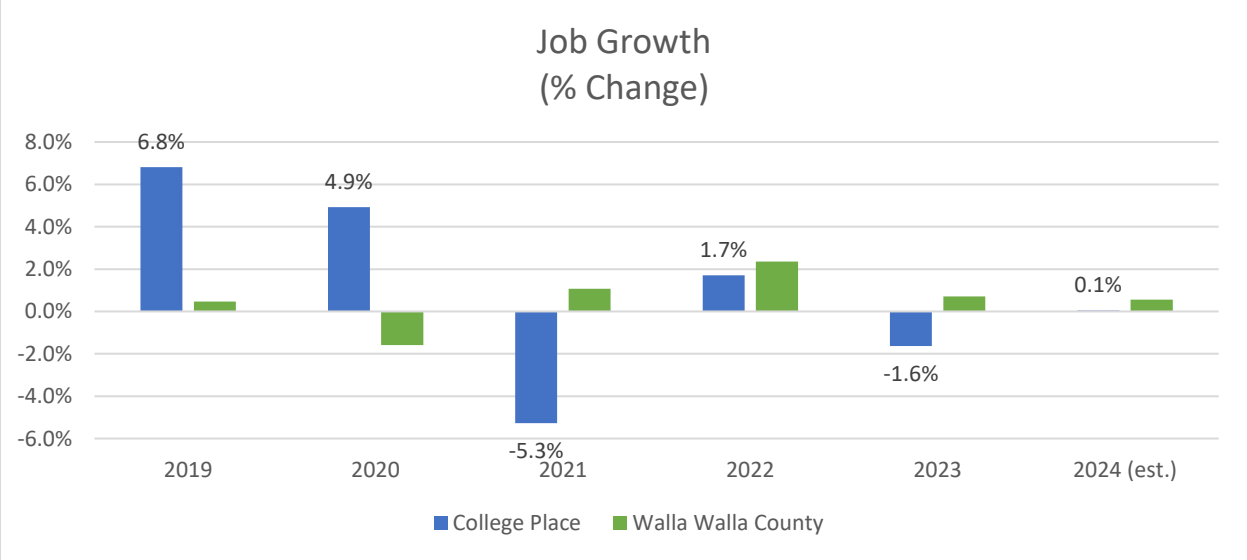


TheMettsGroup

The job market in College Place is still recovering from the pandemic. Between the peak in 2020 and the trough in late 2021, approximately 200 jobs were lost within the 99324 ZIP code, representing a 5.3% decline.



Source: Lightcast, QCEW, Non-QCEW, Self-employed



Source: Lightcast, QCEW, Non-QCEW, Self-employed

The largest contributing industries include government (primarily higher education), retail trade, accommodation and food services, health care, and finance and insurance. Government employment dominates the local labor market, followed by educational services, indicating the area's strong ties to public institutions and higher education. Retail and health care also play significant roles, supporting both local consumption and essential services.

The region's Gross Regional Product (GRP) stands at $417 million, accounting for 10% of the County's total economic output. The primary industries driving GRP are government, finance and insurance, retail, educational services, and health care. The data suggests a stable economy with growth in key service-oriented sectors, reinforcing the importance of education, health care, and retail as economic pillars.

GRP

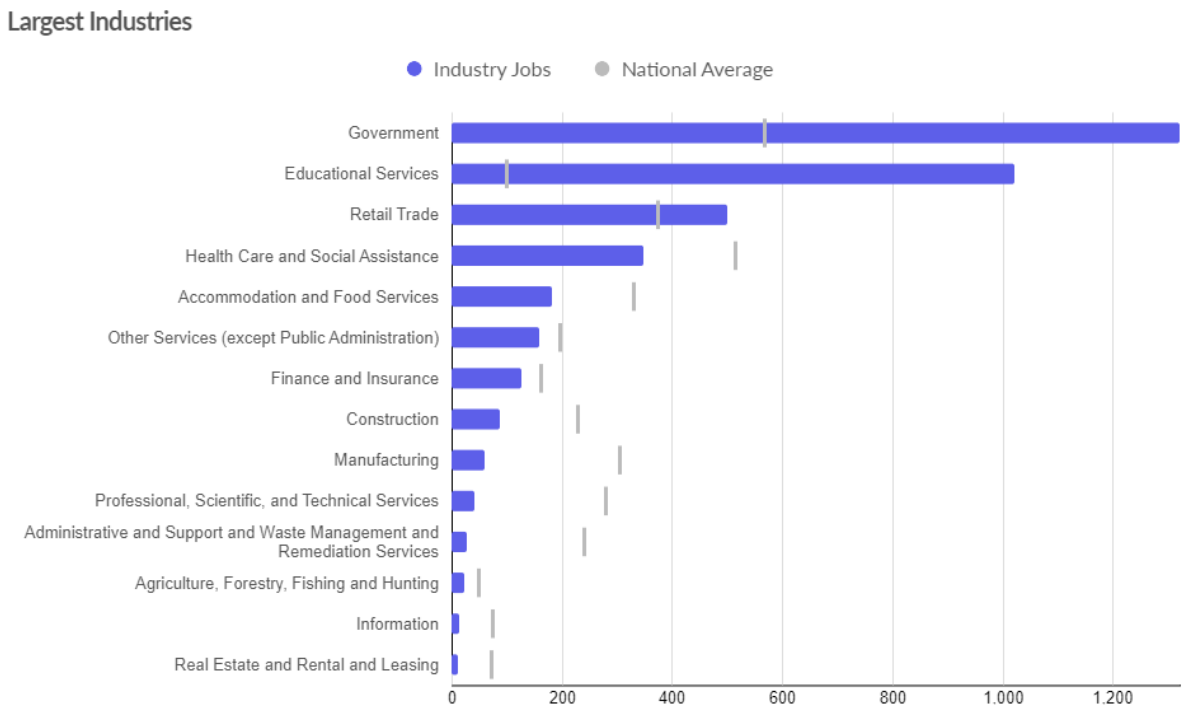
$417M

(10% of County)

Largest Contributing Industries:

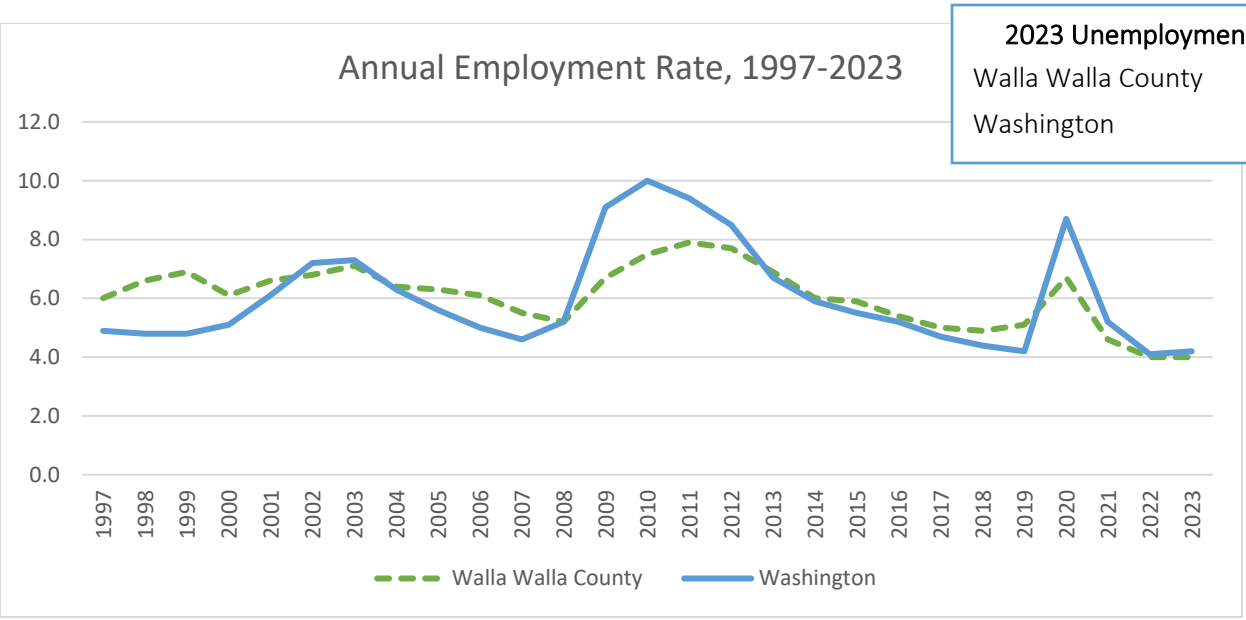
- Government
- Finance & Insurance
- Retail
- Educational Svcs
- Health Care

Source: Lightcast, College Place (zip code 99324)



Source: Lightcast, QCEW, Non-QCEW, Self-employed for College Place (zip code 99324)

The unemployment rate in Franklin County remains higher than the state, by 2.1 percentage points. The 2019 annual unemployment rate—the most recent annual number at the time of this report—in Franklin County was 6.4%, compared to 4.3% statewide and 3.7% for the nation.



2023 Unemployment Rate	
Walla Walla County	4.0%
Washington	4.2%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics program

According to the Bureau of Labor Statistics' Occupational Employment and Wage Statistics, the median hourly wage in Walla Walla County was $23.04 as of the latest available data (May 2023). Walla Walla County continues to trail the state in wages—20% below the state average.

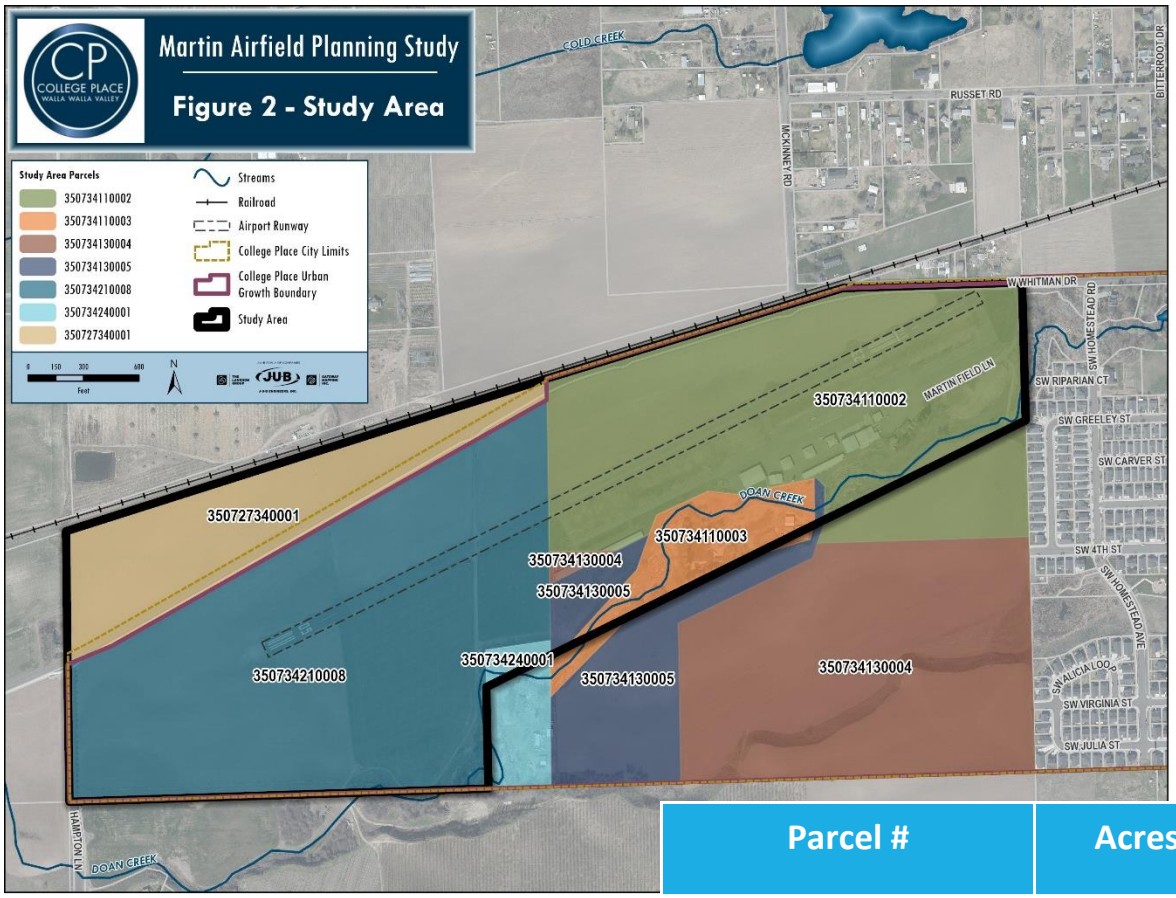
Median Hourly Wage

$23.04
(Walla Walla County)

$28.81
(Washington)

Commercial Real Estate Snapshot

The City of College Place only has three acres of active light industrial land. The project area consists of six (6) light industrial zoned parcels, totaling 233 acres.



Parcel #	Acres
350734210008	79.83
350734240001 (private)	6.61
350734130005	19.82
350734130004	54.58
350734110002	62.60
350734110003	10.00
Total	233.44

Industrial Inventory

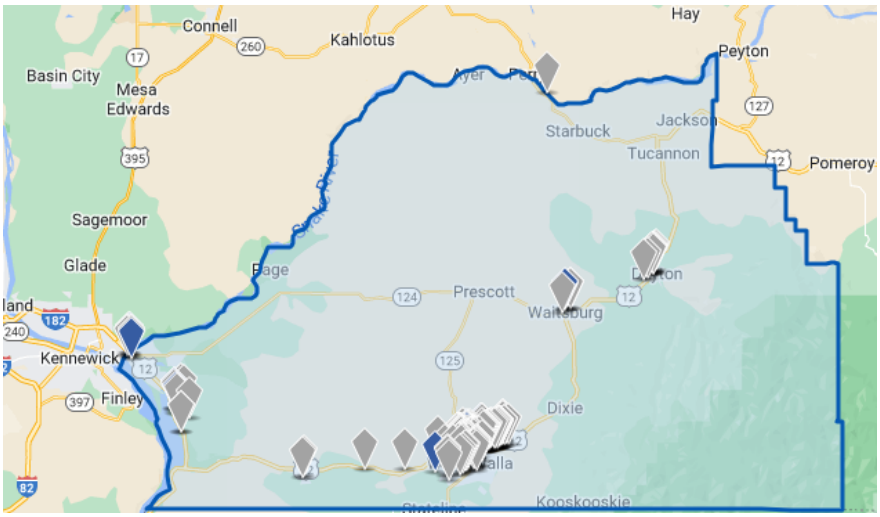
Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

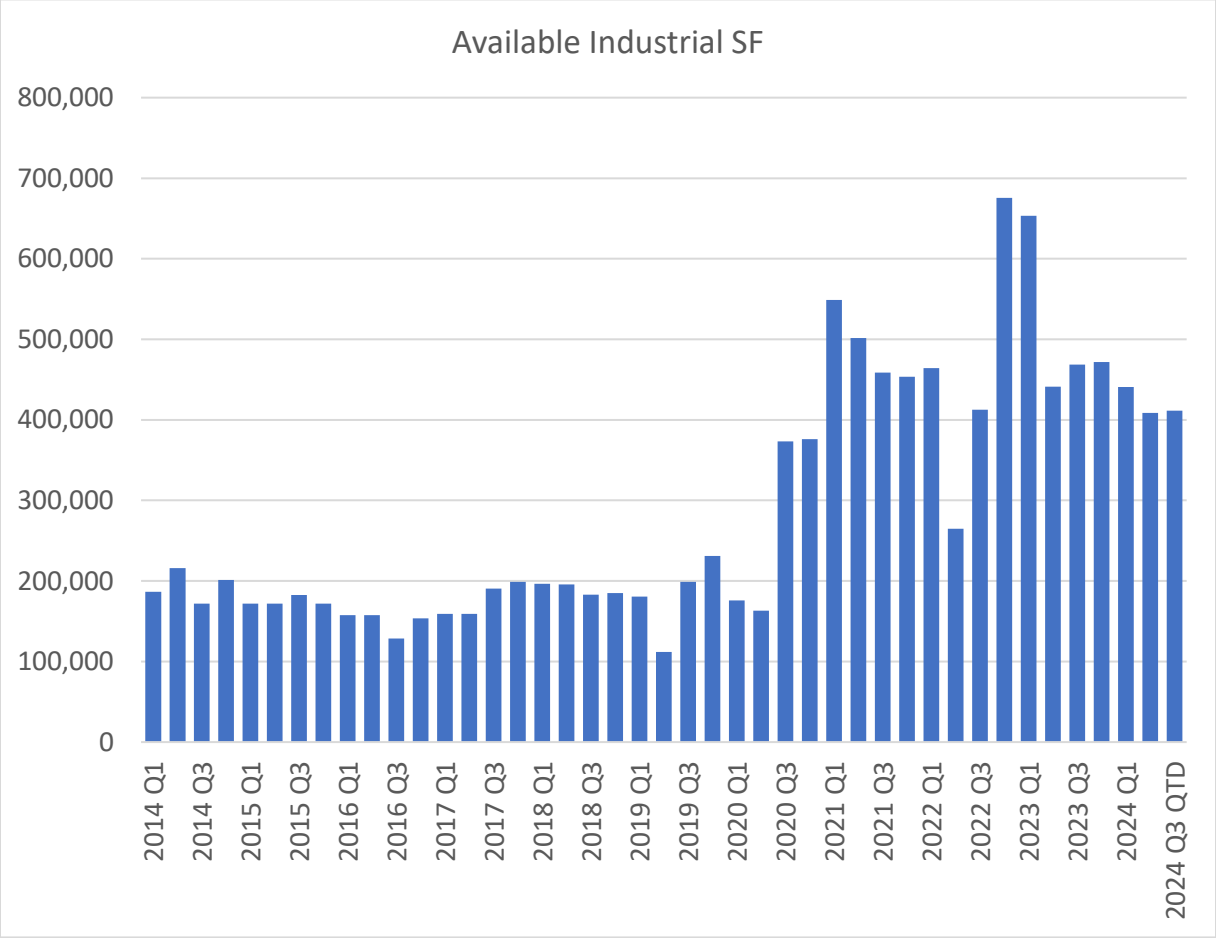
4.6M SF
inventory

411,260 SF
available space

5.6%
vacancy rate

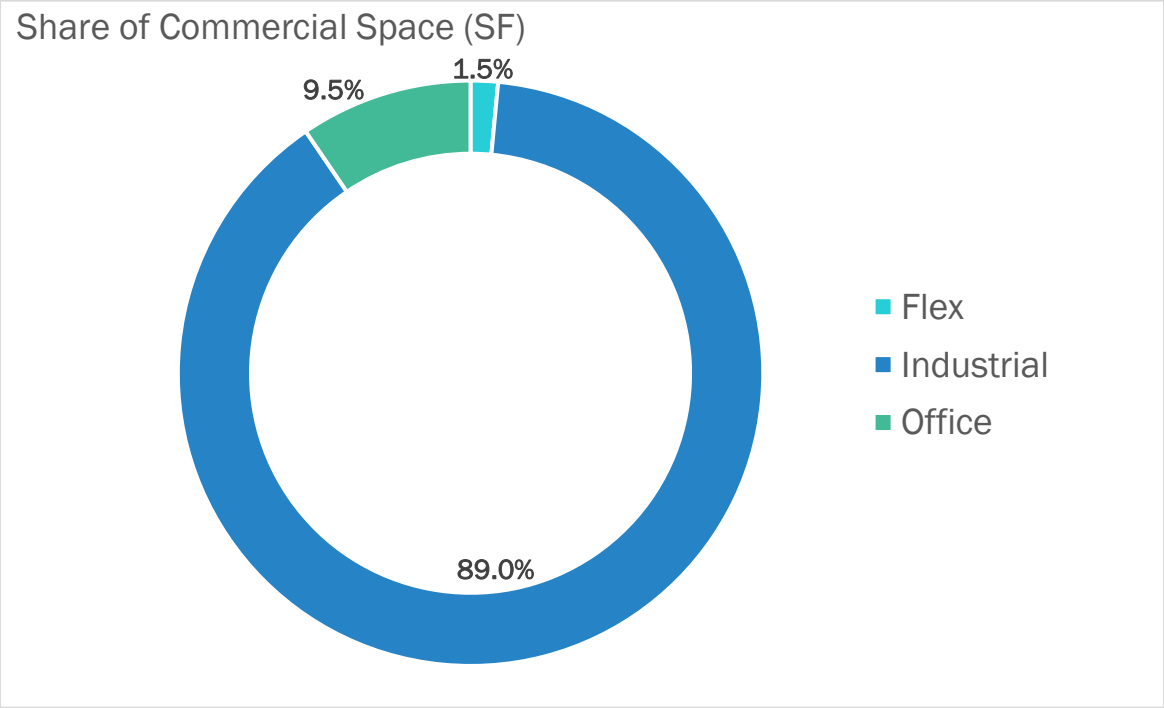
$8.71/SF
rental rate

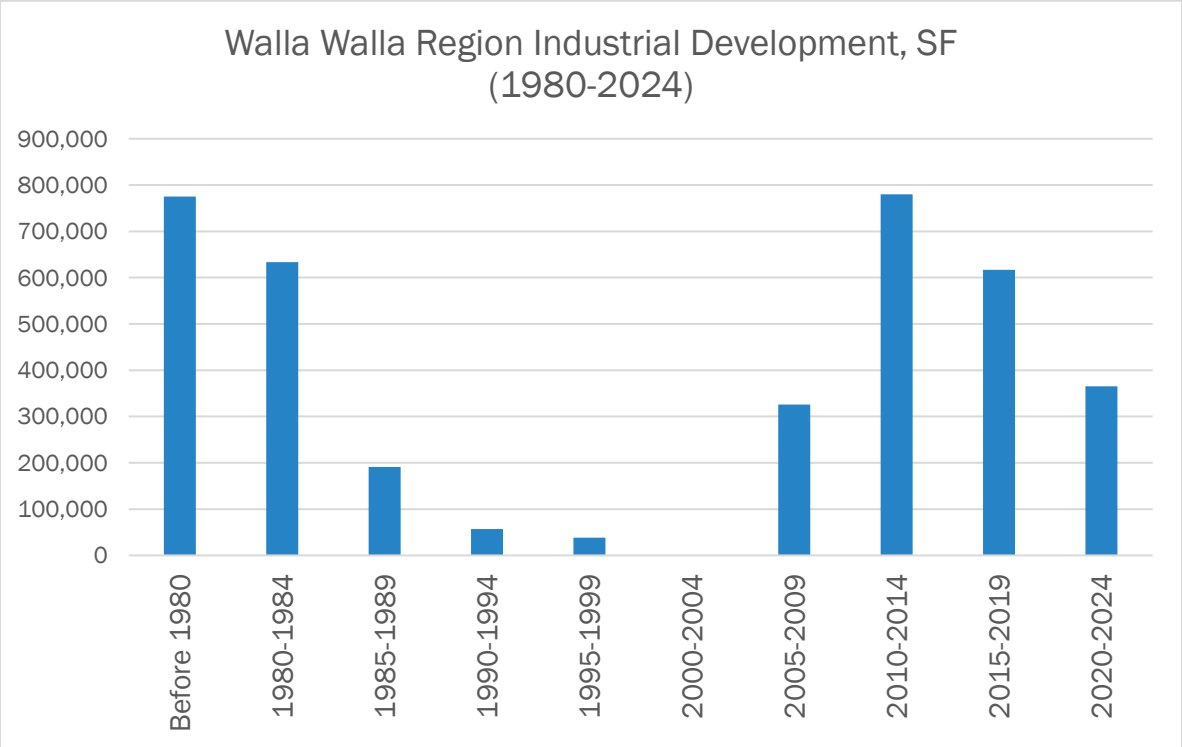




Source: Costar

Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

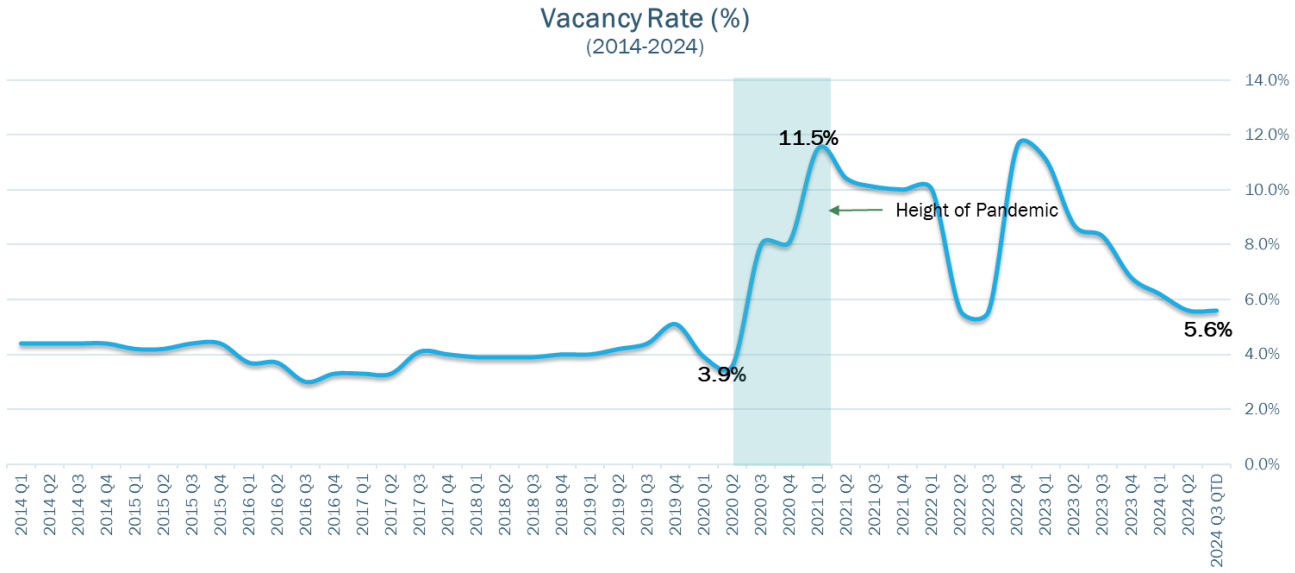




Source: Costar

Industrial Performance

Vacancy rates in the Walla Walla region are currently slightly above average at 5.6%. However, this is a significant improvement from the pandemic peak of 11.5%. Before the pandemic, vacancy rates typically ranged between 3% and 4%.

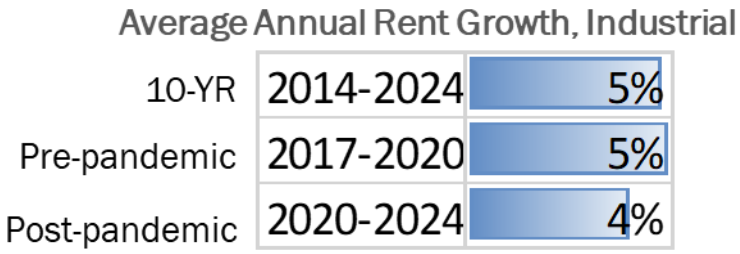


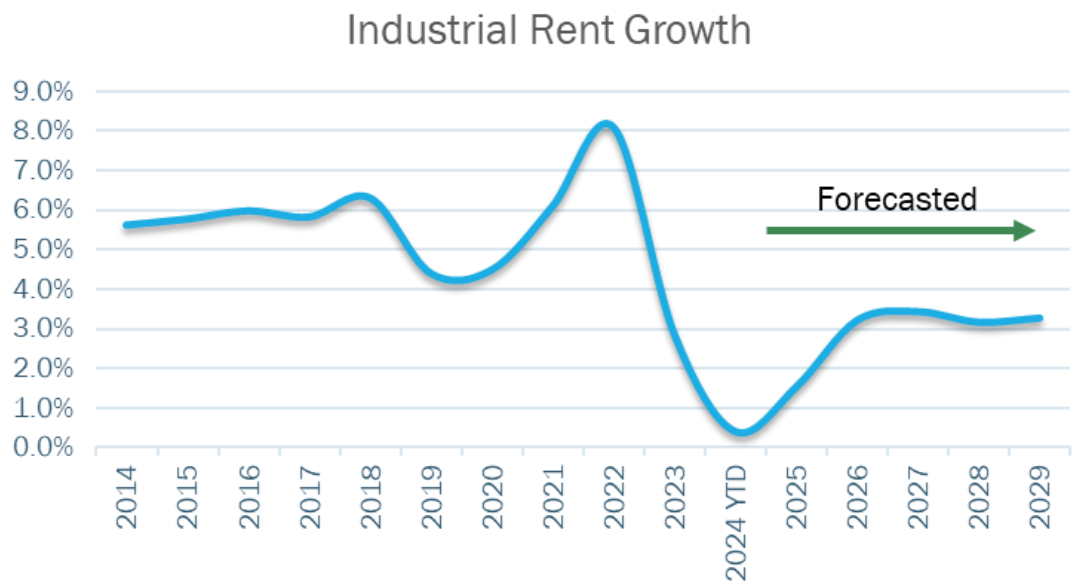
Source: Costar, Authors calculations

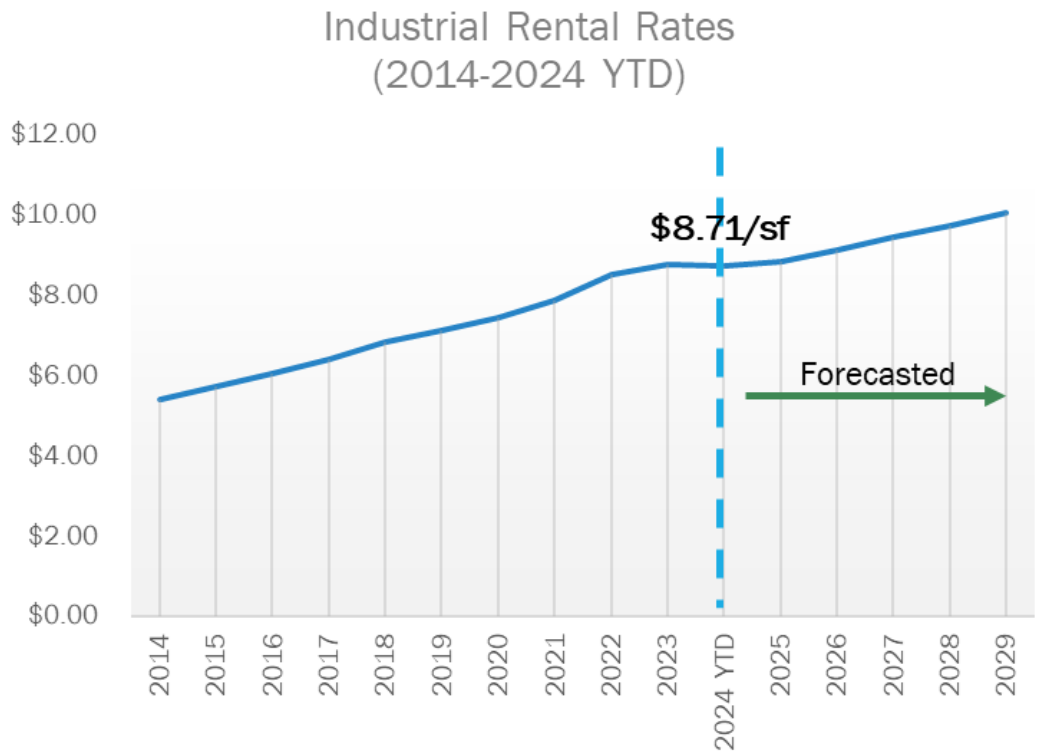
Rent growth for both industrial and office space has maintained a steady trajectory, defying the challenges posed by the pandemic.

While there was a slight deceleration in rent growth for office space during the pandemic, it managed to persevere and return to pre-pandemic levels of growth. In contrast, industrial rental rates continued their upward trend at a commendable pace.

This sustained growth, coupled with the constrained supply of new commercial inventory and low vacancy rates, underscores the demand for commercial space in Ellensburg.



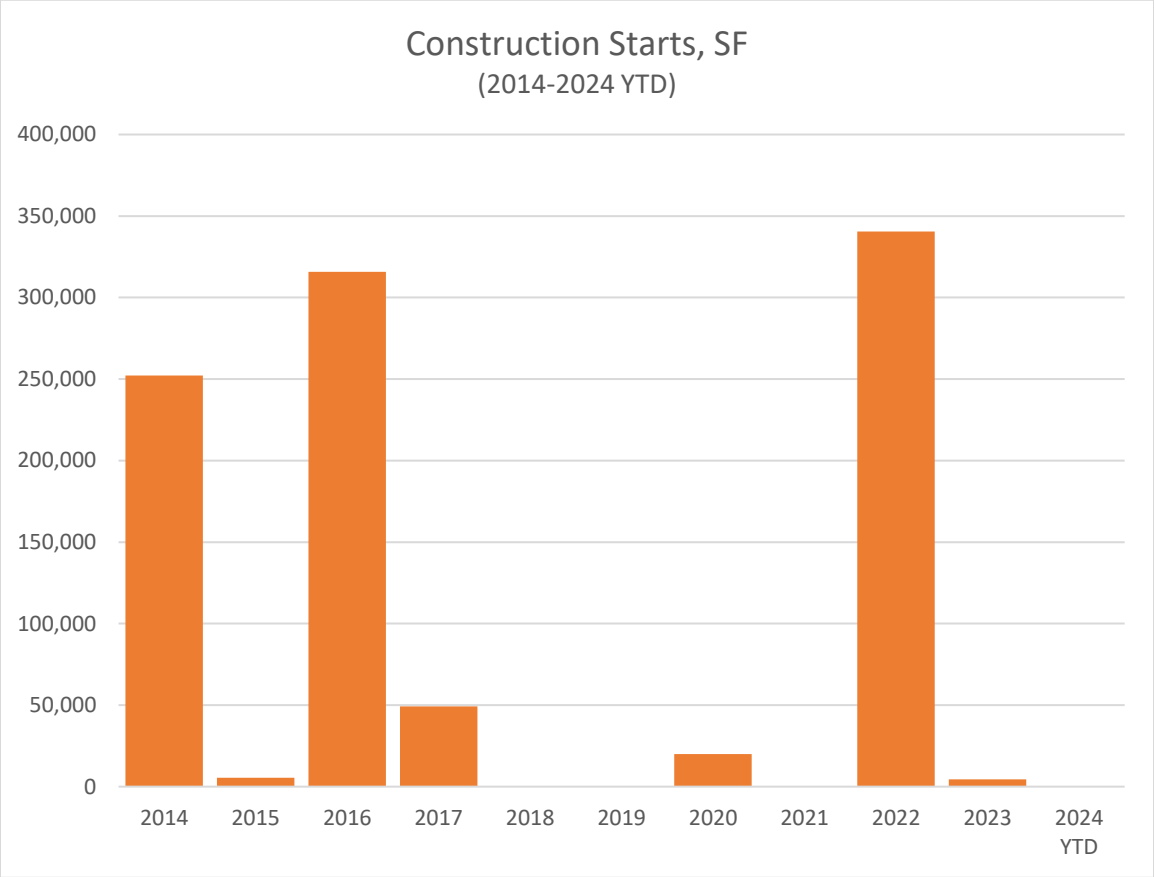




Source: Costar, Authors calculations

Industrial Pipeline

Based on information from Costar, there is 223,720 SF of industrial space under construction in the Walla Walla region. Majority of this activity started in 2022 and is anticipated to hit the market by 2025.



Source: Costar

Competing Sites

Address	City	Year Built	Building SF	Acres (Land only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Industrial Market Potential

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

Industry and Supply Chain Gap Analysis

An industry and supply chain gap analysis was conducted to determine the businesses and industry sectors that offer the most potential for growth around the region. This data was then ground-truthed with interviews from major businesses in the area, potential businesses, and other industry experts and stakeholders.

This analysis was assessed by four critical factors and conducted at the MSA level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 mark but showing job loss, were deemed "*Important and Requiring Attention*," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Industry Health Check

Agriculture and food processing remain central to the local economy, with crop production, food manufacturing, and beverage product manufacturing serving as core industries. The presence of these sectors suggests strong opportunities for value-added agriculture, food processing, and supply chain expansions such as packaging, cold storage, and distribution. Additionally, the region's healthcare sector, led by hospitals and social assistance, indicates an ongoing demand for medical services, elder care, and workforce training in healthcare-related fields. Retail and trade are also significant, with merchant wholesalers (nondurable goods) and sporting goods and hobby retailers playing a role in the local economy, pointing to potential growth in specialty retail and recreational markets.

To capitalize on these strengths, strategic investments should focus on targeted food and beverage processing infrastructure, support for healthcare workforce development, and logistics and wholesale distribution enhancements. Expanding retail and recreation offerings could further stimulate economic activity, particularly in outdoor and lifestyle industries.

Several industries are gaining traction in College Place, indicating new opportunities in construction, healthcare, professional services, and logistics. The construction sector, including building material supply dealers, specialty trade contractors, and construction of buildings, reflects increased demand for residential and commercial development. This growth underscores the need for real estate investment, workforce training in skilled trades, and green building technologies.

The expansion of ambulatory healthcare services points to a growing need for urgent care facilities, specialized outpatient clinics, and home health services, while repair and maintenance services highlight demand for auto repair, equipment servicing, and facility management. The rise of professional, scientific, and technical services, including computer systems design, engineering, custom programming, and R&D, suggests an increasing focus on technology-driven economic diversification. Encouraging the growth of tech startups, cybersecurity firms, and engineering consultancies could strengthen the region's innovation ecosystem.

Additionally, insurance carriers and durable goods wholesalers signal potential for expanded finance and logistics services, supporting regional supply chains and commercial trade. Investing in warehouse and distribution infrastructure could further position College Place as a logistics hub, particularly for durable goods related to agriculture, construction, and manufacturing.

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

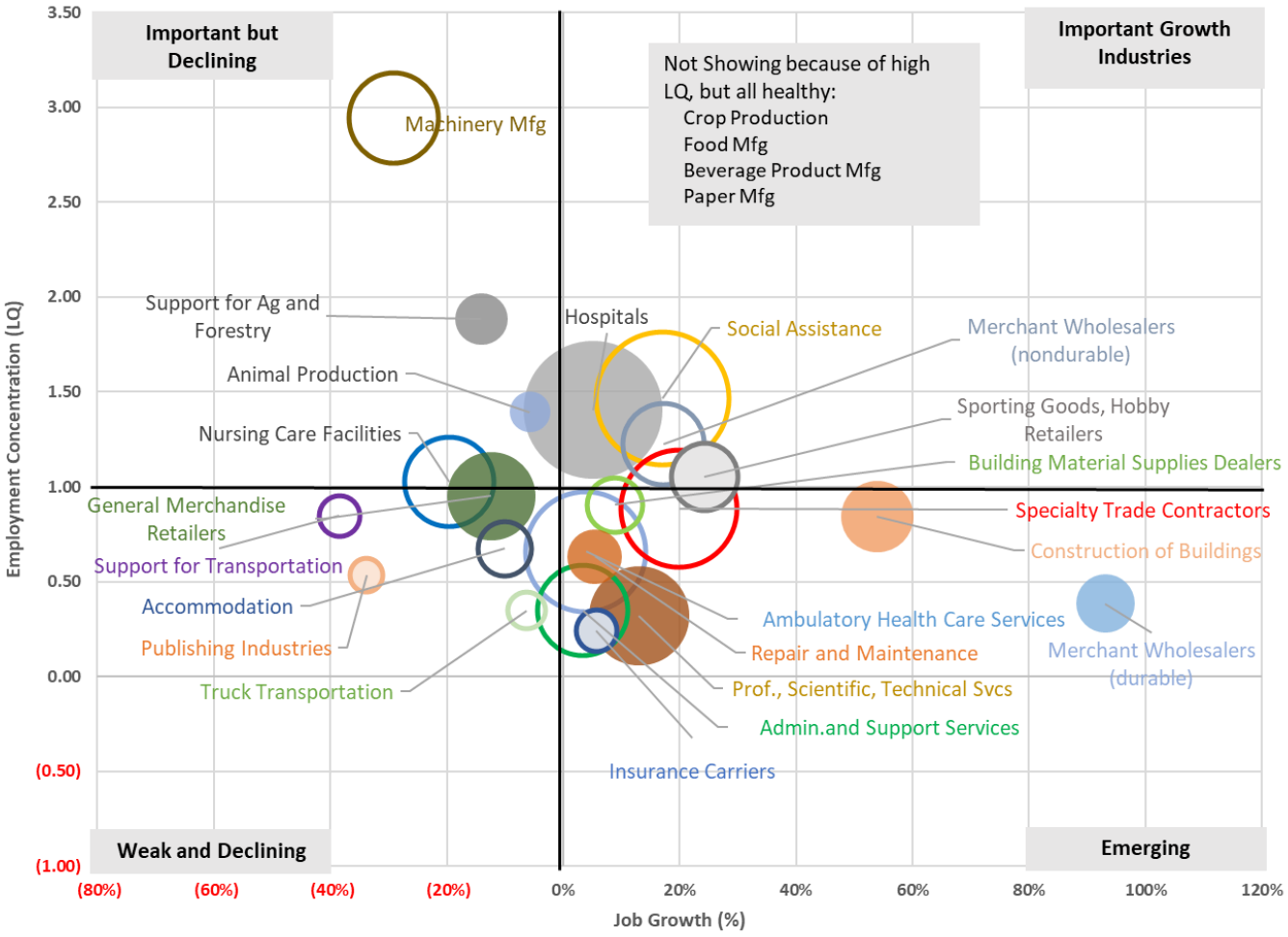
- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

Industry Health Check



Additionally, the following key sectors are driving the success of major employers in the region. By leveraging these industries, there is an opportunity to strengthen and expand local supply chains, attract complementary businesses, and enhance regional competitiveness through targeted infrastructure investments and workforce development.

Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

Potential Uses

Following the industry and supply chain gap analysis, we conducted interviews with local and regional businesses, higher education institutions, and key stakeholders to gather input on potential uses and validate the summarized data.

Based on the above analysis and insights gathered from interviews, the following uses were identified as having the greatest potential for the 233-acre site.

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
- R&D or Professional & Technical Services
- Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
- Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

Site Building Capacity

The following potential buildout scenario was estimated based on the potential uses identified in the analysis above, combined with industry standards for land requirements for different types of industrial facilities, focusing on site usage, building size, and ground coverage ratios. For each industry, the data outlines the percentage of the site utilized, the typical building square footage, and the corresponding potential number of buildings that could be accommodated on a given site. The total acreage potential across all industries is roughly 28 acres, with an average of 4 acres per building.

Use	% of Site	Ground Coverage Ratio	Typical Building SF (industry standard)	Potential Number of Buildings	Acres per Bldg	Typical Range (small to medium)
Wholesalers	25%	50%	50,000	6.7	4.6	2-5 acres
Truck Transportation	15%	30%	25,000	2.9	6.4	2-5 acres
Manufacturing	20%	50%	50,000	5.3	4.6	2-5 acres
Food Processing	15%	40%	50,000	2.6	7.2	2-5 acres
Lab & Testing Facilities	10%	30%	15,000	3.2	3.8	0.5-2 acres
R&D	15%	30%	10,000	7.2	2.6	0.5-2 acres
Total	100%			28	4	

Impacts

Economic impact analyses are used to estimate the overall economic activity, including spill-over and multiplier impacts, which occurs as a result of a particular business, development or event.

The economic activity related to the Martin Airfield site is the millions of dollars of goods and services purchased from local vendors and the wages and benefits paid to local workers. This initial injection of funds circulates to the business owners and employees that supply the materials, goods and services needed for the development. These contractors, businesses and households continue the economic ripple effect by hiring workers and buying goods and services to facilitate their business.

This analysis breaks down the overall project based on the results from the industry analysis and interviews. The project site layout will be further vetted by JUB Engineers based on infrastructure needs and requirements.

Once the development is completed and occupied, commercial activity and new residential households will spend millions of dollars annually in the course of their daily activities. This recirculation of the original expenditures multiplies their impact through these indirect and induced effects.

The extent to which the initial expenditures multiply is estimated using economic models that depict the relationships between industries and firms and their employees. These models are built upon expenditure patterns that are reported to the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Bureau of Economic Analysis. Data is regionalized so that it reflects and incorporates local conditions such as average wages, expenditure patterns and resource availability and costs.

The multipliers used in this analysis were generated by IMPLAN in coordination with the U.S. Bureau of Economic Analysis' RIMS II multipliers. Where appropriate, conservative estimates were used.

To further delineate, below are brief definitions of the three typical types of impacts.

> ***Direct impacts***: derive directly from an activity or event (first round supply chain)
>
> ***Indirect impacts***: generated as a result of business-to-business transactions (second tier supply chain)
>
> ***Induced impacts***: generated as a result of consumer-to-business transactions (a result from consumer spending)

Direct impacts are those economic impacts that occur as a consequence of direct activity and employment provided by the businesses that support the area, other businesses and government agencies that provide a range of related support services.

Indirect impacts are generated as a result of business-to-business transactions and induced impacts are a result of consumer-to-business transactions.

The economic impact results should be interpreted as those that are *attributable* to the proposed development at the subject site rather than assuming the new development will *generate* such new activities.

Given the desirable industries that have the potential of fulfilling existing business supply chain needs and interviews from industry experts, there is potential for several different users at this site. The impacts summarized below are indicative of different users in the identified industries, as outlined in the section above. The median wage for proposed jobs in these industries is $40.36 per hour in Walla Walla County, driven upward by manufacturing, lab and R&D positions. This is **72% higher than the CERB median hourly wage** of $23.04 for the County. Truck transportation and warehousing average $30.56 per hour, still above the median hourly wage for the County.

The 687 direct jobs estimated to be created at full build-out is expected to increase the labor force in Walla Walla County—assuming that some workers will reside in Walla Walla County. A small portion will most likely reside outside the area and, therefore, positively impacting their labor force numbers as well.

Impact on Jobs						
Impact on Jobs	Buildout Scenario					Total
	MFG	Truck Transp.	Wholesalers	Lab & Testing Facilities	R&D	
TOTAL JOBS	494	33	239	124	228	1,118
Direct	317	23	107	96	144	687
Indirect + Induced	177	10	132	28	84	430
SUBTOTAL	***494***	***33***	***239***	***124***	***228***	***1,118***

Source: Author's calculations using multipliers from IMPLAN; rounds to nearest thousand

Table 1. Labor Force Impacts as a result of Jobs Directly Created (687 new direct jobs)

Walla Walla County	Current	Impact from Direct Jobs	Percent Change
Labor Force	27,255	28,373	4.1%
Unemployed	1,357	239	-82.4%

[1]assuming that people that fill these jobs will reside in Walla Walla County (labor force data is based on "place of residence" and not place of work). Based on the current 5.0% unemployment rate (Jan 2025)
Source: Author's calculations based on BLS data

Conclusion

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

To support these emerging industries, incentives and policy strategies should focus on workforce development, business incubation, and infrastructure investment. Strengthening construction and trade workforce training programs can address the rising demand for skilled labor. Tech and business services growth could be encouraged through business incubators, coworking spaces, and startup funding for IT and cybersecurity firms. Expanding healthcare services and insurance offerings will be crucial in meeting the needs of a growing population. Finally, the development of logistics and wholesale trade infrastructure could enhance College Place's role as a regional distribution center.

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 City track the metrics set forth, and required by CERB, to determine if the desired outcomes are achieved and to help guide future development projects.

Overall, College Place is well-positioned for economic expansion through a combination of industrial diversification, strategic investments, and workforce development initiatives. By leveraging its strong agricultural base, growing healthcare sector, and emerging technical and construction industries, the region can sustain long-term economic growth and resilience.

Appendix 6

Detailed Cost Estimates

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Roads**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$176,000
2.00	**Traffic Control**			5.0%	$110,000
3.00	Crushed Surface Base Course	6,121	Tons	$35	$214,235
4.00	Crushed Surface Top Course	5,226	Tons	$35	$182,910
5.00	HMA CL 1/2" PG 64-28	3,983	Tons	$150	$597,450
6.00	Cement Conc. Traffic Curb and Gutter	8,138	LF	$25	$203,450
7.00	Cement Conc. Sidewalk	5,424	SY	$60	$325,440
8.00	Streetlights (includes wiring, J-Boxes, etc.)	27	EA	$7,500	$202,500
9.00	Street Trees	136	EA	$500	$68,000
10.00	Irrigation	1	LS	$100,000	$100,000
11.00	Stream Crossing - Does Not Include Row Acquisition For House	1	LS	$250,000	$250,000
12.00	Paint & Signage	1	LS	$50,000	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 2,480,000**
	Contingency [1]				**$ 744,000**
	City of College Place Sales Tax (8.8%)				**$ 284,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 877,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 4,385,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Earthwork**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$22,000
2.00	**Traffic Control**			5.0%	$14,000
3.00	Earthwork, Grading Site	8,000	CY	$30	$240,000
4.00	Clearing and Grubbiong	5	ACRE	$5,000	$25,000
5.00	Asphalt Pavement Restoration		SY	$70	$0
6.00	Hydroseeding	2	ACRE	$5,000	$10,000
7.00	Silt Fence		LF	$5	$0
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 311,000**
	Contingency [1]				**$ 93,000**
	City of College Place Sales Tax (8.8%)				**$ 36,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 110,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 550,000**

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3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	2/11/2025 30-24-031
ITEM:	Sewer Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$302,000
2.00	**Construction Traffic Control**			0.0%	$0
3.00	**Gravity Sewer Pipe**				
3.01	4" PVC Gravity Sewer Service Lateral	1,165	LF	$27	$31,455
3.02	8" PVC Gravity Sewer Service Lateral		LF	$41	$0
3.03	6" PVC Gravity Sewer Pipe		LF	$40	$0
3.04	8" PVC Gravity Sewer Pipe	7,400	LF	$47	$347,800
3.05	10" PVC Gravity Sewer Pipe		LF	$56	$0
3.06	12" PVC Gravity Sewer Pipe		LF	$67	$0
3.07	16" PVC Gravity Sewer Pipe		LF	$81	$0
3.08	18" PVC Gravity Sewer Pipe		LF	$98	$0
3.09	21" PVC Gravity Sewer Pipe		LF	$127	$0
3.10	24" PVC Gravity Sewer Pipe		LF	$152	$0
3.11	30" PVC Gravity Sewer Pipe		LF	$188	$0
3.12	36" PVC Gravity Sewer Pipe		LF	$238	$0
3.13	Bedding and Foundation Material	8,565	LF	$15	$128,475
3.14	Sewer Service Line Connection	29	EA	$500	$14,500
4.00	**Gravity Trench Excavation/Backfill**				
4.01	4-10 ft.	3,450	LF	$43	$148,350
4.02	10-16 ft.	5,115	LF	$74	$378,510
4.03	16-20 ft.		LF	$104	$0
4.04	20-24 ft.		LF	$135	$0
4.05	24-28 ft.		LF	$168	$0
4.06	28-30 ft.		LF	$207	$0
4.07	Import Backfill and Foundation Material	16,597	CY	$40	$663,880
5.00	**Surface Repair**				
5.01	Hydroseed		LF	$15	$0
5.02	Natural Ground	8,565	LF	$25	$214,125
5.03	Gravel Roadway		LF	$30	$0
5.04	Asphalt - Trench Patch Width per City Standards (Required for 4-16' Depth Sewer)		LF	$39	$0
5.05	Asphalt - 1/2 Street Width per City Standards (Required for 16-20' Depth Sewer)		LF	$160	$0
5.06	Asphalt - Full Street Width per City Standards (Required for 20-30' Depth Sewer)		LF	$319	$0
6.00	**Manholes**				
6.01	48" Manholes, 4-10 ft.	10	EA	$5,400	$54,000
6.02	48" Manholes, 10-16 ft.	14	EA	$5,900	$82,600
6.03	48" Manholes, 16-20 ft.		EA	$6,400	$0
6.04	60" Manholes, 20-24 ft.		EA	$12,650	$0
6.05	60" Manholes, 24-28 ft.		EA	$13,400	$0
6.06	60" Manholes, 28-30 ft.		EA	$13,750	$0
7.00	**Lift Stations**				
7.01	Site Work	1	LS	$154,000	$154,000
7.02	Yard Piping	1	LS	$134,000	$134,000
7.03	Lift Station - Structural	1	LS	$158,000	$158,000
7.04	Lift Station - Mechanical	1	LS	$716,000	$716,000
7.05	Lift Station - Electrical	1	LS	$452,000	$452,000
8.00	**Project Specific Considerations**				
8.01	Dewatering	1	LS	$8,000	$8,000
9.00	**Miscellaneous Other**				
9.01	Bypass Pumping			0.0%	$0
9.02	Bonding / Admin			2.5%	$92,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$**	**4,080,000**
Contingency [1]	**$**	**1,224,000**
City of College Place Sales Tax (8.8%)	**$**	**467,000**
Planning, Engineering, & Administrative Costs [2]	**$**	**1,443,000**
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$**	**7,214,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/6/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	Water Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8%	$380,000
2.00	**Construction Survey**	1	LS	$10,000	$10,000
3.00	**Erosion Control and Water Pollution Prevention**	1	LS	$10,000	$10,000
4.00	**Materials Testing**	1	LS	$5,000	$5,000
5.00	**Project Temporary Traffic Control**	1	LS	$5,000	$5,000
6.00	**Shoring and Trench Safety Systems**	1	LS	$2,500	$2,500
7.00	**Surface Repair**				
7.01	Removing Asphalt Concrete Pavement	625	SY	$5	$3,125
7.02	HMA Sawcut and Seal	4,070	LF	$2	$8,140
7.03	HMA Restoration	625	SY	$47	$29,375
8.00	**Water Pipe and Appurtenances**				
8.01	Connect to Existing Water Main 12 In. Diam.	2	EA	$5,000	$10,000
8.02	DI Pipe for Water Main 6 In. Diam.	1,500	LF	$90	$135,000
8.03	DI Pipe for Water Main 14 In. Diam.	830	LF	$186	$154,380
8.04	DI Pipe for Water Main 16 In. Diam.	14,395	LF	$221	$3,181,295
8.05	DI Tee 14 In. x 6 In.	3	EA	$2,300	$6,900
8.06	DI Tee 16 In. x 6 In.	27	EA	$3,500	$94,500
8.07	DI Tee 16 In. x 12 In.	1	EA	$4,600	$4,600
8.08	DI Tee 16 In. x 14 In.	3	EA	$4,800	$14,400
8.09	DI Tee 16 In.	1	EA	$11,500	$11,500
8.10	DI Cross 16" In.	1	EA	$4,400	$4,400
8.11	DI Reducer 16 In. x 12 In.	1	EA	$3,700	$3,700
8.12	DI 45° Bend 16 In.	4	EA	$3,100	$12,400
8.13	DI Cap 12 In.	2	EA	$710	$1,420
8.14	DI Cap 14 In.	3	EA	$890	$2,670
8.15	DI Cap 16 In.	3	EA	$1,550	$4,650
8.16	Blowoff Assembly 2 In.	8	EA	$2,500	$20,000
8.17	Butterfly Valve 12 In.	2	EA	$4,000	$8,000
8.18	Butterfly Valve 14 In.	3	EA	$5,400	$16,200
8.19	Butterfly Valve 16 In.	34	EA	$6,100	$209,810
8.20	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	2	EA	$11,000	$22,000
8.21	Hydrant Assembly	30	EA	$6,500	$195,000
8.22	Bollard	60	EA	$1,000	$60,000
8.23	Service Connection 2 In. Diam.	29	EA	$3,400	$98,600
8.24	Water Meter 2 In. Diam.	29	EA	$6,500	$188,500
9.00	**Project Specific Considerations**				
9.01	Doan Creek Crossing	1	LS	$100,000	$100,000
10.00	**Miscellaneous Other**				
10.01	As-Built Drawings	1	LS	$2,500	$2,500
10.02	Bonding / Admin			2.5%	$116,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$5,132,000**
Contingency [1]	$1,540,000
City of College Place Sales Tax (8.8%)	$588,000
Planning, Engineering, & Administrative Costs [2]	$ 1,815,000
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$9,075,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Storm Drain**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$31,000
2.00	**Traffic Control**			5.0%	$20,000
3.00	Catch Basin Type 1		EA	$2,500	$0
4.00	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	500	LF	$85	$42,500
5.00	Stormwater Treatment Device (CDS or Aquaswirl)		EA		$0
6.00	Swales	6,000	LF	$50	$300,000
7.00	Pond excavation, mulch, seeding	1,000	CY	$50	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 444,000**
	Contingency [1]				**$ 133,000**
	City of College Place Sales Tax (8.8%)				**$ 51,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 157,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 785,000**

J-U-B ENGINEERS, INC.
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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Utilities**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$88,000
2.00	**Traffic Control**			5.0%	$55,000
	Electrical				$0
3.00	Primary Electrical Vaults	15	EA	$10,000	$150,000
4.00	Primary Electrical Conduit & Wire	8,500	LF	$40	$340,000
5.00	Transformer for Primary Service	0	EA	$100,000	$0
	Fiber Optic				$0
6.00	Fiber Optic	1.6	MI	$100,000	$160,000
7.00	Fiber Service Vaults	29	EA	$2,000	$58,000
	Gas				$0
8.00	4" Natural Gas Main	12,000	LF	$20	$240,000
9.00	Natural Gas Regulator	1	EA	$150,000	$150,000
				ESTIMATED CONSTRUCTION SUBTOTAL	**$ 1,241,000**
				Contingency [1]	**$ 372,000**
				City of College Place Sales Tax (8.8%)	**$ 142,000**
				Planning, Engineering, & Administrative Costs [2]	**$ 439,000**
				TOTAL PROBABLE COST IN 2025 DOLLARS[3]	**$ 2,194,000**

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MARTIN AIRFIELD AREA PLANNING STUDY 2025

CP
COLLEGE PLACE
WALLA WALLA VALLEY

J·U·B ENGINEERS, INC.

THE LANGDON GROUP

GATEWAY MAPPING INC.

OTHER J-U-B COMPANIES

TheMettsGroup

EXECUTIVE SUMMARY

The City of College Place has retained J-U-B ENGINEERS, Inc. to conduct a planning study evaluating the feasibility and site readiness to establish industrial development on approximately 64.5 acres of property near Martin Airfield. The City desires to attract light industrial development at Martin Airfield, which will create new jobs and private investment in growing market sectors to support the community.

Currently, the City lacks sufficient light industrial and employment lands to meet demand, making this area an essential and increasingly scarce resource for future economic development. Given this limitation, maximizing the potential of Martin Airfield for industrial use is a strategic priority.

This planning study serves as a strategic roadmap, reviewing the area's history and objectives, evaluating current infrastructure, and envisioning future scenarios necessary to draw the desired development. It offers a thorough analysis of site due diligence, highlighting both challenges and opportunities ahead. Ultimately, the aim is to assess the viability and readiness of Martin Airfield as a hub for light industrial use.

A review of existing infrastructure highlights necessary improvements to support development. These improvements include upgrades to transportation facilities, earthwork, and utility infrastructure. The study also presents preliminary cost estimates for these enhancements.
The following sections provide a detailed breakdown of each critical development component:

- **Conceptual Layout** – Overview of the planned site configuration and land use.
- **Transportation Facilities** – Assessment of existing and required road networks.
- **Earthwork** – Site grading and preparation requirements.
- **Utility Requirements** – Infrastructure needs for water, electricity, and other essential services.
- **Preliminary Cost Estimate** – Estimated financial investment for proposed improvements.

By addressing these factors, this document provides a framework for informed decision-making in the development of the study area, ensuring long-term success and sustainability.

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Appendix 5 Economic Analysis
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INTRODUCTION

Background

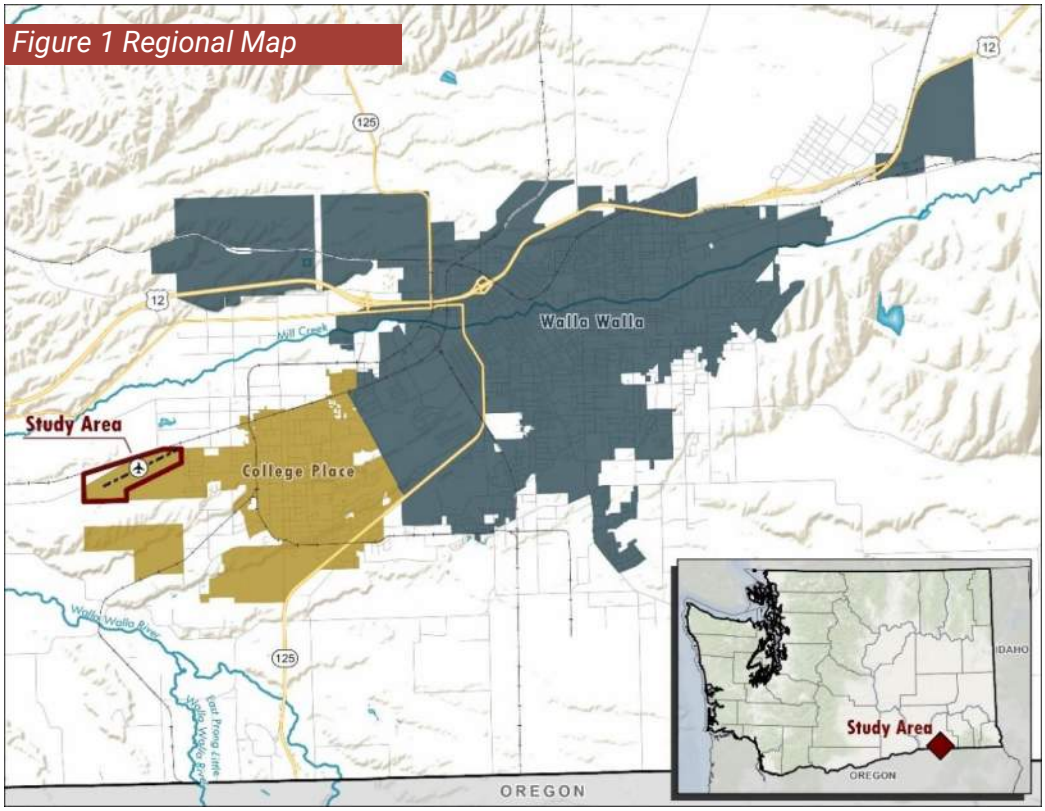
The Martin Airfield Area includes approximately 64.5 acres surrounding the Martin Airfield Airport. In March 2024, the Washington State Community Economic Revitalization Board (CERB) awarded College Place funding for economic development and research to identify infrastructure improvements needed to spur business growth and job creation.

Martin Airfield is a privately owned, public-use airport in College Place, a city in Walla Walla County. Today, Martin Airfield is a general aviation airport for private, student, and experimental aircraft pilots. Martin Airfield was historically developed as a training ground for U.S. Navy aviators. Following World War II, the airport returned to civilian use. Since returning to civilian use, the airport has been underutilized, and the city is excited to take action to identify proactive development opportunities.

Purpose of the Plan

The City of College Place has initiated the Martin Airfield Feasibility Study to assess on-site infrastructure needs, evaluate the development layout options, and provide guidelines for future development. This Feasibility Study examines the opportunities and challenges of developing the site. The Study identifies a long-term vision of Martin Airfield with flexible plan implementation approaches that respect market conditions and interests within the Study's anticipated build-out period.

Figure 1 Regional Map



EXISTING CONDITIONS

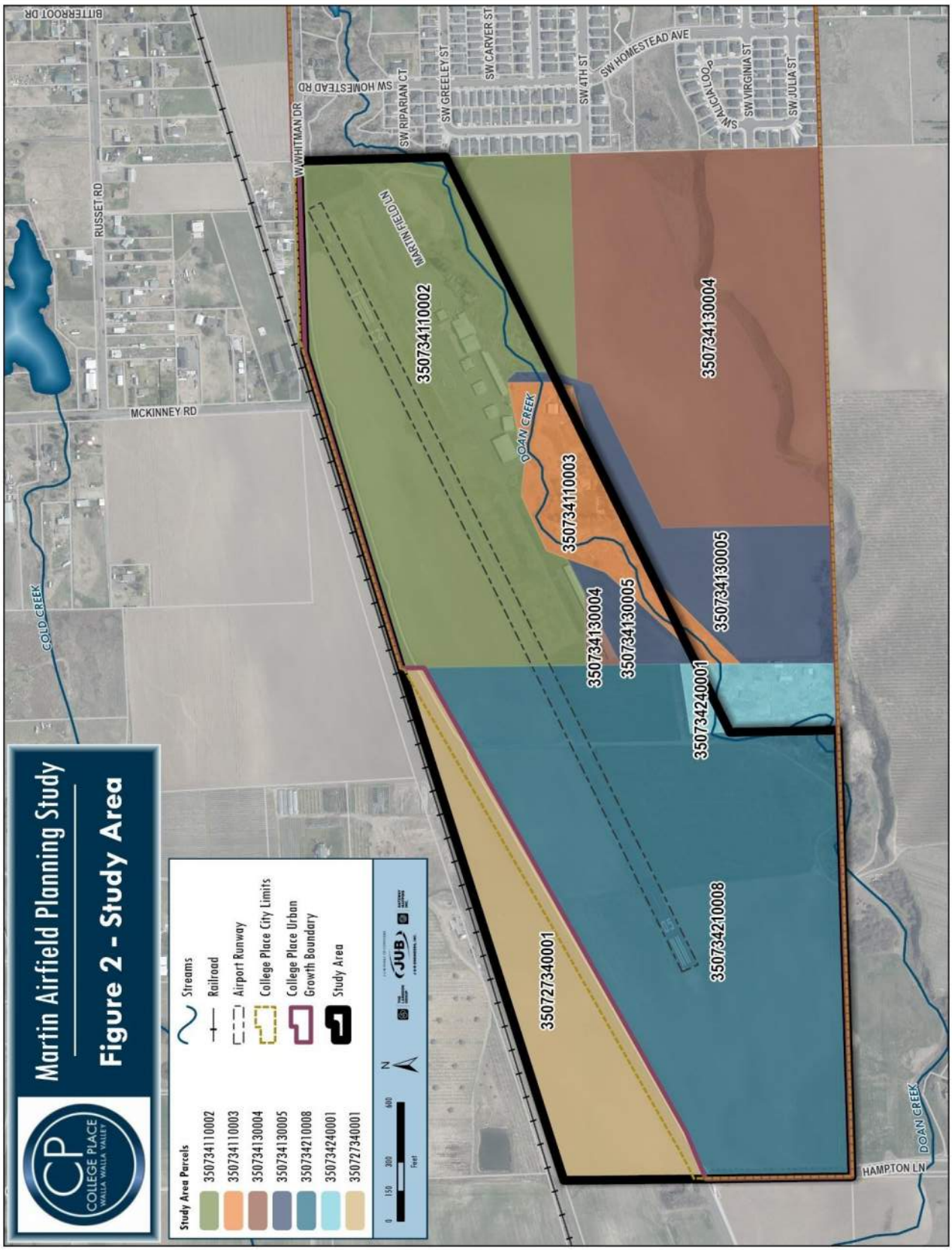
The Existing Conditions chapter provides an overview of the current state of various aspects relevant to the planning process and project development. It gives a detailed description of a wide range of topics within Martin Airfield.

The Existing Conditions chapter is arranged in the following sections:

- Existing Property Description
- Land Use and Planning
- Airport Requirements
- Environmental Overview
- FAA Airspace Analysis
- Transportation
- Utility Availability
- Economic Analysis

Existing Property Description

The land being evaluated for the Martin Airfield Master Plan consists of seven parcels, totaling nearly 180 acres, located in the City of College Place and Walla Walla County. The study area is situated on the western edge of the City of College Place. The Columbia Walla Walla (CWW) Railroad bounds the study area to the north, Doan Creek to the south, Homestead Village to the east, and Hampton Lane to the west, as shown in the Study Area Figure 2 below.


Martin Airfield Planning Study
Figure 2 - Study Area
COLLEGE PLACE
WALLA WALLA VALLEY
Study Area Parcels
350734110002
350734110003
350734130004
350734130005
350734210008
350734240001
350727340001
Streams
Railroad
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
BUTTERROOT DR
RUSSET RD
MCKINNEY RD
COLD CREEK
W WHITMAN DR
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW ACACIA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTIN FIELD LN
DOAN CREEK
HAMPTON LN
350734110002
350734110003
350734130004
350734130005
350734240001
350734210008
350727340001

Land Use and Planning

Land Use Evaluation

Current Land Uses

The property is owned by a private entity and is farmed under a lease agreement. In addition to farming activities, Martin Airfield accommodates a variety of aviation-related uses including:

- Landside facilities – Elements supporting aviation use at an airport include terminals, hangars, tie-down spaces, fuel systems, signs, fencing, and automobile parking.
- Airside facilities – Elements at an airport that enable the safe movement and operation of aircraft between the air and ground include runways, taxiways, taxi lanes, aprons, visual aids, and weather reporting.

These facilities are depicted in the Landside and Airside Facilities (Figure 3) below.

Zoning Districts

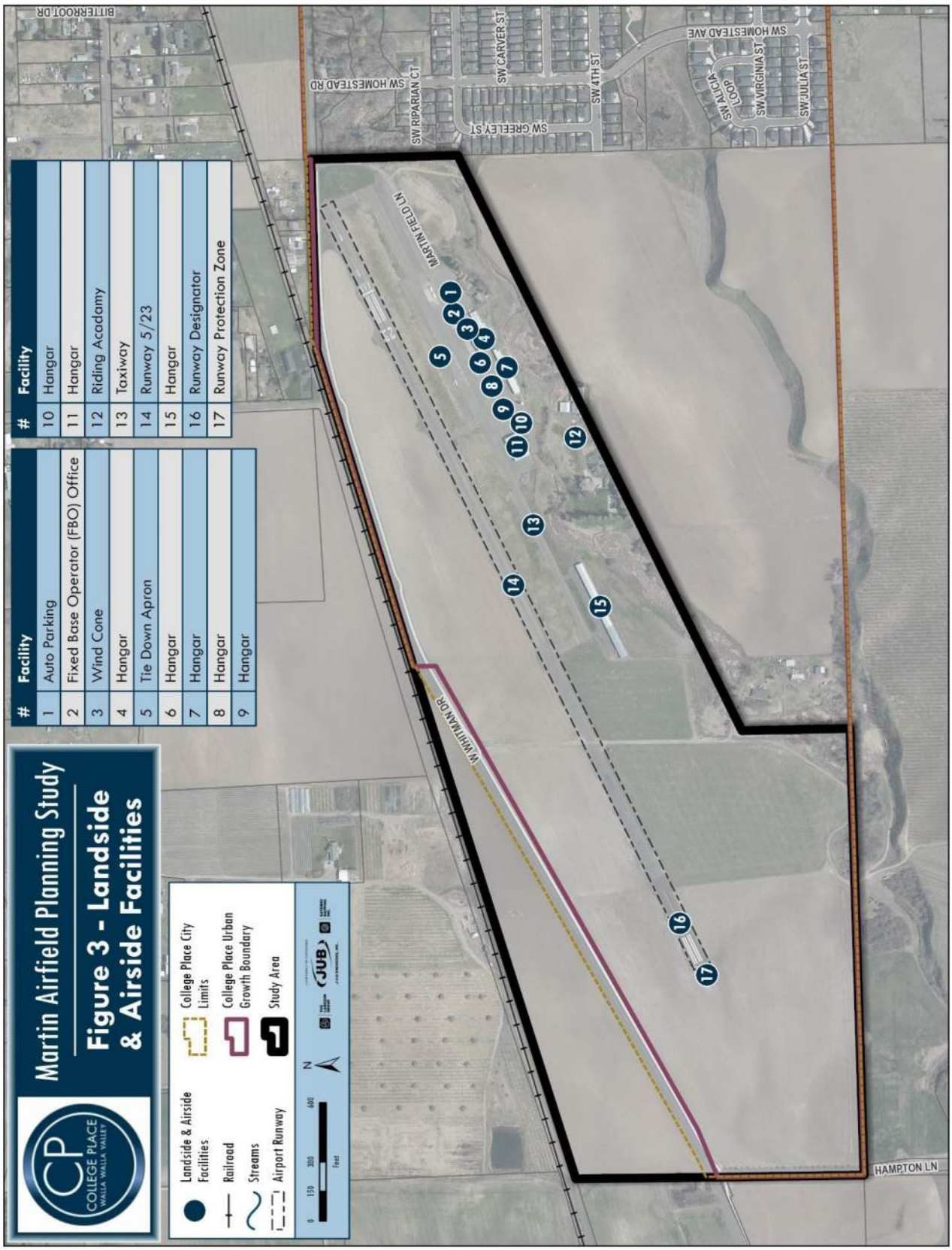
Martin Airfield has two zoning districts within the study area (see Figure 4):

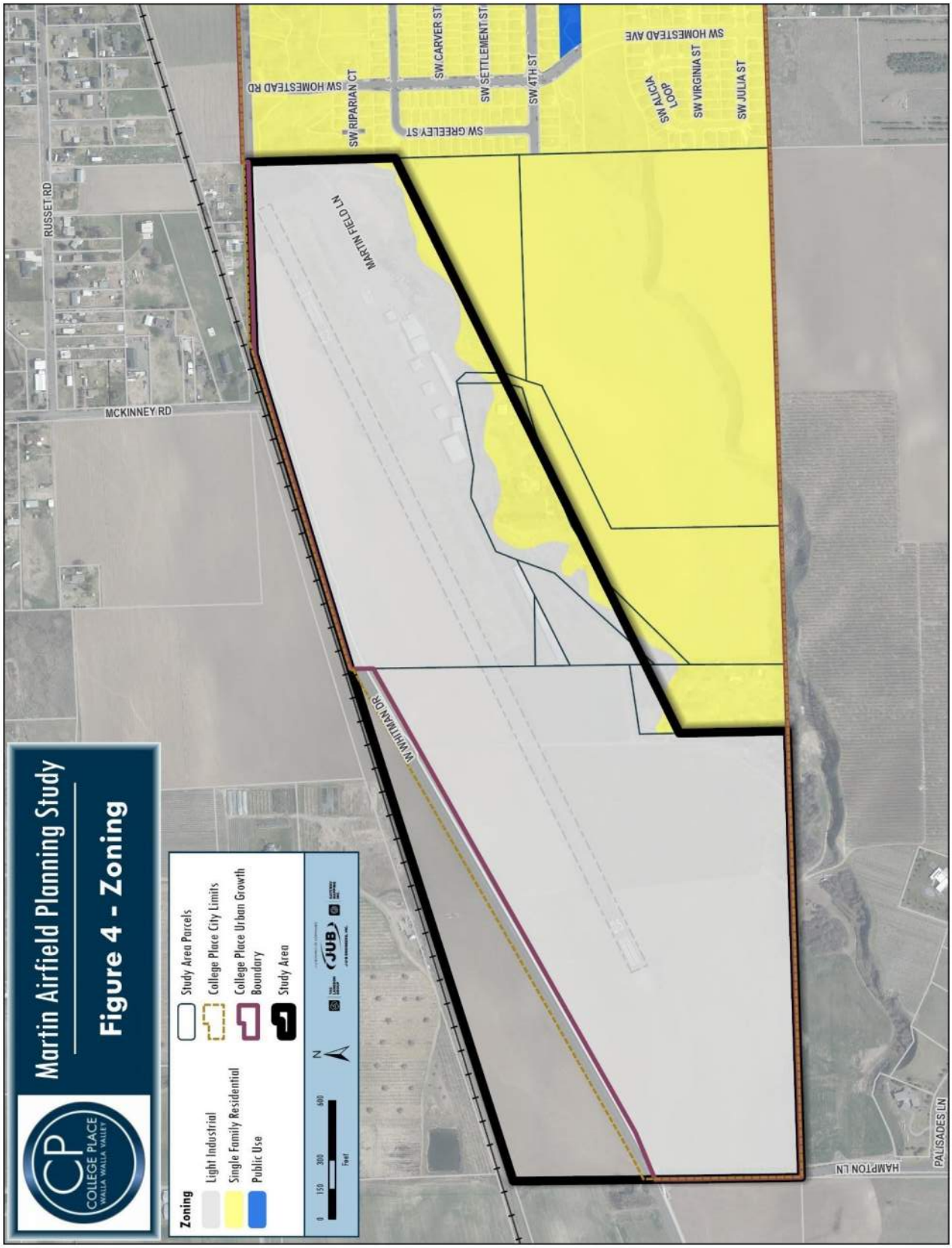
- City Zoning Districts
  - Light Industrial (LI)
- County Zoning District
  - Agriculture Residential 10 (AR-10).

The purpose of the LI and AR-10 zoning districts are described in College Place Municipal Code (CPMC) 14.50.020 or Walla Walla County Code (WWCC) 17.12.030 and summarized below.

- Light Industrial (LI) – The purpose of the light industrial activities that do not generate offensive external impacts such as excessive noise, pollution or emissions, involve limited assembly, fabrication and handling of products, include research and technological processes and do not create exceptional demands upon public facilities and services. A further purpose is to afford protection to the industries so located by prohibiting the intrusion of incompatible influences.
- Agriculture Residential-10 (AR-10) – All lands in this district are lands of long-term commercial significance. The purpose of this district is to maintain the viability of agricultural uses. Land in this district is located adjacent to existing rural lands, rural activity centers, and urban growth areas. Uses are distinctive of the agricultural sector. Large-scale natural resource processing industry is discouraged. Limited commercial-tourism and businesses that support agriculture are permitted. Residences are an allowed use and clustering to preserve large tracts of resource land is the preferred method of residential land development.

The City of College Place does not have an Airport Overlay Zone with additional requirements. Code recommendations for an Airport Overlay Zone are described in the Airport Requirements section.


Martin Airfield Planning Study
Figure 3 - Landside & Airside Facilities
COLLEGE PLACE
WALLA WALLA VALLEY
Facility
1 Auto Parking
2 Fixed Base Operator (FBO) Office
3 Wind Cone
4 Hangar
5 Tie Down Apron
6 Hangar
7 Hangar
8 Hangar
9 Hangar
10 Hangar
11 Hangar
12 Riding Academy
13 Taxiway
14 Runway 5/23
15 Hangar
16 Runway Designator
17 Runway Protection Zone
Landside & Airside Facilities
Railroad
Streams
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600 Feet
N
JUB
BITTERROOT DR
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
SW HOMESTEAD AVE
MARTIN FIELD LN
W WHITMAN DR
HAMPTON LN


Martin Airfield Planning Study
Figure 4 - Zoning
COLLEGE PLACE
WALLA WALLA VALLEY
Zoning
Light Industrial
Single Family Residential
Public Use
Study Area Parcels
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
MARTIN FIELD LN
W WHITMAN DR
MCKINNEY RD
RUSSET RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW SETTLEMENT ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
HAMPTON LN
PALISADES LN

Allowed Uses

The permitted uses for the LI and AR-10 zones are listed below.

Light Industrial

- Appliance repair shop
- Automobile service/repair(1)
- Bakery
- Business park
- Communications center/facility
- Contractor/construction yard
- Electric vehicle infrastructure
- Industry, light
- Manufactured home
- Manufacturing/assembly, light
- Master planned development
- Mini-storage
- Mobile vendor
- Nursery/greenhouse
- Parking lot
- Public utility
- Salvage/wrecking operations
- School, vocational/trade
- Shipping/receiving center
- Storage of flammable material/liquid
- Storage, outdoor
- Technology center
- Warehouse/shipping
- Winery
- Wireless communication facility, academic
- Wireless communication facility, minor

Agriculture Residential 10

- Dwelling Units (One Family, Mobile Home, Manufactured Home)
- Adult Family Home
- Bed & Breakfast Type I
- Produce Stand
- Commercial Greenhouses
- Day Care, Family
- Distillery, production facility
- Storage/Packing agricultural produce
- Crop Maze
- Park
- Growing of Crops
- Hatcheries
- Timber Harvesting
- Airports and Aircraft Landing Field—Agricultural
- Helistops
- Railroad Terminals

Development Standards

The City of College Place and Walla Walla County have adopted zoning regulations and development standards (CPMC Title 14 and WWCC Title 17, respectively) that are consistent with and serve to implement the City's and County's Comprehensive Plan (2018). Below is a summary of the development standards identified in CPMC Chapter 14.60 and WWCC Chapter 17.18.

Table 1 Development Standards

Zone	Lot Size (min.)	Lot Width (min.)	Density (dwelling units/Acre)	Building Height	Front Yard	Side Yard	Rear Yard
LI	No minimum[1]	50'	-	None	None	None[2]	None[2]
AR-10	10 AC	330'	0.10	35'[3]	30'[3]	10'[3]	-

Notes

1. On corner lots, the exterior side yard setback shall be at least 15 feet from the property line.
2. No setback required except when abutting a SFR, MFR, or PUD then a landscaped buffer equal to the height of the building at eave shall be required in accordance with the provisions of Section 14.60.040, landscaping, fences and visibility standards.
3. Buildings housing domestic animals or any use that produces offensive noise, vibration, smoke, dust, odors, heat or glare shall maintain a seventy-five feet front yard setback and fifty feet side and rear yard setbacks.

Planning Process

The City of College Place has jurisdiction over the Martin Airfield and will process all permitting and entitlements necessary for development. The City (or its representative) will initiate the permit review and send it to the Airport Engineer for additional review and comment. The City of College Place will respond and provide a review following the College Place Municipal Code.

SEPA

Any future development of the property will require environmental review. College Place will be the lead agency for the State Environmental Policy Act (SEPA) Process. SEPA is a State of Washington policy intended to ensure that state and local agencies consider environmental values during decision-making. SEPA requires state and local agencies to consider the potential environmental consequences of a proposal before approving or denying the proposal. Once the City receives a SEPA Checklist, a public notice will be sent out for a 14-day public comment period and a 14-day appeal period. Notices are sent out to the following:

- The Department of Ecology
- All agencies with jurisdiction (state, local, and federal)
- Affected tribes; and
- All local agencies whose public services would be affected by the proposal.

Because Martin Airfield is a privately owned airport, it is exempt from following federal regulations, such as the National Environmental Policy Act (NEPA), unless a federal nexus is triggered otherwise during development.

Platting Process

The City has three options for the division, redivision, or alternating lots within the Martin Airfield Study Area. These options are discussed briefly below. The complete Permitting Classification Table can be found in **Appendix 1**. CPMC Chapter 14.90 Subdivisions contains the standards and procedures for dividing land in accordance with the City of College Place Municipal Code.

- Subdivision/Short Plat
- Binding Site Plans
- Lot Line Adjustments (Boundary Line Adjustments)

Subdivision/Short Plat

A subdivision or short plat is used when an applicant desires to subdivide land. This process is guided by the number of lots the applicant wants to create. A subdivision is used when ten or more lots will be created. A short plat is used when nine or fewer lots will be created.

Binding Site Plans

The binding site plan process is an alternative to the subdivision process to divide property for sale, lease, or transfer of ownership as an alternative method of land division into two or more lots, parcels, or tracts in a commercial or industrial zoning district.

Lot Line Adjustments (Boundary Line Adjustments)

A boundary line adjustment is a mechanism by which the city may approve the alteration of a boundary line between legally created lots, provided that:

1. Such an adjustment shall not create any additional lot, tract, parcel, site, or division, nor create lots which are nonconforming or more nonconforming than exists; and
2. A boundary line adjustment may consolidate lots under common ownership.

Environmental Overview

Water Resources

Wetlands

The Clean Water Act (CWA) defines wetlands as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Wetlands include swamps, marshes, bogs, and similar areas.

The U.S. Fish and Wildlife National Wetlands Inventory identifies one wetland within the study area. It is a 3.96-acre Freshwater Emergent Wetland habitat classified as a PEM1C. A Freshwater Emergent Wetland habitat classified as PEM1C refers to a specific type of wetland in the United States National Wetland Classification System. The following is an outline of the classification:

- PEM: Stands for "Palustrine Emergent," which indicates a wetland characterized by non-woody plants (emergent vegetation) such as grasses, sedges, and reeds.
- 1: This number typically denotes the subclass of the wetland, indicating it is dominated by persistent emergent vegetation.
- C: This letter signifies a specific community type within the subclass, often indicating factors like hydrology or the dominant plant species present.

In summary, a PEM1C wetland is a type of freshwater wetland dominated by persistent emergent vegetation, usually found in seasonally or permanently flooded areas. These habitats are vital in biodiversity, water quality, and flood regulation. Before any development activities in the vicinity, a field verification of this area should be completed.

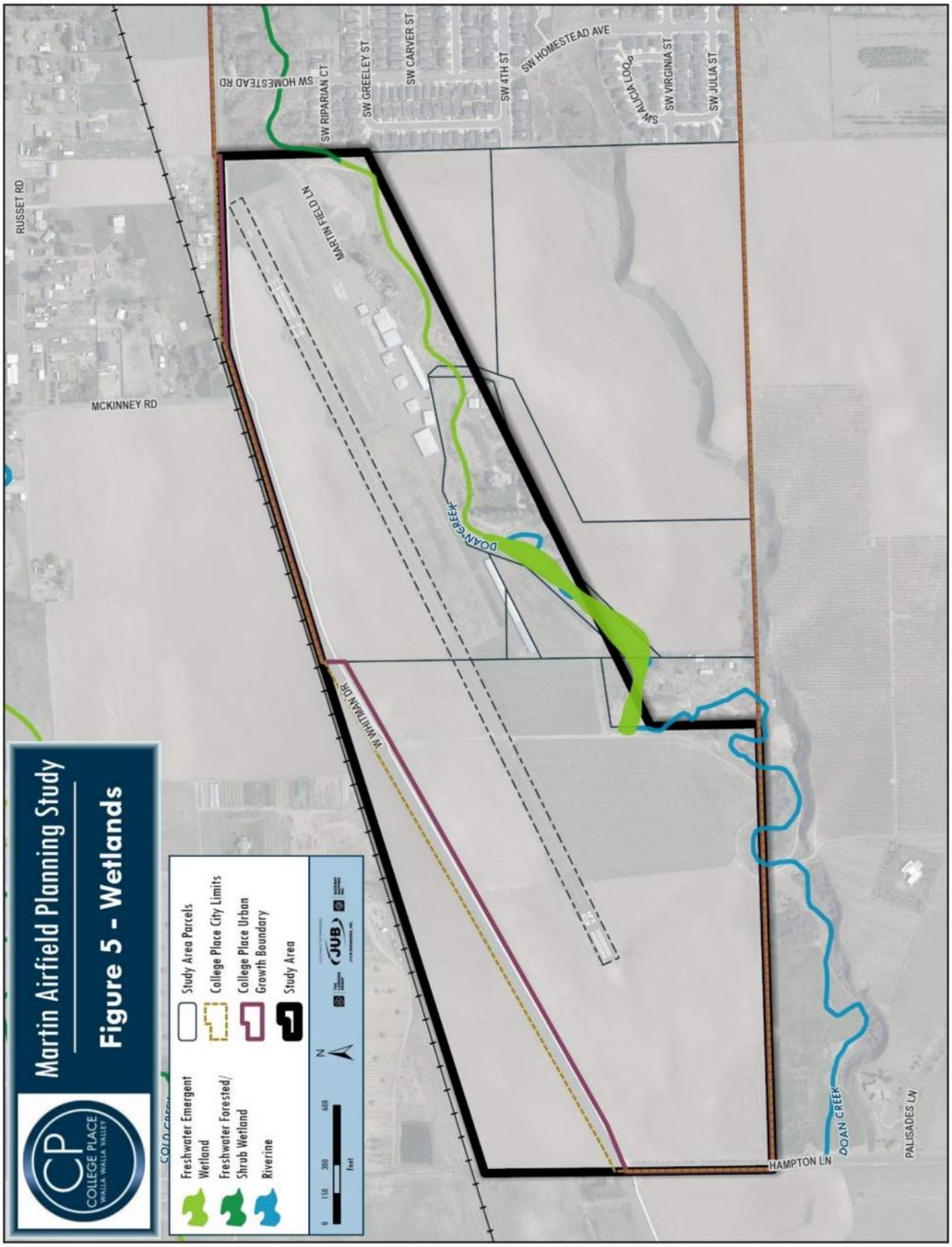
The appropriate regulatory agencies have final authority regarding jurisdictional determinations and acceptance of wetland delineations. If proposed development would permanently impact federal and/or state jurisdictional wetlands, permitting with the U.S. Army Corps of Engineers (USACE) and the Washington State Department of Ecology (WDOE) would be required, and compensatory mitigation may be required.

Floodplains

Floodplains are defined as lowland areas adjoining inland and coastal waters which are periodically inundated by floodwater. Floodplains are discussed in terms of the 100-year flood, 500-year flood, coastal flood, or underdetermined/undesignated areas. The study area is in Zone C (areas of minimal flooding), per the FEMA FIRM (Flood Insurance Rate Map) 530194 0440 B.

Surface Waters

Rivers, streams, lakes, oceans, ponds, and estuaries are examples of surface waters. The study area has one primary surface water feature: Doan Creek. Doan Creek is a small freshwater stream that flows through a mix of residential and natural areas. It typically features riparian zones with diverse vegetation, which support local wildlife. The creek plays a vital role in the local ecosystem, providing habitat for various species and helping with water drainage.


Martin Airfield Planning Study
Figure 5 - Wetlands
COLLEGE PLACE
WALLA WALLA VALLEY
Freshwater Emergent Wetland
Freshwater Forested/ Shrub Wetland
Riverine
Study Area Parcels
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTIN FIELD LN
DOAN CREEK
W WHITMAN DR
HAMPTON LN
DOAN CREEK
PALISADES LN

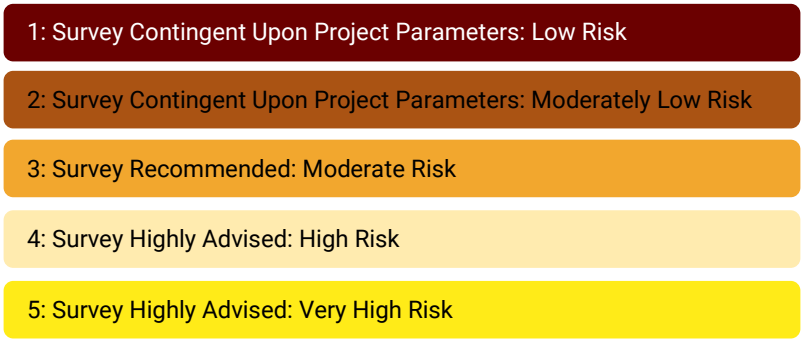
Critical Areas Ordinance

Per City of College Place Municipal Code 14.070.030.A, "The entire City of College Place is hereby designated as a critical aquifer recharge area, and the provisions of this chapter shall apply to all proposed development activities unless specifically exempted or otherwise provided.

Cultural Resources

This study does not include a cultural resource report, but it should be considered before development.

Using the predictive model, the Washington State Department of Archaeology & Historic Preservation (DAHP) mapping system, WISAARD (Washington Information System for Architectural and Archeological Records Data) identifies the study area with a value of 3, 4, and 5. The values are defined below:



Because the site is identified as Moderate to Very High Risk for survey recommendations, consulting with a cultural resource specialist or archaeologist before development is advised.

In addition to the WISAARD mapping and its recommendation for a cultural resource survey prior to development, it is also important to note that the Whitman Monument is approximately 2 miles west of the study area. The Whitman Mission National Historic Site preserves the site of the 19th-century mission established by Marcus and Narcissa Whitman to convert the Cayuse people to Christianity. The mission became a point of cultural conflict, culminating in the 1847 Whitman Massacre, in which the Whitmans and several others were killed by Cayuse members following an outbreak of measles that devastated the Native population. Today, the site includes a visitor center, interpretive trails, and a memorial, offering insight into the complex history of early missionary efforts, westward expansion, and Native resistance.

Air Quality

The Clean Air Act (CAA) sets the general policy for regulating air quality throughout the U.S. Under the CAA, the Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) to protect human health and the environment against the detrimental effects of outdoor air pollution. NAAQS exists for the following criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), sulfur dioxide (SO2), particulate matter (PM¬2.5 and PM10), and lead (Pb).

Under the CAA, the EPA assesses air quality conditions within all areas of a state based on NAAQS. Areas that exceed NAAQS are considered "nonattainment" areas. Areas once considered nonattainment but currently meet NAAQS and CAA requirements are designated as

"maintenance" areas. As of July 2024, Walla Walla County is not in nonattainment or maintenance for any criteria pollutants (EPA 2024).

Soils Assessment

The National Resource Cooperative Service (NRCS) online web soil survey was used to identify Martin Airfield Properties soil types, see Figure 6 below. Complete mapping and soil details are contained in **Appendix 2**.

Table 2 Soil Assessment

Soil Type	Map Unit Symbol	% of Area of Interest	Acres
Pedigo silt loam, 0 to 3 percent slopes	PmA	11.4%	20.2
Umapine silt loam, 0 to 3 percent slopes	UmA	86.5%	153.2
Umapine silt loam, leached surface, 0 to 3 percent slopes	UpA	2.1%	3.8
	Total	100%	177.2

Airport Requirements

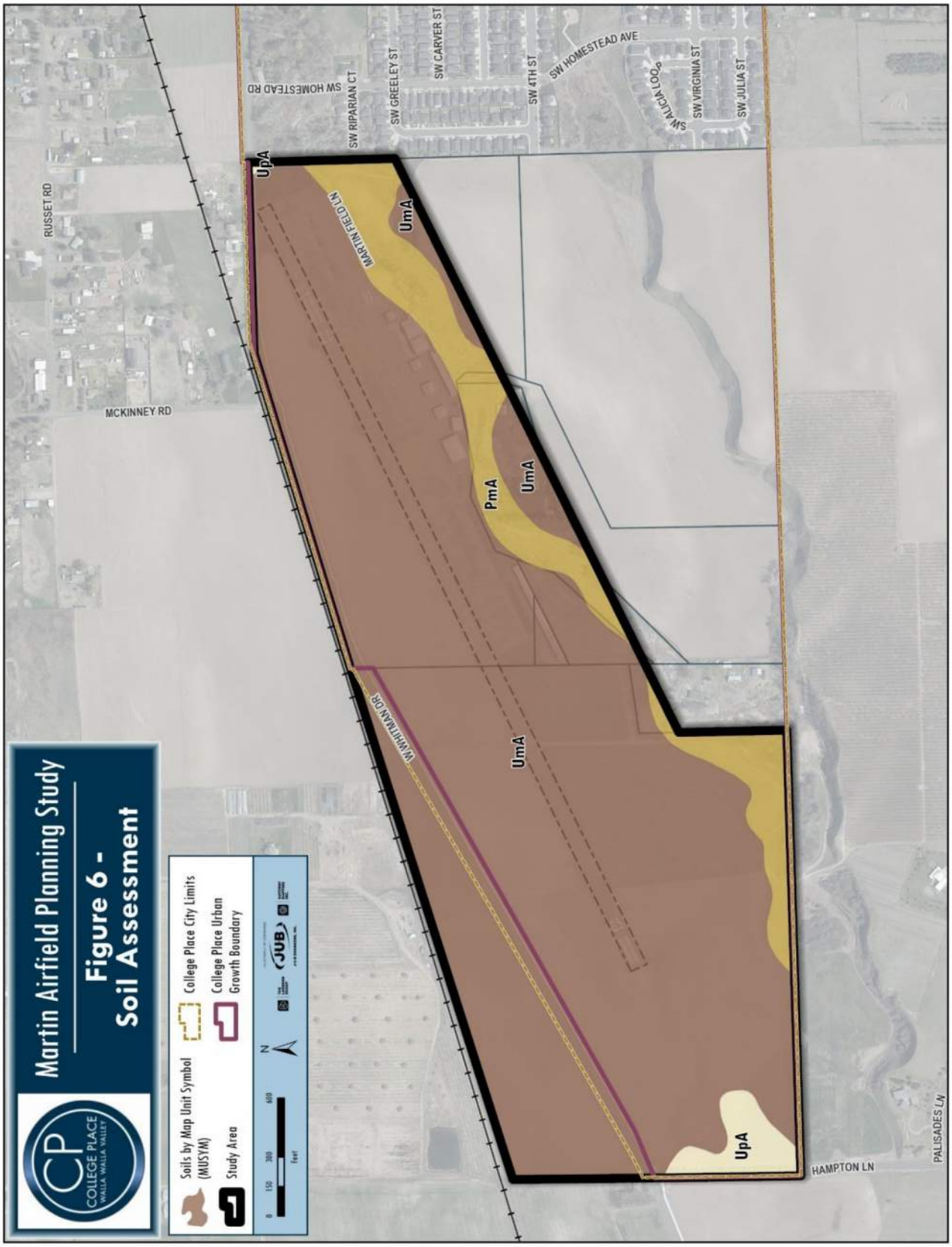
The best approach to promoting land use compatibility at and around an airport is using a combination of regulatory tools. There are two types of zoning overlays that are designed to achieve different purposes.

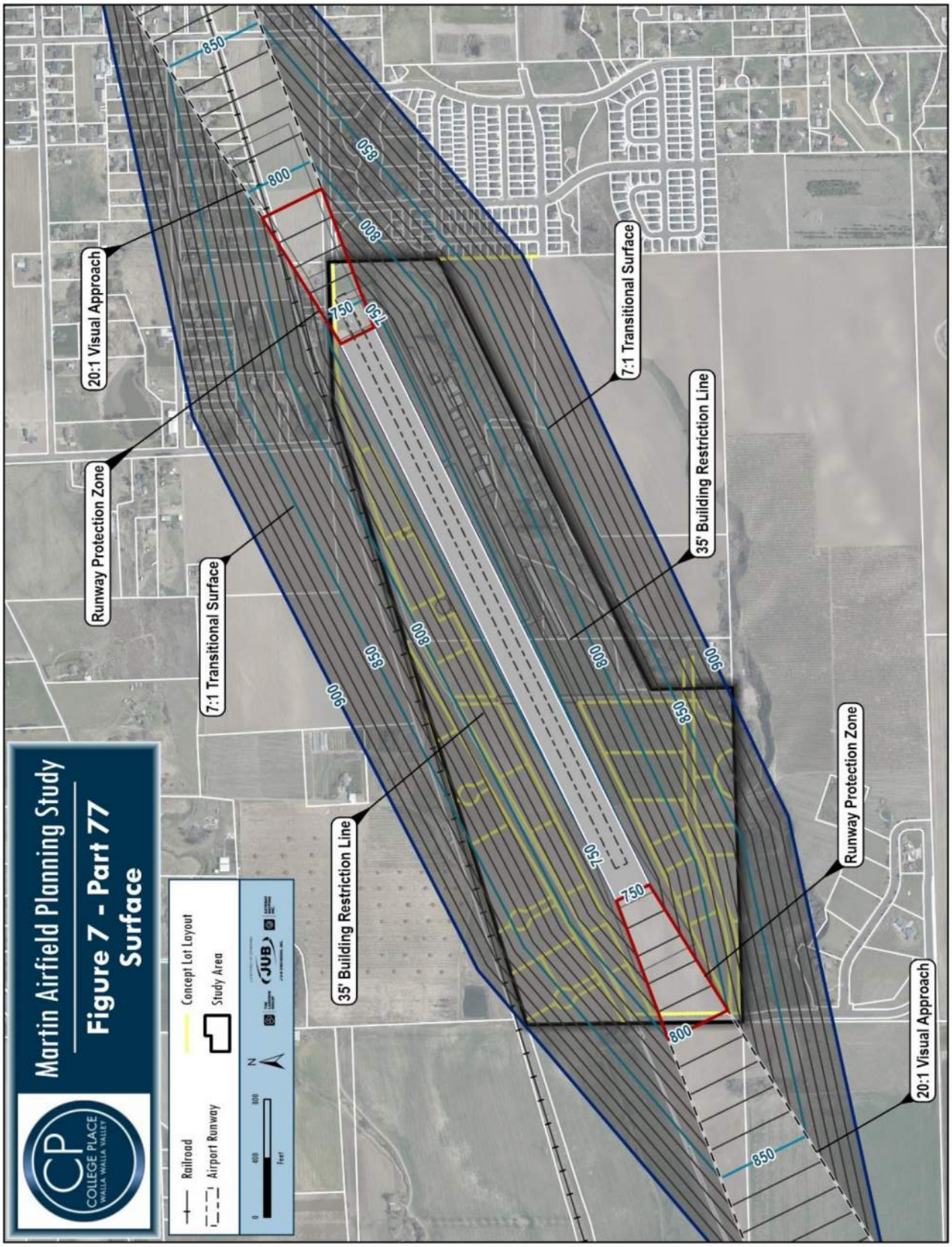
1. One that is designed and shaped to address critical air space surfaces depicted in federal regulations FAA Part 77 Imaginary Surfaces.
2. The other addresses land use compatibility zones or the general operating environment of the airport.

Key Features of an Airport Compatibility Overlay Zone:

- **Height Restrictions** – Limits the height of buildings, towers, and other structures to prevent hazards to aircraft.
- **Noise Compatibility** – Regulates land uses to minimize conflicts, such as restricting residential developments near high-noise areas.
- **Land Use Restrictions** – Controls activities that could pose risks, such as wildlife attractants (e.g., landfills, bodies of water) or emissions that could affect visibility.
- **Approach and Safety Zones** – Establishes buffer areas where certain developments or uses are restricted to protect aircraft on takeoff and landing.

Local governments often establish these regulations in coordination with the Federal Aviation Administration (FAA) or relevant aviation authorities.


Martin Airfield Planning Study
Figure 6 -
Soil Assessment
COLLEGE PLACE
WALLA WALLA VALLEY
Soils by Map Unit Symbol (MUSYM)
Study Area
College Place City Limits
College Place Urban Growth Boundary
0 150 300 600
Feet
N
JUB
UpA
UmA
PmA
UmA
UmA
UpA
MARTIN FIELD LN
W WHITMAN DR
HAMPTON LN
PALISADES LN
MCKINNEY RD
RUSSET RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST


Martin Airfield Planning Study
Figure 7 - Part 77 Surface
COLLEGE PLACE
WALLA WALLA VALLEY
Railroad
Airport Runway
Concept Lot Layout
Study Area
0
400
800
Feet
N
JUB
20:1 Visual Approach
Runway Protection Zone
7:1 Transitional Surface
35' Building Restriction Line
850
800
750
600
500

Land Use Compatibility Zones

In a 2018 Walla Walla County Staff Report, WSDOT requested that the County begin working with the City to propose, at some later date, the establishment of an Airport Compatibility Zoning structure and development guidelines around Martin Field, per the Martin Field Airport Layout Plan (2020). Currently, the Martin Field Airport Layout Plan conforms with the *WSDOT Airports and Compatible Land Use Guidebook* for compatibility criteria and design.

Six land use compatibility/safety zones are identified below:

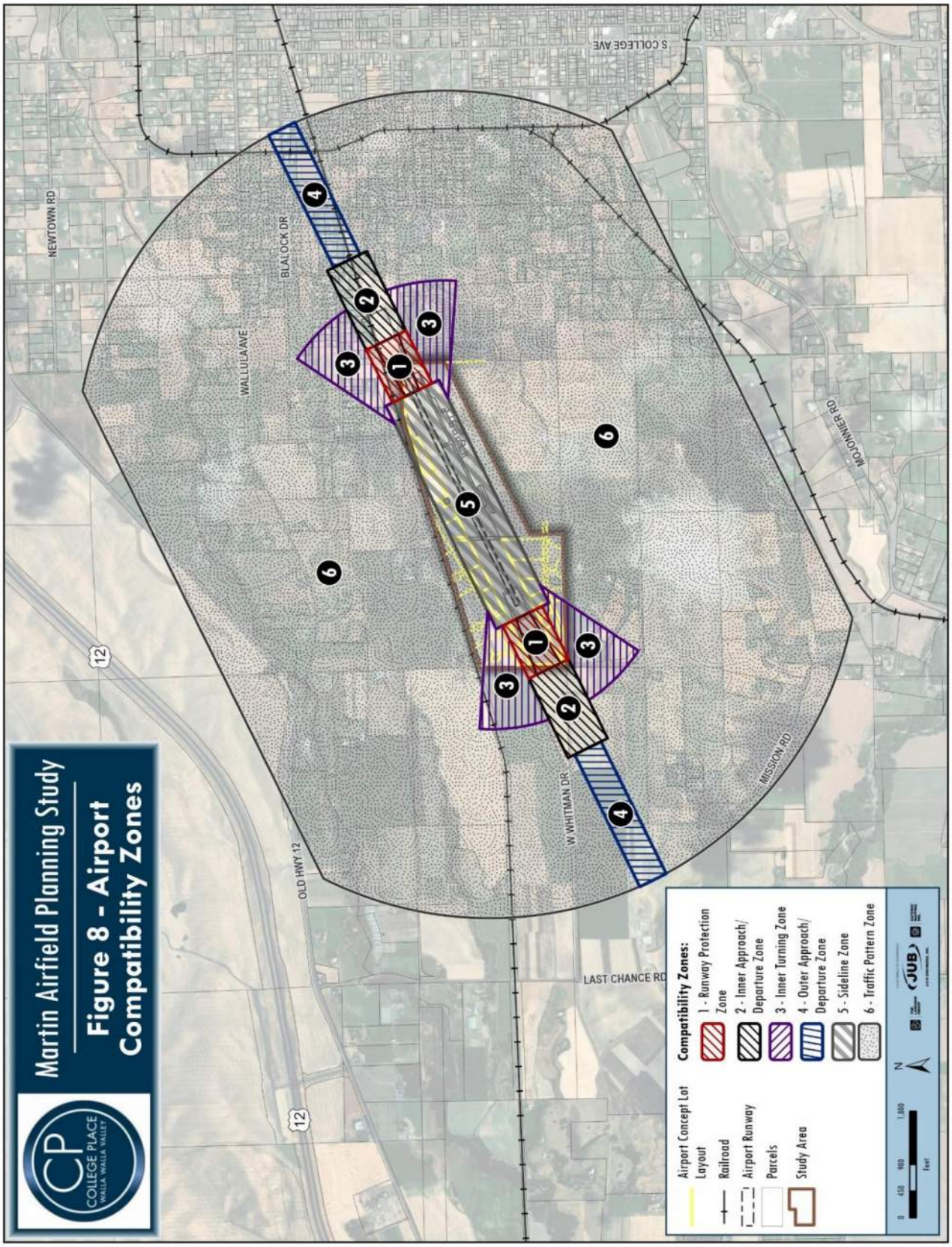
- **Zone 1, Runway Protection Zone**—This zone encompasses the runway protection zone (RPZ) at each end of the runway and should use the RPZ dimensions established in accordance with FAA standards. Also included in the zone are the strips of land immediately adjacent to the runway where FAA standards preclude structures.
- **Zone 2, Inner Approach/Departure Zone—**This zone wraps around and extends beyond Zone 1 along the runway centerline. Next to the RPZ, it represents the area where the risk of aircraft accidents is the greatest. On departure, aircraft are typically at full power in the initial phase of climb. On approach, they are at low altitude as they prepare for landing.
- **Zone 3, Inner Turning Zone**—This zone is a wedge-shaped area lying along the sides of Zone 2. When operating visually, departing aircraft may begin turning over this area to fly toward their destination or to remain in the traffic pattern. Arriving aircraft often overfly this area as well, especially if they are flying a tight pattern.
- **Zone 4, Outer Approach/Departure Zone—**This area lies beyond Zone 3 along the extended runway centerline. Aircraft flying straight out or in overfly this area at low altitude.
- **Zone 5, Sideline Zone—**Lying in narrow bands along each side of the runway, aircraft do not normally fly over the sideline zone. The principal risk is from aircraft that lose directional control while landing or just after take off.
- **Zone 6, Traffic Pattern Zone**—The final zone contains the remainder of the airport environment where aircraft fly as they approach and depart the airport or are engaged in flight training. In area, Zone 6 is typically larger than the other zones combined.

Figure 8 is a graphic depiction of land use compatibility/ safety zones surrounding Martin Field.

Permitted land uses within these zones are consistent with the criteria described by the WSDOT Airports and Compatible Land Use Criteria located in **Appendix 3**.

Importance of these Overlays

Implementing these overlays is vital for the new development around Martin Field. They ensure that land use is compatible with airport operations, thereby protecting the public from potential hazards and minimizing conflicts between airport activities and surrounding developments. By coordinating with local governments and the FAA, these measures help maintain a safe airport environment while supporting sustainable growth in the area.


Martin Airfield Planning Study
Figure 8 - Airport Compatibility Zones
COLLEGE PLACE
WALLA WALLA VALLEY
NEWTOWN RD
BLALOCK DR
WALLULA AVE
S COLLEGE AVE
MOJONNIER RD
MISSION RD
W WHITMAN DR
OLD HWY 12
LAST CHANCE RD
12
Airport Concept Lot Layout
Railroad
Airport Runway
Parcels
Study Area
Compatibility Zones:
1 - Runway Protection Zone
2 - Inner Approach/ Departure Zone
3 - Inner Turning Zone
4 - Outer Approach/ Departure Zone
5 - Sideline Zone
6 - Traffic Pattern Zone
0 450 900 1,800
Feet
N
JUB

Transportation

Roadway Network

The roadway network surrounding Martin Airfield is consistent with a rural agricultural area. Whitman Drive is an east-west minor collector roadway adjacent to Martin Field on the north. The roadway was rebuilt by the county in 2020, incorporating a multi-use path and a gravel stormwater area between the roadway and the airfield. There are only local roads and driveways to the west of the airfield. To the east is the City of College Place, which has urban characteristics and a network of local and collector streets. Table 3 shows the study area roadways and their characteristics. The Existing Roadway Network Figure shows the roadway network, intersection traffic control, lane configurations at the nine study area intersections, and the existing PM Peak Hour Traffic Volumes at the study intersections (see Figure 9).

Traffic Volumes

All-day traffic counts for the City were collected in October 2024. All-day volumes on Whitman Drive range from under 700 west of Martin Field to nearly 4,700 west of College Avenue. College Avenue all-day traffic volumes are approximately 6,000 vehicles per day near Whitman Drive. Intersection turning movement volumes were collected on October 8, 2024, at the nine study intersections from 4:00 – 6:00 PM. The PM peak hour traffic varies at each intersection, but generally the east end of the Whitman Drive corridor occurred from 4:45 – 5:45 with the west end occurring from 4:15 – 5:15. The PM peak hour traffic volumes for the study intersections are shown in the figure below and in **Appendix 4**.

Traffic Operations

The Level-of-Service (LOS) analysis quantitatively describes 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 (MOEs) are used to quantify the LOS of a roadway element. For intersections, the MOE used is the 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 unsignalized intersections are: A < 10 seconds of average vehicle delay, B is 10 – 15 seconds, C is 15 – 25 seconds, D is 25 – 35 seconds, E is 35 – 50 seconds, and F is more than 50 seconds of average vehicle delay.

For unsignalized intersections, the 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 College Place is LOS "D".

An evaluation of existing traffic operations was performed for the PM peak hour using the Highway Capacity Software for unsignalized intersections. The analysis results indicate that each of all eight unsignalized study intersections currently function with good Level of Service (LOS) "A" or "B" with each intersection having less than 13 seconds of average vehicle delay during the PM peak hour. The one signalized intersection at Whitman Dr/College Avenue functions with LOS "C" which is also acceptable. The capacity analysis worksheets are included in **Appendix 4**.

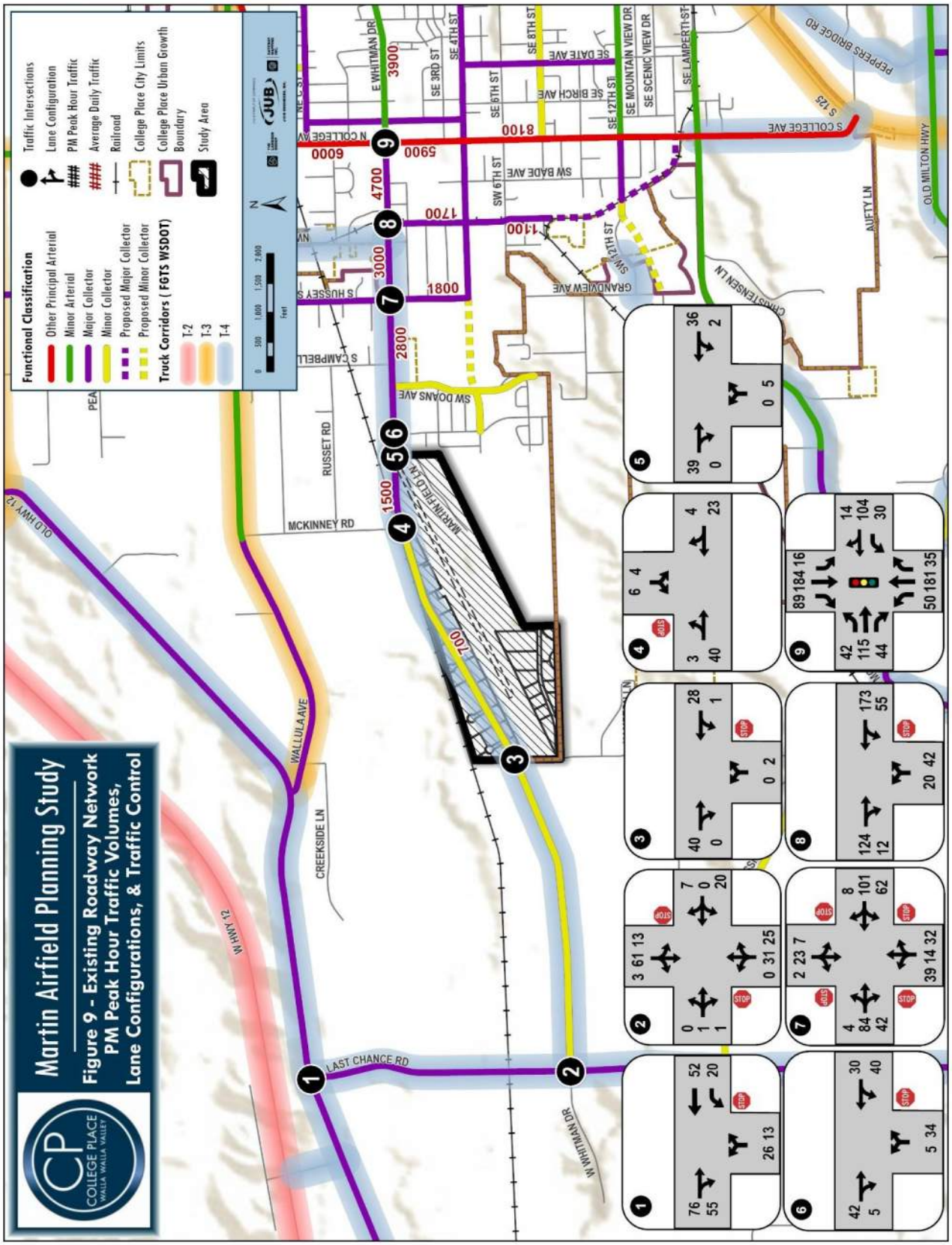

Martin Airfield Planning Study
Figure 9 - Existing Roadway Network PM Peak Hour Traffic Volumes, Lane Configurations, & Traffic Control
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Truck Corridors (FGTS WSDOT)
T-2
T-3
T-4
Traffic Intersections
Lane Configuration
PM Peak Hour Traffic
Average Daily Traffic
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
LAST CHANGE RD
MCKINNEY RD
RUSSET RD
WALLULA AVE
CREEKSIDE LN
MARIN FIELD LN
SW DOANS AVE
S CAMPBELL
S HUSSEY S
E WHITMAN DR
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE DATE AVE
SE BIRCH AVE
SE 12TH ST
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
SW 6TH ST
SW BADE AVE
SW 12TH ST
GRANDVIEW AVE
CHRISTENSEN LN
AUFTY LN
S COLLEGE AVE
PEPPERS BRIDGE RD
OLD MILTON HWY
W WHITMAN DR
OLD HWY 12
HWY 12
N COLLEGE AVE
6000
5900
8100
4700
1700
1100
3900
3000
1800
2800
1500
700
0 300 1,000 1,500 2,000
Feet
N

Table 3 Existing Transportation Network

Roadway	Functional Classification	Roadway Characteristics	Posted Speed
Whitman Drive *	**Major Collector east of McKinney Rd, Minor Collector west of McKinney Rd**	**College to Academy = ~ 36' wide with two lanes, allows parking has sidewalk on north and most of south. Academy to Martin Field Lane is ~30' wide with 2 lanes and asphalt path on south side. West of Martin Field Lane has 2 12' lanes with 4' shoulders and a separated concrete pathway on south side.**	**25 MPH College to Academy,30 MPH to Martin Field, 35 MPH to McKinney, 50 MPH west of McKinney**
Old US 12 *	Major Collector	two 12' lanes and 6' - 8' shoulders, turn lanes at most intersections.	50 MPH
Last Chance Road *	Major Collector	10'-12' lanes with minimal gravel shoulders. Has weight restrictions on a bridge.	Not posted
Hampton Lane *	**Local street**	**~20' wide with no pavement markings**	**Not posted**
McKinney Road *	Local street	~20' wide with no pavement markings, minimal gravel shoulders	25 MPH
Martin Field Lane	Local street	18' - 20' with no pavement markings	Not posted
Homestead Ave	**Local street**	**~22' - 36' wide no pavement markings, allows parking in some places, sidewalk on west side.**	**25 MPH**
Academy Street	**Major Collector**	**South of Whitman has ~36' wide with 2 lanes and a buffered two-directional bike lane on the west side, sidewalks on both sides and school zone. North of Whitman is ~22' with no pavement markings or sidewalks.**	**25 MPH, with 20 MPH school zone south of Whitman**
Davis Avenue	**Major Collector**	**~30' - 36' wide with no pavement markings, sidewalk on the east side.**	**Not posted**
College Avenue	**Principal Arterial**	**~36' wide with 4' painted median in places, allows parking in places, sidewalks on both sides, has pedestrian crossings**	**25 MPH**

City roadways are indicated in **bold** text, county roadways are marked with an (*), privately owned roadways are in regular text. Roadways that are **bold** and have an (*) are both city/county owned roadways.

Table 4 Summary of Existing Delay/LOS

Intersection	2024 Existing Delay (seconds)/ Level of Service	
	Overall Intersection	Worst Movement
Old US 12/Last Chance	*	NB--9.7/A
Whitman/Last Chance	*	WB--9.4/A
Whitman/Hampton	*	NB--8.5/A
Whitman/McKinney	*	SB--8.7/A
Whitman/Martin Field	*	NB--8.5/A
Whitman/Homestead	*	NB--8.9/A
Whitman/Hussey	*	SB--12.5/B
Whitman/Davis	*	NB--10.6/B
Whitman/College	23.8/C	WB--50.1/D

Legend
EB = Eastbound, WB = Westbound NB = Northbound, SB = Southbound
32.6/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled

Rail

The study area is immediately adjacent to a rail line owned by Columbia Walla Walla (CWW) Railroad. At this time, no rail spurs exist within the study area. No additional crossings or improvements are planned for the railroad. Two crossings exist near the study area at Last Chance Road and McKinney Road, but fall outside of the study area.

Other Modes

Valley Transit provides fixed-route bus services in the Walla Walla Valley, with two College Place routes. The College Place Circulator, Route 2, provides the closest service to Martin Field, with half-hour service throughout the day as far west on Whitman Drive as Academy Way. Existing sidewalks and pathways in the study area were described above in the description of the street network.

Utility Availability

The Utility Availability section will describe the existing utilities and capacities in and near the study area. Research was completed by coordinating directly with utility providers, reviewing online mapping, and researching existing system plans. The summary below is of the utility availability and whether additional coordination and/or expansion may be required/planned for future development.

Information reported in this Feasibility Study was sourced from several planning documents from the City of College Place, including:

- *City of College Place Comprehensive Water System Plan Update*, prepared by RH2 Engineering, Inc., December 2021.
- *City of College Place General Sewer Plan*, prepared by J-U-B ENGINEERS, Inc., March 2022.
- *City of College Place Wastewater Treatment Facility Plan*, prepared by J-U-B ENGINEERS, Inc., September 2018.
- *Technical Memorandum: Reservoir No. 4 Storage Capacity Evaluation*, prepared by RH2 Engineering, Inc., August 2023.

Sanitary Sewer Service

Existing on-site sewage systems (OSS) or septic systems serve existing users within the Martin Airfield study area. The Walla Walla County Health District (WWCHD) is the primary one responsible for permitting and policing residential and small-flow commercial discharges using OSS within the city's urban growth area (UGA).

The City of College Place owns a sanitary sewer collection system and Wastewater Treatment Plant (WWTP) that serves properties within the City limits and a neighboring Walla Walla Housing Authority property. Jacobs has been contract operating the collection system and WWTP facilities since April 2016.

Sanitary sewage generated in the City is collected and transported to the WWTP via gravity collection sewers and pump stations. The City's public collection system has expanded from an initial series of pipelines serving the old downtown area to a system containing over 40 miles of gravity pipelines, 960 manholes, and 5 active pumping stations providing public sanitary sewer service to a residential population of approximately 9,780. The total area that can be provided with public sanitary sewer service totals approximately 1,907 acres or about 3.0 square miles. The existing wastewater collection system consists of gravity pipelines ranging in size from 6 inches in diameter up to 30 inches in diameter, of which a majority are over 30 years old.

The City's existing collection system extends to the eastern boundary of the study area. The City's Sewer Basin B, adjacent to the east of the study area, consists of existing 8-inch collector piping that serves the Homestead Village residential development. Sewer Basin B flows are collected at an existing pump station (Lift Station No. 3) at the west end of SW 4th Street, and then pumped to the east along SW 4th Street. Existing 8-inch collector pipe terminates at the eastern boundary of the study area at SW 4th Street and SW Virginia Street. A preliminary analysis of the Martin Airfield study area was conducted in the City's 2022 General Sewer Plan (GSP). The preliminary analysis indicated the Martin Airfield study area would require new infrastructure to be served by gravity flow to a low point to the southwest. Later in this report, the buildout infrastructure analysis will evaluate the optimal location, depth, and capacity required to serve the study area.

The City's activated sludge WWTP is located approximately one mile southwest of city limits, and approximately 5,000 feet south of Martin Airfield. The WWTP currently discharges to a land treatment system during the critical periods (May through October) and to Garrison Creek during the non-critical periods (November through April). The City's WWTP operates under National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit No. WA-0020656. The permit was effective on March 1, 2014, and expired on February 28, 2019, the City is currently working with the Department of Ecology to update the permit. The existing NPDES permit has the following limitations:

Table 5 NPDES Permit Limitations

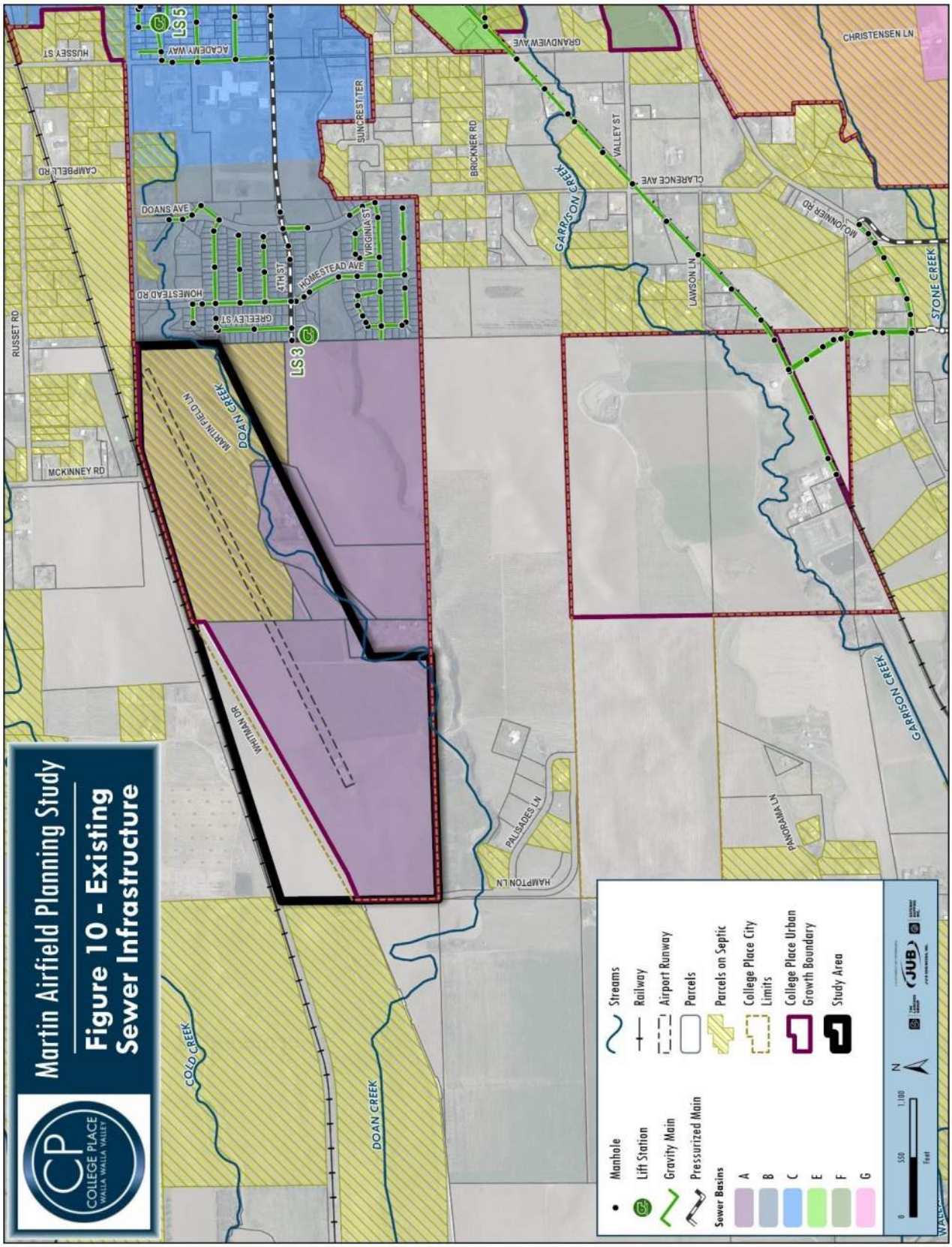
Category	Limit
Annual Average Flow	1.5 MGD
Maximum Month Design Flow	1.65 MGD
Peak Instantaneous Design Flow	5.7 MGD
Irrigation Discharge for Maximum Month	1.65 MGD
BOD_5 Influent Loading for Maximum Month	4,500 lb/day
TSS Influent Loading for Maximum Month	3,400 lb/day
Influent Ammonia-nitrogen Max Month	500 lb/day
Design Population Equivalents (People)	11,813

The City's 2018 Wastewater Treatment Plant Facility Plan (Facility Plan) has the following flows and loads (from 2015 to 2016):

Table 6 WTP Flows and Loads (2015 to 2016)

Category	Limit
Maximum Month Flow	1.55 MGD
Peak Instantaneous Flow	3.16 MGD
BOD_5 Influent Loading for Maximum Month	1,997 lb/day
TSS Influent Loading for Maximum Month	2,086 lb/day

Existing sanitary sewer infrastructure can be seen on the exhibit below.


Martin Airfield Planning Study
Figure 10 - Existing Sewer Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
LS 5
LS 3
ACADEMY WAY
HUSSEY ST
CAMPBELL RD
RUSSET RD
DOANS AVE
HOMESTEAD RD
GREELEY ST
4TH ST
HOMESTEAD AVE
VIRGINIA ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
CHRISTENSEN LN
GARRISON CREEK
LAWSON LN
MCCONNER RD
STONE CREEK
MARTIN FIELD LN
MCKINNEY RD
DOAN CREEK
WHITMAN DR
PALISADES LN
HAMPTON LN
PANORAMA LN
COLD CREEK
Manhole
Lift Station
Gravity Main
Pressurized Main
Sewer Basins
A
B
C
E
F
G
Streams
Railway
Airport Runway
Parcels
Parcels on Septic
College Place City Limits
College Place Urban Growth Boundary
Study Area
N
0
550
1,100
Feet
JUB

Industrial Wastewater Service

In accordance with the City's 2018 Wastewater Treatment Plant Facility Plan (Facility Plan); the City does not currently have any significant industrial users (SIUs) that are permitted with the Department of Ecology. Additionally, there is currently no separate industrial wastewater collection system in the City to convey flows to the Wastewater Treatment Plant (WWTP). The Facility Plan did not consider additions of any SIUs in the 20-year planning period and assumed the growth of the WWTP demands to match the general service population growth rate. The impact of the addition of an SIU to the City's wastewater collection system and WWTP will require careful evaluation and planning as the flows and loads of industrial users vary based on the proposed industry.

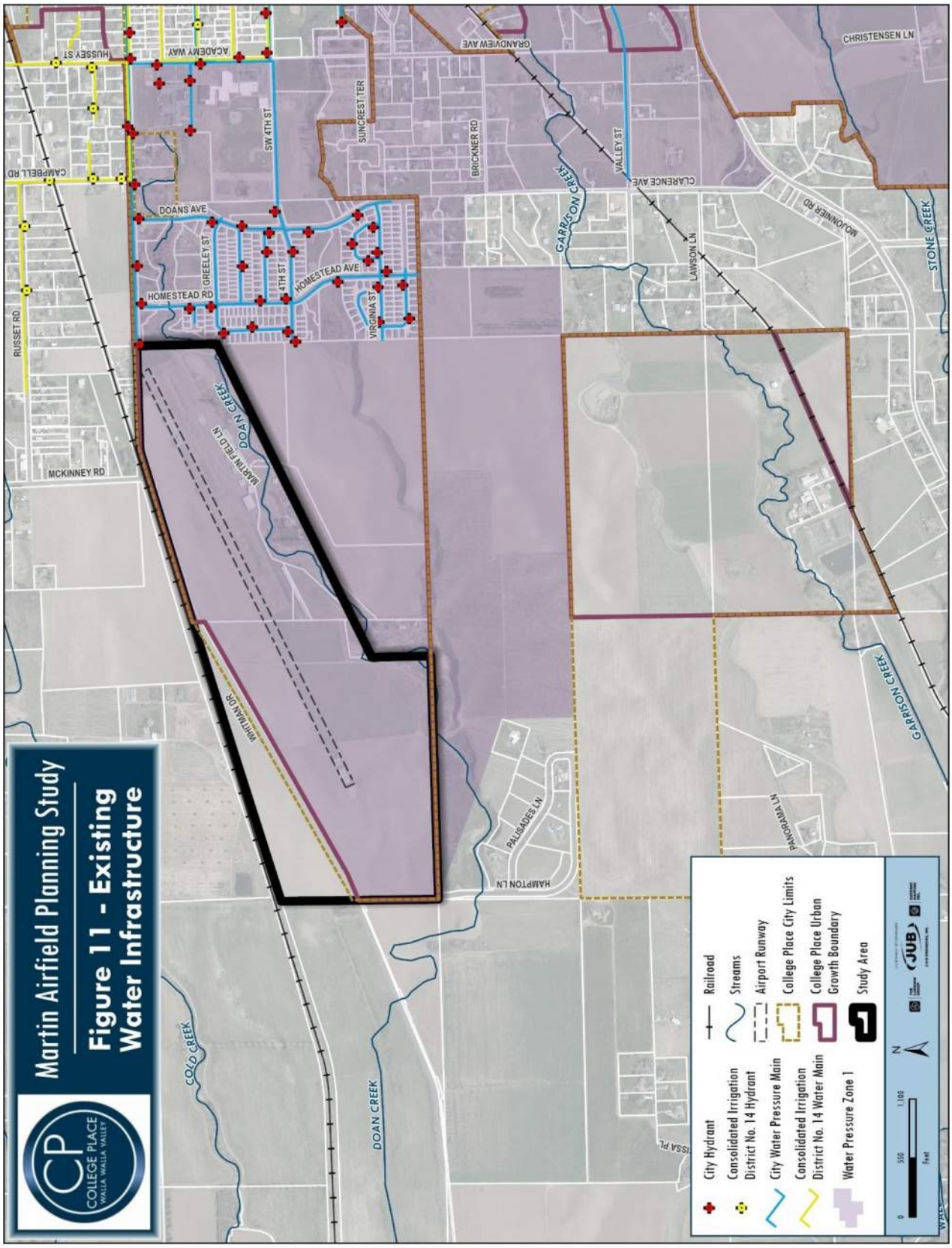
Potable Water Service

Privately owned wells currently serve the airport and residences in the study area. The nearest publicly owned water system, City of College Place, is adjacent to the study area. The College Place Water Department, public water system (PWS) ID 14050K, is a group A community water system publicly owned and managed by the City of College Place. As reported in the 2021 Comprehensive Water System Plan (WSP), the City provides water service to approximately 3,639 customer connections within the City's water service area. The City limits encompass approximately 3.0 square miles, and the existing retail water service area is approximately 3.6 square miles. In accordance with the WSP, in 2019 the system served a population of 8,302 residents.

The City's system includes three pressure zones (Zone 1, 2, and 3), four wells (Wells No. 2, 3, 4, and 6), three reservoirs (Reservoir No. 1, 2, and 3), one booster station (East Side Booster), and various pressure reducing valves. In addition to the City's water system, there are several other water purveyors within the City limits and surrounding areas that the City has intertie agreements with. The City's system contains over 48 miles of water main, ranging in size from 2 inches in diameter to 24 inches in diameter. Approximately 68% of all distribution piping is either 8-inch or 12-inch pipe.

In accordance with the WSP, the Martin Airfield study area partially lies within the City's retail service area and lies fully within the City's future service area. The study area is within the Zone 1 pressure zone, approximately ranging in elevation from 695 feet to 790 feet. The Zone 1 pressure zone serves elevations lower than 935 feet in elevation and is served by Wells No. 3 (2,400 gpm), 4 (1,700 gpm), and 6 (2,750 gpm) for a total capacity of 6,850 gpm. Well No. 2 (1,500 gpm) is an emergency back-up well only. Reservoir No. 1 provides storage for Zone 1, and is a 500,000-gallon elevated steel multi-column tank. The nearest waterlines are east of the study area, see Figure 11. The City's existing 12-inch water mains terminate at the west end of SW 4th Street and at the northeast study area boundary on W Whitman Drive. Additionally, there is existing 8-inch distribution pipe at the intersection of SW Virginia Street and SW Alicia Loop, approximately 100 feet east of the study area boundary.

Existing potable water infrastructure can be seen on the exhibit below Figure 10.


Martin Airfield Planning Study
Figure 11 - Existing Water Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
City Hydrant
Consolidated Irrigation District No. 14 Hydrant
City Water Pressure Main
Consolidated Irrigation District No. 14 Water Main
Water Pressure Zone 1
Railroad
Streams
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
N
Feet
JUB
DOANS AVE
HOMESTEAD RD
HOMESTEAD AVE
GREELEY ST
4TH ST
SW 4TH ST
ACADEMY WAY
HUSSEY ST
CAMPBELL RD
RUSSET RD
MCKINNEY RD
SUNCREST TER
BRICKNER RD
VIRGINIA ST
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
GARRISON CREEK
LAWSON LN
MOUNTAIN RD
CHRISTENSEN LN
STONE CREEK
MARTIN FIELD LN
DOAN CREEK
WHITMAN DR
PALISADES LN
HAMPTON LN
PANORAMA LN
COLD CREEK
DOAN CREEK
GARRISON CREEK

Surface and Storm Water Management

This area has no known formal drainage facilities or flooding issues. The area south of Martin Airfield generally drains to Doan Creek, which runs south of the study area and flows northeast to southwest before eventually joining Mill Creek. Doan Creek also contains some wetlands, as noted previously. High groundwater is assumed to be present in low-lying areas near the creek. The areas north of Martin Airfield drain east to west and infiltrate runoff in low-lying areas onsite, such as the ditches associated with Whitman Drive, the railroad, and Hampton Lane, which forms the western border.

Other Utilities

Power

Columbia Rural Electric Association (Columbia REA) provides power to Martin Airfield with underground, 3-phase available. The study area is located off an express feed on the south side of Whitman Drive that can provide ample power to future development. Pacific Power can also provide service with both single-phase and 3-phase power.

Natural Gas

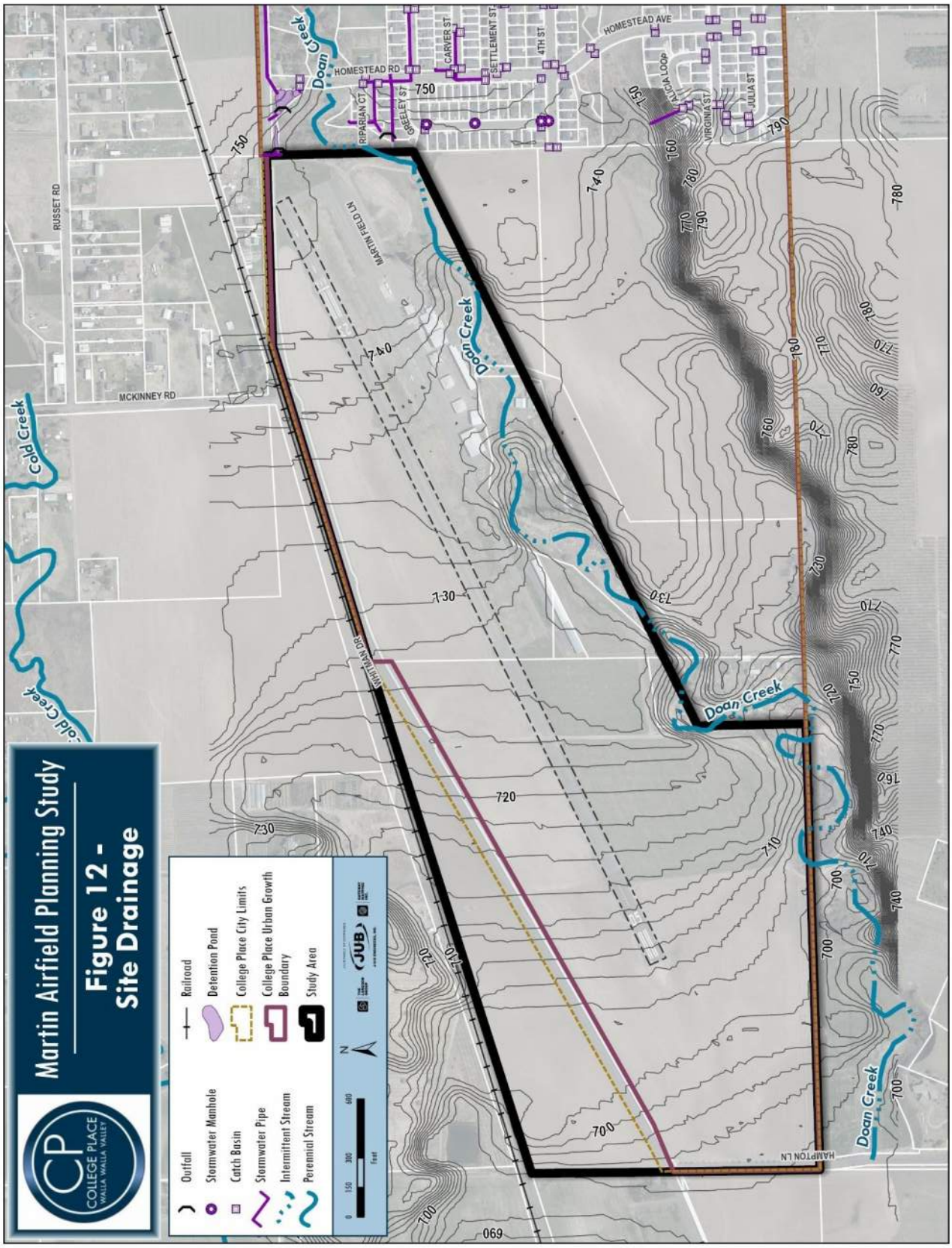
Cascade Natural Cas Corporation (CNGC) has gas service to the Martin Field hangar buildings, including a recent extension west to serve all of the eastern airport building cluster. This 2-inch line could be extended as needed to serve future needs in some capacity, but the 2-inch line is not looped and its capacity is currently limited. There are looping and line upsizing options available if sufficient need is anticipated.

Telecommunications and Fiber Optic Communication

There are a variety of telecommunication services available in the area, including national satellite carriers. Century Link has cable internet immediately available to the site and Spectrum appears to have good coverage nearby, as well as PocketiNet, Columbia iConnect, and 360 Communications.

Irrigation

Irrigation water from an irrigation district or the City is not currently available at the site, but there appear to be five wells and a surface diversion off of Doan Creek within or near the study area that may be tied to the study parcels. The assessor lists all of the parcels except the hangar parcel as “irrigated” in various forms. One of the water rights is listed to Martin H. L. and is for 400 gpm of irrigation over 60 acres, so this water right could potentially be transferred to a new area of use for irrigation of proposed landscape areas. Additionally, these water rights should have existing pumps (or a diversion structure) that could be put into use with varying levels of improvement required.


Martin Airfield Planning Study
Figure 12 - Site Drainage
COLLEGE PLACE
WALLA WALLA VALLEY
Outfall
Stormwater Manhole
Catch Basin
Stormwater Pipe
Intermittent Stream
Perennial Stream
Railroad
Detention Pond
College Place City Limits
College Place Urban Growth Boundary
Study Area
JUB
Doan Creek
Cold Creek
MCKINNEY RD
RUSSET RD
HOMESTEAD RD
HOMESTEAD AVE
MARTIN FIELD LN
RIPARIAN CT
GREELEY ST
CARVER ST
SETTLEMENT ST
4TH ST
ALICIA LOOP
VIRGINIA ST
JULIA ST
HAMPTON LN

Economic Analysis

The Metts Group conducted an Economic Analysis for the Feasibility Study. The following is a summary of the results. The full report can be found in Appendix 5.

The Martin Airfield Economic Feasibility analysis focuses on the potential for growth and development at Martin Airfield. College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.

Jobs

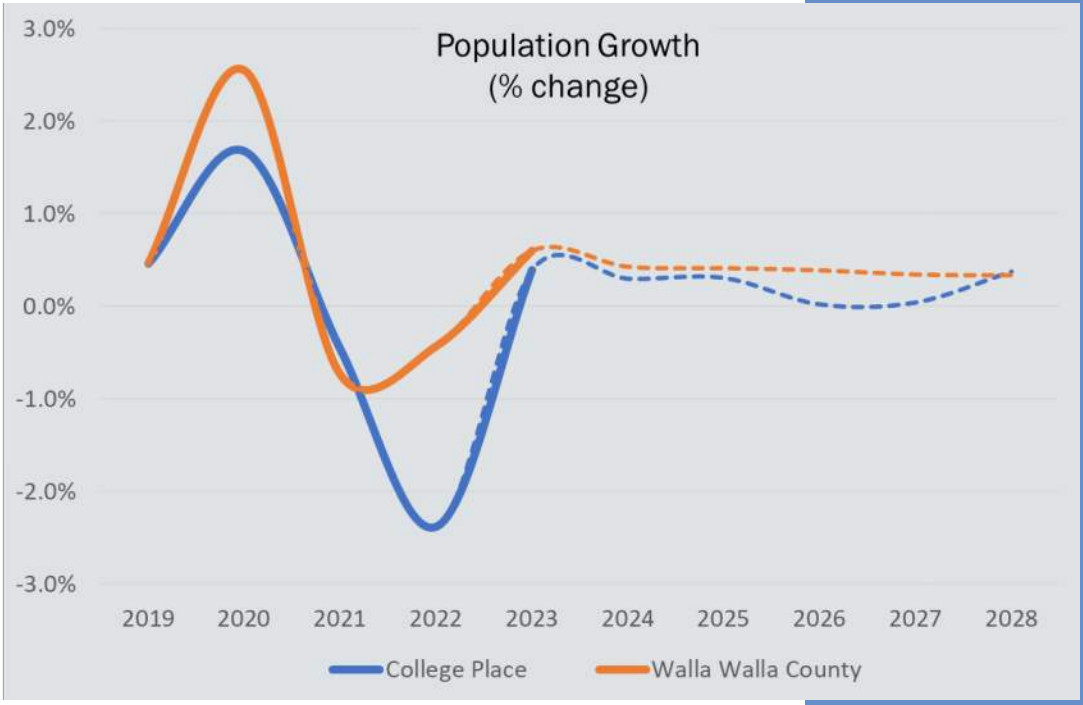
3,900

14% ⇧

(2018-2023)

Largest Contributing Industries:

- Government (Higher Ed)
- Retail
- Accom. & Food Svcs
- Health Care
- Finance & Insurance



A target industry analysis was conducted in order to narrow down the types of uses most suitable for the project site. The target industry analysis was assessed by four critical factors and conducted at the county level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

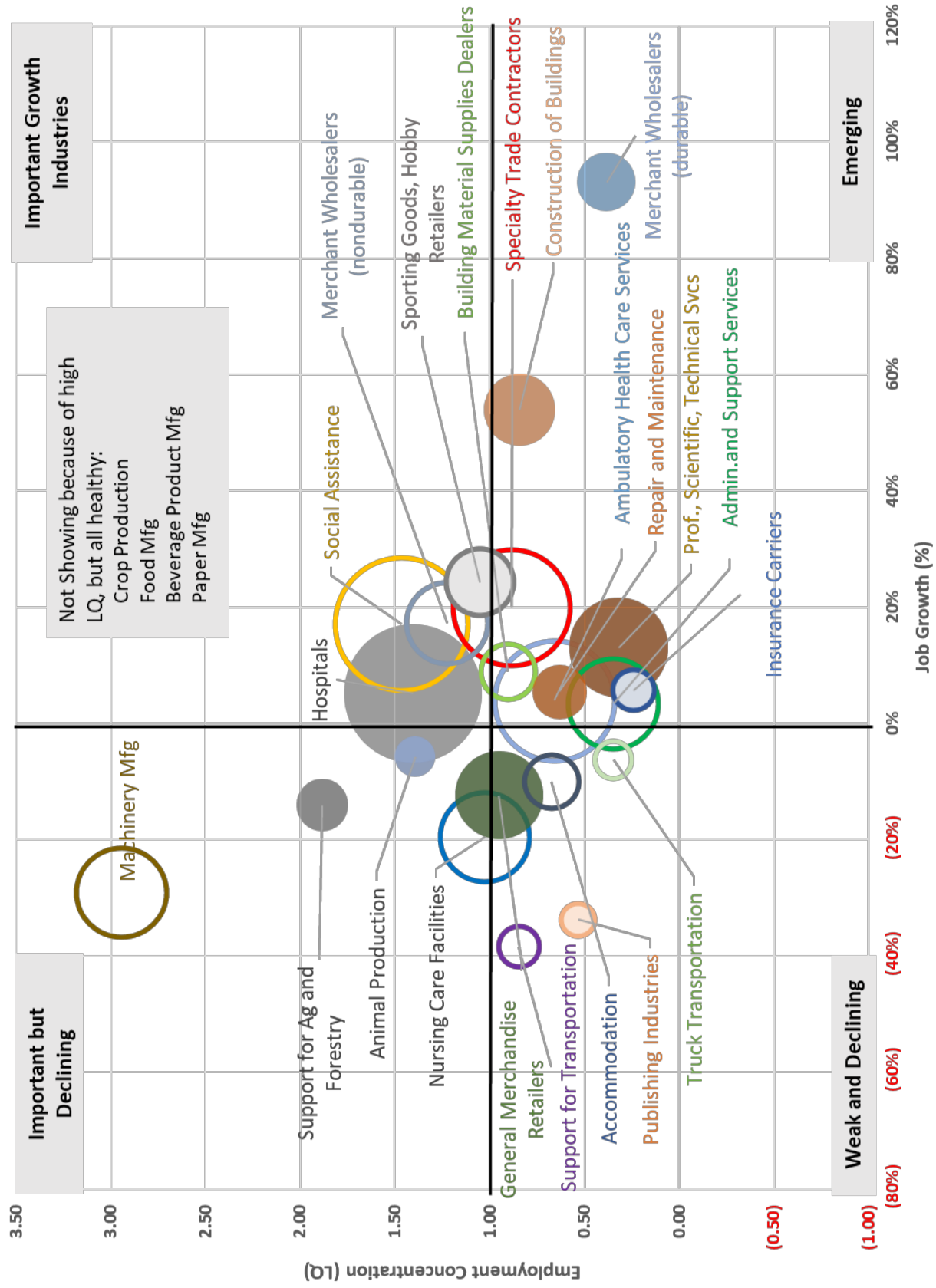
Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 marks but showing job loss, were deemed "Important and Requiring Attention," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Key industries identified within the region that exhibit both strength and growth potential include crop production, food and beverage manufacturing, hospitals, social assistance, and merchant wholesalers, while emerging industries such as specialty trade contractors, construction, professional services, and insurance carriers show promise. On the other hand, sectors like general merchandise retail, truck transportation, publishing, and accommodations are on the decline.


Important Growth Industries
Emerging
Important but Declining
Weak and Declining
Not Showing because of high LQ, but all healthy:
Crop Production
Food Mfg
Beverage Product Mfg
Paper Mfg
Machinery Mfg
Support for Ag and Forestry
Animal Production
Nursing Care Facilities
General Merchandise Retailers
Support for Transportation
Accommodation
Publishing Industries
Truck Transportation
Insurance Carriers
Admin.and Support Services
Prof., Scientific, Technical Svcs
Repair and Maintenance
Ambulatory Health Care Services
Construction of Buildings
Specialty Trade Contractors
Building Material Supplies Dealers
Sporting Goods, Hobby Retailers
Merchant Wholesalers (nondurable)
Social Assistance
Hospitals
Merchant Wholesalers (durable)
Employment Concentration (LQ)
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
(0.50)
(1.00)
Job Growth (%)
120%
100%
80%
60%
40%
20%
0%
(20%)
(40%)
(60%)
(80%)

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

The following table outlines the key industries or areas of the economy that are central to the operations and growth of major area employers. These sectors typically provide the foundation for job creation, innovation, and economic stability, influencing the competitive advantages of businesses within them.

Table 7 Major Employers

Key Sectors Driving Major Employers' Success
Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

The commercial real estate market is healthy across the region, with a current industrial space inventory of 4.6 million square feet, a low vacancy rate of 5.6%, and stable rental rates around $8.71 per square foot. Future development includes the construction of 223,720 square feet of industrial space, slated for completion by 2025. Approximately 3,070 acres of industrial land are available in the region. A list of competing sites is summarized in the following table.

Table 8 Competing Sites

Address	City	Year Built	Bldg. SF	Acres (Land Only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Martin Airfield is viewed as a prime location for a variety of potential uses, including light industrial development such as wholesaling, truck transportation, and food manufacturing, as well as aerospace-related services, aircraft maintenance, and testing. Emerging technologies like sustainable aviation fuels, hydrogen research, and advanced air mobility offer further opportunities for innovation. The site's strategic location also lends itself to agricultural technology advancements, including an ag-logistics testing hub. The site has the potential for a logistics hub to ease congestion from Seattle and Tacoma ports. However, infrastructure improvements will be essential to support future development and maximize job creation and economic impact, as outlined in the main report.

Potential Light Industrial Uses

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
    - R&D or Professional & Technical Services
    - Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
    - Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

The following recommendations are designed to promote sustainable long-term growth and development at Martin Airfield, capitalizing on its unique assets and strategic location to drive economic expansion and foster collaborative opportunities across public and private sectors.

- **Strategic Development**: Focus on aligning industry recruitment efforts with current market trends and growth sectors.
- **Leveraging Assets**: Capitalize on Martin Airfield's strategic proximity to major transportation networks, including highways, rail, and ports, as well as its location within an Opportunity Zone.
- **Public-Private Partnerships**: Engage with both public and private stakeholders to foster collaboration and support long-term growth and development.

DEVELOPMENT CONSIDERATIONS

This section outlines the essential components required to fully develop the study area, including necessary improvements to support its growth. It covers the conceptual layout, existing and proposed transportation and utility networks, and cost estimates. These elements are crucial for ensuring the area is properly equipped for future development.

The Development Considerations are arranged in the following Sections:

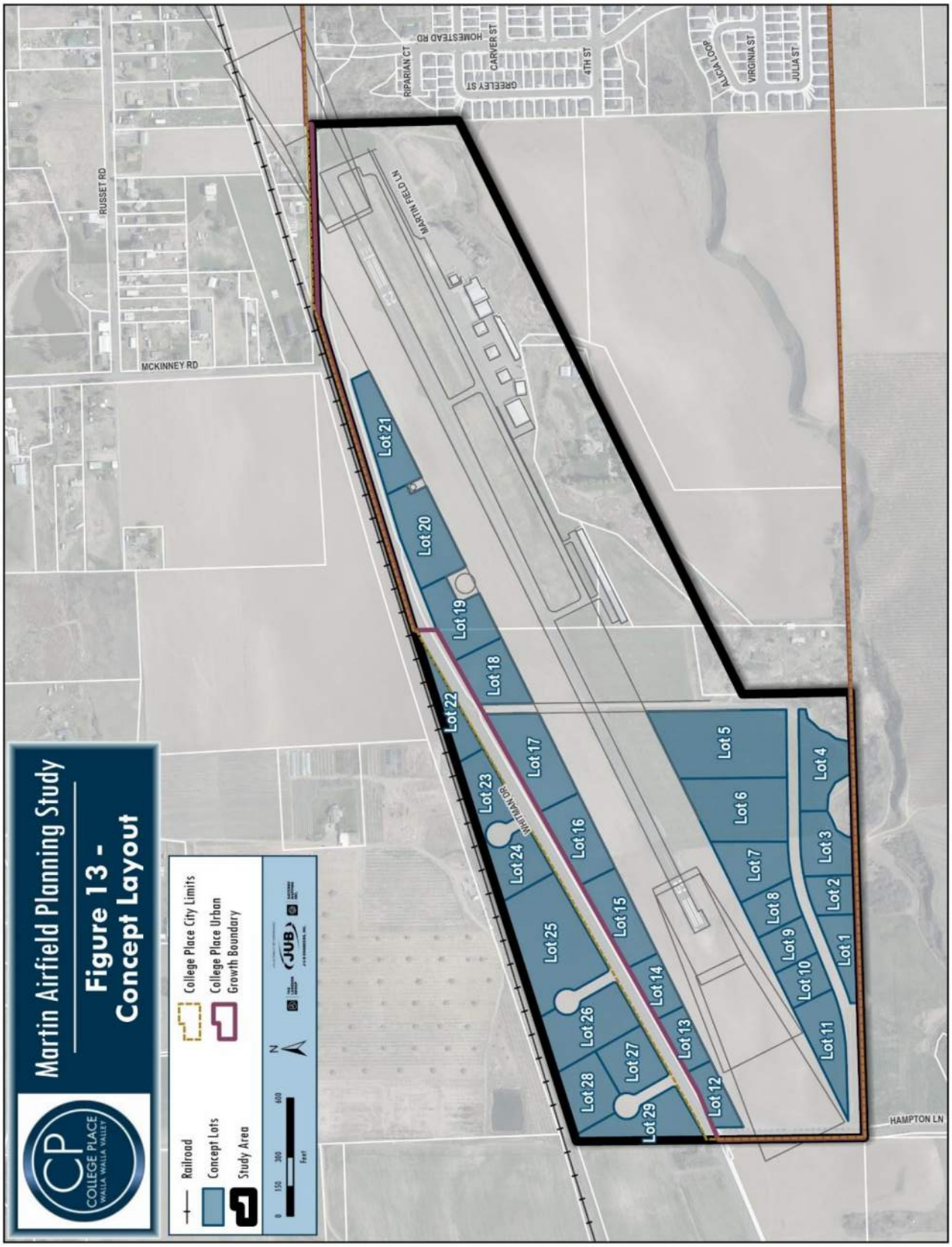
- Conceptual Layout
- Transportation Facilities
- Rail
- Earthwork
- Utility Requirements
- Preliminary Cost Estimate

Conceptual Layout

The Martin Airfield Study Area are designed to support medium and large industrial users, with parcel sizes ranging from approximately 1 to 5 acres. The preliminary lot layout includes 29 lots in total. 18 lots with access from Whitman Drive use cul-de-sacs or shared driveways to limit the number of direct access points to Whitman Drive. The remaining 11 lots will have access off of Hampton Lane with a future access point crossing Doan's Creek to the east to the residentially zoned land. The estimated roadway improvement costs for roadway, grading, pavement, curb and gutter, streetlights, and storm drainage systems is located **Appendix 6**.

The proposed lot layout is preliminary and flexible, allowing adjustments to meet the needs of future developers. As development progresses, existing parcel boundaries will be reviewed, and modifications such as boundary line adjustments (BLAs), lot consolidations (LCs), or preliminary plat may be required to accommodate different lot sizes. The preliminary lot layout was informed by a site analysis of existing conditions, input from the City of College Place and a general understanding of the project area's needs. Rail spurs are not proposed at this time, but can be incorporated into the concept layout if there is a need from a future developer.

The exhibit below depicts the preliminary lot layout.


Martin Airfield Planning Study
Figure 13 - Concept Layout
COLLEGE PLACE
WALLA WALLA VALLEY
Railroad
Concept Lots
Study Area
College Place City Limits
College Place Urban Growth Boundary
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
MARTIN FIELD LN
HOMESTEAD RD
RIPARIAN CT
CARVER ST
GREELEY ST
4TH ST
ALICIA LOOP
VIRGINIA ST
JULIA ST
WHITMAN DR
HAMPTON LN
Lot 1
Lot 2
Lot 3
Lot 4
Lot 5
Lot 6
Lot 7
Lot 8
Lot 9
Lot 10
Lot 11
Lot 12
Lot 13
Lot 14
Lot 15
Lot 16
Lot 17
Lot 18
Lot 19
Lot 20
Lot 21
Lot 22
Lot 23
Lot 24
Lot 25
Lot 26
Lot 27
Lot 28
Lot 29

Transportation Facilities

Planned Internal Roadway Network

As mentioned above, future industrial lots created between Martin Field and the railroad tracks to the north will be served by cul-de-sacs that access Whitman Drive. These cul-de-sacs should meet city standards and should be constructed opposite each other so as to minimize turning conflicts.

Access to lots south of Martin Field will be provided by a new east-west road that will connect to Hampton Lane south of Whitman Drive. A future extension of this new road is planned that would connect to land zoned residential to the east that could give secondary access to the area.

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.

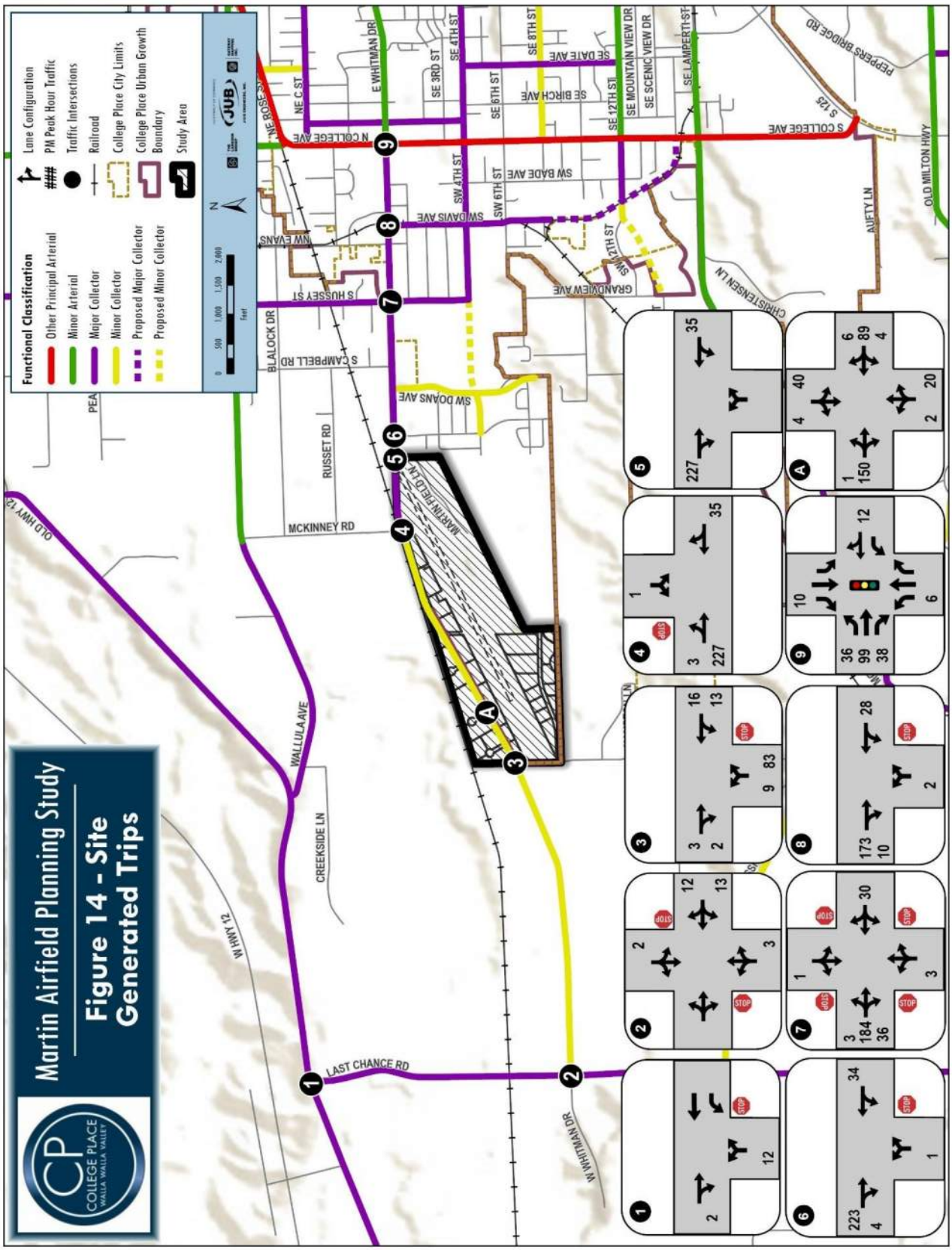
Traffic growth in College Place is typically 1.5% per year. To be conservatively high, a growth rate of 2% per year was assigned to traffic volumes shown in Figure 9 for all study intersections to represent growth occurring in the region that is not within the study for 20-year analysis.

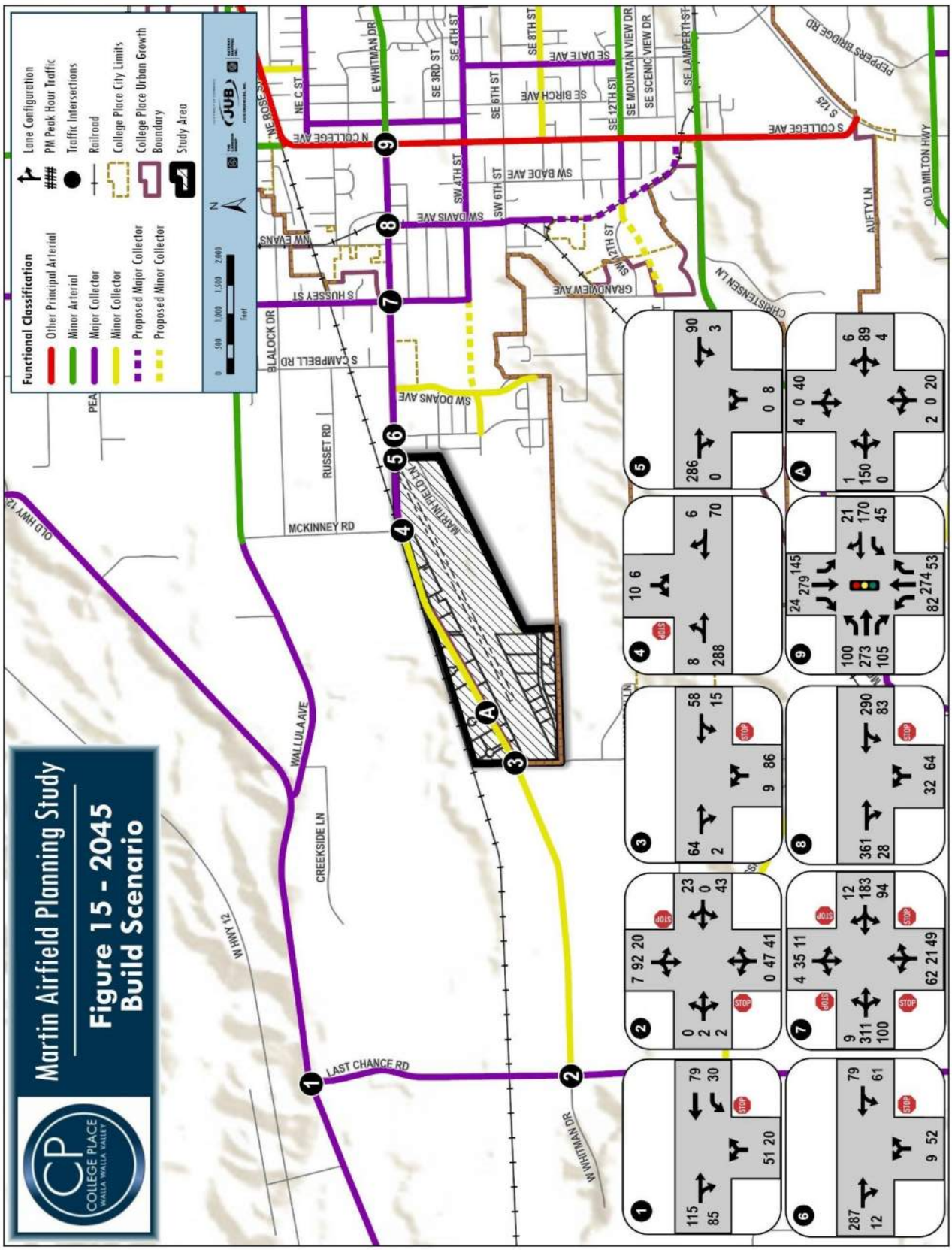
Trip Generation and Trip Distribution

To estimate the new trips that could be added to the transportation network the development concept shown in Figure 13 that shows approximately 59.43 acres of industrial land that could be developed after roads are constructed. The Institute of Transportation Engineers *Trip Generation Manual* 11th Edition was used to estimate the number of trips that could be generated using Land Use 110 General Light Industrial. The fitted curve equation was used and the building size was estimated by using Floor Area Ratio of 40% of the acreage, totaling over 1 million square feet of industrial development. The PM peak hour trips were calculated for four areas, including the worst driveway off of Whitman Drive to be able to ensure that driveways would function acceptably, with the resulting trips shown below.

- Worst Driveway, north side – 51 trips (7 inbound, 44 outbound)
- Worst Driveway, south side – 26 trips (4 inbound, 22 outbound)
- Whitman Drive (includes the worst driveway) – 189 trips (26 inbound, 163 outbound)
- Hampton Drive – 107 trips (15 inbound, 92 outbound)

These trips were added to the roadway network using existing traffic patterns to estimate the percentages of trips throughout the roadway network. This evaluation indicated that approximately 13% of traffic in the Whitman Drive Corridor turned westbound and 87% turned eastbound, which was used for the purposes of this study. The resulting new trips at each study intersection are shown in Figure 14. The new trips were added to the 2045 No-Build Scenario volumes with the resulting Build Scenario volumes shown in Figure 15. Trip Generation and trips for all scenarios at all intersections are included in **Appendix 4**.


Martin Airfield Planning Study
Figure 14 - Site Generated Trips
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Lane Configuration
PM Peak Hour Traffic
Traffic Intersections
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
LAST CHANCE RD
W HWY 12
WALLULA AVE
CREEKSIDE LN
MCKINNEY RD
RUSSET RD
BLALOCK DR
S CAMPBELL RD
S HUSSEY ST
SW DOANS AVE
MARTIN FIELD LN
W WHITMAN DR
NW EVANS
NE C ST
NE ROSE ST
N COLLEGE AVE
E WHITMAN DR
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE BIRCH AVE
SE DATE AVE
SE 12TH ST
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
PEPPERS BRIDGE RD
S COLLEGE AVE
S 125
OLD MILTON HWY
AUFTY LN
CHRISTENSEN LN
SW 4TH ST
SW 6TH ST
SW 12TH ST
SW BADE AVE
GRANDVIEW AVE
SW DAVIS AVE
OLD HWY 12
STOP


Martin Airfield Planning Study
Figure 15 - 2045 Build Scenario
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Lane Configuration
PM Peak Hour Traffic
Traffic Intersections
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
JUB
LAST CHANCE RD
W HWY 12
WALLULA AVE
CREEKSIDE LN
MCKINNEY RD
RUSSET RD
BLALOCK DR
S CAMPBELL RD
S HUSSEY ST
SW DOANS AVE
MARTIN FIELD LN
W WHITMAN DR
NW EVANS
SW DAVIS AVE
SW 4TH ST
SW 6TH ST
SW BADE AVE
SW 12TH ST
GRANDVIEW AVE
N COLLEGE AVE
NE C ST
E WHITMAN DR
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE BIRCH AVE
SE DATE AVE
SE 8TH ST
SE 12TH ST
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
S COLLEGE AVE
S 125
PEPPERS BRIDGE RD
AUFTY LN
CHRISTENSEN LN
OLD MILTON HWY
OLD HWY 12
STOP

Traffic Operations and Mitigation Summary

Capacity analysis of the 2045 No-Build and Build scenarios was performed. A few seconds of delay is observed at each intersection in the No-Build Scenario with two intersections dropping one Level of Service (LOS) and all intersections functioning with acceptable LOS. For the Build Scenario, additional delay is anticipated, with five intersections dropping one LOS, the most notable being the intersection of Whitman/Hussey/Academy which falls to LOS "D", but is still an acceptable LOS. Interestingly, the only signalized intersection of Whitman Drive/College Ave actually improves, which is counter-intuitive, but this is the result of the intersection working more efficiently because of the addition of traffic to movements that were underutilized which influences the average delay. These capacity analysis is summarized in Table 9 with detailed capacity worksheets included in Appendix 4. No mitigation for the purposes of traffic operations is anticipated.

Table 9 Summary of 2045 Delay (seconds)/Level Of Service

Movement	2045 No-Build		2045 Build	
	Overall Intersection	Worst Movement	Overall Intersection	Worst Movement
Old US 12/Last Chance	*	NB--10.5/B	*	NB--10.8/B
Whitman/Last Chance	*	WB--9.9/A	*	WB--10.0/B
Whitman/Hampton	*	NB--8.6/A	*	NB--9.2/A
Whitman/McKinney	*	SB--8.8/A	*	SB--9.7/A
Whitman/Martin Field	*	NB--8.7/A	*	NB--10.2/B
Whitman/Homestead	*	NB--9.3/A	*	NB--11.5/B
Whitman/Hussey/Academy	*	SB--16.2/C	*	NB--17.9/D
Whitman/Davis	*	NB--12.9/B	*	NB--17.4/C
Whitman/College	25.9/C	WB--54.7/D	27.6/C	WB--44.3/D
Whitman/new driveway	N/A	N/A	*	10.9/B

Legend
EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound
25.9/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled Intersections
25.9/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled Intersections

Rail

The study area includes rail; however, it does not encompass rail spurs or connections to the rail, owned by Columbia Walla Railroad. No recommendations are made to extend or develop a spur as part of this study. Any future spur development would be at the discretion of an individual developer seeking rail access for their specific parcel. Existing rail crossings were evaluated based on existing traffic capacity and deemed suitable. No improvements are recommended.

Earthwork

The existing site topography slopes at approximately 1-3% from northeast to southwest and is generally planar. Minimal grading will be required to construct the new access roads and will consist primarily of stripping and removing topsoil and importing crushed rock and pavement. No site mass grading is recommended.

Utility Requirements

Sanitary Sewer Service

For the purposes of this study, it is assumed that the airport will continue being served by the existing privately owned septic system. The infrastructure in this section is specifically sized to serve the lots shown in the concept lot layout, see Figure 15. Additionally, there are known parcels outside of the study area that may be developed in the future, such as the Walla Walla University properties, that would rely on the sanitary sewer infrastructure in this study. The sanitary sewer infrastructure discussed in this section or any previous analysis, did not accommodate any growth outside the study area. Further evaluation of the study area and any growth outside of it will need to be analyzed independently of this study.

Sanitary sewer flows for prospective users include domestic discharges such as onsite toilets, sinks, and floor drains and industrial demands such as process, washdown, or other sewer needs. The Average Daily Flows (ADF) and Peak Hour Flows (PHF) for domestic sanitary sewer flows were estimated based on acreage and unit flows designated in the City's 2022 General Sewer Plan. The General Sewer Plan's domestic sanitary sewer unit demand for Commercial/Light Industrial is 520 gallons per acre per day (GPAD).

The sanitary sewer infrastructure will accommodate the domestic sanitary sewer flows and the industrial sanitary sewer flows anticipated by users in the study area. This is contingent on all industrial wastewater being pretreated within typical sanitary sewer strength before entering the sanitary sewer system. Pretreatment requirements and regulations are provided in Chapter 13.12 of the City's municipal code.

Typically, the industrial sanitary sewer flows are dependent on the type of light industrial facility. Since the exact kinds of facilities that could develop are unknown, the industrial sanitary sewer flows were estimated based on acreage unit flows defined in *Wastewater Engineering: Treatment and Reuse*, Fourth Edition by Metcalf & Eddy. Industrial flows are categorized as either light industrial or medium industrial. Light industrial water demands range from 1,000 to 1,500 GPAD, and medium industrial water demands range from 1,500 to 3,000 GPAD. Industrial wastewater flows are typically no more than 95% of water demands; therefore, light industrial flows range from 950 to 1,425 GPAD and medium industrial flows range from 1,425 to 2,850 GPAD (Metcalf & Eddy, 2003). To be conservative, the highest end of each range was used when estimating flows in the study area. Since the exact location of each type of use within the study area is unknown, a weighted average of the potential industrial sanitary sewer unit flows was determined and applied to all lots within the study area. The estimated industrial sanitary sewer flows by anticipated land use are summarized in Table 9.

Table 9 Industrial Sanitary Sewer Unit Flows

Land Use[1]	Portion of Study Area[1]	Industrial Wastewater Type	Industrial Wastewater Unit Flow (GPAD)	Weighted Industrial Wastewater Unit Flow (GPAD)
Wholesalers	25%	None	0	0.0 GPAD
Truck Transportation	15%	None	0	0.0 GPAD
Manufacturing	20%	Light	1,425	285.0 GPAD
Food Processing	15%	Medium	2,850	427.5 GPAD
Lab & Testing Facilities	10%	Light	1,425	142.5 GPAD
R & D	15%	None	0	0.0 GPAD
Total	**100%**			**855.0 GPAD**

1. Land use determinations in accordance with Figure 13.

The estimated sanitary sewer unit flows are summarized in Table 10 and the estimated sanitary sewer flows per lot are summarized in Table 11.

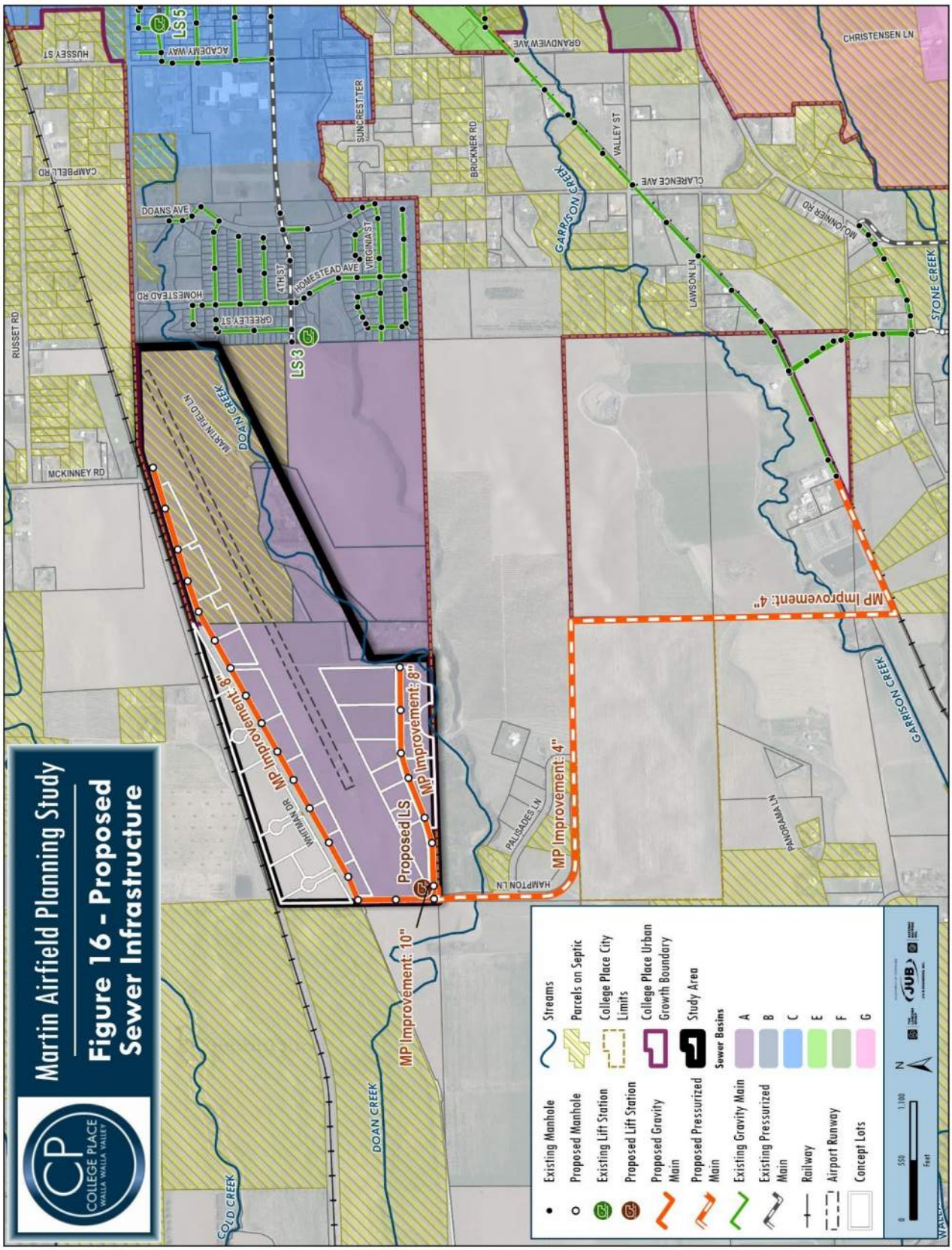
Table 10 Sanitary Sewer Unit Flows

Domestic ADF[1] (GPAD)	Industrial ADF[2] (GPAD)	Total Potable ADF (GPAD)	Total PHF[3] (GPAD)
520.0	855.0	1,375.0	5,362.5

1. Based on Commercial/Light Industrial unit flow of 520 gallons per acre per day (2022 General Sewer Plan).
2. Based on Weighted Industrial Wastewater Unit Flow from Table 9.
3. Based on Peak Hour Flow peaking factor of 3.90 (2022 General Sewer Plan).

Lot	ADF (gpm)[1]	PHF (gpm)[2]	Lot	ADF (gpm)[1]	PHF (gpm)[2]
1	1.27	4.96	**16**	1.92	7.49
2	1.06	4.14	**17**	2.61	10.17
3	1.70	6.63	**18**	1.78	6.93
4	2.04	7.94	**19**	2.00	7.79
5	4.78	18.63	**20**	2.51	9.80
6	3.35	13.08	**21**	1.98	7.71
7	1.88	7.34	**22**	1.30	5.07
8	1.18	4.58	**23**	1.70	6.63
9	1.09	4.25	**24**	1.70	6.63
10	1.02	3.99	**25**	4.76	18.56
11	1.86	7.27	**26**	2.71	10.58
12	1.00	3.91	**27**	1.69	6.60
13	0.97	3.76	**28**	1.83	7.15
14	1.05	4.10	**29**	2.12	8.27
15	1.92	7.49			
			Total	**56.78**	**221.46**

1. Based on Commercial/Light Industrial unit flow of 855 gallons per acre per day (Table 9).
2. Based on Peak Hour Flow peaking factor of 3.90 (2022 General Sewer Plan).


Martin Airfield Planning Study
Figure 16 - Proposed Sewer Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
LS 5
LS 3
Proposed LS
MP Improvement: 8"
MP Improvement: 8"
MP Improvement: 4"
MP Improvement: 4"
MP Improvement: 10"
DOAN CREEK
GARRISON CREEK
STONE CREEK
MARTIN FIELD LN
MCKINNEY RD
RUSSET RD
HUSSEY ST
CAMPBELL RD
ACADEMY WAY
DOANS AVE
HOMESTEAD RD
GREELEY ST
4TH ST
HOMESTEAD AVE
VIRGINIA ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
LAWSON LN
MOJONNIER RD
CHRISTENSEN LN
WHITMAN DR
PALISADES LN
HAMPTON LN
PANORAMA LN
Existing Manhole
Proposed Manhole
Existing Lift Station
Proposed Lift Station
Proposed Gravity Main
Proposed Pressurized Main
Existing Gravity Main
Existing Pressurized Main
Railway
Airport Runway
Concept Lots
Streams
Parcels on Septic
College Place City Limits
College Place Urban Growth Boundary
Study Area
Sewer Basins
A
B
C
E
F
G
N
0
550
1,100
Feet
JUB

Potable Water Service

For the purposes of this study, it is assumed that the airport will continue being served by the existing privately owned wells. The infrastructure in this section is specifically sized to serve the lots shown in the concept lot layout, see Figure 17. Additionally, there are known parcels outside of the study area that may also be developed in the future, such as the Walla Walla University properties, that would rely on the potable water infrastructure sized in this study. The potable water infrastructure discussed in this section or any previous source or storage analysis, did not accommodate any growth outside of the study area. Further evaluation of the study area and any growth outside of it will need to be analyzed independently of this study.

Potable water demands for prospective users include both domestic demands such as sinks, toilets, drinking water, as well as industrial demands such as process, washdown, or other water needs. Since these values are not known at this time, the Average Day Demand (ADD), Maximum Daily Demand (MDD) and Peak Hour Demand (PHD) were estimated based on acreage and unit flows designated in the City's 2022 General Sewer Plan. The General Sewer Plan's domestic sanitary sewer unit demand for Commercial/Light Industrial is 520 gallons per acre per day (GPAD), it was assumed that domestic potable water demands would be 5% higher than the domestic sanitary sewer flows for a potable water unit demand of 546 GPAD. The unit demands from the City's 2021 Water System Plan, 854 gallons per day per connection (GPD) for Commercial users, were also considered, however, the General Sewer Plan unit demands were considered more conservative in regard to the planned Light Industrial use anticipated within the study area.

In addition to the domestic potable water demands, the potable water infrastructure will also accommodate the industrial potable water demands anticipated by users in the study area. Typically, the demand of industrial potable water is dependent on the type of light industrial facility. Since the exact types of facilities that could develop are unknown the industrial potable water demands were estimated based on acreage unit flows defined in *Wastewater Engineering: Treatment and Reuse*, Fourth Edition by Metcalf & Eddy. As noted in the industrial wastewater section, industrial demands are categorized as either light industrial or medium industrial. Light industrial potable water demands range from 1,000 to 1,500 gallons per acre per day (GPAD), and medium industrial water demands range from 1,500 to 3,000 GPAD (Metcalf & Eddy, 2003). To be conservative, the highest end of each range was used when estimating flows in the study area. Since the exact location of each type of use within the study area is unknown, a weighted average of the potential industrial potable water unit demands was determined and applied to all lots within the study area. The estimated industrial potable water demands by anticipated land use are summarized in Table 12.

Table 12 Industrial Potable Water Unit Demands

Land Use[1]	Portion of Study Area[1]	Industrial Potable Water Type	Industrial Potable Water Unit Demand (GPAD)	Weighted Industrial Potable Water Unit Demand (GPAD)
Wholesalers	25%	None	0	0
Truck Transportation	15%	None	0	0
Manufacturing	20%	Light	1,500	300
Food Processing	15%	Medium	3,000	450
Lab & Testing Facilities	10%	Light	1,500	151
R & D	15%	None	0	0
Total	**100%**			**901**

1. Land use determinations in accordance with Figure 13.

The estimated unit potable water demands are summarized in Table 13 and the estimated potable water demands per lot are summarized in Table 14.

Table 13 Potable Water Unit Demands

Domestic ADD[1] (GPAD)	Industrial ADD[1] (GPAD)	Total Potable ADD[1] (GPAD)	Total Potable MDD[2] (GPAD)[4]	Total Potable PHD[3] (GPAD)[4]
546	901	1,447	5,165	8,626

1. ADD = Average Day Demand.
2. MDD = Maximum Day Demand.
3. PHD = Peak Hourly Demand.
4. In accordance with the City's 2021 Water System Plan the potable water peaking factors are 3.57 (MDD/ADD) and 1.67 (PHD/MDD) respectively.

Table 14 Estimated Potable Water Demands

Lot	ADD[1] (GPM)	MDD[2] (GPM)	PHD[3] (GPM)	Lot	ADD[1] (GPM)	MDD[2] (GPM)	PHD[3] (GPM)
1	1.00	3.59	5.99	**16**	2.02	7.21	12.04
2	1.12	3.98	6.65	**17**	2.74	9.79	16.35
3	1.79	6.39	10.66	**18**	1.87	6.67	11.14
4	2.14	7.64	12.76	**19**	2.10	7.50	12.52
5	5.02	17.94	29.95	**20**	2.64	9.43	15.76
6	3.53	12.59	21.03	**21**	2.08	7.43	12.40
7	1.98	7.07	11.80	**22**	1.37	4.88	8.15
8	1.24	4.41	7.37	**23**	1.79	6.39	10.66
9	1.15	4.09	6.83	**24**	1.79	6.39	10.66
10	1.08	3.84	6.41	**25**	5.00	17.86	29.83
11	1.96	6.99	11.68	**26**	2.85	10.19	17.01
12	1.06	3.77	6.29	**27**	1.78	6.35	10.60
13	1.01	3.62	6.05	**28**	1.93	6.89	11.50
14	1.11	3.95	6.59	**29**	2.23	7.96	13.30
15	2.02	7.21	12.04				
				Total	**59.38**	**212.00**	**354.04**

1. ADD = Average Day Demand.
2. MDD = Maximum Day Demand.
3. PHD = Peak Hourly Demand.

In addition to the domestic and industrial water demands, the City's potable water system also provides fire flow. Fire flow demand is the amount of water required during firefighting as defined by applicable codes. Fire flow requirements are nationally established for individual buildings and expressed in terms of flow rate (gpm) and flow duration (hours). The City's planning-level fire flow requirement for Light Industrial land uses is 4,000 gpm for a duration of 4 hours.

The rate at which development occurs and the type of users added may have an impact on the City's ability and responsiveness in providing services related to fire and EMS. While this study did not evaluate details of these impacts in terms of response time, it does consider the ability to provide potable water for fire flow purposes. It is recommended that the City continue to work closely with the emergency services authorities to understand impacts to responsiveness, capacity, and service as development expands.

The study area is estimated to increase the City's Pressure Zone 1 Average Day Demands (ADD) by 59 gallons per minute (GPM) or 85,513 gallons per day (GPD). In accordance with the 2021 WSP, the City's Equivalent Residential Unit (ERU) demand is 325 GPD per connection. An ERU is defined as the approximate potable water demand of a single-family residential connection, ERUs are used to evaluate a system's capacity using a common unit of measurement. The proposed study area is estimated to add approximately 263 ERUs of growth to the City's system. In 2023,

the City retained RH2 Engineers to evaluate the impact of the increased growth rate of the Martin Airfield area compared to the 0.6% growth rate that had been anticipated in the 2021 WSP. In the 2023 technical memorandum (RH2 Engineers), the City's potable water demands were assumed to grow by 2,400 ERUs compared to the City's 2020 baseline demands with a majority of the growth being within the Martin Airfield study area. The 2023 memo indicated the additional demand to the Martin Airfield area would not require additional source improvements apart from those already indicated in the 2021 WSP. However, the increased demands to the Martin Airfield area did require additional storage capacity, thus increasing the capacity of the proposed Reservoir No. 4 from 0.50 MG to 1.0 MG. Reservoir No. 4 and the connecting transmission main are currently under design.

For the purposes of this study, the potable water infrastructure required to provide service to the study area will be limited to transmission water mains required to connect to the adjacent City distribution system, onsite distribution piping, service connections, fire hydrants and related appurtenances. Preliminary alignments for the potable water infrastructure were based on the proposed layout of lots and roadways within the study area. In accordance with the City's Water System Plan, the City's Standard Specifications, and common industry hydraulic criteria the following assumptions were made for the proposed infrastructure:

- Mains were assumed to be no smaller than 8-inches in diameter,
- Mains were sized to maintain a velocity of less than 8-feet per second during PHD conditions,
- Mains were sized to maintain a velocity of less than 10-feet per second during MDD plus Fire Flow conditions,
- Mains were looped, where practical, to increase liability and water quality,
- Fire hydrants were placed at all street intersections, at 350-foot spacings in the study area, or at 1,000-foot spacings in sections where hydrants were not needed for the protection of structures, in accordance with the International Fire Code Table C102.1,
- Isolation valves were placed at all legs of mainline tees, not including hydrants, or at 1,000-foot spacings elsewhere, and,
- Service connections were assumed to be 2-inch water meters

The proposed improvements can be seen in Figure 17. As shown in Figure 17, the proposed 16-inch water main loop will need to connect to the existing distribution system to server prospective users in the study area. As mentioned above, the system was looped to increase water system reliability by connecting to existing 12-inch water mains near the intersection of Whitman Drive and Martin Field Lane as well as at SW 4th Street. In addition to the 16-inch water main loop, connection to Reservoir No. 4, which is currently under design, is necessary to meet the storage demands of the study area. With the phasing/subdivision timing of the study area unknown, the proposed improvements will need to be evaluated as development occurs. If the study area develops in phases, further analysis of each phase will be required to evaluate a partial system's ability to meet the operational criteria for the development and for the long-term planning of the water system outside of the development. This includes meeting the City's Water system operational goals for minimum pressure, maximum pressure, and fire flows.

Surface and Storm Water Management

Minimal surface and stormwater improvements will be required to prepare the site for individual parcel development. The proposed roadways will require roadside swales and some small ponds

or swales at the low areas near the intersections to infiltrate roadway runoff. Culverts across the proposed shared driveways will also be required. Individual parcels will provide stormwater infiltration facilities for each site as they are developed. Stormwater improvements will need to be designed according to the Ecology Stormwater Management Manual for Eastern Washington and City Standards.

Other Utilities

Power

Electrical improvements will include running conduits and wires along the proposed roadways and shared driveways, which includes pull boxes and termination cabinets. Pacific Power has single-phase available, and both Pacific Power and Columbia REA have three-phase power available. Transformers will be required at each lot to serve the sites with their desired voltage.

Natural Gas

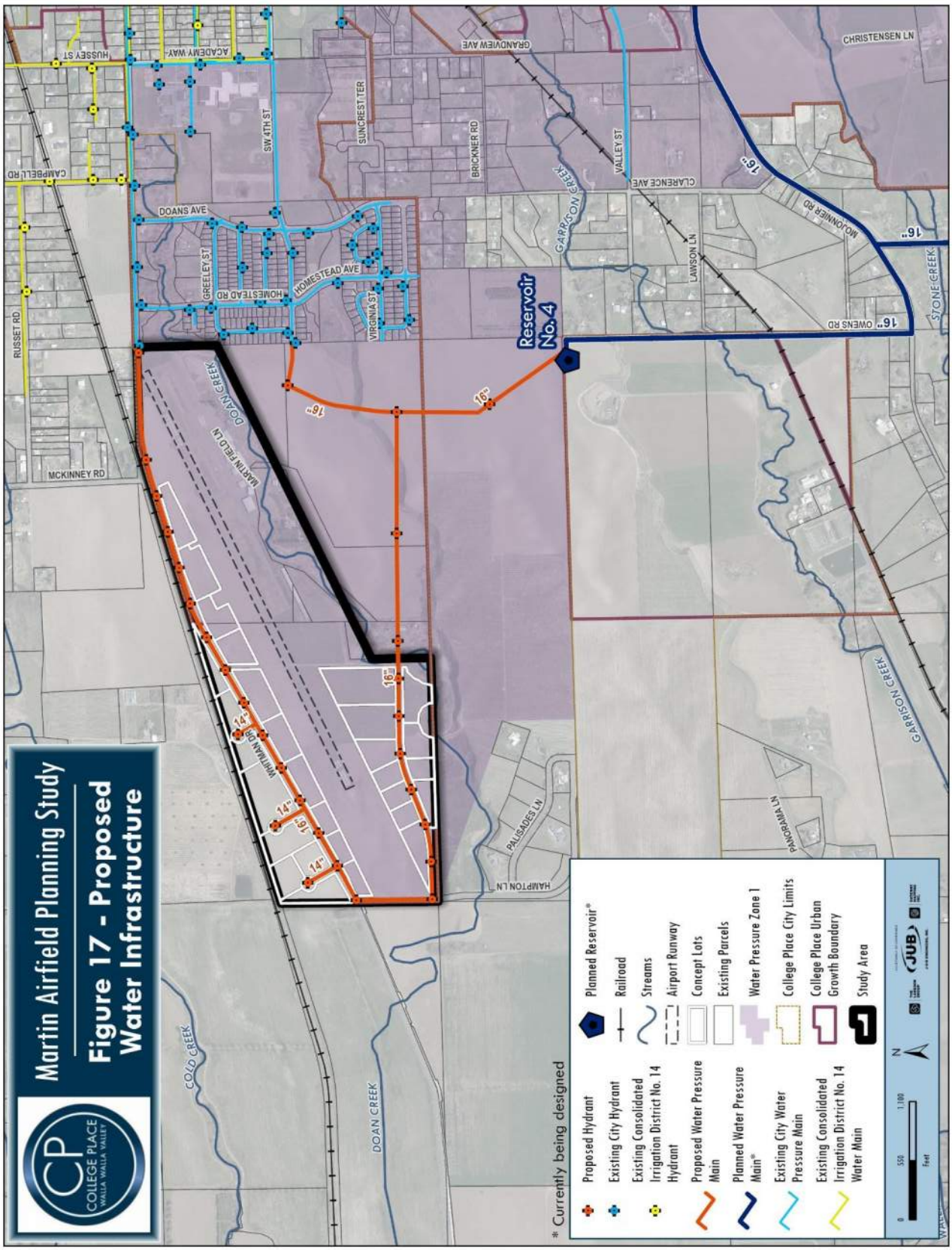
Natural gas improvements will depend on whether or not the project decides to provide gas service as part of the master development. If gas service is desired, proposed improvements will include increasing the gas line size east of the project and extending it to the site. It is assumed that a 4-inch gas line will be sufficient to serve the assumed customer base. Gas demands can vary significantly, so high-demand users may need to partner with CNGC to bring additional capacity to their site.

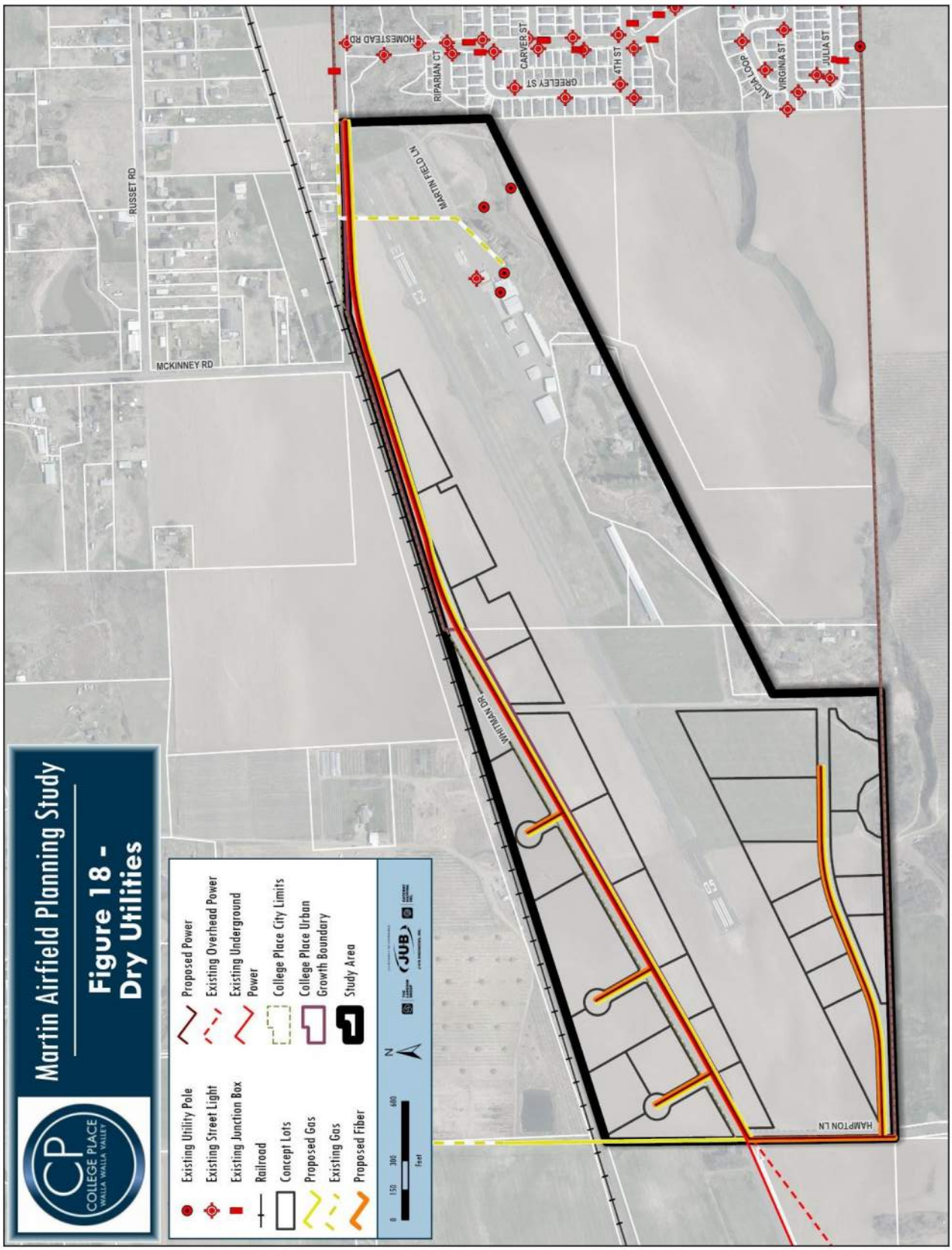
Telecommunications and Fiber Optic Communications

Communications improvements will include installation of new fiber optic lines along the proposed roadways by Century Link and/or Spectrum. Depending on the level of demand that the development can generate as it builds out, additional infrastructure improvements would be required to bring higher speed internet and communications to the project area. Development of the nearby housing will help generate the demand required to make this financially viable for communications providers.

Irrigation

No proposed irrigation improvements are anticipated. Light industrial users typically have minimal irrigation demand that does not justify the additional infrastructure cost. Additionally, unless the irrigation water rights that are tied to the existing airport parcels are transferred to the proposed industrial lots, no irrigation water is readily available. Irrigation lines could be installed, if desired, for future use of reclaimed water or irrigation via the existing water rights.


Martin Airfield Planning Study
Figure 17 - Proposed Water Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
Reservoir No. 4
DOANS AVE
HOMESTEAD AVE
HOMESTEAD RD
GREELEY ST
VIRGINIA ST
SW 4TH ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
GARRISON CREEK
LAWSON LN
MOUNNIER RD
CHRISTENSEN LN
OWENS RD
STONE CREEK
ACADEMY WAY
HUSSEY ST
CAMPBELL RD
RUSSET RD
MCKINNEY RD
MARTIN FIELD LN
DOAN CREEK
WHITMAN DR
PALISADES LN
HAMPTON LN
PANORAMA LN
COLD CREEK
16"
14"
* Currently being designed
Proposed Hydrant
Existing City Hydrant
Existing Consolidated Irrigation District No. 14 Hydrant
Proposed Water Pressure Main
Planned Water Pressure Main*
Existing City Water Pressure Main
Existing Consolidated Irrigation District No. 14 Water Main
Planned Reservoir*
Railroad
Streams
Airport Runway
Concept Lots
Existing Parcels
Water Pressure Zone 1
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
550
1,100
Feet
N
JUB


Martin Airfield Planning Study
Figure 18 -
Dry Utilities
COLLEGE PLACE
WALLA WALLA VALLEY
Existing Utility Pole
Existing Street Light
Existing Junction Box
Railroad
Concept Lots
Proposed Gas
Existing Gas
Proposed Fiber
Proposed Power
Existing Overhead Power
Existing Underground Power
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
150
300
600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
HOMESTEAD RD
RIPARIAN CT
CARVER ST
GREELEY ST
4TH ST
ALICIA LOOP
VIRGINIA ST
JULIA ST
MARTIN FIELD LN
WHITMAN DR
HAMPTON LN

Preliminary Cost Estimate

Development Costs

The following is a summary of infrastructure improvement costs in 2025 dollars. Detailed reports on improvement costs are shown in Appendix 6. These costs generally include engineering, construction administration, sales tax, and 30% contingency.

Table 15 Summary of Capital Improvement Costs

Description	Dollars
Internal Road Network	$4,385,000
Earthwork	$550,000
Sanitary Sewer Infrastructure	$7,214,000
Potable Water Infrastructure	$9,075,000
Surface and Storm Water Management	$785,000
Dry Utilities	$2,194,000
Total	**$24,203,000**

NEXT STEPS

The Next Steps Section provides an overview of what is recommended to be initiated to continue momentum and progress for development at Martin Airfield.

The Next Steps is arranged in the following sections:

- Airport Recommendations
- Transportation Recommendations
- Ongoing Communications with Utility Providers
- Funding and Revenue Sources

Airport Recommendations

A combination of regulatory rules can be used to establish and implement land use compatibility at and around Martin Airfield. Below is a list of items, recommendations to improve land use compatibility:

- **Establish Zoning Overlays** – Consider establishing the following regulations to address land use compatibility in the airport influence area: 1) Traditional or performance-based zoning regulations; 2) Compatible land use overlay; and 3) Height hazard overlay.
- **Utilize Building Restriction Line Map** – Utilize the included BRL map showing the maximum building heights for developable lands with contours.
- **Identify Part 77 Surface** – Use the airspace definitions provided in federal law to identify FAR Part 77 Surfaces for your airport and include in the development regulations language that prohibits penetration of these surfaces. Provide a map and instructions to assist community members, airport managers, and planning staff in implementing the regulations. The FAA relies on local jurisdictions with land use authority to keep critical airspace clear of obstructions. Washington State Legislature RCW 14.12 Airport Zoning gives local jurisdictions the authority to develop and adopt airspace regulations.
- **Establish Airport Compatibility Zones** – Each airport is unique. Thus, adjusting these safety zones to fit the airfield configuration is essential. Establishing an airport compatibility zone tailored to Martin Field's needs is recommended. Use the WSDOT Airports and Compatible Land Use Criteria to follow the suggested permitted land uses for each safety zone to guide recommended development around Martin Field.

Transportation Recommendations

Geotechnical Survey

Conducting a geotechnical survey to evaluate the subsurface conditions to determine soil stability, bearing capacity, and other geologic factors for roadways or rail crossings in the study area vicinity will aid the city in identifying if mitigation measures are needed as future development occurs.

Roadway Conditions Analysis

A roadway conditions analysis will determine the ability of roadways near the study area to accommodate industrial traffic as development occurs. If roadway upgrades are recommended, this analysis will identify necessary upgrades such as resurfacing, widening or new construction.

Ongoing Communications with Utility Providers

Sewer

It will be critical to have ongoing communication between developers and the City of College Place for the sanitary sewer improvements needed to serve the Martin Airfield Study Area. Design and construction of the lift station and forcemain will be required before any development in the study area can begin. Gravity sewer pipe to the lift station will need to be evaluated as development occurs and can be constructed in phases depending on the timing and rate of development. All improvements will need to be coordinated with the City of College Place to ensure the necessary infrastructure and capacity is available for each stage of development. It is also recommended that the City further develops a Pretreatment Code and places it in effect prior to development in the study area.

Water

As noted in the Utility Requirements section, connection to the City of College Place's existing water system is required to serve the Martin Airfield Study Area. Design and construction of transmission and distribution mains will need to be evaluated as development occurs. Phased system construction will be dependent on the timing and rate of development and will need to be coordinate with the City of College Place for conformance with the operational criteria of the on-site development as well as the long-term planning of the water system.

Funding and Revenue Sources

The following is a summary of the various revenue sources available to the City to help offset the site's development cost. It is intended that a variety of funding sources will be used to implement the master plan. A range of ways to fund the basic infrastructure, with the site-specific infrastructure connections being the responsibility of the developer of the individual sites, could be available, for example:

Department of Ecology Grants

The State of Washington supplies grants for various solid waste programs, including Remedial Action Grants to assist with local hazardous waste sites, Moderate Risk/Hazardous Waste Implementation Grants to manage local hazardous waste, and Food and Yard Waste Composting Grants.

Economic Development Administration (EDA)

The Economic Development Administration (EDA) has various programs and funding opportunities available. Through the competitive grant process, EDA evaluates all projects to determine the extent in which they align with EDA's investment priorities, effectively address the creation and/or retention of high-quality jobs, and provide a clear scope of work with specific, measurable project outputs. EDA's investment priorities provide an overarching framework to ensure its grant investment portfolio – from planning to infrastructure construction – contributes

to local efforts to build, improve, or better leverage economic assets that allow businesses to succeed and regional economies to prosper and become more resilient.

Federal Congressionally Directed Spending (CDS) and Community Project Funding (CPF)

In November 2021, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was passed. This established the Congressionally Directed Spending (CDS) program (as known in the Senate) and the Community Project Funding (CPF) program (as known in the House). These two terms are synonymous and created to support specific community projects as part of the annual appropriations process. For every year of funding, the CDS/CPF projects are solicited and selected by the members of the U.S. Congress and U.S. Senate. Once selected, the individual scope and funding amount for each of the selected projects is then written into law via the Annual Appropriations Bill. The CDS/CPF program is authorized through the 2026 Federal Fiscal Year (FFY).

Infrastructure Assistance Coordinating Council (IACC)

IACC is a nonprofit organization helping Washington communities identify and obtain infrastructure funding resources. It sponsors an annual statewide conference (typically in Wenatchee, WA) where state and federal programs convene to share funding information. Technical assistance is available for individual projects as part of this.

Local Improvement District (LID)

The City can work with purchasers/developers to establish a local improvement district that includes an agreed-upon repayment schedule based on agreed-upon equitable criteria. The City or County sells bonds to cover the costs of infrastructure to be built within the district, and the owners/developers pay off the bonds through regular payments, usually over a 10-20-year period.

Office of Economic Development & Competitiveness (OEDC)

The Office of Economic Development & Competitiveness (OEDC) is committed to providing businesses large and small with the specific solutions they need, wherever they are in the lifecycle, from conceptualization to an exit strategy. OEDC has a suite of services and programs that include Business Recruitment, Retention and expansion, Site Selection, foreign direct investment, Key Sector Support, Small Business Export Assistance, and Entrepreneurship and rural Business Assistance.

Public/Private Development Agreements

New development agreements between the county and/or city and a developer specify financing needs and responsibilities for infrastructure needs that serve a wider area than the developer is contemplating.

Public Works Board (PWB) Funding

In partnership with local governments, the Public Works Board (PWB) addresses infrastructure needs. PWB uses a dedicated funding pool to offer low-interest financing (interest rates as low as 0.5% over 20 years) in a revolving loan program to finance up to 85% of a project's cost. Applicants must have a capital facilities plan, be levying the 1/4% real estate excise tax, and comply with UGA requirements. Capital improvement planning projects are limited to planning for streets and utilities. PWB provides traditional financing and broadband specific financing. Ports are not eligible to apply for these funds and will be required to partner with the City when applying.

Tax Increment Financing (TIF)

Tax increment financing (TIF) is a tool that local governments in Washington State (cities, towns, counties, port districts, or any combination thereof) can use to fund public infrastructure in targeted areas to encourage private development and investment. A local government wishing to utilize TIF will designate an "increment area" surrounding the site of the public improvements. The property tax portion of increases in the assessed value of properties within the increment area is allocated toward paying for the public improvement costs.

Washington State Department of Commerce – Community Economic Revitalization Board (CERB) Grants

Department of Commerce funds are available via low-interest loans and grants to finance domestic and industrial water, stormwater, wastewater, public buildings, telecommunications, and port facilities.

Washington State Department of Commerce – Industrial Site Readiness Grant

This program offers grants of up to $500,000 to public entities such as counties, cities, port districts, or tribal governments. The funding supports pre-development planning for large manufacturing sites, including engineering studies, permitting, and site due diligence.

Washington State Transportation Improvement Board (TIB)

TIB funds high-priority transportation projects in communities throughout the state to enhance the movement of people, goods, and services. TIB is an independent state agency created by the Legislature that distributes and manages street construction and maintenance grants. Funding for TIB's grant programs comes from revenue generated by three cents of the statewide gas tax. This funding may be appropriate for transportation improvements such as the widening and frontage of Road 36.

Public Works Trust Fund (PWTF)

The PWTF provides low-interest loans to local governments for infrastructure projects, including those related to industrial development. The fund aims to assist municipalities in addressing infrastructure needs through a dedicated funding pool. (wacities.org)

Better Utilizing Investments to Leverage Development (BUILD) grant

A program administered by the U.S. Department of Transportation (DOT). It provides federal funding to support investments in infrastructure that enhance economic development and improve safety, mobility, and quality of life. The BUILD program is designed to support projects that have a significant impact on communities, especially in terms of regional economic growth, access to opportunities, and overall public welfare.

Appendix 1

Permit Classification Table

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 1 Review	• ADU Permit • Administrative Interpretation • Boundary Line Adjustment • Building Permit • Certificate of Occupancy • Certificate of Appropriateness (and waiver)(1) • Certificate of Design Review • Certificate of Zoning Compliance • Clearing and Grading Permit • Code Enforcement Action • Critical Area Authorization • Landscaping Plan Approval • Permit, Minor Amendment • Plats, Final (10+ lots)	None	None	Community Development Director or designee (unless otherwise noted)	Hearing Examiner

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
	• SEPA Action (no public notice required) • Sign Permit • Site Plan Approval • Special Property Tax Valuation [1] • Special Use Permit				
Type 2 Review	• Binding Site Plan • Critical Area Permit • SEPA Action (public notice required) • Short plat (9 lots or less) • Variance with Type 1/2 Permit	Yes	None, but written comments may be submitted	Community Development Director	Hearing Examiner

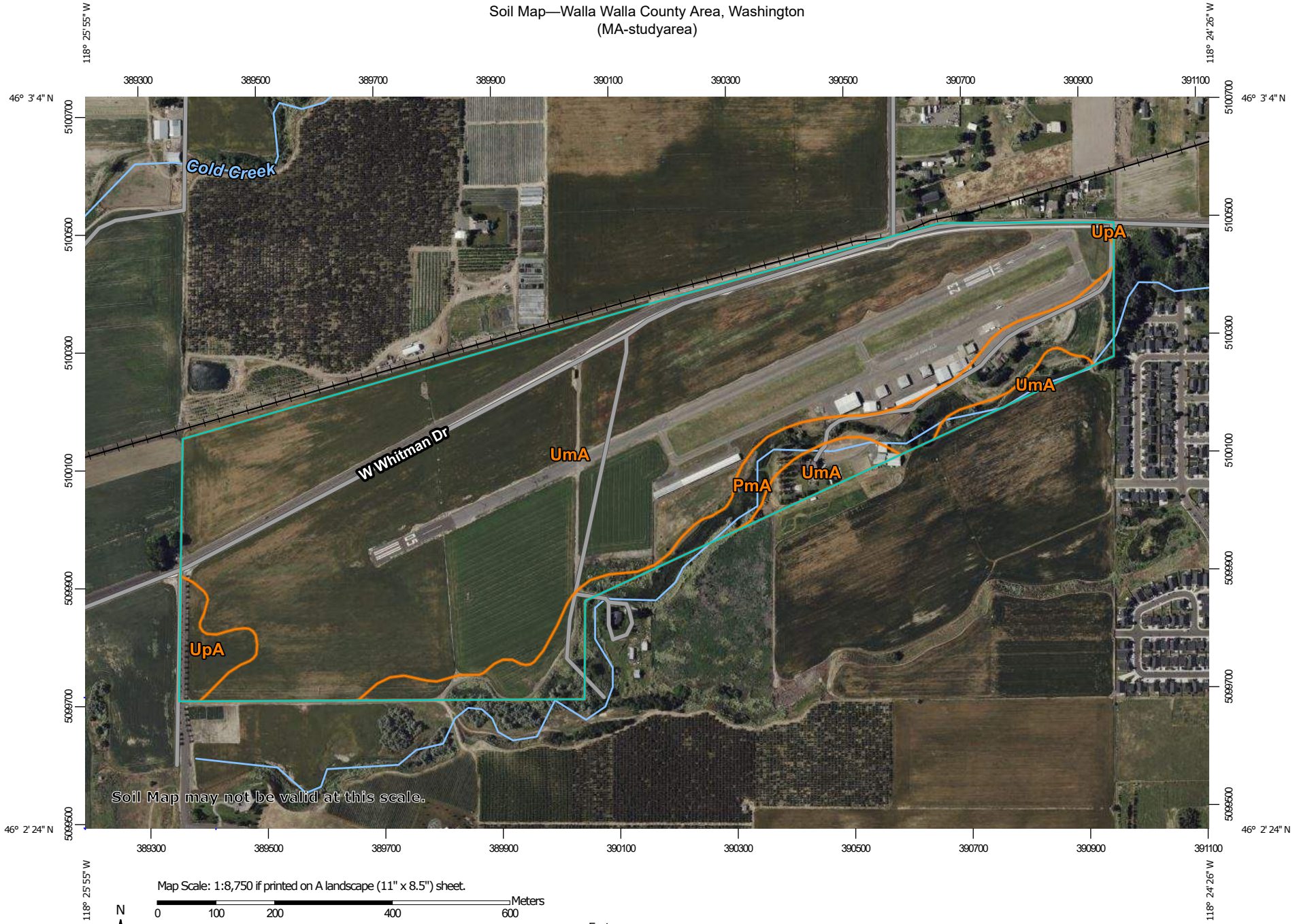
	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 3 Review	• Conditional Use Permit • Master Planned Development • Plat, Preliminary (10+ lots) • Permit, Major Amendment • Reasonable Use Exception • Rezone, Site Specific • Variance with Type 3 Permit	Yes	Hearing Examiner	Hearing Examiner	Superior Court

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 4 Review	• Comprehensive Plan Text Amendment • Development Agreement [5] • Future Land Use Map Amendment • Rezone, General • Shoreline Master Program Amendment [2] • Unified Development Code Amendment [4]	Yes	Planning Commission	City Council	Superior Court [3]

Appendix 2

Soil Assessment

Soil Map—Walla Walla County Area, Washington
(MA-studyarea)



Map Scale: 1:8,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:31,700.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walla Walla County Area, Washington
Survey Area Data: Version 9, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 25, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PmA	Pedigo silt loam, 0 to 3 percent slopes	20.4	11.5%
UmA	Umapine silt loam, 0 to 3 percent slopes	152.7	86.3%
UpA	Umapine silt loam, leached surface, 0 to 3 percent slopes	3.8	2.1%
Totals for Area of Interest		**176.8**	**100.0%**

Appendix 3

WSDOT Airports and Compatible Land Use Criteria

Table F-1

Maximum Residential Density						
Compatibility Zones	**Zone 1**	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
Maximum Residential Density						
	Average Number of Dwelling Units Per Gross Acre					
Agricultural (farmland/forest)	0	Maintain current comprehensive plan designation and zoning designation				
Rural (outside an urban growth boundary)	0	1 d.u. per 10 acres	1 d.u. per 10 acres[A]	1 d.u. per 5 acres[A]	1 d.u. per 10 acres[A]	1 d.u. per 5 acres
Urban (within the urban growth boundary)	0	0	B	C	B	C
Maximum Intensities for Nonresidential Uses (Commercial, Industrial, Offices, and Activities)						
	Average Number of People Units Per Gross Acre					
Agricultural (farmland/forest)	1-5[E]	D, E	D, E	D, E	D, F	D
Rural (outside an urban growth boundary)	1-5[E]	10-25[E]	10-25[E]	40-60[E]	100-150[E]	100-150[G]
Urban (within the urban growth boundary)	1-5[E]	50-75[E]	80-120[E]	100-150[E]	100-150[E]	No Limit[G]

Notes:

A Cluster to preserve open space to maintain open approach corridor at and near runway ends.

B Infill development up to average of surrounding residential area is allowed, but is appropriate only if nonresidential uses are not feasible

C Promote high density and intensity mixed use development (15 or more d.u. per acre)

D Maintain current comprehensive plan designation and zoning designation.

E Special Function Land uses should be prohibited.

F 50-100 people per acre allowed if on airport and aviation-related.

G Special Function Land uses should be avoided.

Table F-2
Airport Land Use Matrix

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
A. Resource Operations						
1. Agricultural (Commercial)						
Agriculture, horticulture, general farming (crops only, not feedlots and stockyards)	P	P	P	P	P	P
Agricultural building	L	L	P	P	P	P
Agricultural chemical sales/storage	X	L	P	P	P	P
Agricultural Housing/Farm labor	X	X	L	P	L	P
Agricultural housing/farm labor	X	X	L	P	L	P
Agricultural market	X	X	P	P	X	P
Agricultural related industries	X	L	P	P	P	P
Animal husbandry	X	L	L	L	X	P
Agricultural feeding operation or stockyards	X	X	X	X	X	X
Agriculture or food processing facility	X	L	P	P	L	P
Livestock auction	X	X	X	L	X	P
Fairgrounds	X	X	X	X	X	P
Floriculture, aquaculture	X	L	P	P	P	P
Fruit bin sales/storage	X	L	P	P	P	P
2. Forest (Commercial)						
General forest silver culture	L	L	P	P	P	P
Forest product processing	X	L	P	P	P	P
3. Mining/Refining/Offsite Hazardous Waste Treatment						
Asphalt paving and roofing materials, rock crushing	X	X	L	L	L	P
Mining including sand and gravel pits	X	L	L	L	X	P
Stockpiling of earthen materials	X	L	L	L	X	P
B. Rural Development						
1. Rural Residential						
Single-family dwelling (large lot, 5 acres or greater*)	X	L	L	P	X	P
Single-family dwelling, rural centers	X	X	L	L	X	L
Residential Cluster Development, 40% open	X	X	LSC	X	X	P
Multi-family dwelling	X	X	X	X	X	P
Temporary farm housing	X	X	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
2. Rural Centers						
Single-family dwelling; up to 12 dwelling units/acre	X	X	L	L	X	L
Two - Four family dwelling (duplex) (*)	X	X	X	X	X	L
Multi-family dwelling; 12-20 units/acre	X	X	L	X	X	P
21+ units/acre	X	X	P	P	X	P
Agriculture/forest/mineral resources or industry (see item A)						
Community services (see item D2)						
Retail and commercial service (see items D4 & D5)						
Industrial/manufacturing (see item D4s & D5)						
C. Education Facilities						
1. Education Facilities						
Junior or community college	X	X	L	L	L	P
Schools, K-12 elementary, middle, senior high	X	X	X	X	X	X
Business school	X	L	L	L	L	P
Vocational schools	X	L	L	L	L	P
D. Urban Development						
1. Residential						
Single-family dwelling; up to 12 dwelling units/acre	X	X	X	X	X	L
Two - four-family dwelling (duplex)(*)	X	X	X	X	X	L
Multi-family dwelling(*): 15 or more	X	X	LSC	X	X	P
Mixed-use office/commercial/residential use	X	X	P	P	X	P
Residential development cluster 40% > open space	X	X	L	L	X	L
Residential infill	X	X	L	L	L	P
Mobile home parks	X	X	L	L	X	L
Boarding house	X	X	L	L	L	L
Retirement homes	X	X	X	X	X	L

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
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All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
2. Community Services						
Cemetery	P	P	P	P	L	P
Churches, synagogues, temples	X	X	L	L	X	L
Community center meeting halls, fraternal organizations	X	X	L	L	X	P
Convalescent, nursing home and group homes	X	X	X	X	X	L
Day care facilities, family in-home	X	X	L	L	X	L
Day care center	X	X	L	L	X	L
Funeral home	X	X	P	P	X	P
Police, fire stations, ambulance service	X	L	P	P	P	P
Hospital	X	X	X	X	X	X
Medical clinic	X	X	L	L	X	P
Correction facilities	X	L	L	L	L	L
Libraries	X	X	P	P	X	P
Museums and art galleries	X	X	L	P	P	P
Zoo	X	X	P	P	X	P
3. Amusement and Recreation						
Amusement park (permanent)	X	X	L	L	X	L
Bowling alleys	X	X	P	P	X	P
Campground	X	L	L	P	L	P
Recreational vehicle parks; short term	X	L	L	P	L	P
Drive-in theatres	X	X	L	L	X	P
Fairgrounds	X	X	P	L	L	P
Golf courses	X	L	P	P	X	P
Gymnasiums, exercise facilities	X	L	L	L	L	P
Horse racing tracks, speedways	X	X	X	X	X	X
Miniature golf courses	X	X	P	P	X	P
Movie theatres, auditoriums exhibition halls	X	X	L	L	X	P
Parks	L	L	P	P	L	P
Roller skating rink	X	X	L	L	X	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
4. Retail Trade and Service						
Addressing, mailing, and stenographic services	X	L	P	P	L	P
Advertising agencies	X	L	P	P	L	P
Airport uses and activities commercial/industrial	L	P	P	P	P	P
Animal clinic/hospital	L	P	P	P	P	P
Antique stores	X	L	P	P	X	P
Automobile, truck, manufactured home, and travel trailer sales	L	P	P	P	P	P
Automobile and recreational vehicle (RV) sales; weekend	L	P	P	P	L	P
Automotive: car wash	L	P	P	P	L	P
Sales lot/auto center	L	P	P	P	P	P
Parking lots and garages	L	P	P	P	P	P
Maintenance and repair shops	X	P	P	P	P	P
Paint and body repair shops	L	P	P	P	P	P
Parts and accessories (tires, batteries, etc.)	X	P	P	P	P	P
Specialized repair shops (radiator, etc.)	L	P	P	P	P	P
Towing services	L	P	P	P	P	P
Wrecking and dismantling yard	L	P	P	P	L	P
Bakery	X	P	P	P	L	P
Beauty and barber shops	X	L	P	P	X	P
Bed and breakfast inn	X	X	L	L	X	P
Boats and marine accessories	X Except storage L	P	P	P	P	P
Books, stationery, office supplies	Storage only	P	P	P	L	P
Building and trade (plumbing, heating, electrical, painting, etc.)	Storage only	P	P	P	L	P
Clothing and accessories	X	L	P	P	L	P
Communication towers	X	X	L	L	L	L
Computer and electronic stores	X	L	P	P	L	P
Department, discount, variety stores	X	X	P	P	X	P
Drug stores (optical goods, orthopedic supplies)	X	L	P	P	L	P
Employment agencies (private)	X	P	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Farm and implements, tools and heavy construction equipment	X	L	P	P	P	P
Farm supplies	L	P	P	P	P	P
Financial institutions	X	P	P	P	L	P
Food store	X	P	P	P	L	P
Furniture, home furnishings, appliances	X	P	P	P	L	P
General hardware, garden equipment and supplies	X	P	P	P	L	P
Grocery and convenience stores	X	L	P	P	L	P
Heavy equipment storage, maintenance and repair	X	L	P	P	L	P
Insurance agents, brokers, and service agencies	X	P	P	P	L	P
Kennels	L	P	P	P	L	P
Laundries, laundromats, and dry cleaning plants	X	P	P	P	L	P
Liquor stores	X	P	P	P	L	P
Lumber yards	L	P	P	P	L	P
Medical and dental laboratory, offices and clinic	X	X	L	P	x	P
Mini Storage	L	P	P	P	P	P
Motels and Hotels	X	X	P	P	P	P
Motorcycles sales/repair (including maintenance)	X	P	P	P	L	P
Paint, glass, and wallpaper stores	X	P	P	P	L	P
Pet stores, pet supplies, and dog grooming	X	L	P	P	L	
Professional office buildings for architects, attorneys, government, etc.	X	L	P	P	P	P
Rental: auto, truck, trailer, fleet leasing services	L	P	P	P	L	P
Repairs: small appliances, tv, business machines, watches, etc.	L	P	P	P	L	P
Restaurant, cafe and drive-in eating facilities	X	L	P	P	P	P
Service station	X	L	P	P	L	P
Sporting goods, bicycle shops	X	P	P	P	P	P
Taverns, bars, dance establishments	X	L	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
5. Industry/Manufacturing						
Aircraft parts	Storage only	L	P	P	P	P
Aircraft industrial	Storage only	L	P	P	P	P
Apparel and accessories	X	L	P	P	X	P
Bakery products (wholesale)	Storage only	L	P	P	X	P
Beverage industry	Storage only	L	P	P	X	P
Canning, preserving, and packaging fruits, vegetables, and other foods	X	L	L	L	X	P
Cement and concrete plants	X	L	L	L	X	P
Chemicals (industrial, agricultural, wood, etc.)	X	X	L	L	X	L
Concrete, gypsum, and plaster products	Storage only	L	P	L	L	P
Confectionery and related products (wholesale)	Storage only	P	P	P	L	P
Mini storage	P	P	P	P	P	P
Product assembly	Storage only	L	P	P	L	P
Prefabricated structural wood products and containers	Storage only	P	P	P	L	P
Printing, publishing, and binding	Storage only	P	P	P	L	P
Rendering plants, slaughter houses	X	X	X	X	X	L
Rubber products	X	L	P	P	L	P
Sawmills and planing mills	Storage only	L	P	P	L	P
Sheet metal and welding shops	Storage only	P	P	P	L	P
Stone products (includes finishing of monuments for retail sale)	Storage only	P	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
6. Wholesale Trade-Storage						
Warehouses	Storage only	P	P	P	P	P
Wholesale trade	Storage only	P	P	P	P	P
Storage facilities; bulk	L	P	P	P	P	P
commercial	L	P	P	P	P	P
mini-storage	L	P	P	P	P	P
E. Transportation and Utilities						
1. Transportation						
Bus terminals	X	L	P	P	L	P
Transportation storage and maintenance facilities	Storage only	P	P	P	P	P
Transportation brokerage offices; without truck parking	X	P	P	P	P	P
with truck parking	L	P	P	P	P	P
Contract truck hauling, rental of trucks with drivers	L	P	P	P	P	P
Rail, truck terminals (for short-term storage, office)	L	P	P	P	P	P
Air storage and office use	Storage only	P	P	P	P	P
Railroad switch yards, maintenance, and repair facilities, etc.	X	P	P	P	P	P
Taxicab terminals, maintenance, and dispatching centers, etc.	X	P	P	P	P	P
2. Utilities						
Power generating facilities	L	L	L	L	L	L
Utility services (substations, etc.)	L	L	L	L	L	P
Wholesale trade	L	P	P	P	L	P
Storage facilities; bulk	L	P	P	P	P	P
Commercial	L	P	P	P	P	P

Chart Symbols

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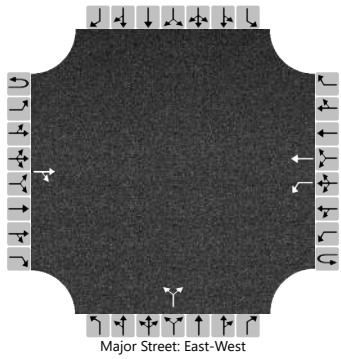
Appendix 4

Traffic Counts and Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

General Information		Site Information	Existing Conditions Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	11/4/2024	East/West Street	Old US 12
Analysis Year	2024	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			76	55		20	52			26		13				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22					42					
Capacity, c (veh/h)						1434					813					
v/c Ratio						0.02					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.5					9.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						2.1				9.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

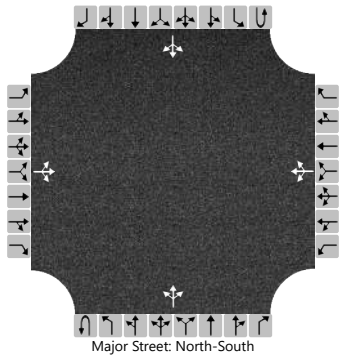
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	1		20	0	7		0	31	25		13	61	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				30			0				14		
Capacity, c (veh/h)			837				857			1524				1535		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
Control Delay (s/veh)			9.3				9.4			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.3				9.4				0.0				1.3		
Approach LOS		A				A				A						

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HCS7 Two-Way Stop-Control Report

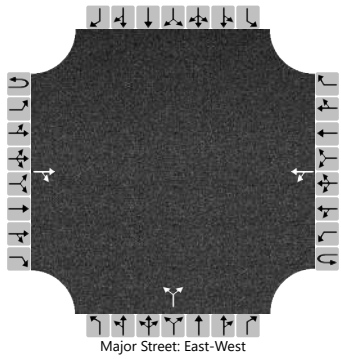
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			40	0		1	28			0		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					2					
Capacity, c (veh/h)						1557					1022					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.3				8.5							
Approach LOS					A											

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HCS7 Two-Way Stop-Control Report

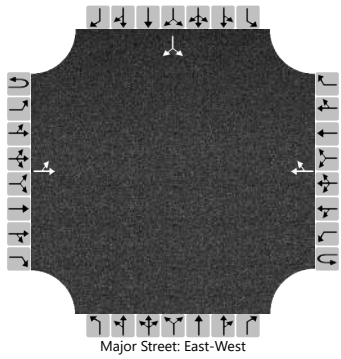
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	40				23	4						4		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													11	
Capacity, c (veh/h)		1577													991	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.3													8.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.5												8.7		
Approach LOS		A					A							A		

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HCS7 Two-Way Stop-Control Report

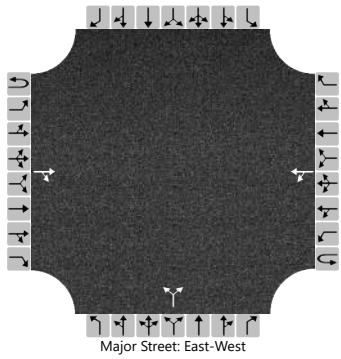
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			39	0		2	36			0		5				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					6					
Capacity, c (veh/h)						1556					1021					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.5						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

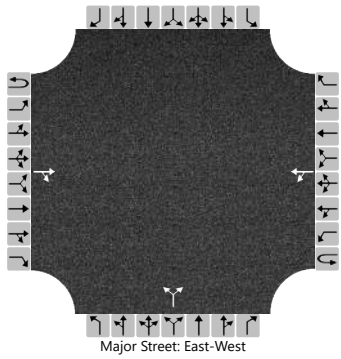
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			42	5		40	30			5		34				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						49					48					
Capacity, c (veh/h)						1540					970					
v/c Ratio						0.03					0.05					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.4					8.9					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.3				8.9						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

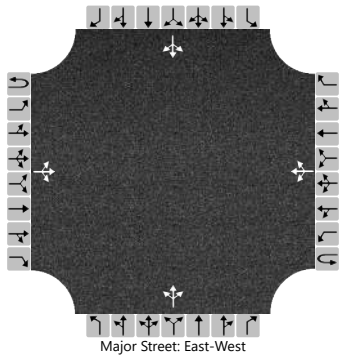
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	84	43		62	101	8		39	14	32		7	23	2
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				69					94				36	
Capacity, c (veh/h)		1460				1436					622				518	
v/c Ratio		0.00				0.05					0.15				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.2					0.5				0.2	
Control Delay (s/veh)		7.5				7.6					11.8				12.5	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.3				3.0				11.8				12.5			
Approach LOS	A				A				B				B			

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HCS7 Two-Way Stop-Control Report

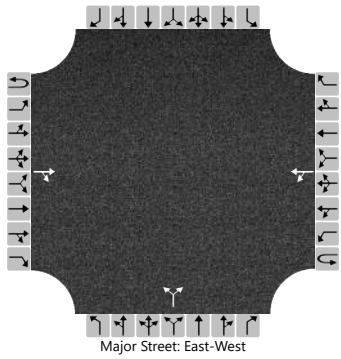
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			124	12		55	173			20		42				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						65					74					
Capacity, c (veh/h)						1411					715					
v/c Ratio						0.05					0.10					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.6					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.2				10.6						
Approach LOS										B						

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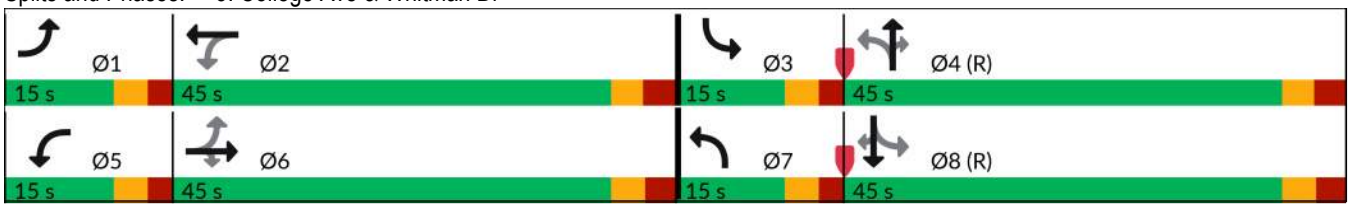
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Future Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.503			0.671			0.602			0.634		
Satd. Flow (perm)	937	1863	1583	1250	1829	0	1121	1863	1583	1181	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	125	48	33	113	15	54	197	38	17	200	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	125	48	33	128	0	54	197	38	17	200	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	22.3	16.4	16.4	20.2	13.4		83.2	79.4	79.4	79.6	74.3	74.3
Actuated g/C Ratio	0.19	0.14	0.14	0.17	0.11		0.69	0.66	0.66	0.66	0.62	0.62
v/c Ratio	0.20	0.49	0.15	0.14	0.61		0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
LOS	D	D	A	D	E		A	B	A	A	B	A
Approach Delay (s/veh)		38.9			55.1			8.7			9.1	
Approach LOS		D			E			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



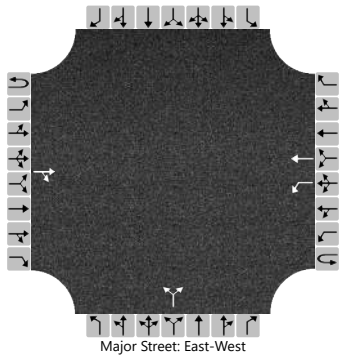
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	125	48	33	128	54	197	38	17	200	97
v/c Ratio	0.20	0.49	0.15	0.14	0.61	0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Length 50th (ft)	28	93	0	20	91	12	49	0	4	68	0
Queue Length 95th (ft)	56	150	0	45	150	31	122	0	14	128	18
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	272	601	837	1233	1088	861	1154	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.20	0.08	0.12	0.21	0.06	0.16	0.03	0.02	0.17	0.09

Intersection Summary

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 No-Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour No-Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	83		30	79			39		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					64					
Capacity, c (veh/h)						1349					714					
v/c Ratio						0.02					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

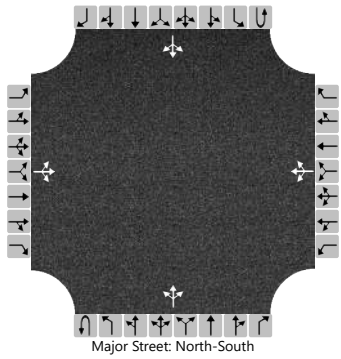
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		30	0	11		0	47	38		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				45			0				22		
Capacity, c (veh/h)			770				775			1478				1495		
v/c Ratio			0.01				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.0		
Control Delay (s/veh)			9.7				9.9			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.7				9.9				0.0				1.4		
Approach LOS		A				A										

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HCS7 Two-Way Stop-Control Report

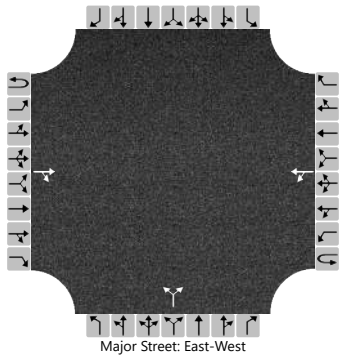
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			61	0		2	42			0		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					3					
Capacity, c (veh/h)						1526					992					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.6					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.3				8.6						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

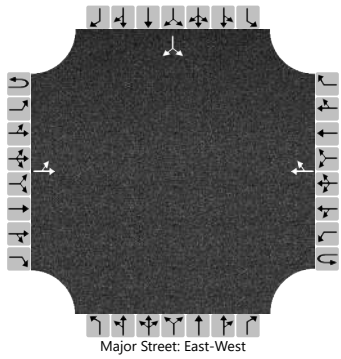
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	61				35	6						6		9
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													16	
Capacity, c (veh/h)		1557													958	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.3													8.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.6												8.8		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

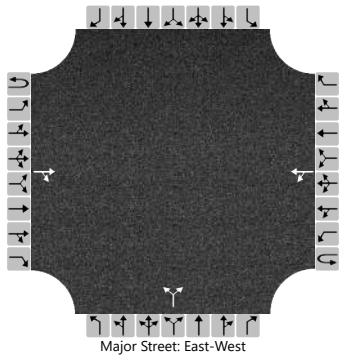
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			59	0		3	55			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1525					991					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.4				8.7							
Approach LOS					A											

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HCS7 Two-Way Stop-Control Report

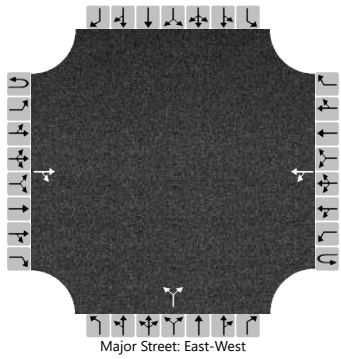
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	8		61	45			8		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					74					
Capacity, c (veh/h)						1500					915					
v/c Ratio						0.05					0.08					
95% Queue Length, Q_{95} (veh)						0.2					0.3					
Control Delay (s/veh)						7.5					9.3					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.5				9.3						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

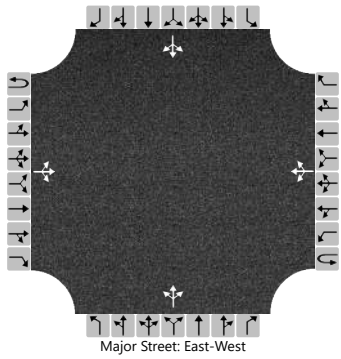
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	127	64		94	153	12		59	21	49		11	35	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				104					143				54	
Capacity, c (veh/h)		1386				1352					463				374	
v/c Ratio		0.00				0.08					0.31				0.15	
95% Queue Length, Q_{95} (veh)		0.0				0.3					1.3				0.5	
Control Delay (s/veh)		7.6				7.9					16.2				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				3.3				16.2				16.2			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

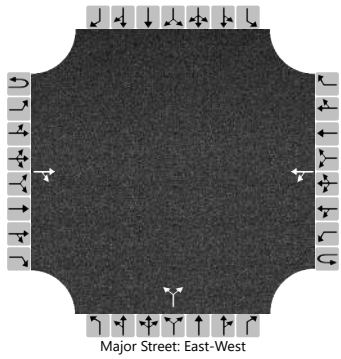
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			188	18		83	262			30		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					112					
Capacity, c (veh/h)						1315					565					
v/c Ratio						0.08					0.20					
95% Queue Length, Q_{95} (veh)						0.2					0.7					
Control Delay (s/veh)						8.0					12.9					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.5				12.9						
Approach LOS										B						

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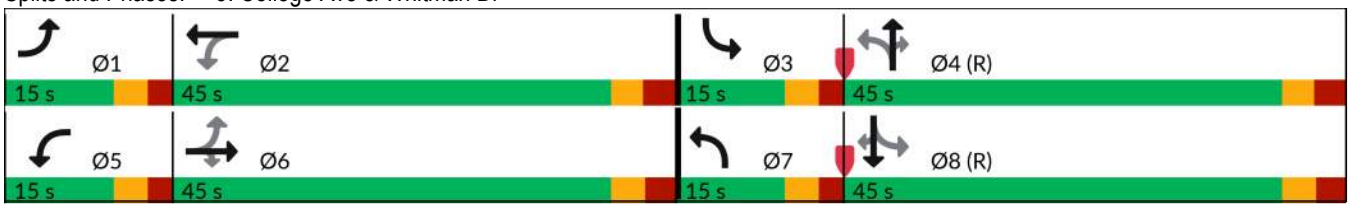
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Future Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.387			0.443			0.510			0.563		
Satd. Flow (perm)	721	1863	1583	825	1829	0	950	1863	1583	1049	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	189	73	49	172	23	83	298	58	26	303	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	189	73	49	195	0	83	298	58	26	303	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	26.5	18.6	18.6	25.2	17.9		77.7	71.9	71.9	74.0	68.4	68.4
Actuated g/C Ratio	0.22	0.16	0.16	0.21	0.15		0.65	0.60	0.60	0.62	0.57	0.57
v/c Ratio	0.30	0.65	0.21	0.21	0.70		0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
LOS	D	E	A	C	E		A	B	A	A	B	A
Approach Delay (s/veh)		41.0			54.7			12.3			13.2	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	70	189	73	49	195	83	298	58	26	303	147
v/c Ratio	0.30	0.65	0.21	0.21	0.70	0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Length 50th (ft)	41	138	0	28	141	23	121	0	7	127	10
Queue Length 95th (ft)	73	207	9	55	209	50	209	0	21	222	49
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	258	601	688	1116	996	729	1061	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.31	0.12	0.19	0.32	0.12	0.27	0.06	0.04	0.29	0.15

Intersection Summary

Martin Field Trip Generation

Area	Total Acres	Bldg. SF (1,000 SF)	PM Peak Hour Trips Generated		
			Total	Inbound	Outbound
North Driveway	18.65	325	95	13	82
South Driveway	18.56	323	94	13	81
Total Whitman	37.21	648	189	26	163
Total Hampton	22.22	387	107	15	92
TOTAL	59.43	1,036	296	41	255

Notes

Assumes 40% FAR

ITE Trip Generation Manual 11th Edition

Land Use 110 - General Light Industrial

Fitted equation =(ROUNDUP(EXP(0.72*LN(X)+0.38),0))

where X is the sq ft of the development

Worst Driveway - included in Total Whitman trips above

North Driveway	7.82	136	51	7	44
South Driveway	3.11	54	26	4	22

Martin Airfield Feeasibility Study

PM Peak Hour Turning Movement Volumes

Old US 12/Last Chance

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	26	0	13	0	0	0	0	76	55	20	52	0	242
2045 No-Build	39	0	20	0	0	0	0	115	83	30	79	0	366
20-year New Trips	12	0	0	0	0	0	0	0	2	0	0	0	14
2045 Build	51	0	20	0	0	0	0	115	85	30	79	0	380

Last Chance/Whitman Dr

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	31	25	13	61	3	0	1	1	20	0	7	162
2045 No-Build	0	47	38	20	92	5	0	2	2	30	0	11	247
20-year New Trips	0	0	3	0	0	2	0	0	0	13	0	12	30
2045 Build	0	47	41	20	92	7	0	2	2	43	0	23	277

Whitman Dr/Hampton

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	2	0	0	0	0	40	0	1	28	0	71
2045 No-Build	0	0	3	0	0	0	0	61	0	2	42	0	108
20-year New Trips	9	0	83	0	0	0	0	3	2	13	16	0	126
2045 Build	9	0	86	0	0	0	0	64	2	15	58	0	234

Whitman Dr/McKinney

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	4	0	6	3	40	0	0	23	4	80
2045 No-Build	0	0	0	6	0	9	5	61	0	0	35	6	122
20-year New Trips	0	0	0	0	0	1	3	227	0	0	35	0	266
2045 Build	0	0	0	6	0	10	8	288	0	0	70	6	388

Whitman Dr/Martin Field

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	5	0	0	0	0	39	0	2	36	0	82
2045 No-Build	0	0	8	0	0	0	0	59	0	3	55	0	125
20-year New Trips	0	0	0	0	0	0	0	227	0	0	35	0	262
2045 Build	0	0	8	0	0	0	0	286	0	3	90	0	387

Whitman Dr/Homestead

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	5	0	34	0	0	0	0	42	5	40	30	0	156
2045 No-Build	8	0	52	0	0	0	0	64	8	61	45	0	238
20-year New Trips	1	0	0	0	0	0	0	223	4	0	34	0	262
2045 Build	9	0	52	0	0	0	0	287	12	61	79	0	500

Whitman Dr/Hussey/Academy

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	39	14	32	7	23	2	4	84	42	62	101	8	418
2045 No-Build	59	21	49	11	35	3	6	127	64	94	153	12	634
20-year New Trips	3	0	0	0	0	1	3	184	36	0	30	0	257
2045 Build	62	21	49	11	35	4	9	311	100	94	183	12	891

Whitman Dr/Davis

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	20	0	42	0	0	0	1	124	12	55	173	1	428
2045 No-Build	30	0	64	0	0	0	2	188	18	83	262	2	649
20-year New Trips	2	0	0	0	0	0	1	173	10	0	28	0	214
2045 Build	32	0	64	0	0	0	3	361	28	83	290	2	863

Whitman Dr/College Ave

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	50	181	35	16	184	89	42	115	44	30	104	14	904
2045 No-Build	76	274	53	24	279	135	64	174	67	45	158	21	1370
20-year New Trips	6	0	0	0	0	10	36	99	38	0	12	0	201
2045 Build	82	274	53	24	279	145	100	273	105	45	170	21	1571

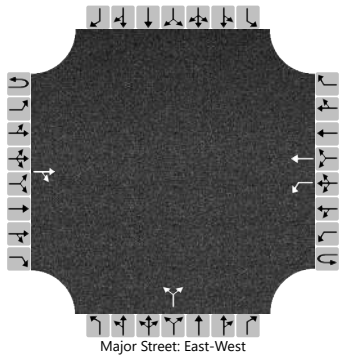
Whitman/New Driveway (busiest one)

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	0	0	0	0	43	0	0	42	0	85
2045 No-Build	0	0	0	0	0	0	0	65	0	0	64	0	129
20-year New Trips	2	0	20	40	0	4	1	85	0	4	25	6	187
2045 Build	2	0	20	40	0	4	1	150	0	4	89	6	316

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	85		30	79			51		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					77					
Capacity, c (veh/h)						1346					702					
v/c Ratio						0.02					0.11					
95% Queue Length, Q_{95} (veh)						0.1					0.4					
Control Delay (s/veh)						7.7					10.8					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.8						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

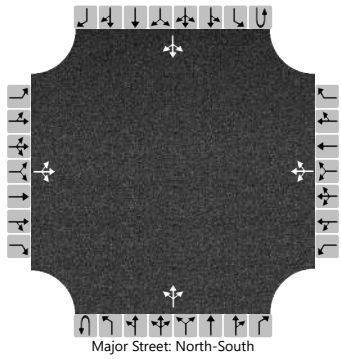
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		43	0	23		0	47	41		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				73			0				22		
Capacity, c (veh/h)			768				792			1478				1490		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
Control Delay (s/veh)			9.7				10.0			7.4				7.5		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.7				10.0				0.0				1.4		
Approach LOS		A				B										

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HCS7 Two-Way Stop-Control Report

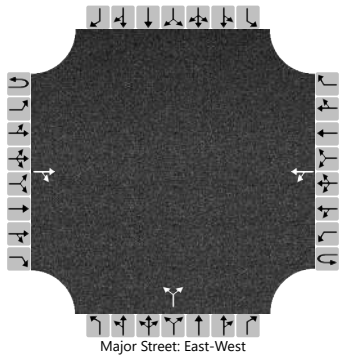
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	2		15	58			9		86				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						17					107					
Capacity, c (veh/h)						1519					966					
v/c Ratio						0.01					0.11					
95% Queue Length, Q_{95} (veh)						0.0					0.4					
Control Delay (s/veh)						7.4					9.2					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						1.6				9.2						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

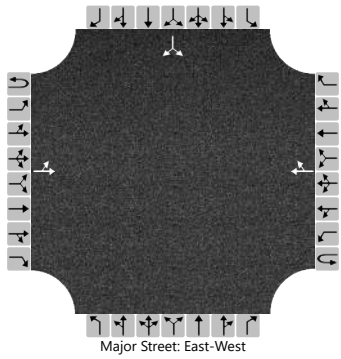
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	288				70	6						6		10
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9													18	
Capacity, c (veh/h)		1507													783	
v/c Ratio		0.01													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.4													9.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.3												9.7			
Approach LOS													A			

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HCS7 Two-Way Stop-Control Report

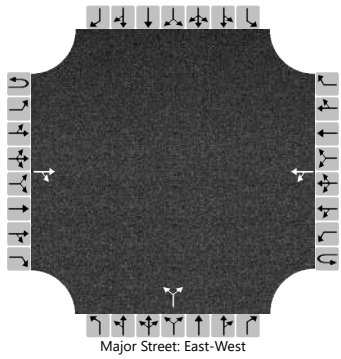
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			286	0		3	90			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1217					703					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						8.0					10.2					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						0.3				10.2						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

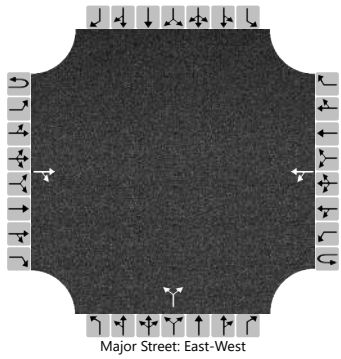
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			287	12		61	79			9		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					75					
Capacity, c (veh/h)						1184					625					
v/c Ratio						0.06					0.12					
95% Queue Length, Q_{95} (veh)						0.2					0.4					
Control Delay (s/veh)						8.2					11.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						3.9				11.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

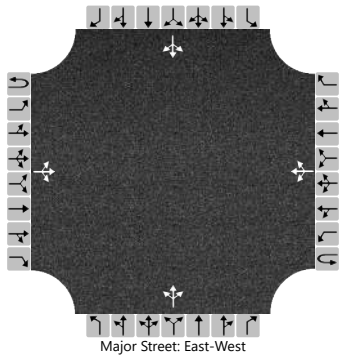
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	311	100		94	183	12		62	21	49		11	35	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				104					147				56	
Capacity, c (veh/h)		1347				1099					301				250	
v/c Ratio		0.01				0.10					0.49				0.22	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.5				0.8	
Control Delay (s/veh)		7.7				8.6					27.9				23.5	
Level of Service (LOS)		A				A					D				C	
Approach Delay (s/veh)	0.2				3.4				27.9				23.5			
Approach LOS									D				C			

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HCS7 Two-Way Stop-Control Report

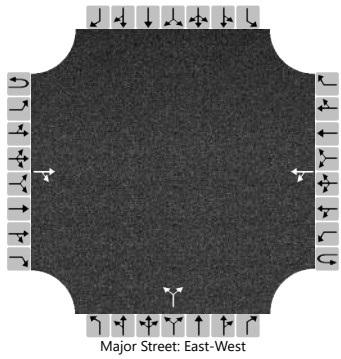
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			361	28		83	290			32		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					114					
Capacity, c (veh/h)						1093					405					
v/c Ratio						0.09					0.28					
95% Queue Length, Q_{95} (veh)						0.3					1.1					
Control Delay (s/veh)						8.6					17.4					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)						2.7				17.4						
Approach LOS										C						

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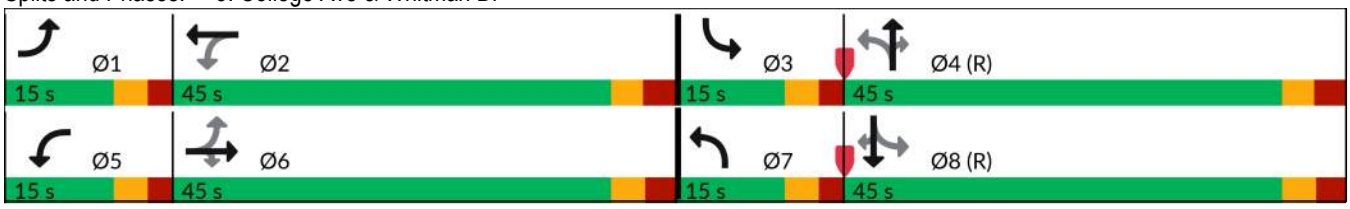
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Future Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.983				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1831	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.408			0.334			0.468			0.560		
Satd. Flow (perm)	760	1863	1583	622	1831	0	872	1863	1583	1043	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	297	114	49	185	23	89	298	58	26	303	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	297	114	49	208	0	89	298	58	26	303	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	35.0	26.7	26.7	31.3	22.9		70.0	63.8	63.8	64.4	57.6	57.6
Actuated g/C Ratio	0.29	0.22	0.22	0.26	0.19		0.58	0.53	0.53	0.54	0.48	0.48
v/c Ratio	0.36	0.72	0.26	0.21	0.59		0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
LOS	C	D	A	C	D		B	C	A	B	C	A
Approach Delay (s/veh)		38.4			44.3			16.1			17.6	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	297	114	49	208	89	298	58	26	303	158
v/c Ratio	0.36	0.72	0.26	0.21	0.59	0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Length 50th (ft)	61	219	0	26	144	28	135	0	8	142	15
Queue Length 95th (ft)	92	290	40	48	199	64	244	0	25	261	66
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	304	610	599	266	602	587	989	897	649	894	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.19	0.18	0.35	0.15	0.30	0.06	0.04	0.34	0.19

Intersection Summary

HCS7 Two-Way Stop-Control Report

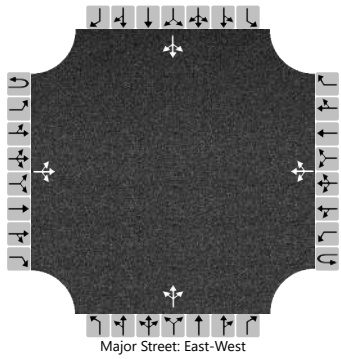
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	3/5/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/New Driveway
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	New Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	150	0		4	89	6		2	0	20		40	0	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				4					24				49	
Capacity, c (veh/h)		1479				1405					850				660	
v/c Ratio		0.00				0.00					0.03				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.4				7.6					9.4				10.9	
Level of Service (LOS)		A				A					A				B	
Approach Delay (s/veh)		0.1				0.3				9.4				10.9		
Approach LOS										A				B		

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Appendix 5

Economic Analysis

2025

Market Feasibility

MARTIN AIRFIELD

An analysis conducted by: TheMettsGroup

Prepared for: CP COLLEGE PLACE WALLA WALLA VALLEY

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Purpose

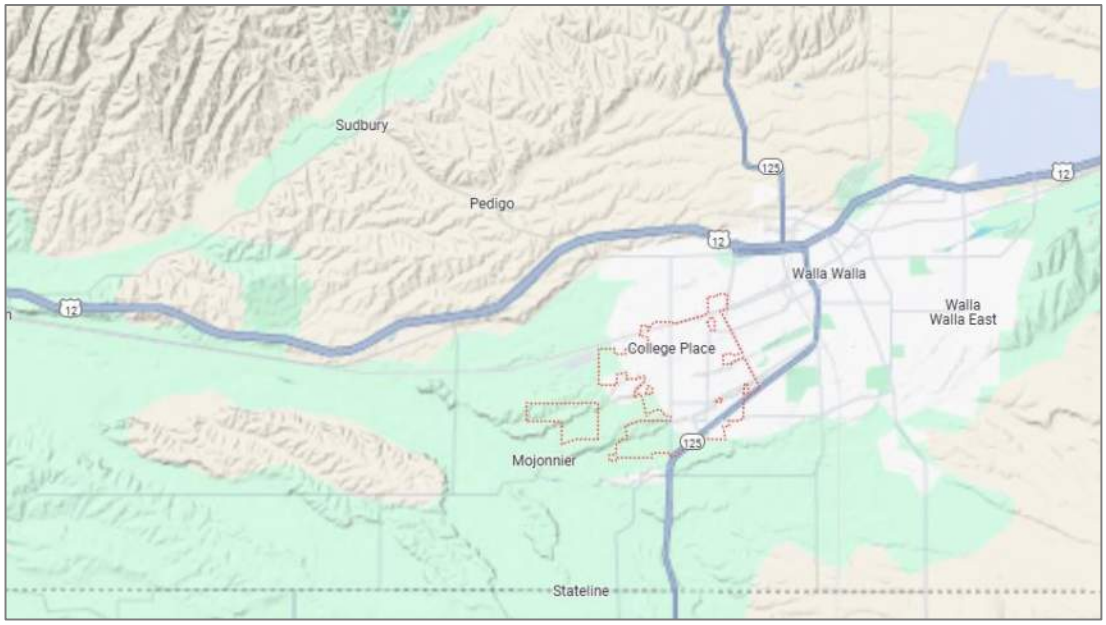
The purpose of this study is to analyze market feasible light industrial uses for the 233-acre site around Martin Airfield and bordered by Whitman Drive to the north, Hampton Lane to the west, Homestead Acres Subdivision to the east, and a bluff to the south. This study conforms to the minimum threshold criteria established by the Washington State Community and Economic Revitalization Board for potential grant funding opportunities.

The following outlines the scope within the above objectives:

1. Interview key stakeholders to gather and review pertinent project background data.
2. Assess the locational characteristics of the site relative to the industrial market.
3. Perform Market analysis for the site
4. Perform Job Benefit Analysis
5. Evaluate the overall City of College Place area economic outlook for industrial real estate development.
6. Conduct interviews with selected key persons in the College Place catchment area knowledgeable of demand potentials by various industrial uses (e.g. complementary agricultural processing/supplier needs, light manufacturing, warehouse distribution, flex space, etc.).
7. Identify and evaluate potentially competing sites and corresponding industrial uses.
8. Analyze which target industries may be located at the site.
9. Recommend specific companies that should be targeted to prospective tenants.
10. Forecast the economic impacts to the City of College Place if the site is fully tenanted with the prescribed potential industrial users.
11. Recommend a project marketing strategy for the site.
12. Prepare a corresponding Economic Feasibility Analysis and marketing strategy for the site.

Location

College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.



Economy Overview

The population of College Place is estimated at 9,945, reflecting a modest growth of 0.4% from 2020 to 2024. Population growth trends for both College Place and Walla Walla County show similar growth trends, with a sharp decline around 2022 in College Place, followed by gradual stabilization. Workforce characteristics indicate a labor force participation rate of 59%, which is below the national average of 63.5%. Additionally, 10% of the workforce consists of remote workers, and 71% of residents have some college education or higher, suggesting a relatively educated workforce.

Population

9,945

0.4% ⇧

(2020-2024 est.)

Workforce Characteristics

59%

Labor Force Participation Rate
(63.5% U.S.)

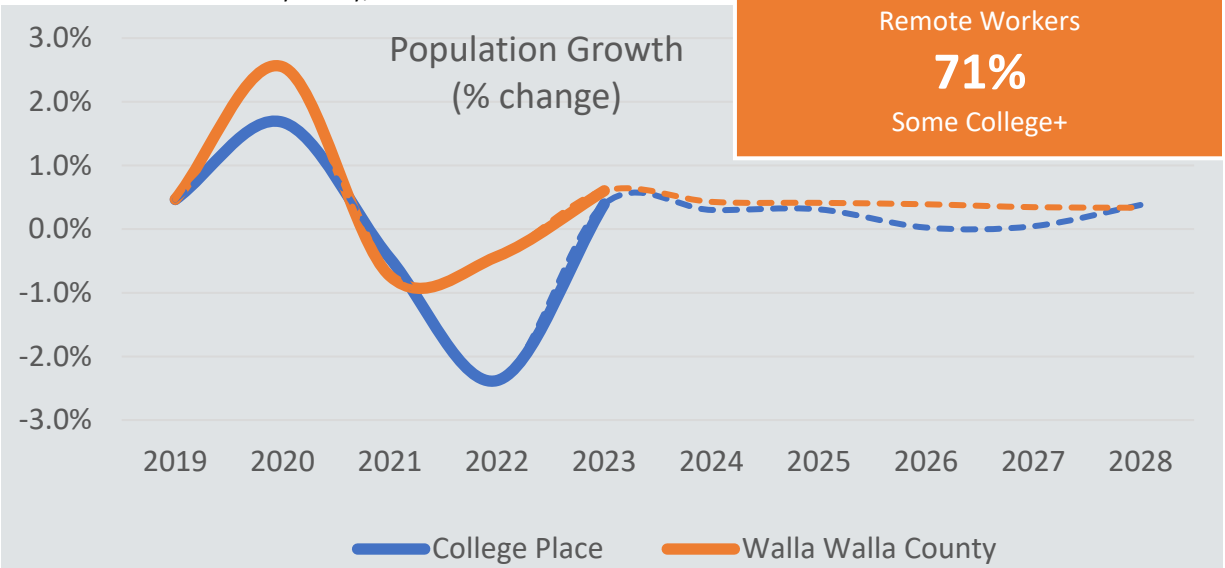
10%

Remote Workers

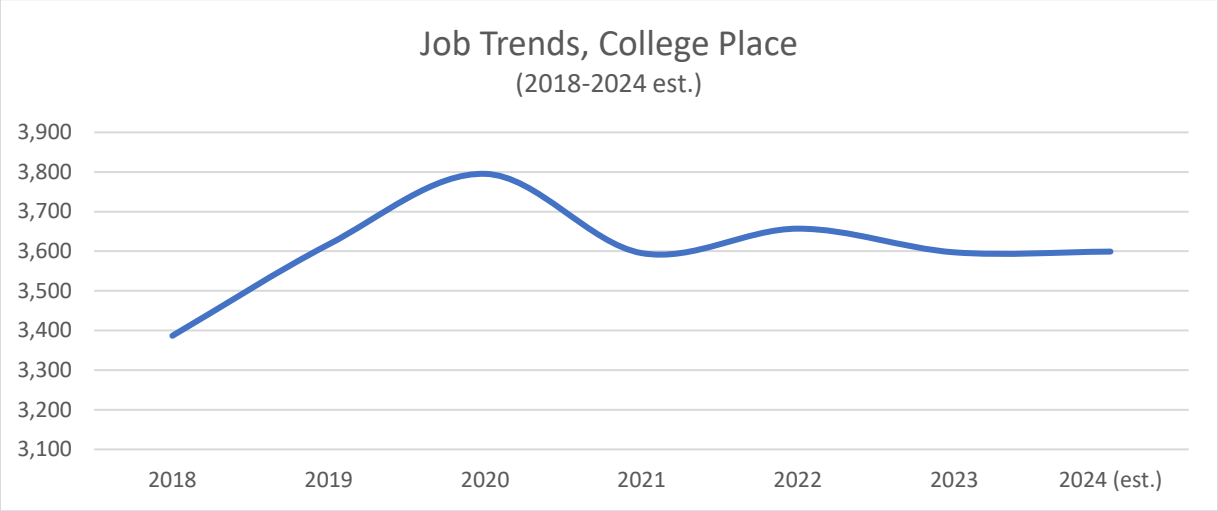
71%

Some College+

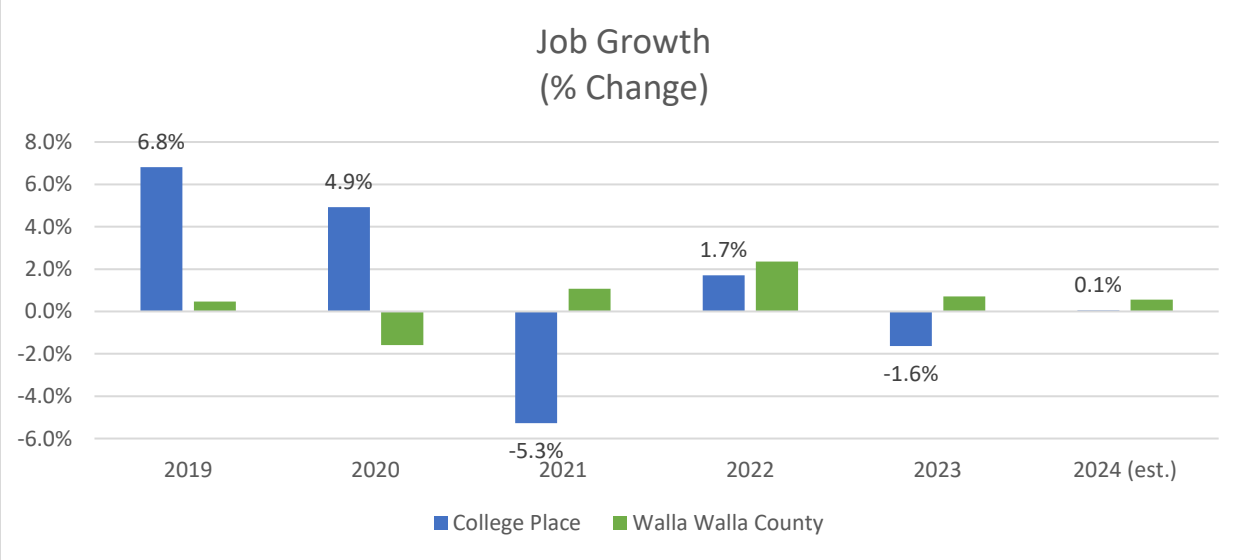
Source: American Community Survey, 5-Year Estimates



The job market in College Place is still recovering from the pandemic. Between the peak in 2020 and the trough in late 2021, approximately 200 jobs were lost within the 99324 ZIP code, representing a 5.3% decline.



Source: Lightcast, QCEW, Non-QCEW, Self-employed



Source: Lightcast, QCEW, Non-QCEW, Self-employed

The largest contributing industries include government (primarily higher education), retail trade, accommodation and food services, health care, and finance and insurance. Government employment dominates the local labor market, followed by educational services, indicating the area's strong ties to public institutions and higher education. Retail and health care also play significant roles, supporting both local consumption and essential services.

The region's Gross Regional Product (GRP) stands at $417 million, accounting for 10% of the County's total economic output. The primary industries driving GRP are government, finance and insurance, retail, educational services, and health care. The data suggests a stable economy with growth in key service-oriented sectors, reinforcing the importance of education, health care, and retail as economic pillars.

GRP

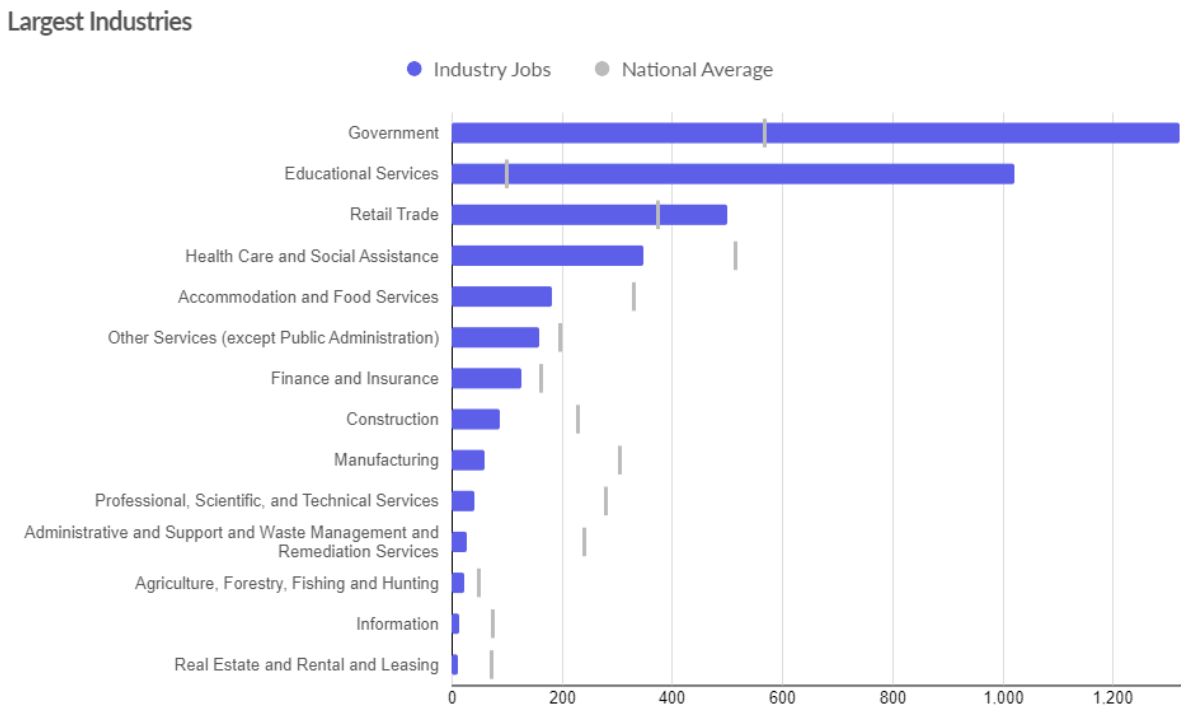
$417M

(10% of County)

Largest Contributing Industries:

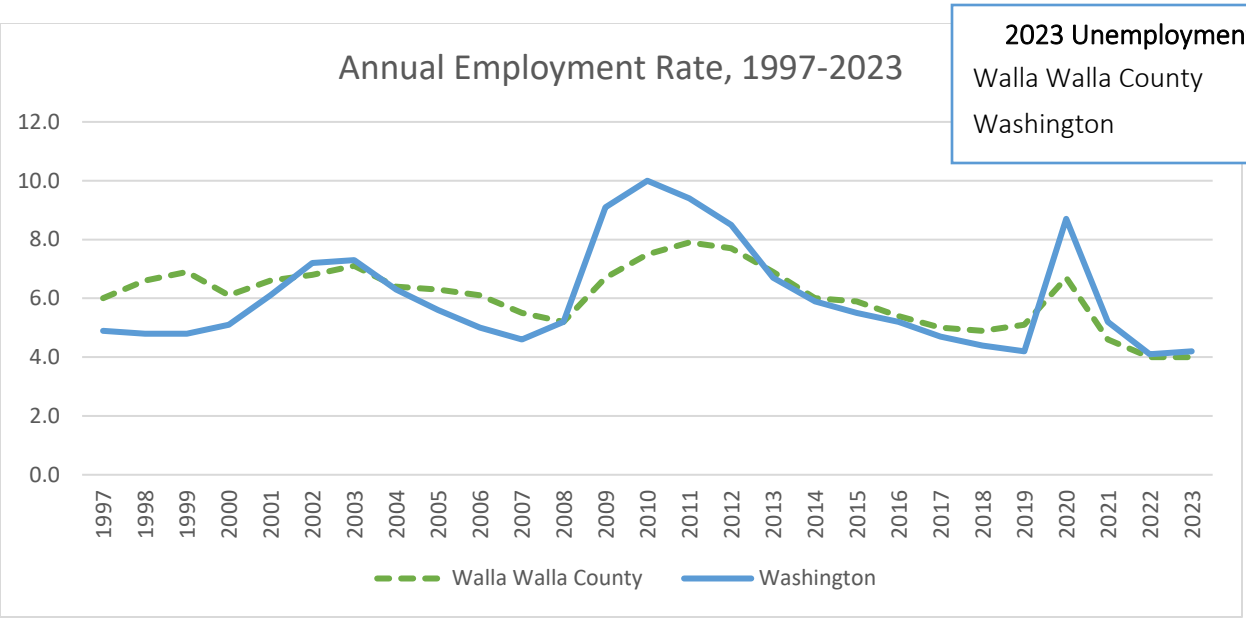
- Government
- Finance & Insurance
- Retail
- Educational Svcs
- Health Care

Source: Lightcast, College Place (zip code 99324)



Source: Lightcast, QCEW, Non-QCEW, Self-employed for College Place (zip code 99324)

The unemployment rate in Franklin County remains higher than the state, by 2.1 percentage points. The 2019 annual unemployment rate—the most recent annual number at the time of this report—in Franklin County was 6.4%, compared to 4.3% statewide and 3.7% for the nation.



2023 Unemployment Rate	
Walla Walla County	4.0%
Washington	4.2%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics program

According to the Bureau of Labor Statistics' Occupational Employment and Wage Statistics, the median hourly wage in Walla Walla County was $23.04 as of the latest available data (May 2023). Walla Walla County continues to trail the state in wages—20% below the state average.

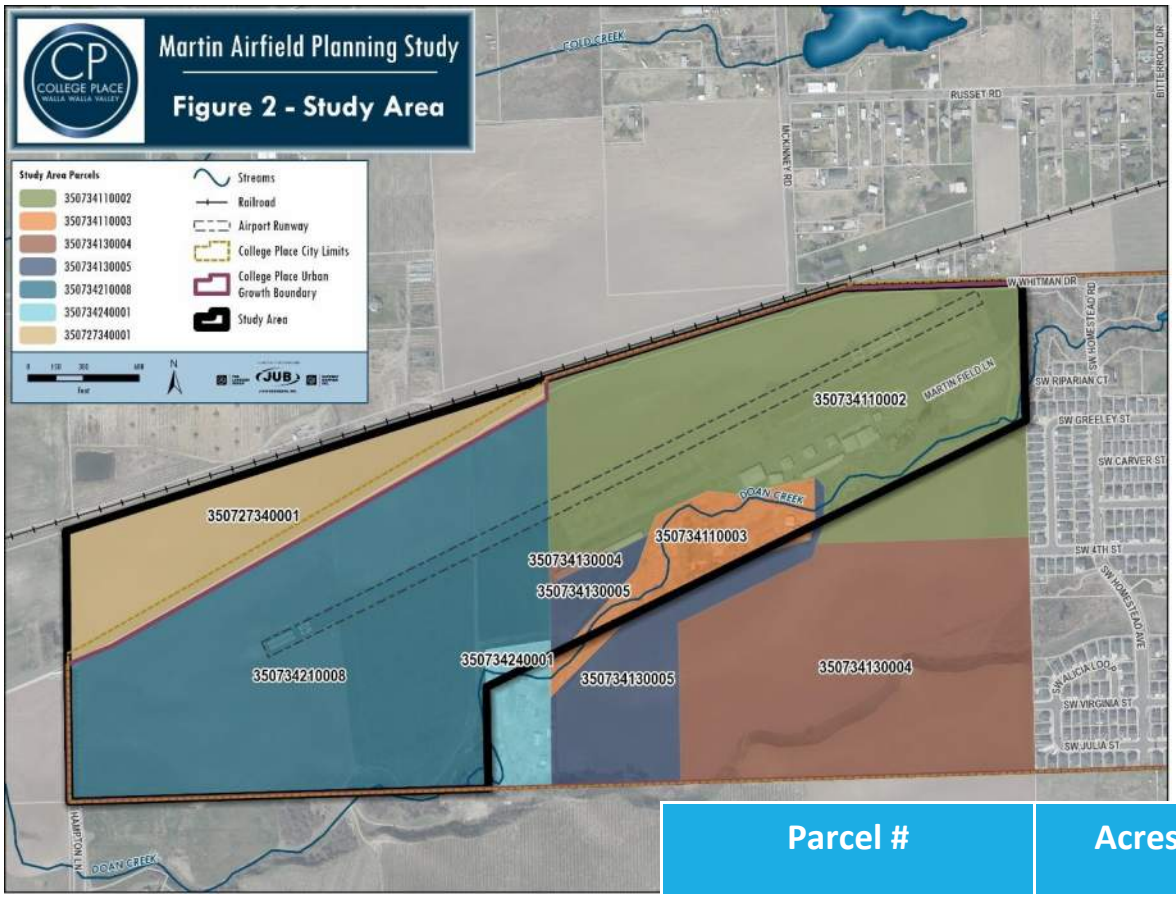
Median Hourly Wage

$23.04
(Walla Walla County)

$28.81
(Washington)

Commercial Real Estate Snapshot

The City of College Place only has three acres of active light industrial land. The project area consists of six (6) light industrial zoned parcels, totaling 233 acres.



Parcel #	Acres
350734210008	79.83
350734240001 (private)	6.61
350734130005	19.82
350734130004	54.58
350734110002	62.60
350734110003	10.00
Total	233.44

Industrial Inventory

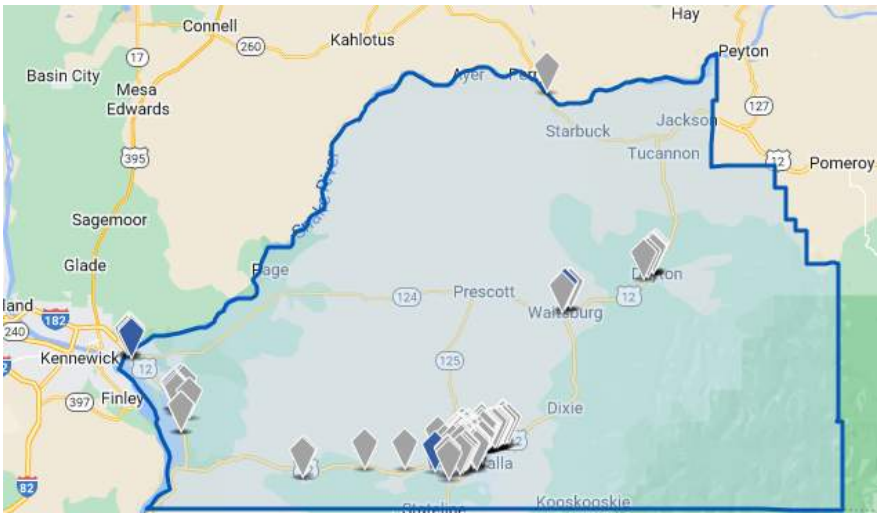
Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

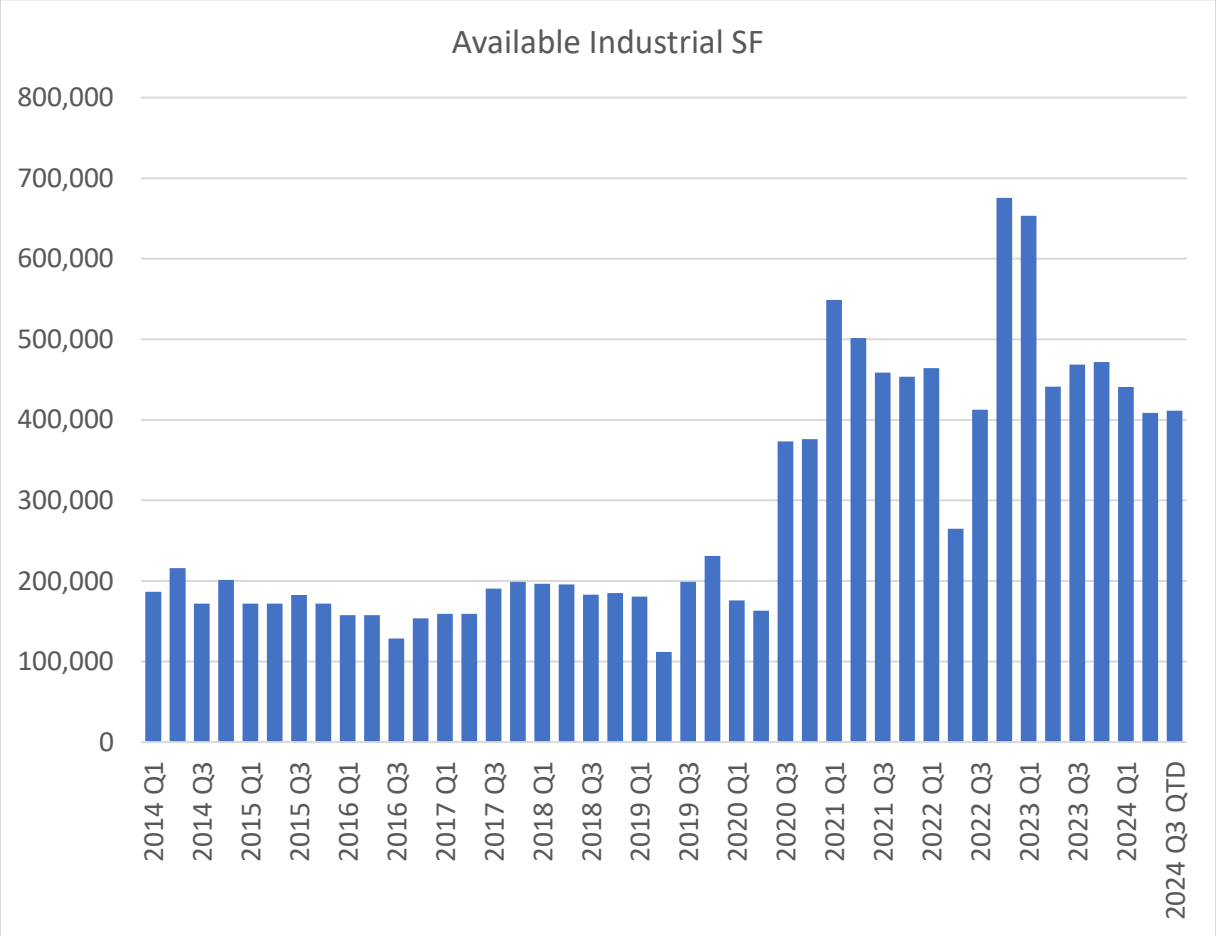
4.6M SF
inventory

411,260 SF
available space

5.6%
vacancy rate

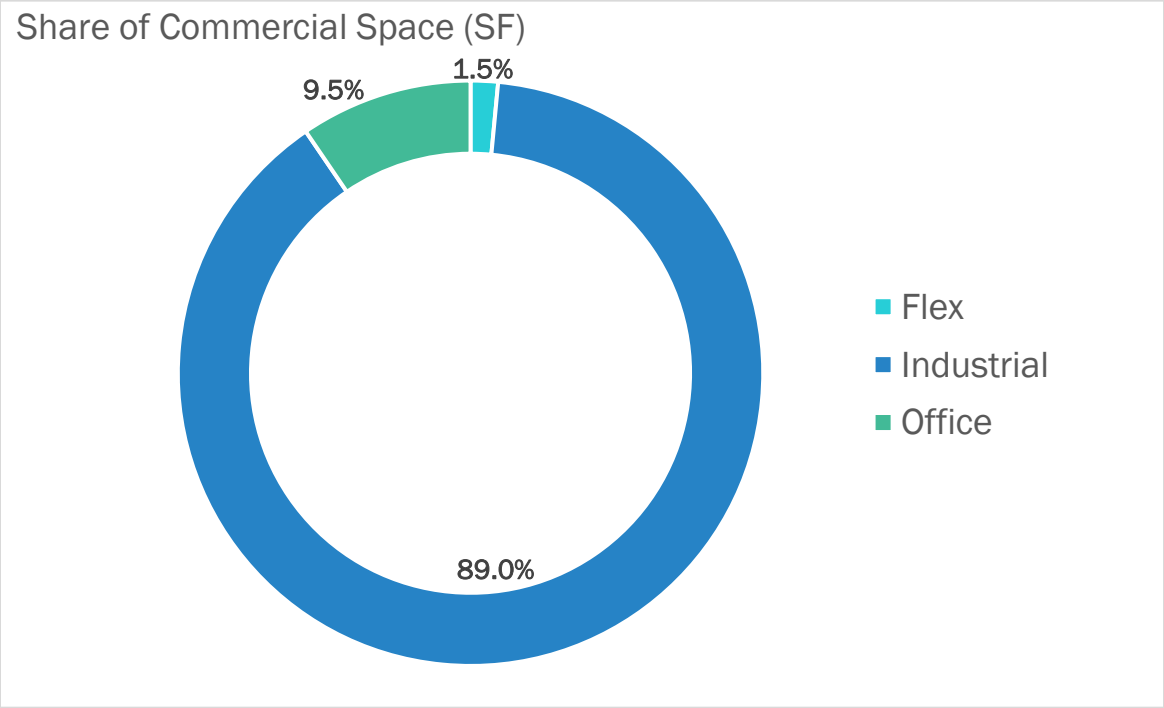
$8.71/SF
rental rate

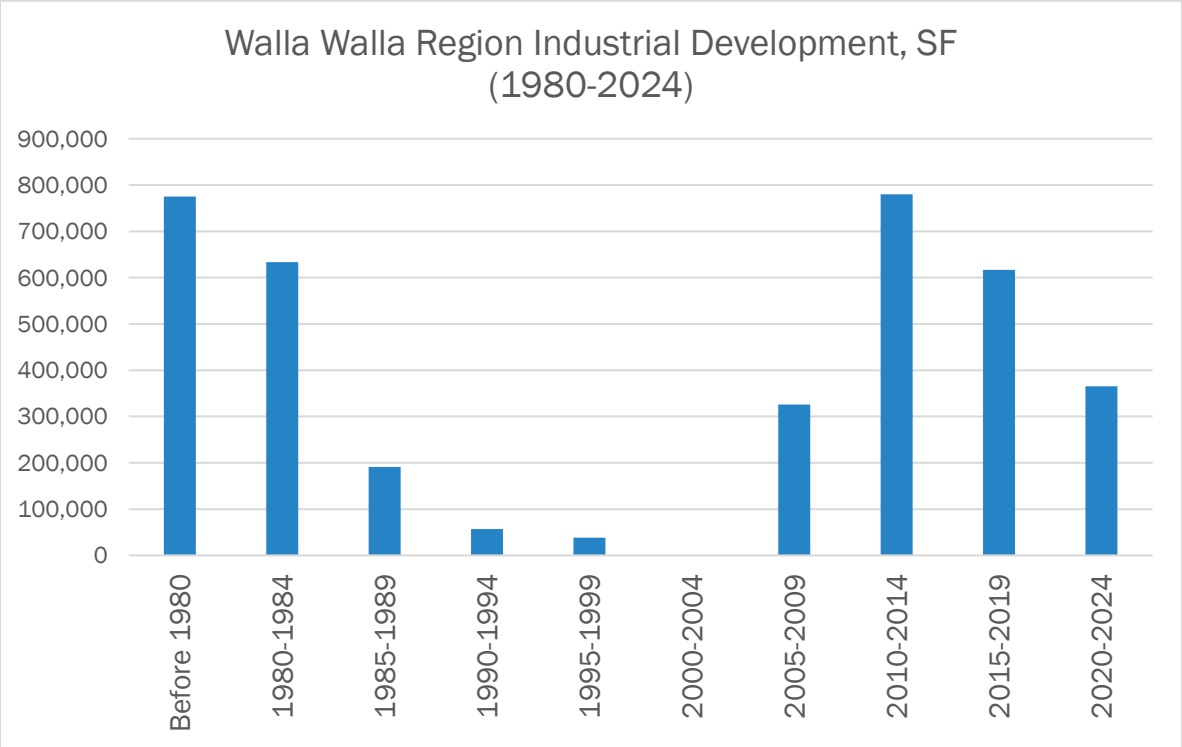




Source: Costar

Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

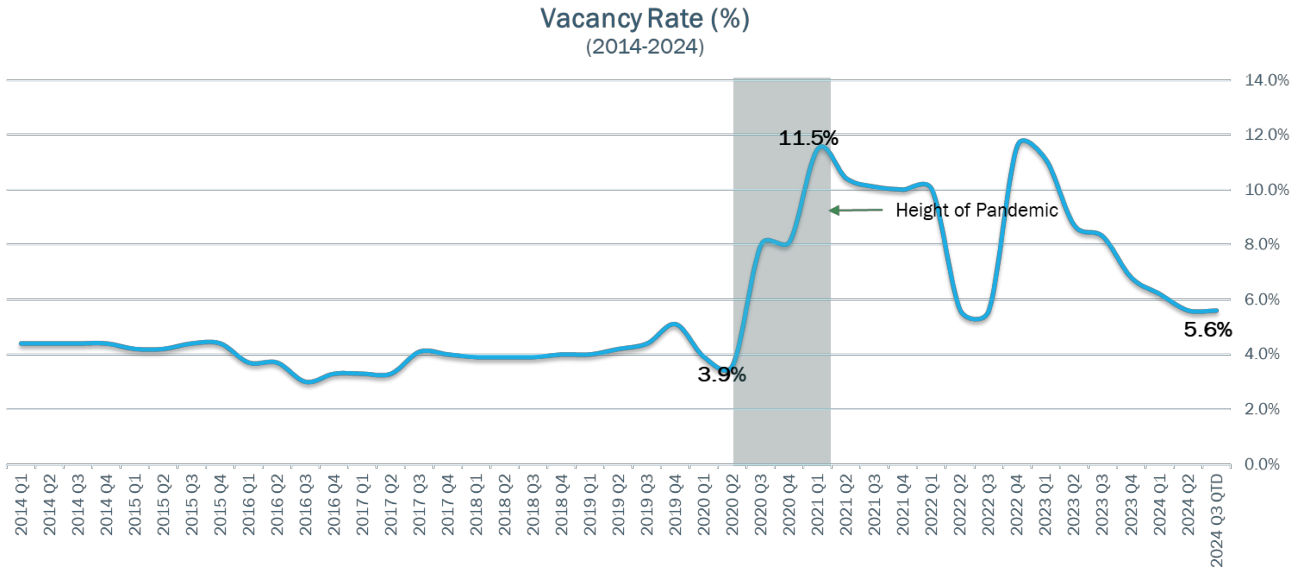




Source: Costar

Industrial Performance

Vacancy rates in the Walla Walla region are currently slightly above average at 5.6%. However, this is a significant improvement from the pandemic peak of 11.5%. Before the pandemic, vacancy rates typically ranged between 3% and 4%.

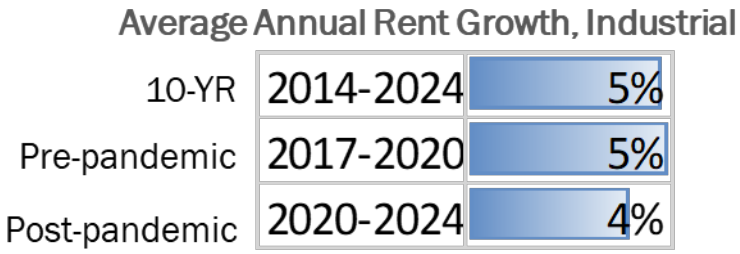


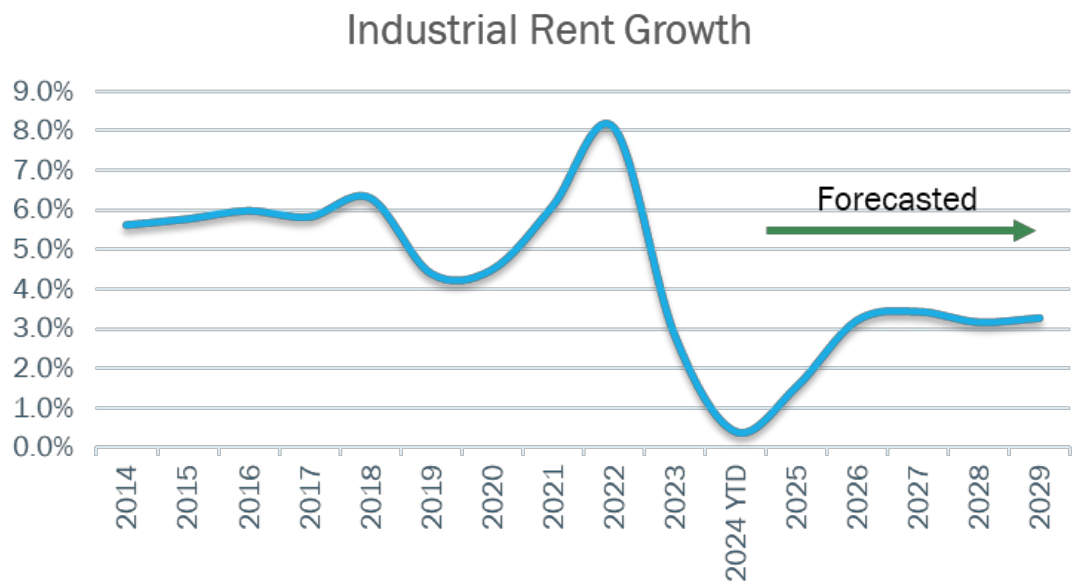
Source: Costar, Authors calculations

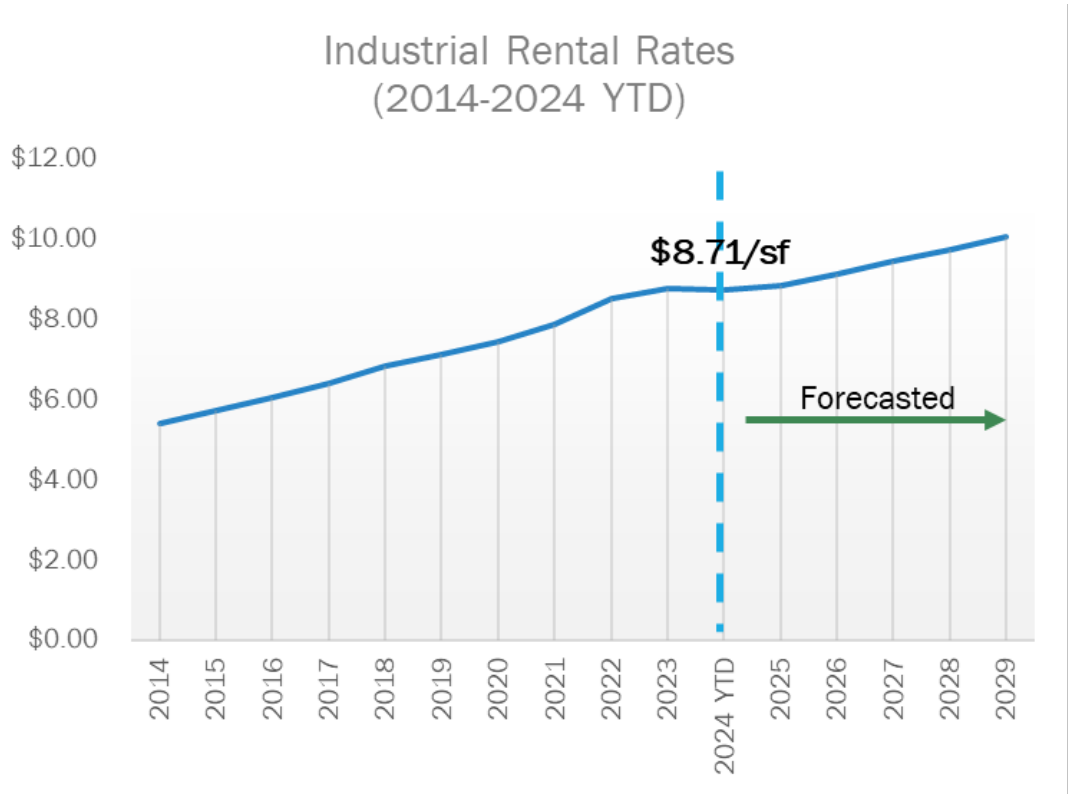
Rent growth for both industrial and office space has maintained a steady trajectory, defying the challenges posed by the pandemic.

While there was a slight deceleration in rent growth for office space during the pandemic, it managed to persevere and return to pre-pandemic levels of growth. In contrast, industrial rental rates continued their upward trend at a commendable pace.

This sustained growth, coupled with the constrained supply of new commercial inventory and low vacancy rates, underscores the demand for commercial space in Ellensburg.



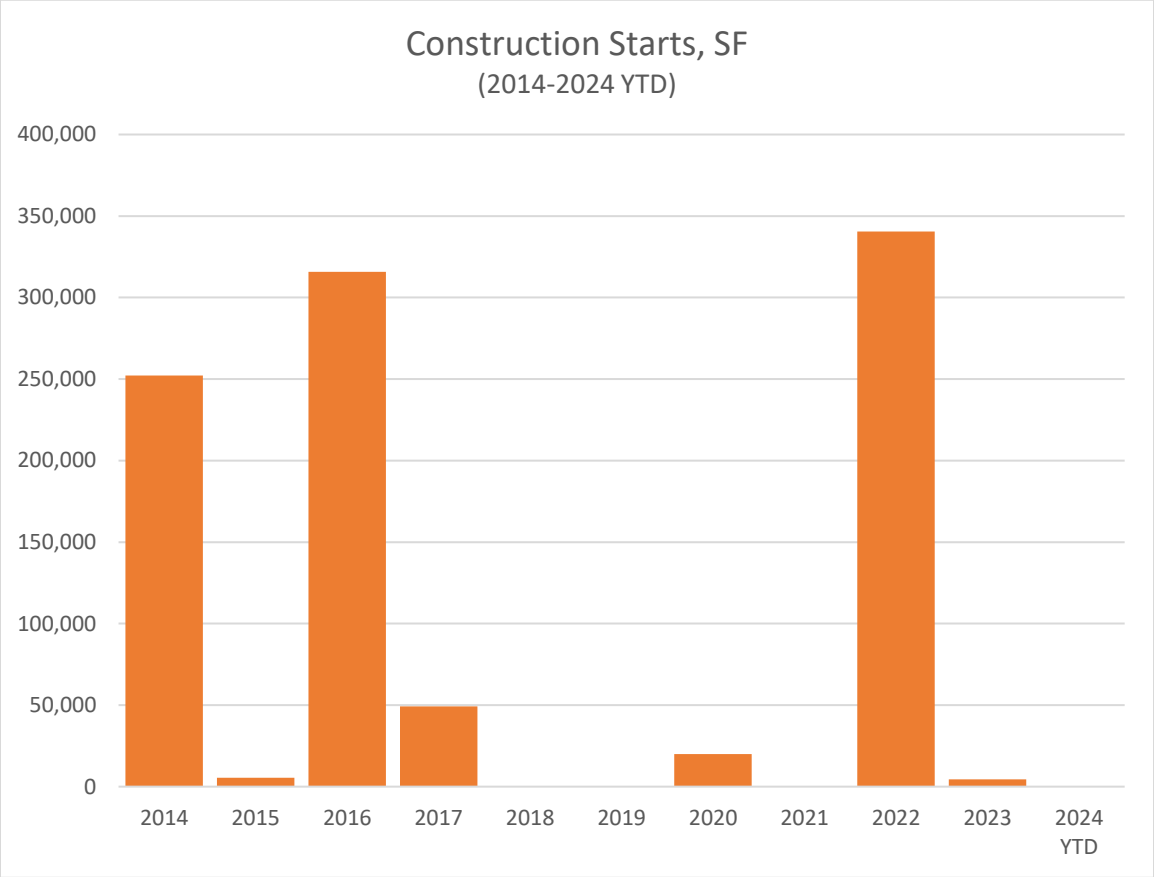




Source: Costar, Authors calculations

Industrial Pipeline

Based on information from Costar, there is 223,720 SF of industrial space under construction in the Walla Walla region. Majority of this activity started in 2022 and is anticipated to hit the market by 2025.



Source: Costar

Competing Sites

Address	City	Year Built	Building SF	Acres (Land only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Industrial Market Potential

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

Industry and Supply Chain Gap Analysis

An industry and supply chain gap analysis was conducted to determine the businesses and industry sectors that offer the most potential for growth around the region. This data was then ground-truthed with interviews from major businesses in the area, potential businesses, and other industry experts and stakeholders.

This analysis was assessed by four critical factors and conducted at the MSA level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 mark but showing job loss, were deemed "*Important and Requiring Attention*," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Industry Health Check

Agriculture and food processing remain central to the local economy, with crop production, food manufacturing, and beverage product manufacturing serving as core industries. The presence of these sectors suggests strong opportunities for value-added agriculture, food processing, and supply chain expansions such as packaging, cold storage, and distribution. Additionally, the region's healthcare sector, led by hospitals and social assistance, indicates an ongoing demand for medical services, elder care, and workforce training in healthcare-related fields. Retail and trade are also significant, with merchant wholesalers (nondurable goods) and sporting goods and hobby retailers playing a role in the local economy, pointing to potential growth in specialty retail and recreational markets.

To capitalize on these strengths, strategic investments should focus on targeted food and beverage processing infrastructure, support for healthcare workforce development, and logistics and wholesale distribution enhancements. Expanding retail and recreation offerings could further stimulate economic activity, particularly in outdoor and lifestyle industries.

Several industries are gaining traction in College Place, indicating new opportunities in construction, healthcare, professional services, and logistics. The construction sector, including building material supply dealers, specialty trade contractors, and construction of buildings, reflects increased demand for residential and commercial development. This growth underscores the need for real estate investment, workforce training in skilled trades, and green building technologies.

The expansion of ambulatory healthcare services points to a growing need for urgent care facilities, specialized outpatient clinics, and home health services, while repair and maintenance services highlight demand for auto repair, equipment servicing, and facility management. The rise of professional, scientific, and technical services, including computer systems design, engineering, custom programming, and R&D, suggests an increasing focus on technology-driven economic diversification. Encouraging the growth of tech startups, cybersecurity firms, and engineering consultancies could strengthen the region's innovation ecosystem.

Additionally, insurance carriers and durable goods wholesalers signal potential for expanded finance and logistics services, supporting regional supply chains and commercial trade. Investing in warehouse and distribution infrastructure could further position College Place as a logistics hub, particularly for durable goods related to agriculture, construction, and manufacturing.

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

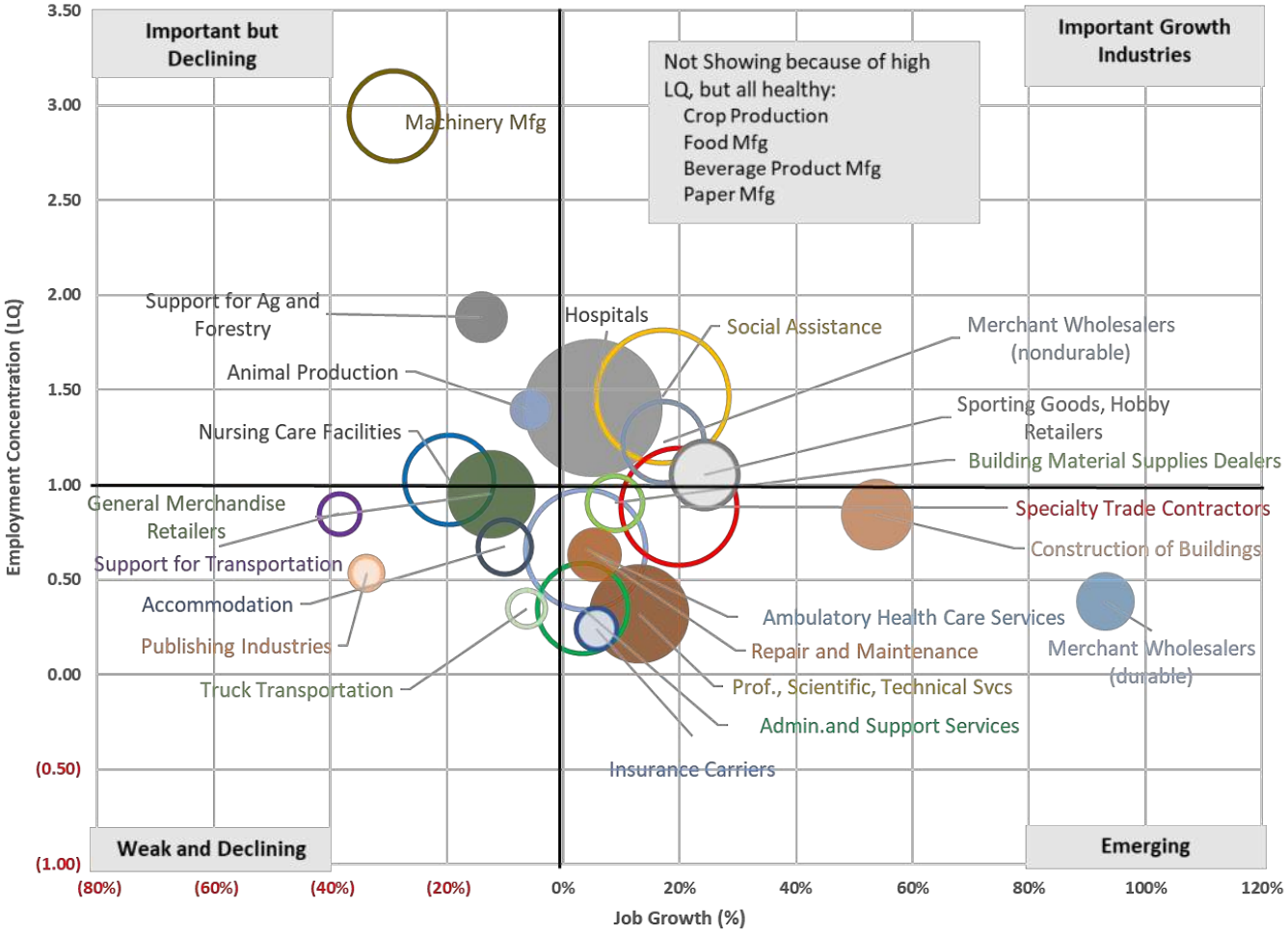
- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

Industry Health Check



Additionally, the following key sectors are driving the success of major employers in the region. By leveraging these industries, there is an opportunity to strengthen and expand local supply chains, attract complementary businesses, and enhance regional competitiveness through targeted infrastructure investments and workforce development.

Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

Potential Uses

Following the industry and supply chain gap analysis, we conducted interviews with local and regional businesses, higher education institutions, and key stakeholders to gather input on potential uses and validate the summarized data.

Based on the above analysis and insights gathered from interviews, the following uses were identified as having the greatest potential for the 233-acre site.

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
- R&D or Professional & Technical Services
- Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
- Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

Site Building Capacity

The following potential buildout scenario was estimated based on the potential uses identified in the analysis above, combined with industry standards for land requirements for different types of industrial facilities, focusing on site usage, building size, and ground coverage ratios. For each industry, the data outlines the percentage of the site utilized, the typical building square footage, and the corresponding potential number of buildings that could be accommodated on a given site. The total acreage potential across all industries is roughly 28 acres, with an average of 4 acres per building.

Use	% of Site	Ground Coverage Ratio	Typical Building SF (industry standard)	Potential Number of Buildings	Acres per Bldg	Typical Range (small to medium)
Wholesalers	25%	50%	50,000	6.7	4.6	2-5 acres
Truck Transportation	15%	30%	25,000	2.9	6.4	2-5 acres
Manufacturing	20%	50%	50,000	5.3	4.6	2-5 acres
Food Processing	15%	40%	50,000	2.6	7.2	2-5 acres
Lab & Testing Facilities	10%	30%	15,000	3.2	3.8	0.5-2 acres
R&D	15%	30%	10,000	7.2	2.6	0.5-2 acres
Total	100%			28	4	

Impacts

Economic impact analyses are used to estimate the overall economic activity, including spill-over and multiplier impacts, which occurs as a result of a particular business, development or event.

The economic activity related to the Martin Airfield site is the millions of dollars of goods and services purchased from local vendors and the wages and benefits paid to local workers. This initial injection of funds circulates to the business owners and employees that supply the materials, goods and services needed for the development. These contractors, businesses and households continue the economic ripple effect by hiring workers and buying goods and services to facilitate their business.

This analysis breaks down the overall project based on the results from the industry analysis and interviews. The project site layout will be further vetted by JUB Engineers based on infrastructure needs and requirements.

Once the development is completed and occupied, commercial activity and new residential households will spend millions of dollars annually in the course of their daily activities. This recirculation of the original expenditures multiplies their impact through these indirect and induced effects.

The extent to which the initial expenditures multiply is estimated using economic models that depict the relationships between industries and firms and their employees. These models are built upon expenditure patterns that are reported to the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Bureau of Economic Analysis. Data is regionalized so that it reflects and incorporates local conditions such as average wages, expenditure patterns and resource availability and costs.

The multipliers used in this analysis were generated by IMPLAN in coordination with the U.S. Bureau of Economic Analysis' RIMS II multipliers. Where appropriate, conservative estimates were used.

To further delineate, below are brief definitions of the three typical types of impacts.

> ***Direct impacts***: derive directly from an activity or event (first round supply chain)
>
> ***Indirect impacts***: generated as a result of business-to-business transactions (second tier supply chain)
>
> ***Induced impacts***: generated as a result of consumer-to-business transactions (a result from consumer spending)

Direct impacts are those economic impacts that occur as a consequence of direct activity and employment provided by the businesses that support the area, other businesses and government agencies that provide a range of related support services.

Indirect impacts are generated as a result of business-to-business transactions and induced impacts are a result of consumer-to-business transactions.

The economic impact results should be interpreted as those that are *attributable* to the proposed development at the subject site rather than assuming the new development will *generate* such new activities.

Given the desirable industries that have the potential of fulfilling existing business supply chain needs and interviews from industry experts, there is potential for several different users at this site. The impacts summarized below are indicative of different users in the identified industries, as outlined in the section above. The median wage for proposed jobs in these industries is $40.36 per hour in Walla Walla County, driven upward by manufacturing, lab and R&D positions. This is **72% higher than the CERB median hourly wage** of $23.04 for the County. Truck transportation and warehousing average $30.56 per hour, still above the median hourly wage for the County.

The 687 direct jobs estimated to be created at full build-out is expected to increase the labor force in Walla Walla County—assuming that some workers will reside in Walla Walla County. A small portion will most likely reside outside the area and, therefore, positively impacting their labor force numbers as well.

Impact on Jobs						
Impact on Jobs	Buildout Scenario					Total
	MFG	Truck Transp.	Wholesalers	Lab & Testing Facilities	R&D	
TOTAL JOBS	494	33	239	124	228	1,118
Direct	317	23	107	96	144	687
Indirect + Induced	177	10	132	28	84	430
SUBTOTAL	***494***	***33***	***239***	***124***	***228***	***1,118***

Source: Author's calculations using multipliers from IMPLAN; rounds to nearest thousand

Table 1. Labor Force Impacts as a result of Jobs Directly Created (687 new direct jobs)

Walla Walla County	Current	Impact from Direct Jobs	Percent Change
Labor Force	27,255	28,373	4.1%
Unemployed	1,357	239	-82.4%

[1]assuming that people that fill these jobs will reside in Walla Walla County (labor force data is based on "place of residence" and not place of work). Based on the current 5.0% unemployment rate (Jan 2025)
Source: Author's calculations based on BLS data

Conclusion

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

To support these emerging industries, incentives and policy strategies should focus on workforce development, business incubation, and infrastructure investment. Strengthening construction and trade workforce training programs can address the rising demand for skilled labor. Tech and business services growth could be encouraged through business incubators, coworking spaces, and startup funding for IT and cybersecurity firms. Expanding healthcare services and insurance offerings will be crucial in meeting the needs of a growing population. Finally, the development of logistics and wholesale trade infrastructure could enhance College Place's role as a regional distribution center.

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 City track the metrics set forth, and required by CERB, to determine if the desired outcomes are achieved and to help guide future development projects.

Overall, College Place is well-positioned for economic expansion through a combination of industrial diversification, strategic investments, and workforce development initiatives. By leveraging its strong agricultural base, growing healthcare sector, and emerging technical and construction industries, the region can sustain long-term economic growth and resilience.

Appendix 6

Detailed Cost Estimates

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Roads**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$176,000
2.00	**Traffic Control**			5.0%	$110,000
3.00	Crushed Surface Base Course	6,121	Tons	$35	$214,235
4.00	Crushed Surface Top Course	5,226	Tons	$35	$182,910
5.00	HMA CL 1/2" PG 64-28	3,983	Tons	$150	$597,450
6.00	Cement Conc. Traffic Curb and Gutter	8,138	LF	$25	$203,450
7.00	Cement Conc. Sidewalk	5,424	SY	$60	$325,440
8.00	Streetlights (includes wiring, J-Boxes, etc.)	27	EA	$7,500	$202,500
9.00	Street Trees	136	EA	$500	$68,000
10.00	Irrigation	1	LS	$100,000	$100,000
11.00	Stream Crossing - Does Not Include Row Acquisition For House	1	LS	$250,000	$250,000
12.00	Paint & Signage	1	LS	$50,000	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 2,480,000**
	Contingency [1]				**$ 744,000**
	City of College Place Sales Tax (8.8%)				**$ 284,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 877,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 4,385,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Earthwork**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$22,000
2.00	**Traffic Control**			5.0%	$14,000
3.00	Earthwork, Grading Site	8,000	CY	$30	$240,000
4.00	Clearing and Grubbiong	5	ACRE	$5,000	$25,000
5.00	Asphalt Pavement Restoration		SY	$70	$0
6.00	Hydroseeding	2	ACRE	$5,000	$10,000
7.00	Silt Fence		LF	$5	$0
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 311,000**
	Contingency [1]				**$ 93,000**
	City of College Place Sales Tax (8.8%)				**$ 36,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 110,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 550,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	2/11/2025 30-24-031
ITEM:	Sewer Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$302,000
2.00	**Construction Traffic Control**			0.0%	$0
3.00	**Gravity Sewer Pipe**				
3.01	4" PVC Gravity Sewer Service Lateral	1,165	LF	$27	$31,455
3.02	8" PVC Gravity Sewer Service Lateral		LF	$41	$0
3.03	6" PVC Gravity Sewer Pipe		LF	$40	$0
3.04	8" PVC Gravity Sewer Pipe	7,400	LF	$47	$347,800
3.05	10" PVC Gravity Sewer Pipe		LF	$56	$0
3.06	12" PVC Gravity Sewer Pipe		LF	$67	$0
3.07	16" PVC Gravity Sewer Pipe		LF	$81	$0
3.08	18" PVC Gravity Sewer Pipe		LF	$98	$0
3.09	21" PVC Gravity Sewer Pipe		LF	$127	$0
3.10	24" PVC Gravity Sewer Pipe		LF	$152	$0
3.11	30" PVC Gravity Sewer Pipe		LF	$188	$0
3.12	36" PVC Gravity Sewer Pipe		LF	$238	$0
3.13	Bedding and Foundation Material	8,565	LF	$15	$128,475
3.14	Sewer Service Line Connection	29	EA	$500	$14,500
4.00	**Gravity Trench Excavation/Backfill**				
4.01	4-10 ft.	3,450	LF	$43	$148,350
4.02	10-16 ft.	5,115	LF	$74	$378,510
4.03	16-20 ft.		LF	$104	$0
4.04	20-24 ft.		LF	$135	$0
4.05	24-28 ft.		LF	$168	$0
4.06	28-30 ft.		LF	$207	$0
4.07	Import Backfill and Foundation Material	16,597	CY	$40	$663,880
5.00	**Surface Repair**				
5.01	Hydroseed		LF	$15	$0
5.02	Natural Ground	8,565	LF	$25	$214,125
5.03	Gravel Roadway		LF	$30	$0
5.04	Asphalt - Trench Patch Width per City Standards (Required for 4-16' Depth Sewer)		LF	$39	$0
5.05	Asphalt - 1/2 Street Width per City Standards (Required for 16-20' Depth Sewer)		LF	$160	$0
5.06	Asphalt - Full Street Width per City Standards (Required for 20-30' Depth Sewer)		LF	$319	$0
6.00	**Manholes**				
6.01	48" Manholes, 4-10 ft.	10	EA	$5,400	$54,000
6.02	48" Manholes, 10-16 ft.	14	EA	$5,900	$82,600
6.03	48" Manholes, 16-20 ft.		EA	$6,400	$0
6.04	60" Manholes, 20-24 ft.		EA	$12,650	$0
6.05	60" Manholes, 24-28 ft.		EA	$13,400	$0
6.06	60" Manholes, 28-30 ft.		EA	$13,750	$0
7.00	**Lift Stations**				
7.01	Site Work	1	LS	$154,000	$154,000
7.02	Yard Piping	1	LS	$134,000	$134,000
7.03	Lift Station - Structural	1	LS	$158,000	$158,000
7.04	Lift Station - Mechanical	1	LS	$716,000	$716,000
7.05	Lift Station - Electrical	1	LS	$452,000	$452,000
8.00	**Project Specific Considerations**				
8.01	Dewatering	1	LS	$8,000	$8,000
9.00	**Miscellaneous Other**				
9.01	Bypass Pumping			0.0%	$0
9.02	Bonding / Admin			2.5%	$92,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$**	**4,080,000**
Contingency [1]	**$**	**1,224,000**
City of College Place Sales Tax (8.8%)	**$**	**467,000**
Planning, Engineering, & Administrative Costs [2]	**$**	**1,443,000**
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$**	**7,214,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/6/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	Water Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8%	$380,000
2.00	**Construction Survey**	1	LS	$10,000	$10,000
3.00	**Erosion Control and Water Pollution Prevention**	1	LS	$10,000	$10,000
4.00	**Materials Testing**	1	LS	$5,000	$5,000
5.00	**Project Temporary Traffic Control**	1	LS	$5,000	$5,000
6.00	**Shoring and Trench Safety Systems**	1	LS	$2,500	$2,500
7.00	**Surface Repair**				
7.01	Removing Asphalt Concrete Pavement	625	SY	$5	$3,125
7.02	HMA Sawcut and Seal	4,070	LF	$2	$8,140
7.03	HMA Restoration	625	SY	$47	$29,375
8.00	**Water Pipe and Appurtenances**				
8.01	Connect to Existing Water Main 12 In. Diam.	2	EA	$5,000	$10,000
8.02	DI Pipe for Water Main 6 In. Diam.	1,500	LF	$90	$135,000
8.03	DI Pipe for Water Main 14 In. Diam.	830	LF	$186	$154,380
8.04	DI Pipe for Water Main 16 In. Diam.	14,395	LF	$221	$3,181,295
8.05	DI Tee 14 In. x 6 In.	3	EA	$2,300	$6,900
8.06	DI Tee 16 In. x 6 In.	27	EA	$3,500	$94,500
8.07	DI Tee 16 In. x 12 In.	1	EA	$4,600	$4,600
8.08	DI Tee 16 In. x 14 In.	3	EA	$4,800	$14,400
8.09	DI Tee 16 In.	1	EA	$11,500	$11,500
8.10	DI Cross 16" In.	1	EA	$4,400	$4,400
8.11	DI Reducer 16 In. x 12 In.	1	EA	$3,700	$3,700
8.12	DI 45° Bend 16 In.	4	EA	$3,100	$12,400
8.13	DI Cap 12 In.	2	EA	$710	$1,420
8.14	DI Cap 14 In.	3	EA	$890	$2,670
8.15	DI Cap 16 In.	3	EA	$1,550	$4,650
8.16	Blowoff Assembly 2 In.	8	EA	$2,500	$20,000
8.17	Butterfly Valve 12 In.	2	EA	$4,000	$8,000
8.18	Butterfly Valve 14 In.	3	EA	$5,400	$16,200
8.19	Butterfly Valve 16 In.	34	EA	$6,100	$209,810
8.20	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	2	EA	$11,000	$22,000
8.21	Hydrant Assembly	30	EA	$6,500	$195,000
8.22	Bollard	60	EA	$1,000	$60,000
8.23	Service Connection 2 In. Diam.	29	EA	$3,400	$98,600
8.24	Water Meter 2 In. Diam.	29	EA	$6,500	$188,500
9.00	**Project Specific Considerations**				
9.01	Doan Creek Crossing	1	LS	$100,000	$100,000
10.00	**Miscellaneous Other**				
10.01	As-Built Drawings	1	LS	$2,500	$2,500
10.02	Bonding / Admin			2.5%	$116,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$5,132,000**
Contingency [1]	$1,540,000
City of College Place Sales Tax (8.8%)	$588,000
Planning, Engineering, & Administrative Costs [2]	$ 1,815,000
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$9,075,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Storm Drain**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$31,000
2.00	**Traffic Control**			5.0%	$20,000
3.00	Catch Basin Type 1		EA	$2,500	$0
4.00	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	500	LF	$85	$42,500
5.00	Stormwater Treatment Device (CDS or Aquaswirl)		EA		$0
6.00	Swales	6,000	LF	$50	$300,000
7.00	Pond excavation, mulch, seeding	1,000	CY	$50	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 444,000**
	Contingency [1]				**$ 133,000**
	City of College Place Sales Tax (8.8%)				**$ 51,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 157,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 785,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Utilities**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$88,000
2.00	**Traffic Control**			5.0%	$55,000
	Electrical				$0
3.00	Primary Electrical Vaults	15	EA	$10,000	$150,000
4.00	Primary Electrical Conduit & Wire	8,500	LF	$40	$340,000
5.00	Transformer for Primary Service	0	EA	$100,000	$0
	Fiber Optic				$0
6.00	Fiber Optic	1.6	MI	$100,000	$160,000
7.00	Fiber Service Vaults	29	EA	$2,000	$58,000
	Gas				$0
8.00	4" Natural Gas Main	12,000	LF	$20	$240,000
9.00	Natural Gas Regulator	1	EA	$150,000	$150,000
				ESTIMATED CONSTRUCTION SUBTOTAL	**$ 1,241,000**
				Contingency [1]	**$ 372,000**
				City of College Place Sales Tax (8.8%)	**$ 142,000**
				Planning, Engineering, & Administrative Costs [2]	**$ 439,000**
				TOTAL PROBABLE COST IN 2025 DOLLARS[3]	**$ 2,194,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

Appendix 1

Permit Classification Table

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 1 Review	• ADU Permit • Administrative Interpretation • Boundary Line Adjustment • Building Permit • Certificate of Occupancy • Certificate of Appropriateness (and waiver)(1) • Certificate of Design Review • Certificate of Zoning Compliance • Clearing and Grading Permit • Code Enforcement Action • Critical Area Authorization • Landscaping Plan Approval • Permit, Minor Amendment • Plats, Final (10+ lots)	None	None	Community Development Director or designee (unless otherwise noted)	Hearing Examiner

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
	• SEPA Action (no public notice required) • Sign Permit • Site Plan Approval • Special Property Tax Valuation [1] • Special Use Permit				
Type 2 Review	• Binding Site Plan • Critical Area Permit • SEPA Action (public notice required) • Short plat (9 lots or less) • Variance with Type 1/2 Permit	Yes	None, but written comments may be submitted	Community Development Director	Hearing Examiner

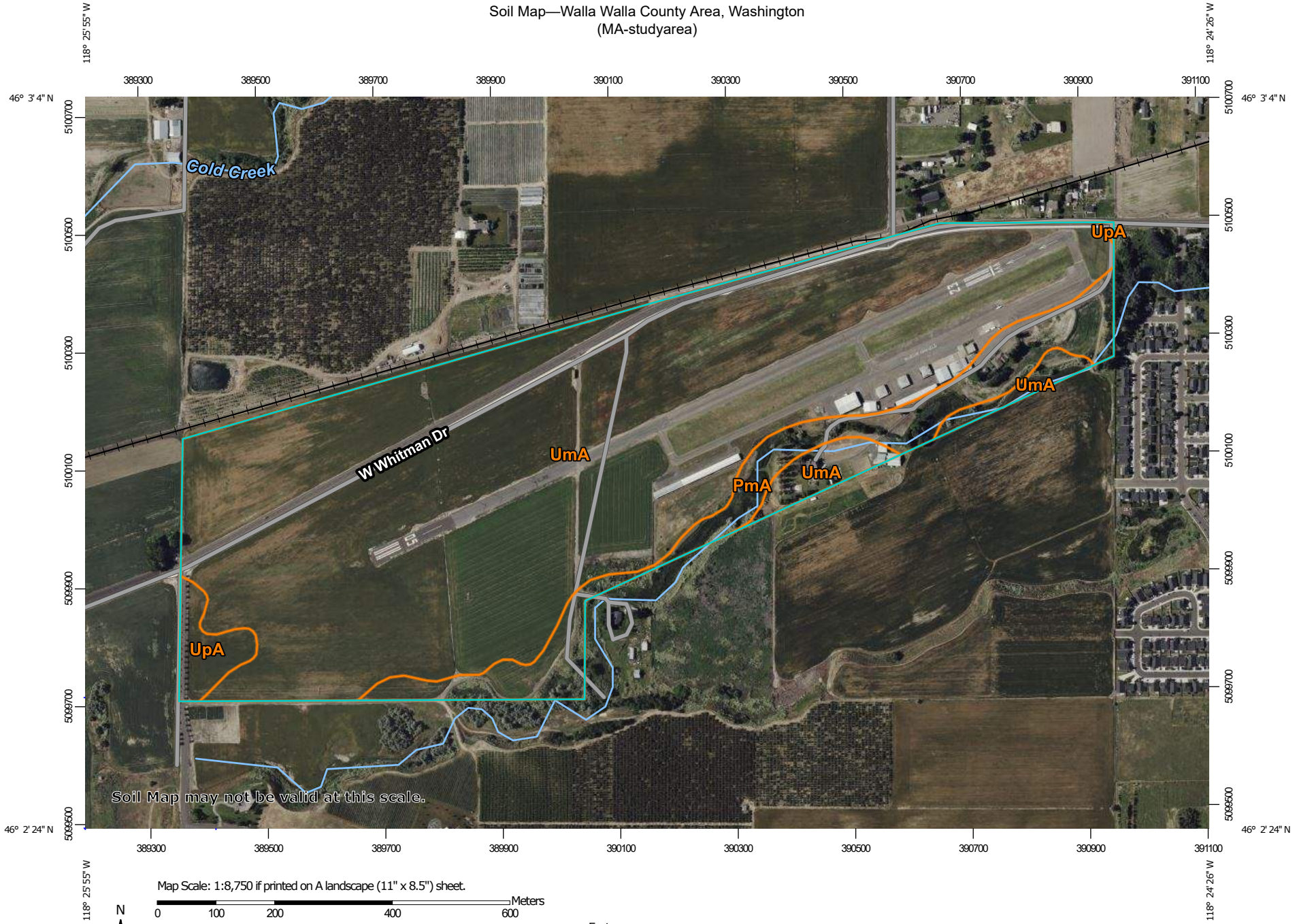
	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 3 Review	• Conditional Use Permit • Master Planned Development • Plat, Preliminary (10+ lots) • Permit, Major Amendment • Reasonable Use Exception • Rezone, Site Specific • Variance with Type 3 Permit	Yes	Hearing Examiner	Hearing Examiner	Superior Court

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 4 Review	• Comprehensive Plan Text Amendment • Development Agreement [5] • Future Land Use Map Amendment • Rezone, General • Shoreline Master Program Amendment [2] • Unified Development Code Amendment [4]	Yes	Planning Commission	City Council	Superior Court [3]

Appendix 2

Soil Assessment

Soil Map—Walla Walla County Area, Washington
(MA-studyarea)



Map Scale: 1:8,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:31,700.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walla Walla County Area, Washington
Survey Area Data: Version 9, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 25, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PmA	Pedigo silt loam, 0 to 3 percent slopes	20.4	11.5%
UmA	Umapine silt loam, 0 to 3 percent slopes	152.7	86.3%
UpA	Umapine silt loam, leached surface, 0 to 3 percent slopes	3.8	2.1%
Totals for Area of Interest		**176.8**	**100.0%**

Appendix 3

WSDOT Airports and Compatible Land Use Criteria

Table F-1

Maximum Residential Density						
Compatibility Zones	**Zone 1**	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
Maximum Residential Density						
	Average Number of Dwelling Units Per Gross Acre					
Agricultural (farmland/forest)	0	Maintain current comprehensive plan designation and zoning designation				
Rural (outside an urban growth boundary)	0	1 d.u. per 10 acres	1 d.u. per 10 acres[A]	1 d.u. per 5 acres[A]	1 d.u. per 10 acres[A]	1 d.u. per 5 acres
Urban (within the urban growth boundary)	0	0	B	C	B	C
Maximum Intensities for Nonresidential Uses (Commercial, Industrial, Offices, and Activities)						
	Average Number of People Units Per Gross Acre					
Agricultural (farmland/forest)	1-5[E]	D, E	D, E	D, E	D, F	D
Rural (outside an urban growth boundary)	1-5[E]	10-25[E]	10-25[E]	40-60[E]	100-150[E]	100-150[G]
Urban (within the urban growth boundary)	1-5[E]	50-75[E]	80-120[E]	100-150[E]	100-150[E]	No Limit[G]

Notes:

A Cluster to preserve open space to maintain open approach corridor at and near runway ends.

B Infill development up to average of surrounding residential area is allowed, but is appropriate only if nonresidential uses are not feasible

C Promote high density and intensity mixed use development (15 or more d.u. per acre)

D Maintain current comprehensive plan designation and zoning designation.

E Special Function Land uses should be prohibited.

F 50-100 people per acre allowed if on airport and aviation-related.

G Special Function Land uses should be avoided.

Table F-2
Airport Land Use Matrix

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
A. Resource Operations						
1. Agricultural (Commercial)						
Agriculture, horticulture, general farming (crops only, not feedlots and stockyards)	P	P	P	P	P	P
Agricultural building	L	L	P	P	P	P
Agricultural chemical sales/storage	X	L	P	P	P	P
Agricultural Housing/Farm labor	X	X	L	P	L	P
Agricultural housing/farm labor	X	X	L	P	L	P
Agricultural market	X	X	P	P	X	P
Agricultural related industries	X	L	P	P	P	P
Animal husbandry	X	L	L	L	X	P
Agricultural feeding operation or stockyards	X	X	X	X	X	X
Agriculture or food processing facility	X	L	P	P	L	P
Livestock auction	X	X	X	L	X	P
Fairgrounds	X	X	X	X	X	P
Floriculture, aquaculture	X	L	P	P	P	P
Fruit bin sales/storage	X	L	P	P	P	P
2. Forest (Commercial)						
General forest silver culture	L	L	P	P	P	P
Forest product processing	X	L	P	P	P	P
3. Mining/Refining/Offsite Hazardous Waste Treatment						
Asphalt paving and roofing materials, rock crushing	X	X	L	L	L	P
Mining including sand and gravel pits	X	L	L	L	X	P
Stockpiling of earthen materials	X	L	L	L	X	P
B. Rural Development						
1. Rural Residential						
Single-family dwelling (large lot, 5 acres or greater*)	X	L	L	P	X	P
Single-family dwelling, rural centers	X	X	L	L	X	L
Residential Cluster Development, 40% open	X	X	LSC	X	X	P
Multi-family dwelling	X	X	X	X	X	P
Temporary farm housing	X	X	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
2. Rural Centers						
Single-family dwelling; up to 12 dwelling units/acre	X	X	L	L	X	L
Two - Four family dwelling (duplex) (*)	X	X	X	X	X	L
Multi-family dwelling; 12-20 units/acre	X	X	L	X	X	P
21+ units/acre	X	X	P	P	X	P
Agriculture/forest/mineral resources or industry (see item A)						
Community services (see item D2)						
Retail and commercial service (see items D4 & D5)						
Industrial/manufacturing (see item D4s & D5)						
C. Education Facilities						
1. Education Facilities						
Junior or community college	X	X	L	L	L	P
Schools, K-12 elementary, middle, senior high	X	X	X	X	X	X
Business school	X	L	L	L	L	P
Vocational schools	X	L	L	L	L	P
D. Urban Development						
1. Residential						
Single-family dwelling; up to 12 dwelling units/acre	X	X	X	X	X	L
Two - four-family dwelling (duplex)(*)	X	X	X	X	X	L
Multi-family dwelling(*): 15 or more	X	X	LSC	X	X	P
Mixed-use office/commercial/residential use	X	X	P	P	X	P
Residential development cluster 40% > open space	X	X	L	L	X	L
Residential infill	X	X	L	L	L	P
Mobile home parks	X	X	L	L	X	L
Boarding house	X	X	L	L	L	L
Retirement homes	X	X	X	X	X	L

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
2. Community Services						
Cemetery	P	P	P	P	L	P
Churches, synagogues, temples	X	X	L	L	X	L
Community center meeting halls, fraternal organizations	X	X	L	L	X	P
Convalescent, nursing home and group homes	X	X	X	X	X	L
Day care facilities, family in-home	X	X	L	L	X	L
Day care center	X	X	L	L	X	L
Funeral home	X	X	P	P	X	P
Police, fire stations, ambulance service	X	L	P	P	P	P
Hospital	X	X	X	X	X	X
Medical clinic	X	X	L	L	X	P
Correction facilities	X	L	L	L	L	L
Libraries	X	X	P	P	X	P
Museums and art galleries	X	X	L	P	P	P
Zoo	X	X	P	P	X	P
3. Amusement and Recreation						
Amusement park (permanent)	X	X	L	L	X	L
Bowling alleys	X	X	P	P	X	P
Campground	X	L	L	P	L	P
Recreational vehicle parks; short term	X	L	L	P	L	P
Drive-in theatres	X	X	L	L	X	P
Fairgrounds	X	X	P	L	L	P
Golf courses	X	L	P	P	X	P
Gymnasiums, exercise facilities	X	L	L	L	L	P
Horse racing tracks, speedways	X	X	X	X	X	X
Miniature golf courses	X	X	P	P	X	P
Movie theatres, auditoriums exhibition halls	X	X	L	L	X	P
Parks	L	L	P	P	L	P
Roller skating rink	X	X	L	L	X	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
4. Retail Trade and Service						
Addressing, mailing, and stenographic services	X	L	P	P	L	P
Advertising agencies	X	L	P	P	L	P
Airport uses and activities commercial/industrial	L	P	P	P	P	P
Animal clinic/hospital	L	P	P	P	P	P
Antique stores	X	L	P	P	X	P
Automobile, truck, manufactured home, and travel trailer sales	L	P	P	P	P	P
Automobile and recreational vehicle (RV) sales; weekend	L	P	P	P	L	P
Automotive: car wash	L	P	P	P	L	P
Sales lot/auto center	L	P	P	P	P	P
Parking lots and garages	L	P	P	P	P	P
Maintenance and repair shops	X	P	P	P	P	P
Paint and body repair shops	L	P	P	P	P	P
Parts and accessories (tires, batteries, etc.)	X	P	P	P	P	P
Specialized repair shops (radiator, etc.)	L	P	P	P	P	P
Towing services	L	P	P	P	P	P
Wrecking and dismantling yard	L	P	P	P	L	P
Bakery	X	P	P	P	L	P
Beauty and barber shops	X	L	P	P	X	P
Bed and breakfast inn	X	X	L	L	X	P
Boats and marine accessories	X Except storage L	P	P	P	P	P
Books, stationery, office supplies	Storage only	P	P	P	L	P
Building and trade (plumbing, heating, electrical, painting, etc.)	Storage only	P	P	P	L	P
Clothing and accessories	X	L	P	P	L	P
Communication towers	X	X	L	L	L	L
Computer and electronic stores	X	L	P	P	L	P
Department, discount, variety stores	X	X	P	P	X	P
Drug stores (optical goods, orthopedic supplies)	X	L	P	P	L	P
Employment agencies (private)	X	P	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
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All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Farm and implements, tools and heavy construction equipment	X	L	P	P	P	P
Farm supplies	L	P	P	P	P	P
Financial institutions	X	P	P	P	L	P
Food store	X	P	P	P	L	P
Furniture, home furnishings, appliances	X	P	P	P	L	P
General hardware, garden equipment and supplies	X	P	P	P	L	P
Grocery and convenience stores	X	L	P	P	L	P
Heavy equipment storage, maintenance and repair	X	L	P	P	L	P
Insurance agents, brokers, and service agencies	X	P	P	P	L	P
Kennels	L	P	P	P	L	P
Laundries, laundromats, and dry cleaning plants	X	P	P	P	L	P
Liquor stores	X	P	P	P	L	P
Lumber yards	L	P	P	P	L	P
Medical and dental laboratory, offices and clinic	X	X	L	P	x	P
Mini Storage	L	P	P	P	P	P
Motels and Hotels	X	X	P	P	P	P
Motorcycles sales/repair (including maintenance)	X	P	P	P	L	P
Paint, glass, and wallpaper stores	X	P	P	P	L	P
Pet stores, pet supplies, and dog grooming	X	L	P	P	L	
Professional office buildings for architects, attorneys, government, etc.	X	L	P	P	P	P
Rental: auto, truck, trailer, fleet leasing services	L	P	P	P	L	P
Repairs: small appliances, tv, business machines, watches, etc.	L	P	P	P	L	P
Restaurant, cafe and drive-in eating facilities	X	L	P	P	P	P
Service station	X	L	P	P	L	P
Sporting goods, bicycle shops	X	P	P	P	P	P
Taverns, bars, dance establishments	X	L	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
5. Industry/Manufacturing						
Aircraft parts	Storage only	L	P	P	P	P
Aircraft industrial	Storage only	L	P	P	P	P
Apparel and accessories	X	L	P	P	X	P
Bakery products (wholesale)	Storage only	L	P	P	X	P
Beverage industry	Storage only	L	P	P	X	P
Canning, preserving, and packaging fruits, vegetables, and other foods	X	L	L	L	X	P
Cement and concrete plants	X	L	L	L	X	P
Chemicals (industrial, agricultural, wood, etc.)	X	X	L	L	X	L
Concrete, gypsum, and plaster products	Storage only	L	P	L	L	P
Confectionery and related products (wholesale)	Storage only	P	P	P	L	P
Mini storage	P	P	P	P	P	P
Product assembly	Storage only	L	P	P	L	P
Prefabricated structural wood products and containers	Storage only	P	P	P	L	P
Printing, publishing, and binding	Storage only	P	P	P	L	P
Rendering plants, slaughter houses	X	X	X	X	X	L
Rubber products	X	L	P	P	L	P
Sawmills and planing mills	Storage only	L	P	P	L	P
Sheet metal and welding shops	Storage only	P	P	P	L	P
Stone products (includes finishing of monuments for retail sale)	Storage only	P	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
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All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
6. Wholesale Trade-Storage						
Warehouses	Storage only	P	P	P	P	P
Wholesale trade	Storage only	P	P	P	P	P
Storage facilities; bulk	L	P	P	P	P	P
commercial	L	P	P	P	P	P
mini-storage	L	P	P	P	P	P
E. Transportation and Utilities						
1. Transportation						
Bus terminals	X	L	P	P	L	P
Transportation storage and maintenance facilities	Storage only	P	P	P	P	P
Transportation brokerage offices; without truck parking	X	P	P	P	P	P
with truck parking	L	P	P	P	P	P
Contract truck hauling, rental of trucks with drivers	L	P	P	P	P	P
Rail, truck terminals (for short-term storage, office)	L	P	P	P	P	P
Air storage and office use	Storage only	P	P	P	P	P
Railroad switch yards, maintenance, and repair facilities, etc.	X	P	P	P	P	P
Taxicab terminals, maintenance, and dispatching centers, etc.	X	P	P	P	P	P
2. Utilities						
Power generating facilities	L	L	L	L	L	L
Utility services (substations, etc.)	L	L	L	L	L	P
Wholesale trade	L	P	P	P	L	P
Storage facilities; bulk	L	P	P	P	P	P
Commercial	L	P	P	P	P	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

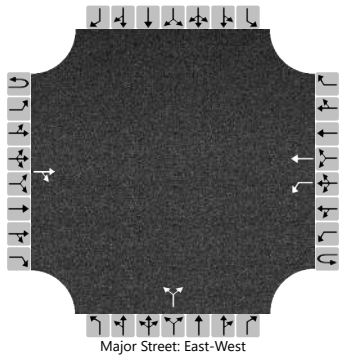
Appendix 4

Traffic Counts and Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

General Information		Site Information	Existing Conditions Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	11/4/2024	East/West Street	Old US 12
Analysis Year	2024	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			76	55		20	52			26		13				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22					42					
Capacity, c (veh/h)						1434					813					
v/c Ratio						0.02					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.5					9.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						2.1				9.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

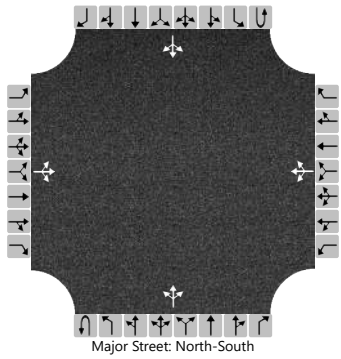
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	1		20	0	7		0	31	25		13	61	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				30			0				14		
Capacity, c (veh/h)			837				857			1524				1535		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
Control Delay (s/veh)			9.3				9.4			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.3				9.4				0.0				1.3		
Approach LOS		A				A				A						

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HCS7 Two-Way Stop-Control Report

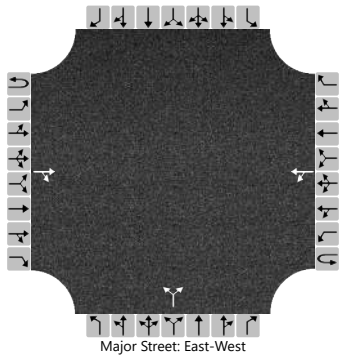
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			40	0		1	28			0		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					2					
Capacity, c (veh/h)						1557					1022					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.3				8.5							
Approach LOS					A											

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HCS7 Two-Way Stop-Control Report

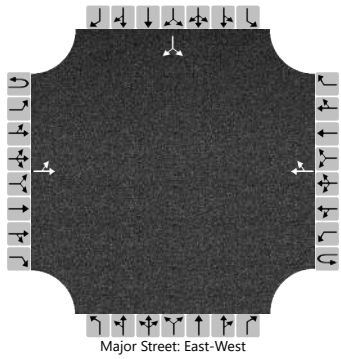
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	40				23	4						4		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													11	
Capacity, c (veh/h)		1577													991	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.3													8.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.5												8.7		
Approach LOS		A					A							A		

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HCS7 Two-Way Stop-Control Report

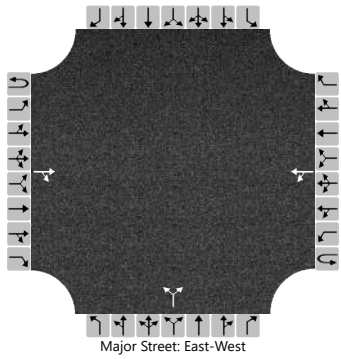
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			39	0		2	36			0		5				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					6					
Capacity, c (veh/h)						1556					1021					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.5						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

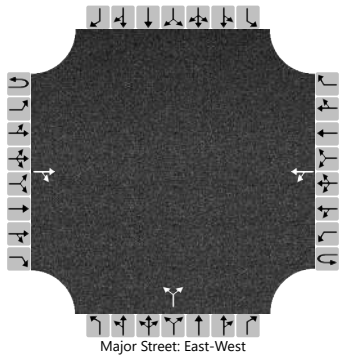
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			42	5		40	30			5		34				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						49					48					
Capacity, c (veh/h)						1540					970					
v/c Ratio						0.03					0.05					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.4					8.9					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.3				8.9						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

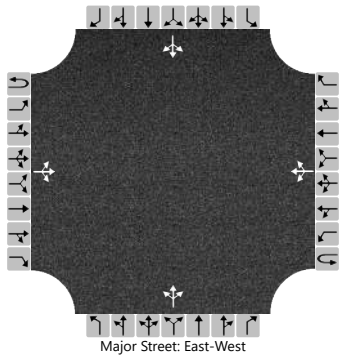
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	84	43		62	101	8		39	14	32		7	23	2
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				69					94				36	
Capacity, c (veh/h)		1460				1436					622				518	
v/c Ratio		0.00				0.05					0.15				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.2					0.5				0.2	
Control Delay (s/veh)		7.5				7.6					11.8				12.5	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.3				3.0				11.8				12.5			
Approach LOS	A				A				B				B			

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HCS7 Two-Way Stop-Control Report

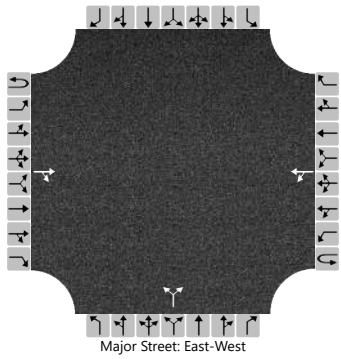
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			124	12		55	173			20		42				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						65					74					
Capacity, c (veh/h)						1411					715					
v/c Ratio						0.05					0.10					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.6					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.2				10.6						
Approach LOS										B						

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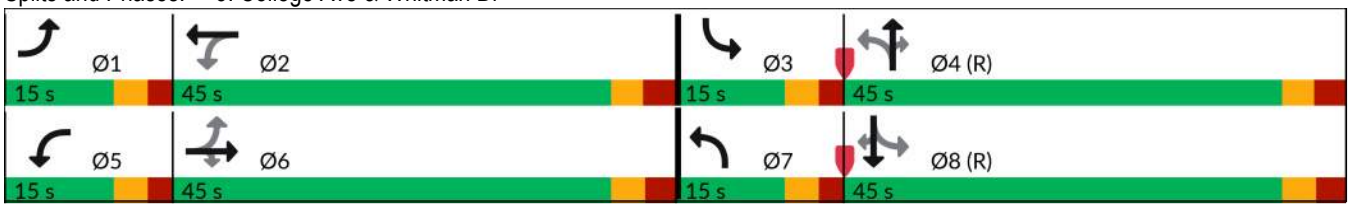
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Future Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.503			0.671			0.602			0.634		
Satd. Flow (perm)	937	1863	1583	1250	1829	0	1121	1863	1583	1181	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	125	48	33	113	15	54	197	38	17	200	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	125	48	33	128	0	54	197	38	17	200	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	22.3	16.4	16.4	20.2	13.4		83.2	79.4	79.4	79.6	74.3	74.3
Actuated g/C Ratio	0.19	0.14	0.14	0.17	0.11		0.69	0.66	0.66	0.66	0.62	0.62
v/c Ratio	0.20	0.49	0.15	0.14	0.61		0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
LOS	D	D	A	D	E		A	B	A	A	B	A
Approach Delay (s/veh)		38.9			55.1			8.7			9.1	
Approach LOS		D			E			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



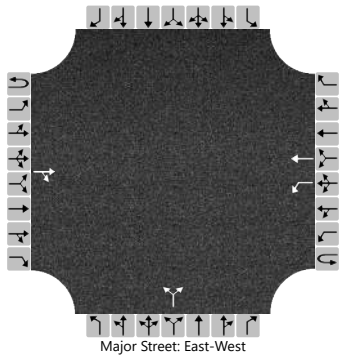
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	125	48	33	128	54	197	38	17	200	97
v/c Ratio	0.20	0.49	0.15	0.14	0.61	0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Length 50th (ft)	28	93	0	20	91	12	49	0	4	68	0
Queue Length 95th (ft)	56	150	0	45	150	31	122	0	14	128	18
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	272	601	837	1233	1088	861	1154	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.20	0.08	0.12	0.21	0.06	0.16	0.03	0.02	0.17	0.09

Intersection Summary

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 No-Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour No-Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	83		30	79			39		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					64					
Capacity, c (veh/h)						1349					714					
v/c Ratio						0.02					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

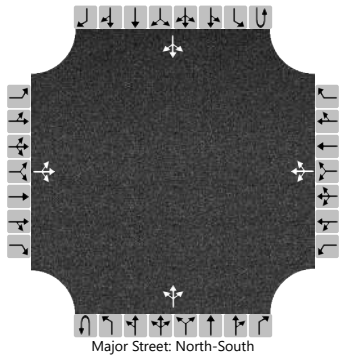
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		30	0	11		0	47	38		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				45			0				22		
Capacity, c (veh/h)			770				775			1478				1495		
v/c Ratio			0.01				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.0		
Control Delay (s/veh)			9.7				9.9			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.7				9.9				0.0				1.4		
Approach LOS		A				A										

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HCS7 Two-Way Stop-Control Report

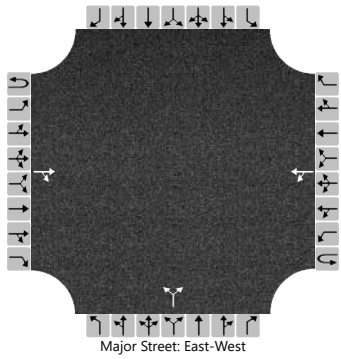
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			61	0		2	42			0		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					3					
Capacity, c (veh/h)						1526					992					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.6					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.3				8.6						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

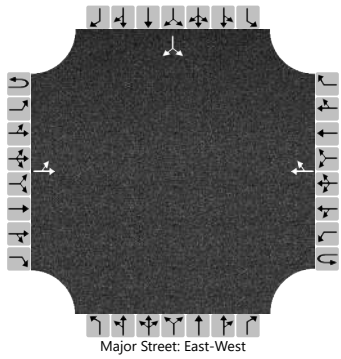
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	61				35	6						6		9
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													16	
Capacity, c (veh/h)		1557													958	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.3													8.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.6												8.8		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

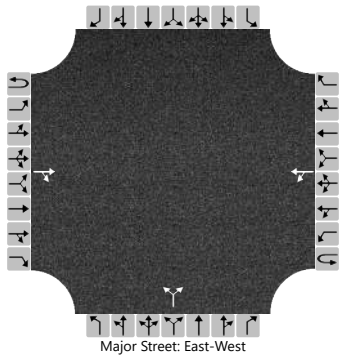
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			59	0		3	55			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1525					991					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.4				8.7							
Approach LOS					A											

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HCS7 Two-Way Stop-Control Report

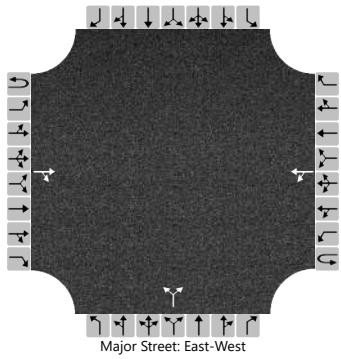
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	8		61	45			8		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					74					
Capacity, c (veh/h)						1500					915					
v/c Ratio						0.05					0.08					
95% Queue Length, Q_{95} (veh)						0.2					0.3					
Control Delay (s/veh)						7.5					9.3					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.5				9.3						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

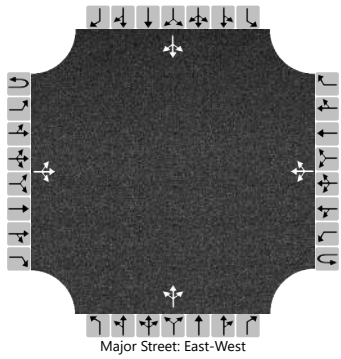
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	127	64		94	153	12		59	21	49		11	35	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				104					143				54	
Capacity, c (veh/h)		1386				1352					463				374	
v/c Ratio		0.00				0.08					0.31				0.15	
95% Queue Length, Q_{95} (veh)		0.0				0.3					1.3				0.5	
Control Delay (s/veh)		7.6				7.9					16.2				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				3.3				16.2				16.2			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

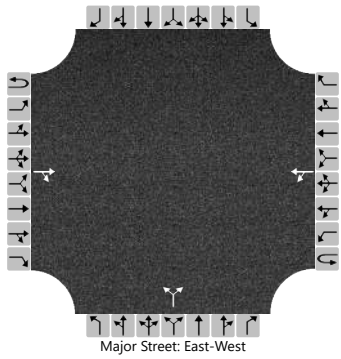
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			188	18		83	262			30		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					112					
Capacity, c (veh/h)						1315					565					
v/c Ratio						0.08					0.20					
95% Queue Length, Q_{95} (veh)						0.2					0.7					
Control Delay (s/veh)						8.0					12.9					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.5				12.9						
Approach LOS										B						

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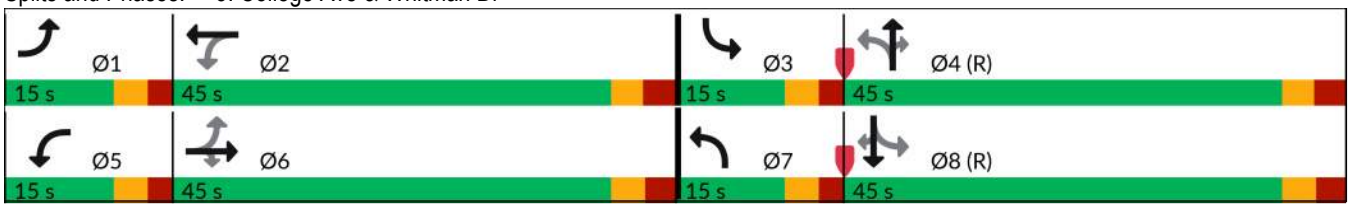
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Future Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.387			0.443			0.510			0.563		
Satd. Flow (perm)	721	1863	1583	825	1829	0	950	1863	1583	1049	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	189	73	49	172	23	83	298	58	26	303	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	189	73	49	195	0	83	298	58	26	303	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	26.5	18.6	18.6	25.2	17.9		77.7	71.9	71.9	74.0	68.4	68.4
Actuated g/C Ratio	0.22	0.16	0.16	0.21	0.15		0.65	0.60	0.60	0.62	0.57	0.57
v/c Ratio	0.30	0.65	0.21	0.21	0.70		0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
LOS	D	E	A	C	E		A	B	A	A	B	A
Approach Delay (s/veh)		41.0			54.7			12.3			13.2	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	70	189	73	49	195	83	298	58	26	303	147
v/c Ratio	0.30	0.65	0.21	0.21	0.70	0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Length 50th (ft)	41	138	0	28	141	23	121	0	7	127	10
Queue Length 95th (ft)	73	207	9	55	209	50	209	0	21	222	49
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	258	601	688	1116	996	729	1061	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.31	0.12	0.19	0.32	0.12	0.27	0.06	0.04	0.29	0.15

Intersection Summary

Martin Field Trip Generation

Area	Total Acres	Bldg. SF (1,000 SF)	PM Peak Hour Trips Generated		
			Total	Inbound	Outbound
North Driveway	18.65	325	95	13	82
South Driveway	18.56	323	94	13	81
Total Whitman	37.21	648	189	26	163
Total Hampton	22.22	387	107	15	92
TOTAL	59.43	1,036	296	41	255

Notes

Assumes 40% FAR

ITE Trip Generation Manual 11th Edition

Land Use 110 - General Light Industrial

Fitted equation =(ROUNDUP(EXP(0.72*LN(X)+0.38),0))

where X is the sq ft of the development

Worst Driveway - included in Total Whitman trips above

North Driveway	7.82	136	51	7	44
South Driveway	3.11	54	26	4	22

Martin Airfield Feeasibility Study

PM Peak Hour Turning Movement Volumes

Old US 12/Last Chance

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	26	0	13	0	0	0	0	76	55	20	52	0	242
2045 No-Build	39	0	20	0	0	0	0	115	83	30	79	0	366
20-year New Trips	12	0	0	0	0	0	0	0	2	0	0	0	14
2045 Build	51	0	20	0	0	0	0	115	85	30	79	0	380

Last Chance/Whitman Dr

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	31	25	13	61	3	0	1	1	20	0	7	162
2045 No-Build	0	47	38	20	92	5	0	2	2	30	0	11	247
20-year New Trips	0	0	3	0	0	2	0	0	0	13	0	12	30
2045 Build	0	47	41	20	92	7	0	2	2	43	0	23	277

Whitman Dr/Hampton

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	2	0	0	0	0	40	0	1	28	0	71
2045 No-Build	0	0	3	0	0	0	0	61	0	2	42	0	108
20-year New Trips	9	0	83	0	0	0	0	3	2	13	16	0	126
2045 Build	9	0	86	0	0	0	0	64	2	15	58	0	234

Whitman Dr/McKinney

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	4	0	6	3	40	0	0	23	4	80
2045 No-Build	0	0	0	6	0	9	5	61	0	0	35	6	122
20-year New Trips	0	0	0	0	0	1	3	227	0	0	35	0	266
2045 Build	0	0	0	6	0	10	8	288	0	0	70	6	388

Whitman Dr/Martin Field

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	5	0	0	0	0	39	0	2	36	0	82
2045 No-Build	0	0	8	0	0	0	0	59	0	3	55	0	125
20-year New Trips	0	0	0	0	0	0	0	227	0	0	35	0	262
2045 Build	0	0	8	0	0	0	0	286	0	3	90	0	387

Whitman Dr/Homestead

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	5	0	34	0	0	0	0	42	5	40	30	0	156
2045 No-Build	8	0	52	0	0	0	0	64	8	61	45	0	238
20-year New Trips	1	0	0	0	0	0	0	223	4	0	34	0	262
2045 Build	9	0	52	0	0	0	0	287	12	61	79	0	500

Whitman Dr/Hussey/Academy

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	39	14	32	7	23	2	4	84	42	62	101	8	418
2045 No-Build	59	21	49	11	35	3	6	127	64	94	153	12	634
20-year New Trips	3	0	0	0	0	1	3	184	36	0	30	0	257
2045 Build	62	21	49	11	35	4	9	311	100	94	183	12	891

Whitman Dr/Davis

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	20	0	42	0	0	0	1	124	12	55	173	1	428
2045 No-Build	30	0	64	0	0	0	2	188	18	83	262	2	649
20-year New Trips	2	0	0	0	0	0	1	173	10	0	28	0	214
2045 Build	32	0	64	0	0	0	3	361	28	83	290	2	863

Whitman Dr/College Ave

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	50	181	35	16	184	89	42	115	44	30	104	14	904
2045 No-Build	76	274	53	24	279	135	64	174	67	45	158	21	1370
20-year New Trips	6	0	0	0	0	10	36	99	38	0	12	0	201
2045 Build	82	274	53	24	279	145	100	273	105	45	170	21	1571

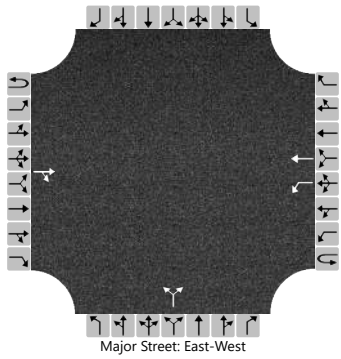
Whitman/New Driveway (busiest one)

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	0	0	0	0	43	0	0	42	0	85
2045 No-Build	0	0	0	0	0	0	0	65	0	0	64	0	129
20-year New Trips	2	0	20	40	0	4	1	85	0	4	25	6	187
2045 Build	2	0	20	40	0	4	1	150	0	4	89	6	316

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	85		30	79			51		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					77					
Capacity, c (veh/h)						1346					702					
v/c Ratio						0.02					0.11					
95% Queue Length, Q_{95} (veh)						0.1					0.4					
Control Delay (s/veh)						7.7					10.8					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.8						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

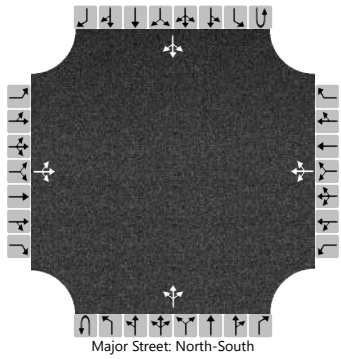
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		43	0	23		0	47	41		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				73			0				22		
Capacity, c (veh/h)			768				792			1478				1490		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
Control Delay (s/veh)			9.7				10.0			7.4				7.5		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.7				10.0				0.0				1.4		
Approach LOS		A				B										

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HCS7 Two-Way Stop-Control Report

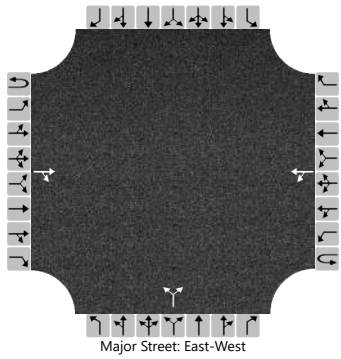
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	2		15	58			9		86				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						17					107					
Capacity, c (veh/h)						1519					966					
v/c Ratio						0.01					0.11					
95% Queue Length, Q_{95} (veh)						0.0					0.4					
Control Delay (s/veh)						7.4					9.2					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						1.6				9.2						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

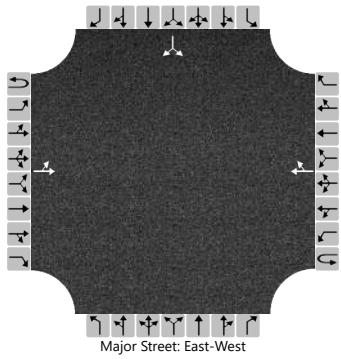
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	288				70	6						6		10
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9													18	
Capacity, c (veh/h)		1507													783	
v/c Ratio		0.01													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.4													9.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)	0.3												9.7			
Approach LOS													A			

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HCS7 Two-Way Stop-Control Report

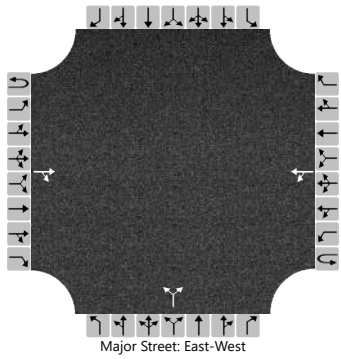
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			286	0		3	90			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1217					703					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						8.0					10.2					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						0.3				10.2						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

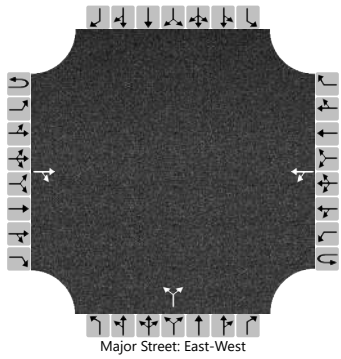
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			287	12		61	79			9		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					75					
Capacity, c (veh/h)						1184					625					
v/c Ratio						0.06					0.12					
95% Queue Length, Q_{95} (veh)						0.2					0.4					
Control Delay (s/veh)						8.2					11.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						3.9				11.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

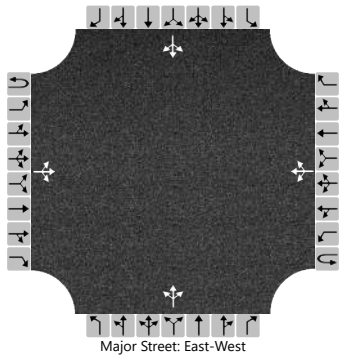
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	311	100		94	183	12		62	21	49		11	35	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				104					147				56	
Capacity, c (veh/h)		1347				1099					301				250	
v/c Ratio		0.01				0.10					0.49				0.22	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.5				0.8	
Control Delay (s/veh)		7.7				8.6					27.9				23.5	
Level of Service (LOS)		A				A					D				C	
Approach Delay (s/veh)	0.2				3.4				27.9				23.5			
Approach LOS									D				C			

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HCS7 Two-Way Stop-Control Report

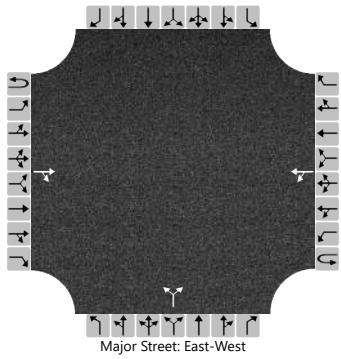
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			361	28		83	290			32		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					114					
Capacity, c (veh/h)						1093					405					
v/c Ratio						0.09					0.28					
95% Queue Length, Q_{95} (veh)						0.3					1.1					
Control Delay (s/veh)						8.6					17.4					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)						2.7				17.4						
Approach LOS										C						

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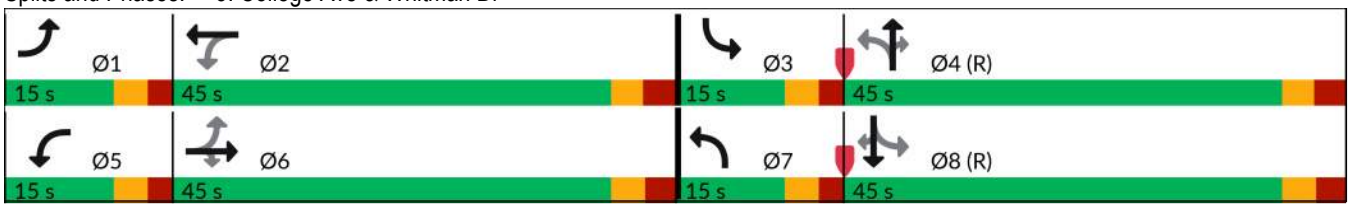
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Future Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.983				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1831	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.408			0.334			0.468			0.560		
Satd. Flow (perm)	760	1863	1583	622	1831	0	872	1863	1583	1043	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	297	114	49	185	23	89	298	58	26	303	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	297	114	49	208	0	89	298	58	26	303	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	35.0	26.7	26.7	31.3	22.9		70.0	63.8	63.8	64.4	57.6	57.6
Actuated g/C Ratio	0.29	0.22	0.22	0.26	0.19		0.58	0.53	0.53	0.54	0.48	0.48
v/c Ratio	0.36	0.72	0.26	0.21	0.59		0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
LOS	C	D	A	C	D		B	C	A	B	C	A
Approach Delay (s/veh)		38.4			44.3			16.1			17.6	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	297	114	49	208	89	298	58	26	303	158
v/c Ratio	0.36	0.72	0.26	0.21	0.59	0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Length 50th (ft)	61	219	0	26	144	28	135	0	8	142	15
Queue Length 95th (ft)	92	290	40	48	199	64	244	0	25	261	66
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	304	610	599	266	602	587	989	897	649	894	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.19	0.18	0.35	0.15	0.30	0.06	0.04	0.34	0.19

Intersection Summary

HCS7 Two-Way Stop-Control Report

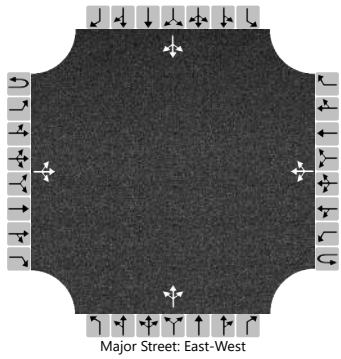
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	3/5/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/New Driveway
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	New Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	150	0		4	89	6		2	0	20		40	0	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				4					24				49	
Capacity, c (veh/h)		1479				1405					850				660	
v/c Ratio		0.00				0.00					0.03				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.4				7.6					9.4				10.9	
Level of Service (LOS)		A				A					A				B	
Approach Delay (s/veh)		0.1				0.3				9.4				10.9		
Approach LOS										A				B		

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Appendix 5

Economic Analysis

2025

Market Feasibility

MARTIN AIRFIELD

An analysis conducted by: TheMettsGroup

Prepared for: CP COLLEGE PLACE WALLA WALLA VALLEY

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Purpose

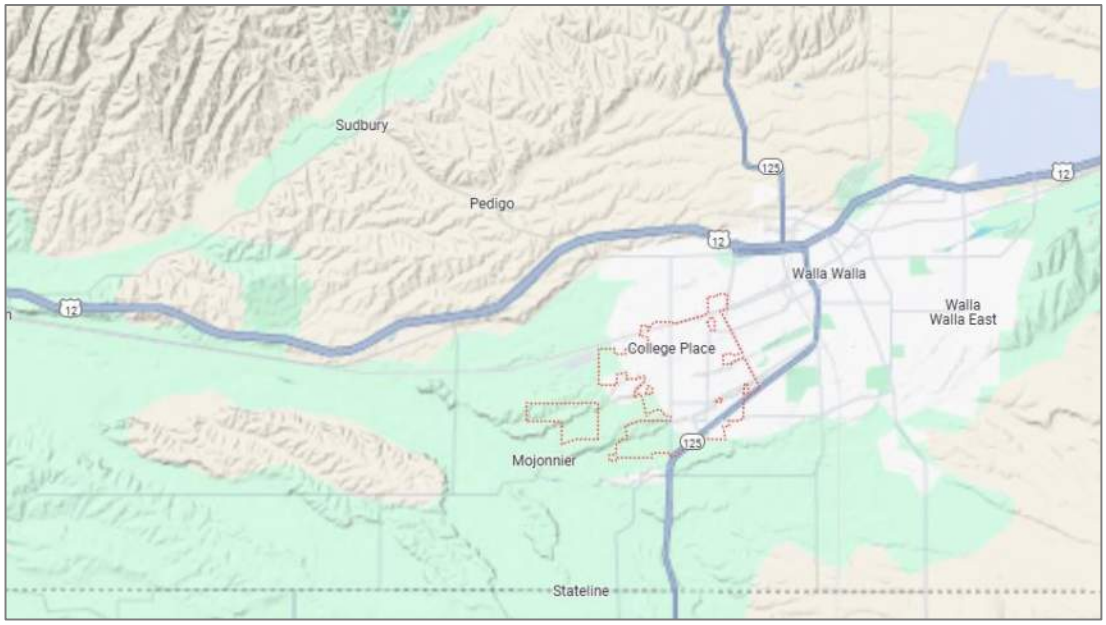
The purpose of this study is to analyze market feasible light industrial uses for the 233-acre site around Martin Airfield and bordered by Whitman Drive to the north, Hampton Lane to the west, Homestead Acres Subdivision to the east, and a bluff to the south. This study conforms to the minimum threshold criteria established by the Washington State Community and Economic Revitalization Board for potential grant funding opportunities.

The following outlines the scope within the above objectives:

1. Interview key stakeholders to gather and review pertinent project background data.
2. Assess the locational characteristics of the site relative to the industrial market.
3. Perform Market analysis for the site
4. Perform Job Benefit Analysis
5. Evaluate the overall City of College Place area economic outlook for industrial real estate development.
6. Conduct interviews with selected key persons in the College Place catchment area knowledgeable of demand potentials by various industrial uses (e.g. complementary agricultural processing/supplier needs, light manufacturing, warehouse distribution, flex space, etc.).
7. Identify and evaluate potentially competing sites and corresponding industrial uses.
8. Analyze which target industries may be located at the site.
9. Recommend specific companies that should be targeted to prospective tenants.
10. Forecast the economic impacts to the City of College Place if the site is fully tenanted with the prescribed potential industrial users.
11. Recommend a project marketing strategy for the site.
12. Prepare a corresponding Economic Feasibility Analysis and marketing strategy for the site.

Location

College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.



Economy Overview

The population of College Place is estimated at 9,945, reflecting a modest growth of 0.4% from 2020 to 2024. Population growth trends for both College Place and Walla Walla County show similar growth trends, with a sharp decline around 2022 in College Place, followed by gradual stabilization. Workforce characteristics indicate a labor force participation rate of 59%, which is below the national average of 63.5%. Additionally, 10% of the workforce consists of remote workers, and 71% of residents have some college education or higher, suggesting a relatively educated workforce.

Population

9,945

0.4% ⇧

(2020-2024 est.)

Workforce Characteristics

59%

Labor Force Participation Rate
(63.5% U.S.)

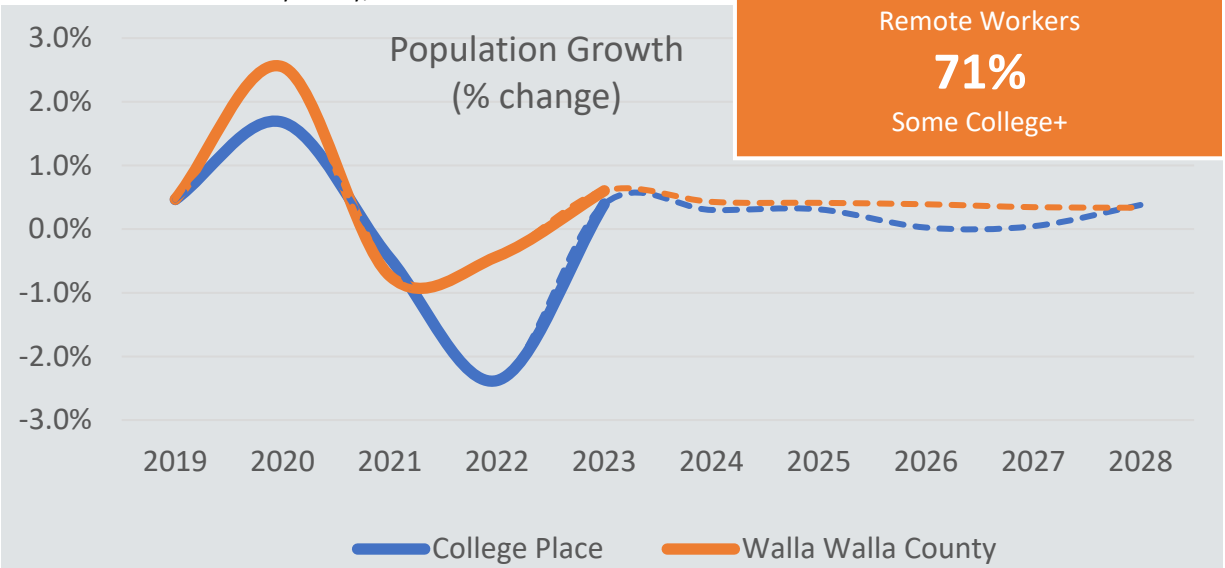
10%

Remote Workers

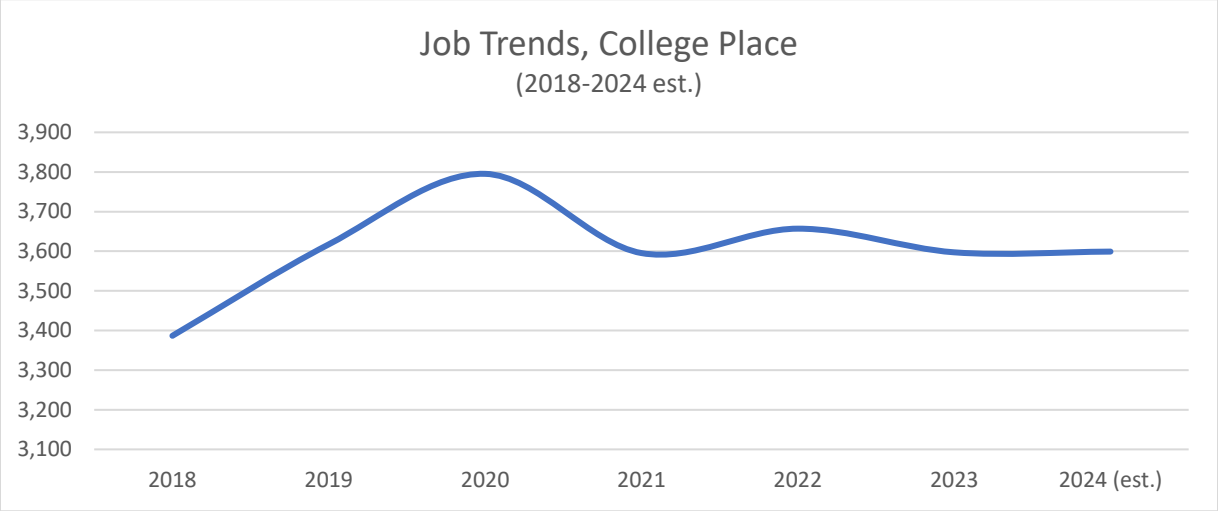
71%

Some College+

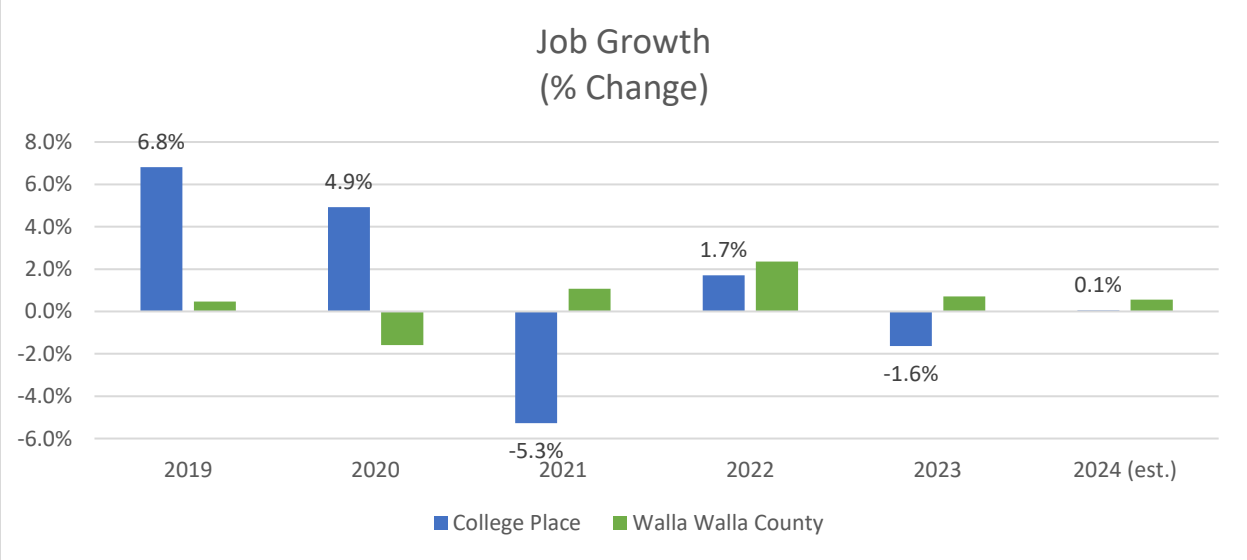
Source: American Community Survey, 5-Year Estimates



The job market in College Place is still recovering from the pandemic. Between the peak in 2020 and the trough in late 2021, approximately 200 jobs were lost within the 99324 ZIP code, representing a 5.3% decline.



Source: Lightcast, QCEW, Non-QCEW, Self-employed



Source: Lightcast, QCEW, Non-QCEW, Self-employed

The largest contributing industries include government (primarily higher education), retail trade, accommodation and food services, health care, and finance and insurance. Government employment dominates the local labor market, followed by educational services, indicating the area's strong ties to public institutions and higher education. Retail and health care also play significant roles, supporting both local consumption and essential services.

The region's Gross Regional Product (GRP) stands at $417 million, accounting for 10% of the County's total economic output. The primary industries driving GRP are government, finance and insurance, retail, educational services, and health care. The data suggests a stable economy with growth in key service-oriented sectors, reinforcing the importance of education, health care, and retail as economic pillars.

GRP

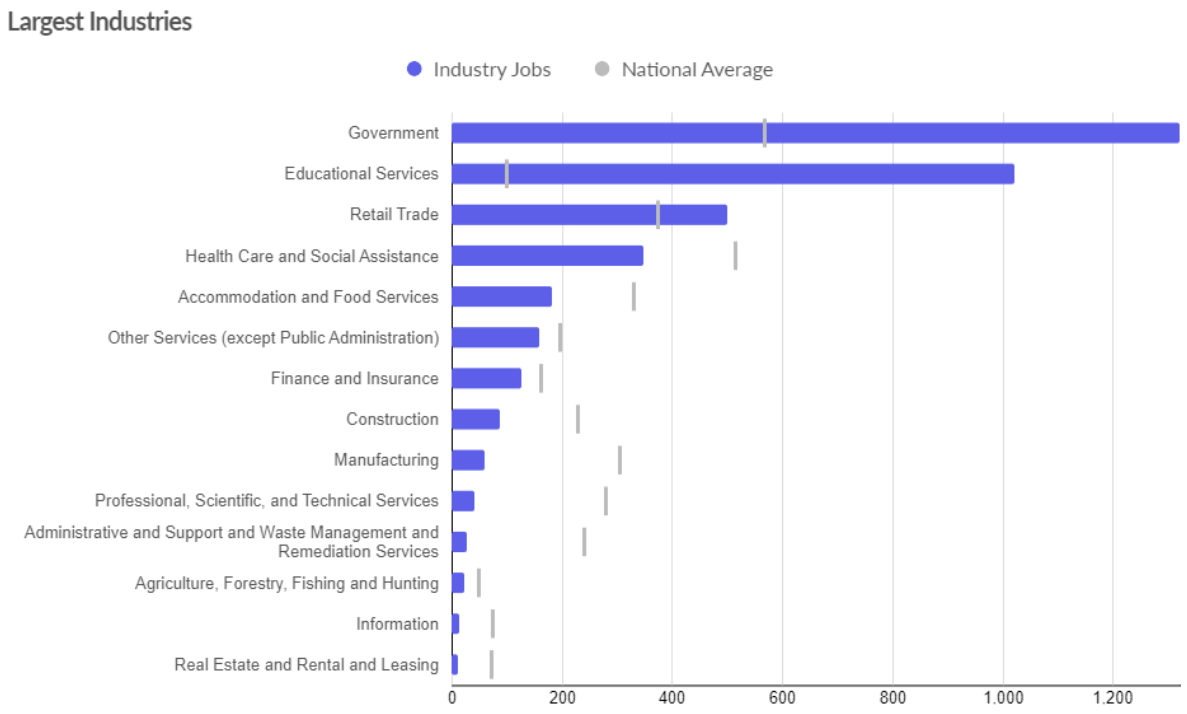
$417M

(10% of County)

Largest Contributing Industries:

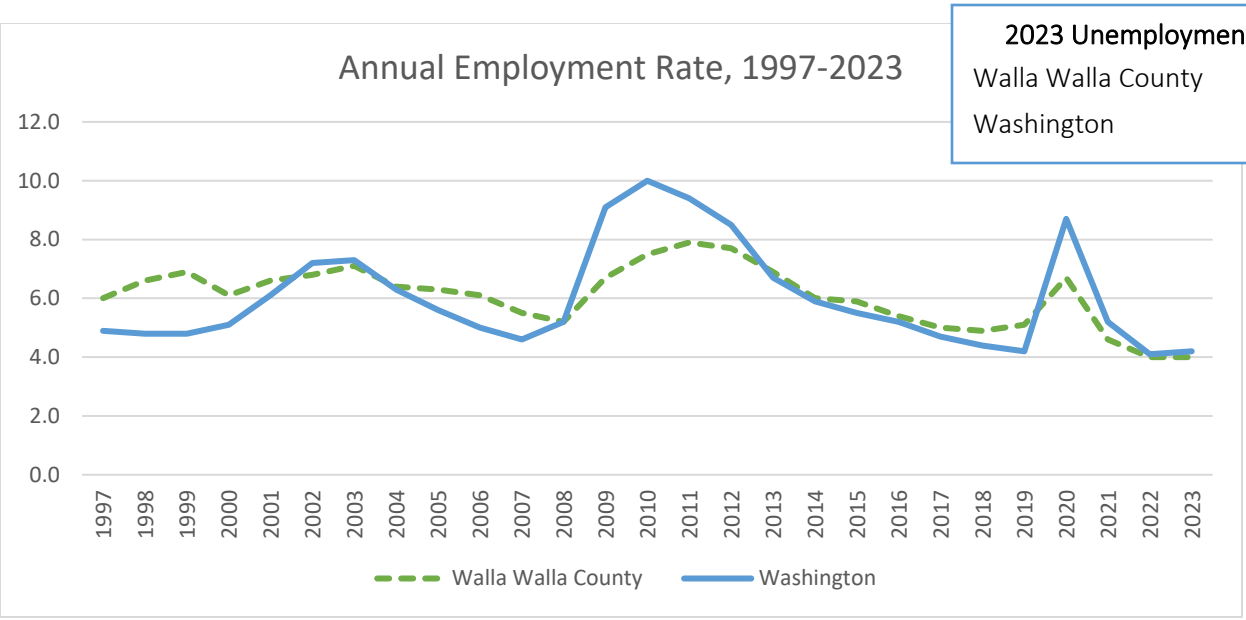
- Government
- Finance & Insurance
- Retail
- Educational Svcs
- Health Care

Source: Lightcast, College Place (zip code 99324)



Source: Lightcast, QCEW, Non-QCEW, Self-employed for College Place (zip code 99324)

The unemployment rate in Franklin County remains higher than the state, by 2.1 percentage points. The 2019 annual unemployment rate—the most recent annual number at the time of this report—in Franklin County was 6.4%, compared to 4.3% statewide and 3.7% for the nation.



2023 Unemployment Rate	
Walla Walla County	4.0%
Washington	4.2%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics program

According to the Bureau of Labor Statistics' Occupational Employment and Wage Statistics, the median hourly wage in Walla Walla County was $23.04 as of the latest available data (May 2023). Walla Walla County continues to trail the state in wages—20% below the state average.

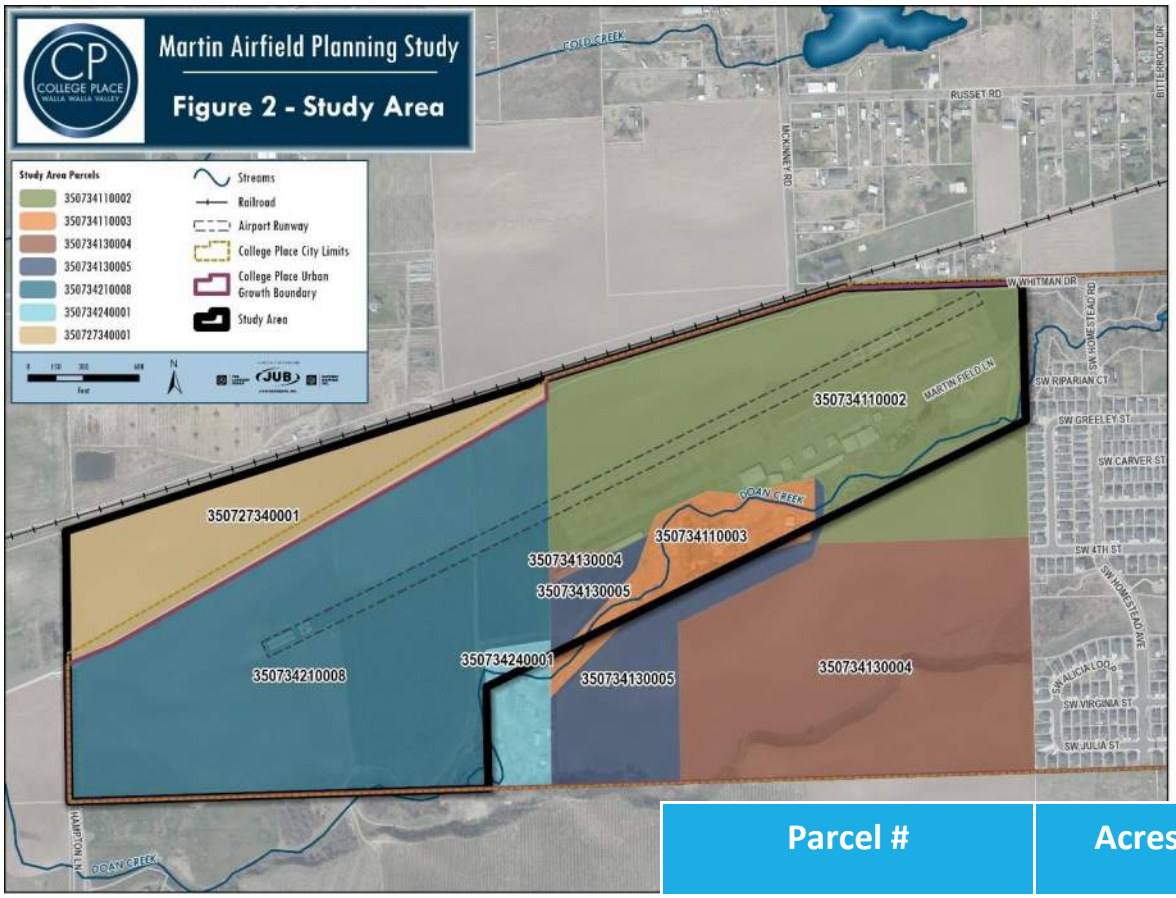
Median Hourly Wage

$23.04
(Walla Walla County)

$28.81
(Washington)

Commercial Real Estate Snapshot

The City of College Place only has three acres of active light industrial land. The project area consists of six (6) light industrial zoned parcels, totaling 233 acres.



Parcel #	Acres
350734210008	79.83
350734240001 (private)	6.61
350734130005	19.82
350734130004	54.58
350734110002	62.60
350734110003	10.00
Total	233.44

Industrial Inventory

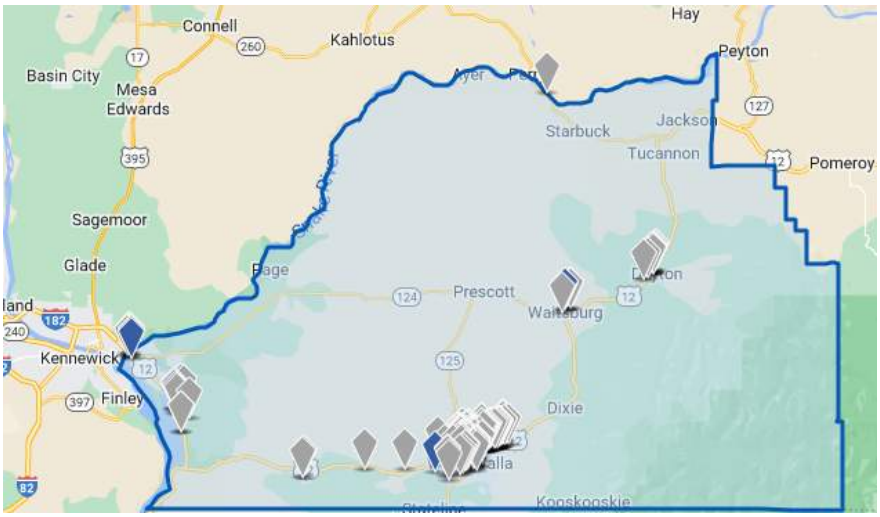
Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

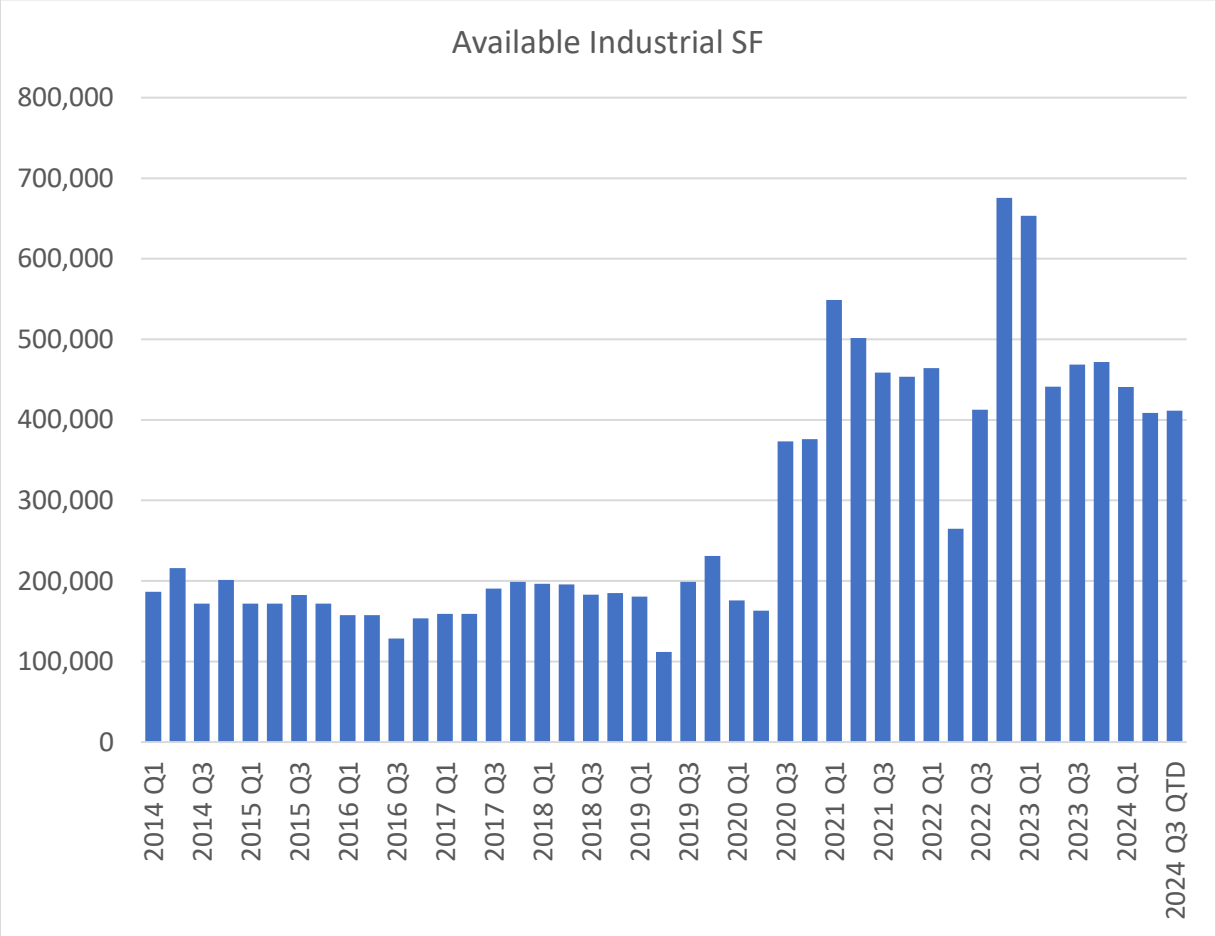
4.6M SF
inventory

411,260 SF
available space

5.6%
vacancy rate

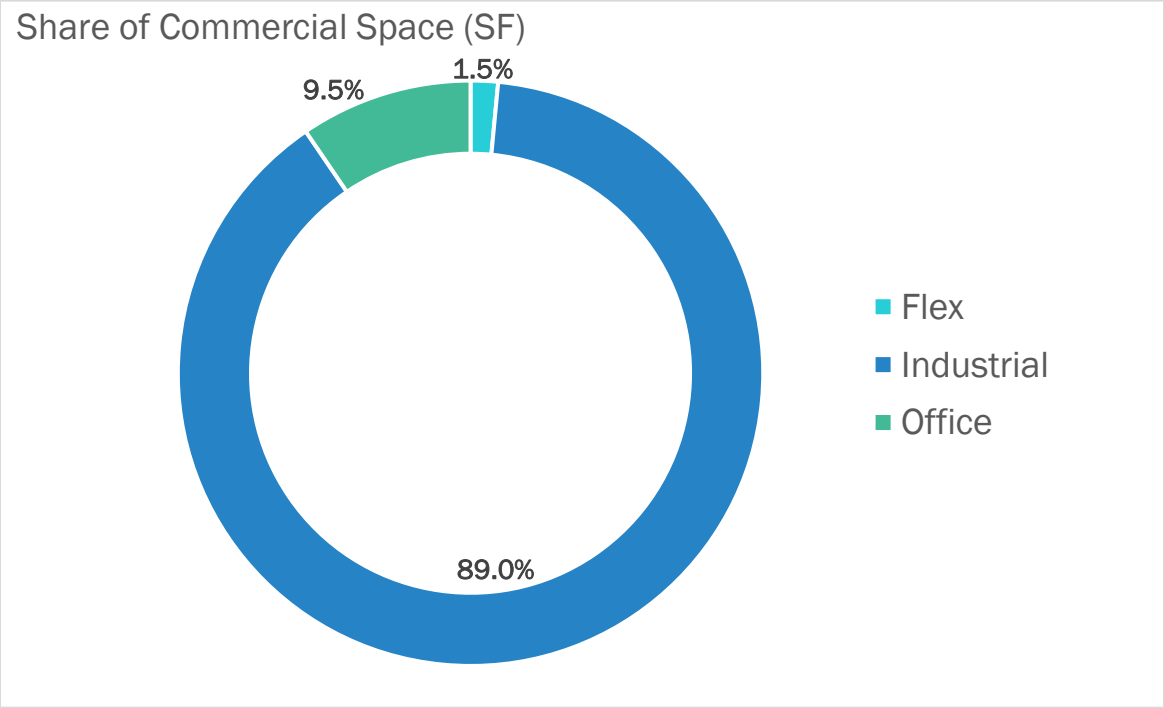
$8.71/SF
rental rate

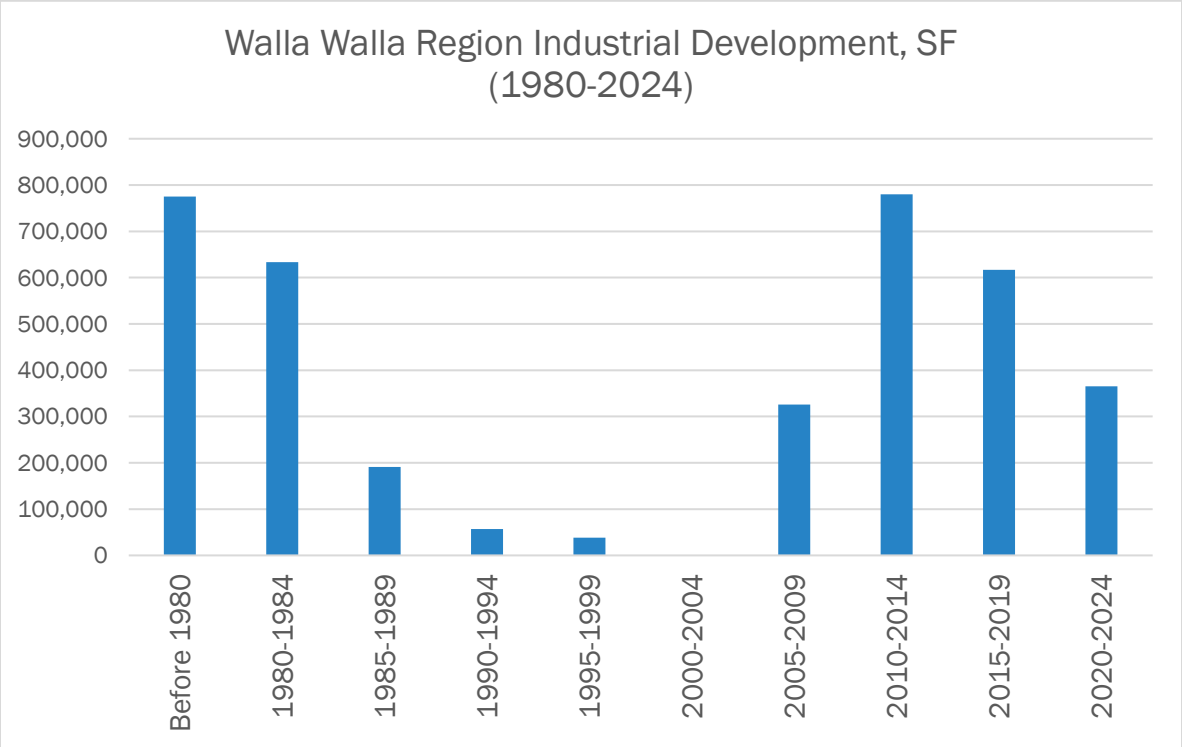




Source: Costar

Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

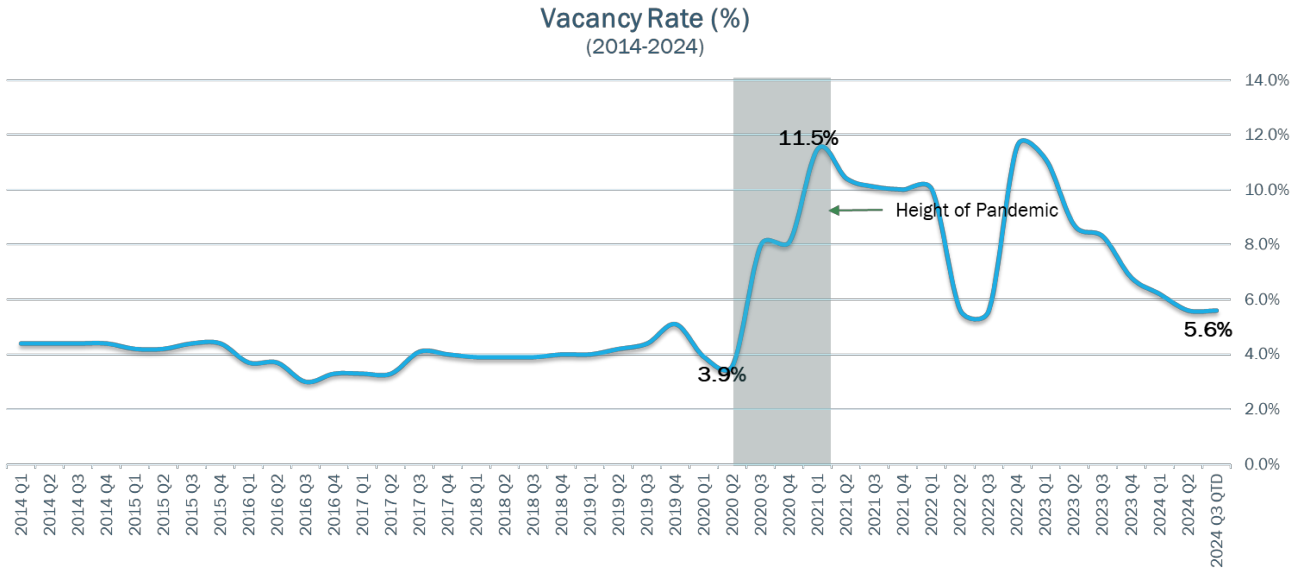




Source: Costar

Industrial Performance

Vacancy rates in the Walla Walla region are currently slightly above average at 5.6%. However, this is a significant improvement from the pandemic peak of 11.5%. Before the pandemic, vacancy rates typically ranged between 3% and 4%.

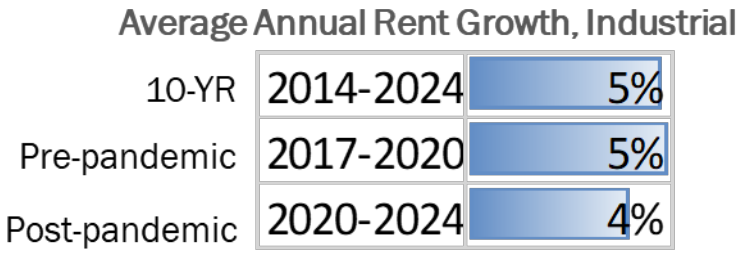


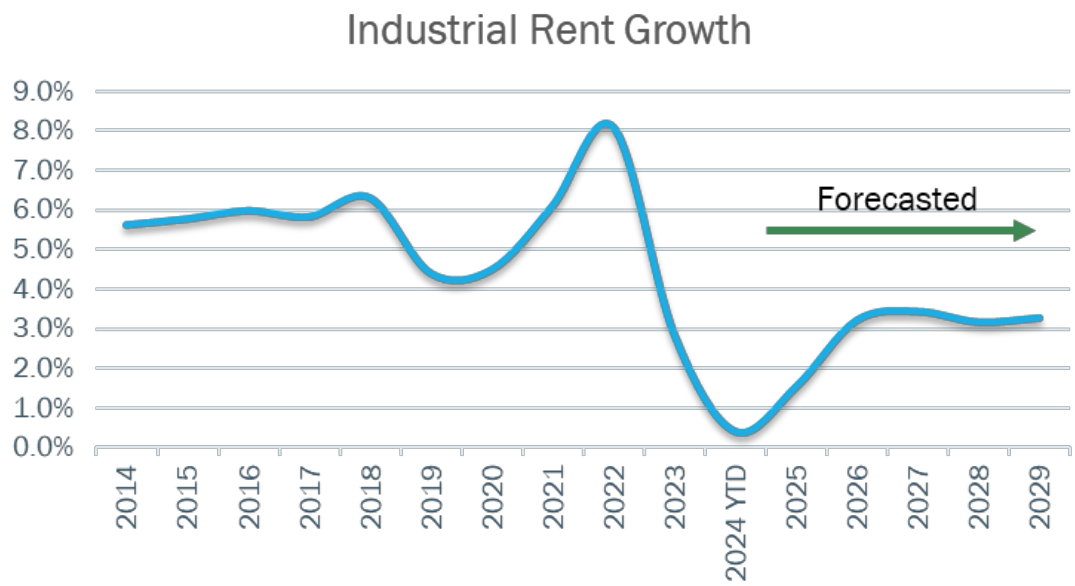
Source: Costar, Authors calculations

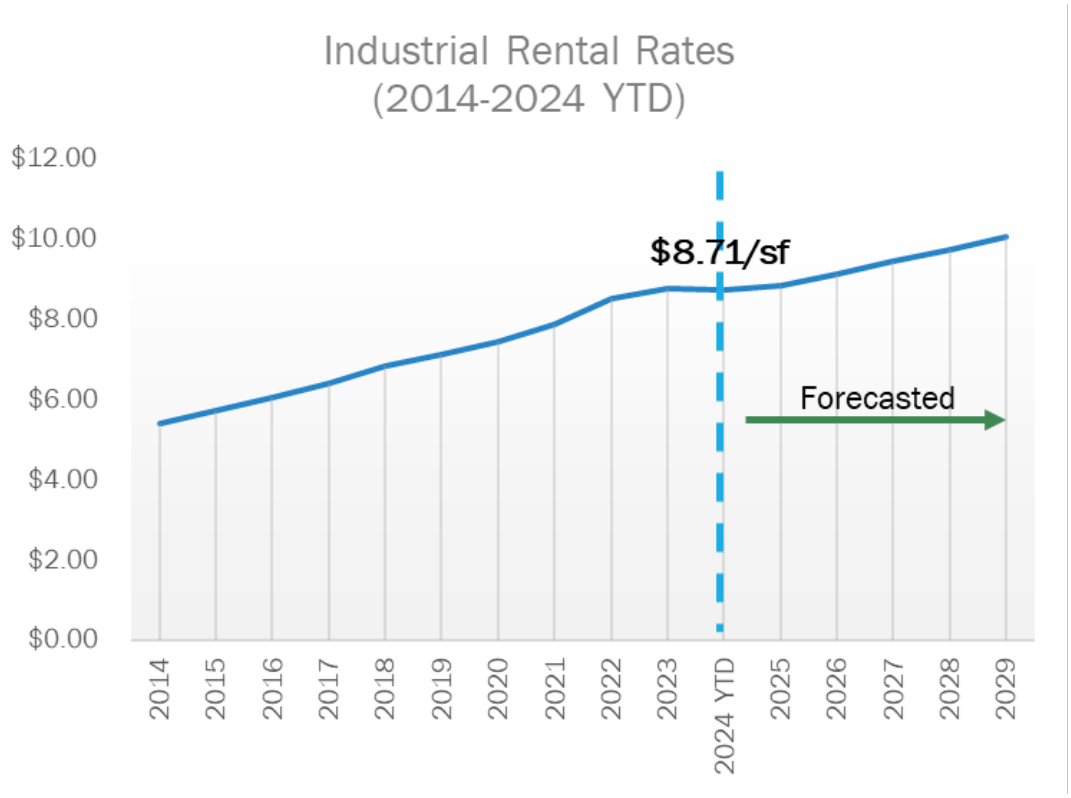
Rent growth for both industrial and office space has maintained a steady trajectory, defying the challenges posed by the pandemic.

While there was a slight deceleration in rent growth for office space during the pandemic, it managed to persevere and return to pre-pandemic levels of growth. In contrast, industrial rental rates continued their upward trend at a commendable pace.

This sustained growth, coupled with the constrained supply of new commercial inventory and low vacancy rates, underscores the demand for commercial space in Ellensburg.



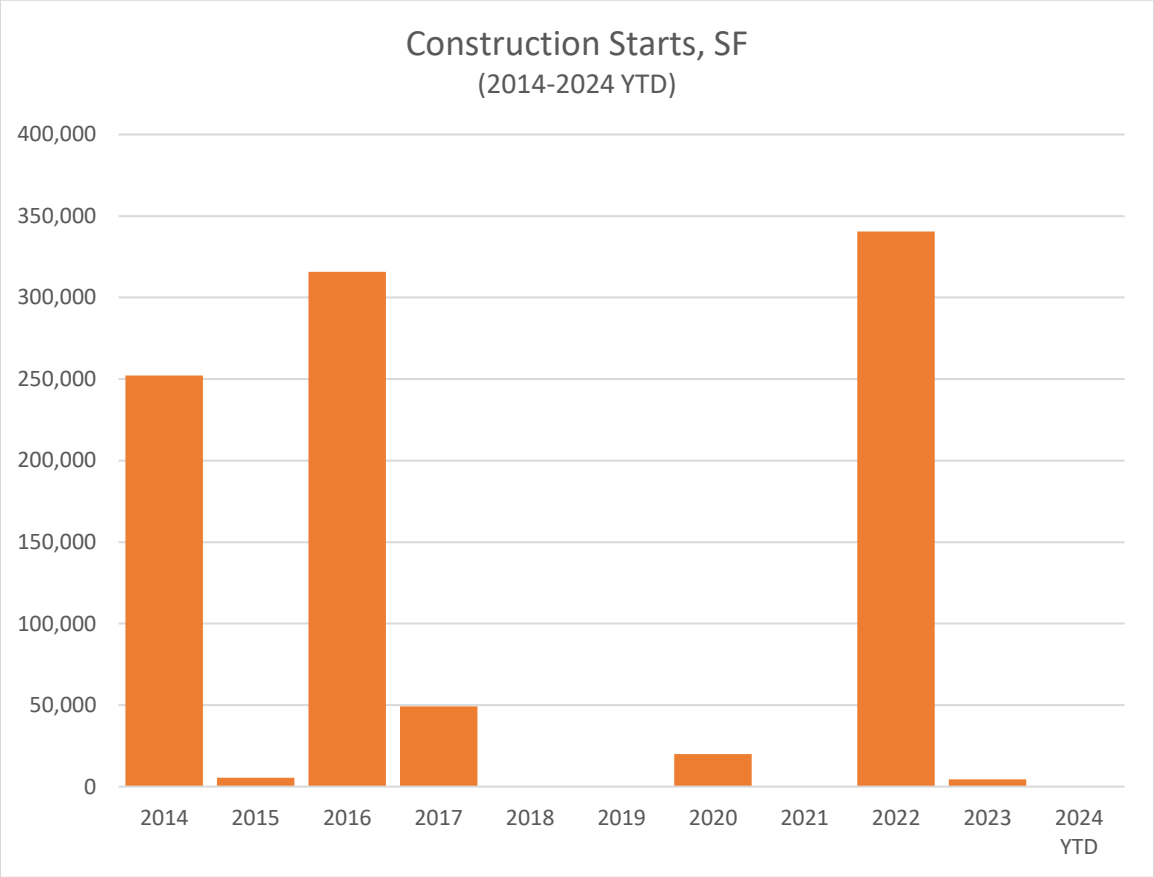




Source: Costar, Authors calculations

Industrial Pipeline

Based on information from Costar, there is 223,720 SF of industrial space under construction in the Walla Walla region. Majority of this activity started in 2022 and is anticipated to hit the market by 2025.



Source: Costar

Competing Sites

Address	City	Year Built	Building SF	Acres (Land only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Industrial Market Potential

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

Industry and Supply Chain Gap Analysis

An industry and supply chain gap analysis was conducted to determine the businesses and industry sectors that offer the most potential for growth around the region. This data was then ground-truthed with interviews from major businesses in the area, potential businesses, and other industry experts and stakeholders.

This analysis was assessed by four critical factors and conducted at the MSA level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 mark but showing job loss, were deemed "*Important and Requiring Attention*," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Industry Health Check

Agriculture and food processing remain central to the local economy, with crop production, food manufacturing, and beverage product manufacturing serving as core industries. The presence of these sectors suggests strong opportunities for value-added agriculture, food processing, and supply chain expansions such as packaging, cold storage, and distribution. Additionally, the region's healthcare sector, led by hospitals and social assistance, indicates an ongoing demand for medical services, elder care, and workforce training in healthcare-related fields. Retail and trade are also significant, with merchant wholesalers (nondurable goods) and sporting goods and hobby retailers playing a role in the local economy, pointing to potential growth in specialty retail and recreational markets.

To capitalize on these strengths, strategic investments should focus on targeted food and beverage processing infrastructure, support for healthcare workforce development, and logistics and wholesale distribution enhancements. Expanding retail and recreation offerings could further stimulate economic activity, particularly in outdoor and lifestyle industries.

Several industries are gaining traction in College Place, indicating new opportunities in construction, healthcare, professional services, and logistics. The construction sector, including building material supply dealers, specialty trade contractors, and construction of buildings, reflects increased demand for residential and commercial development. This growth underscores the need for real estate investment, workforce training in skilled trades, and green building technologies.

The expansion of ambulatory healthcare services points to a growing need for urgent care facilities, specialized outpatient clinics, and home health services, while repair and maintenance services highlight demand for auto repair, equipment servicing, and facility management. The rise of professional, scientific, and technical services, including computer systems design, engineering, custom programming, and R&D, suggests an increasing focus on technology-driven economic diversification. Encouraging the growth of tech startups, cybersecurity firms, and engineering consultancies could strengthen the region's innovation ecosystem.

Additionally, insurance carriers and durable goods wholesalers signal potential for expanded finance and logistics services, supporting regional supply chains and commercial trade. Investing in warehouse and distribution infrastructure could further position College Place as a logistics hub, particularly for durable goods related to agriculture, construction, and manufacturing.

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

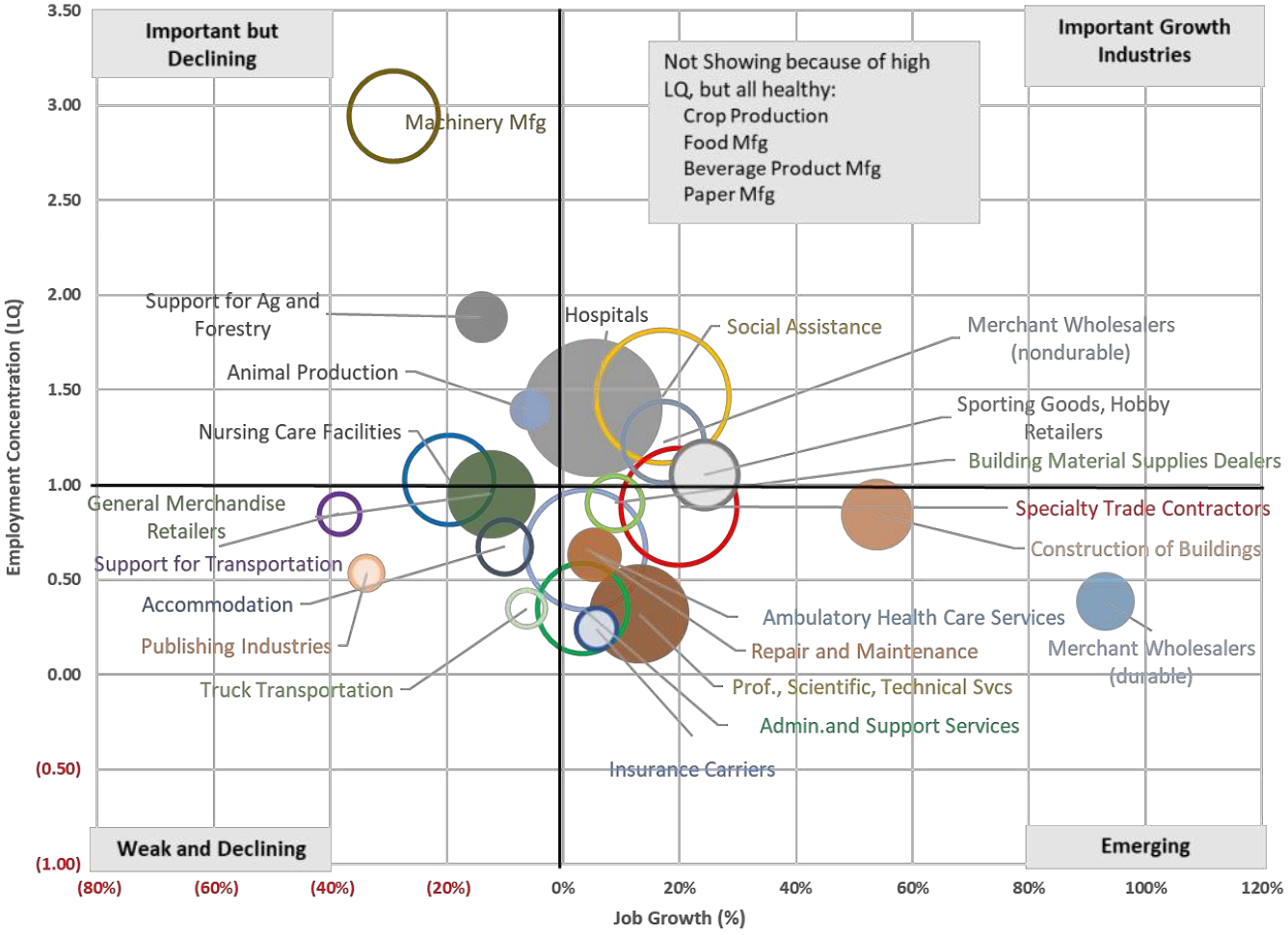
- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

Industry Health Check



Additionally, the following key sectors are driving the success of major employers in the region. By leveraging these industries, there is an opportunity to strengthen and expand local supply chains, attract complementary businesses, and enhance regional competitiveness through targeted infrastructure investments and workforce development.

Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

Potential Uses

Following the industry and supply chain gap analysis, we conducted interviews with local and regional businesses, higher education institutions, and key stakeholders to gather input on potential uses and validate the summarized data.

Based on the above analysis and insights gathered from interviews, the following uses were identified as having the greatest potential for the 233-acre site.

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
- R&D or Professional & Technical Services
- Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
- Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

Site Building Capacity

The following potential buildout scenario was estimated based on the potential uses identified in the analysis above, combined with industry standards for land requirements for different types of industrial facilities, focusing on site usage, building size, and ground coverage ratios. For each industry, the data outlines the percentage of the site utilized, the typical building square footage, and the corresponding potential number of buildings that could be accommodated on a given site. The total acreage potential across all industries is roughly 28 acres, with an average of 4 acres per building.

Use	% of Site	Ground Coverage Ratio	Typical Building SF (industry standard)	Potential Number of Buildings	Acres per Bldg	Typical Range (small to medium)
Wholesalers	25%	50%	50,000	6.7	4.6	2-5 acres
Truck Transportation	15%	30%	25,000	2.9	6.4	2-5 acres
Manufacturing	20%	50%	50,000	5.3	4.6	2-5 acres
Food Processing	15%	40%	50,000	2.6	7.2	2-5 acres
Lab & Testing Facilities	10%	30%	15,000	3.2	3.8	0.5-2 acres
R&D	15%	30%	10,000	7.2	2.6	0.5-2 acres
Total	100%			28	4	

Impacts

Economic impact analyses are used to estimate the overall economic activity, including spill-over and multiplier impacts, which occurs as a result of a particular business, development or event.

The economic activity related to the Martin Airfield site is the millions of dollars of goods and services purchased from local vendors and the wages and benefits paid to local workers. This initial injection of funds circulates to the business owners and employees that supply the materials, goods and services needed for the development. These contractors, businesses and households continue the economic ripple effect by hiring workers and buying goods and services to facilitate their business.

This analysis breaks down the overall project based on the results from the industry analysis and interviews. The project site layout will be further vetted by JUB Engineers based on infrastructure needs and requirements.

Once the development is completed and occupied, commercial activity and new residential households will spend millions of dollars annually in the course of their daily activities. This recirculation of the original expenditures multiplies their impact through these indirect and induced effects.

The extent to which the initial expenditures multiply is estimated using economic models that depict the relationships between industries and firms and their employees. These models are built upon expenditure patterns that are reported to the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Bureau of Economic Analysis. Data is regionalized so that it reflects and incorporates local conditions such as average wages, expenditure patterns and resource availability and costs.

The multipliers used in this analysis were generated by IMPLAN in coordination with the U.S. Bureau of Economic Analysis' RIMS II multipliers. Where appropriate, conservative estimates were used.

To further delineate, below are brief definitions of the three typical types of impacts.

> ***Direct impacts***: derive directly from an activity or event (first round supply chain)
>
> ***Indirect impacts***: generated as a result of business-to-business transactions (second tier supply chain)
>
> ***Induced impacts***: generated as a result of consumer-to-business transactions (a result from consumer spending)

Direct impacts are those economic impacts that occur as a consequence of direct activity and employment provided by the businesses that support the area, other businesses and government agencies that provide a range of related support services.

Indirect impacts are generated as a result of business-to-business transactions and induced impacts are a result of consumer-to-business transactions.

The economic impact results should be interpreted as those that are *attributable* to the proposed development at the subject site rather than assuming the new development will *generate* such new activities.

Given the desirable industries that have the potential of fulfilling existing business supply chain needs and interviews from industry experts, there is potential for several different users at this site. The impacts summarized below are indicative of different users in the identified industries, as outlined in the section above. The median wage for proposed jobs in these industries is $40.36 per hour in Walla Walla County, driven upward by manufacturing, lab and R&D positions. This is **72% higher than the CERB median hourly wage** of $23.04 for the County. Truck transportation and warehousing average $30.56 per hour, still above the median hourly wage for the County.

The 687 direct jobs estimated to be created at full build-out is expected to increase the labor force in Walla Walla County—assuming that some workers will reside in Walla Walla County. A small portion will most likely reside outside the area and, therefore, positively impacting their labor force numbers as well.

Impact on Jobs						
Impact on Jobs	Buildout Scenario					Total
	MFG	Truck Transp.	Wholesalers	Lab & Testing Facilities	R&D	
TOTAL JOBS	494	33	239	124	228	1,118
Direct	317	23	107	96	144	687
Indirect + Induced	177	10	132	28	84	430
SUBTOTAL	***494***	***33***	***239***	***124***	***228***	***1,118***

Source: Author's calculations using multipliers from IMPLAN; rounds to nearest thousand

Table 1. Labor Force Impacts as a result of Jobs Directly Created (687 new direct jobs)

Walla Walla County	Current	Impact from Direct Jobs	Percent Change
Labor Force	27,255	28,373	4.1%
Unemployed	1,357	239	-82.4%

[1]assuming that people that fill these jobs will reside in Walla Walla County (labor force data is based on "place of residence" and not place of work). Based on the current 5.0% unemployment rate (Jan 2025)
Source: Author's calculations based on BLS data

Conclusion

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

To support these emerging industries, incentives and policy strategies should focus on workforce development, business incubation, and infrastructure investment. Strengthening construction and trade workforce training programs can address the rising demand for skilled labor. Tech and business services growth could be encouraged through business incubators, coworking spaces, and startup funding for IT and cybersecurity firms. Expanding healthcare services and insurance offerings will be crucial in meeting the needs of a growing population. Finally, the development of logistics and wholesale trade infrastructure could enhance College Place's role as a regional distribution center.

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 City track the metrics set forth, and required by CERB, to determine if the desired outcomes are achieved and to help guide future development projects.

Overall, College Place is well-positioned for economic expansion through a combination of industrial diversification, strategic investments, and workforce development initiatives. By leveraging its strong agricultural base, growing healthcare sector, and emerging technical and construction industries, the region can sustain long-term economic growth and resilience.

Appendix 6

Detailed Cost Estimates

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Roads**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$176,000
2.00	**Traffic Control**			5.0%	$110,000
3.00	Crushed Surface Base Course	6,121	Tons	$35	$214,235
4.00	Crushed Surface Top Course	5,226	Tons	$35	$182,910
5.00	HMA CL 1/2" PG 64-28	3,983	Tons	$150	$597,450
6.00	Cement Conc. Traffic Curb and Gutter	8,138	LF	$25	$203,450
7.00	Cement Conc. Sidewalk	5,424	SY	$60	$325,440
8.00	Streetlights (includes wiring, J-Boxes, etc.)	27	EA	$7,500	$202,500
9.00	Street Trees	136	EA	$500	$68,000
10.00	Irrigation	1	LS	$100,000	$100,000
11.00	Stream Crossing - Does Not Include Row Acquisition For House	1	LS	$250,000	$250,000
12.00	Paint & Signage	1	LS	$50,000	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 2,480,000**
	Contingency [1]				**$ 744,000**
	City of College Place Sales Tax (8.8%)				**$ 284,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 877,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 4,385,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Earthwork**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$22,000
2.00	**Traffic Control**			5.0%	$14,000
3.00	Earthwork, Grading Site	8,000	CY	$30	$240,000
4.00	Clearing and Grubbiong	5	ACRE	$5,000	$25,000
5.00	Asphalt Pavement Restoration		SY	$70	$0
6.00	Hydroseeding	2	ACRE	$5,000	$10,000
7.00	Silt Fence		LF	$5	$0
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 311,000**
	Contingency [1]				**$ 93,000**
	City of College Place Sales Tax (8.8%)				**$ 36,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 110,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 550,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	2/11/2025 30-24-031
ITEM:	Sewer Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$302,000
2.00	**Construction Traffic Control**			0.0%	$0
3.00	**Gravity Sewer Pipe**				
3.01	4" PVC Gravity Sewer Service Lateral	1,165	LF	$27	$31,455
3.02	8" PVC Gravity Sewer Service Lateral		LF	$41	$0
3.03	6" PVC Gravity Sewer Pipe		LF	$40	$0
3.04	8" PVC Gravity Sewer Pipe	7,400	LF	$47	$347,800
3.05	10" PVC Gravity Sewer Pipe		LF	$56	$0
3.06	12" PVC Gravity Sewer Pipe		LF	$67	$0
3.07	16" PVC Gravity Sewer Pipe		LF	$81	$0
3.08	18" PVC Gravity Sewer Pipe		LF	$98	$0
3.09	21" PVC Gravity Sewer Pipe		LF	$127	$0
3.10	24" PVC Gravity Sewer Pipe		LF	$152	$0
3.11	30" PVC Gravity Sewer Pipe		LF	$188	$0
3.12	36" PVC Gravity Sewer Pipe		LF	$238	$0
3.13	Bedding and Foundation Material	8,565	LF	$15	$128,475
3.14	Sewer Service Line Connection	29	EA	$500	$14,500
4.00	**Gravity Trench Excavation/Backfill**				
4.01	4-10 ft.	3,450	LF	$43	$148,350
4.02	10-16 ft.	5,115	LF	$74	$378,510
4.03	16-20 ft.		LF	$104	$0
4.04	20-24 ft.		LF	$135	$0
4.05	24-28 ft.		LF	$168	$0
4.06	28-30 ft.		LF	$207	$0
4.07	Import Backfill and Foundation Material	16,597	CY	$40	$663,880
5.00	**Surface Repair**				
5.01	Hydroseed		LF	$15	$0
5.02	Natural Ground	8,565	LF	$25	$214,125
5.03	Gravel Roadway		LF	$30	$0
5.04	Asphalt - Trench Patch Width per City Standards (Required for 4-16' Depth Sewer)		LF	$39	$0
5.05	Asphalt - 1/2 Street Width per City Standards (Required for 16-20' Depth Sewer)		LF	$160	$0
5.06	Asphalt - Full Street Width per City Standards (Required for 20-30' Depth Sewer)		LF	$319	$0
6.00	**Manholes**				
6.01	48" Manholes, 4-10 ft.	10	EA	$5,400	$54,000
6.02	48" Manholes, 10-16 ft.	14	EA	$5,900	$82,600
6.03	48" Manholes, 16-20 ft.		EA	$6,400	$0
6.04	60" Manholes, 20-24 ft.		EA	$12,650	$0
6.05	60" Manholes, 24-28 ft.		EA	$13,400	$0
6.06	60" Manholes, 28-30 ft.		EA	$13,750	$0
7.00	**Lift Stations**				
7.01	Site Work	1	LS	$154,000	$154,000
7.02	Yard Piping	1	LS	$134,000	$134,000
7.03	Lift Station - Structural	1	LS	$158,000	$158,000
7.04	Lift Station - Mechanical	1	LS	$716,000	$716,000
7.05	Lift Station - Electrical	1	LS	$452,000	$452,000
8.00	**Project Specific Considerations**				
8.01	Dewatering	1	LS	$8,000	$8,000
9.00	**Miscellaneous Other**				
9.01	Bypass Pumping			0.0%	$0
9.02	Bonding / Admin			2.5%	$92,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$**	**4,080,000**
Contingency [1]	**$**	**1,224,000**
City of College Place Sales Tax (8.8%)	**$**	**467,000**
Planning, Engineering, & Administrative Costs [2]	**$**	**1,443,000**
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$**	**7,214,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/6/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	Water Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8%	$380,000
2.00	**Construction Survey**	1	LS	$10,000	$10,000
3.00	**Erosion Control and Water Pollution Prevention**	1	LS	$10,000	$10,000
4.00	**Materials Testing**	1	LS	$5,000	$5,000
5.00	**Project Temporary Traffic Control**	1	LS	$5,000	$5,000
6.00	**Shoring and Trench Safety Systems**	1	LS	$2,500	$2,500
7.00	**Surface Repair**				
7.01	Removing Asphalt Concrete Pavement	625	SY	$5	$3,125
7.02	HMA Sawcut and Seal	4,070	LF	$2	$8,140
7.03	HMA Restoration	625	SY	$47	$29,375
8.00	**Water Pipe and Appurtenances**				
8.01	Connect to Existing Water Main 12 In. Diam.	2	EA	$5,000	$10,000
8.02	DI Pipe for Water Main 6 In. Diam.	1,500	LF	$90	$135,000
8.03	DI Pipe for Water Main 14 In. Diam.	830	LF	$186	$154,380
8.04	DI Pipe for Water Main 16 In. Diam.	14,395	LF	$221	$3,181,295
8.05	DI Tee 14 In. x 6 In.	3	EA	$2,300	$6,900
8.06	DI Tee 16 In. x 6 In.	27	EA	$3,500	$94,500
8.07	DI Tee 16 In. x 12 In.	1	EA	$4,600	$4,600
8.08	DI Tee 16 In. x 14 In.	3	EA	$4,800	$14,400
8.09	DI Tee 16 In.	1	EA	$11,500	$11,500
8.10	DI Cross 16" In.	1	EA	$4,400	$4,400
8.11	DI Reducer 16 In. x 12 In.	1	EA	$3,700	$3,700
8.12	DI 45° Bend 16 In.	4	EA	$3,100	$12,400
8.13	DI Cap 12 In.	2	EA	$710	$1,420
8.14	DI Cap 14 In.	3	EA	$890	$2,670
8.15	DI Cap 16 In.	3	EA	$1,550	$4,650
8.16	Blowoff Assembly 2 In.	8	EA	$2,500	$20,000
8.17	Butterfly Valve 12 In.	2	EA	$4,000	$8,000
8.18	Butterfly Valve 14 In.	3	EA	$5,400	$16,200
8.19	Butterfly Valve 16 In.	34	EA	$6,100	$209,810
8.20	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	2	EA	$11,000	$22,000
8.21	Hydrant Assembly	30	EA	$6,500	$195,000
8.22	Bollard	60	EA	$1,000	$60,000
8.23	Service Connection 2 In. Diam.	29	EA	$3,400	$98,600
8.24	Water Meter 2 In. Diam.	29	EA	$6,500	$188,500
9.00	**Project Specific Considerations**				
9.01	Doan Creek Crossing	1	LS	$100,000	$100,000
10.00	**Miscellaneous Other**				
10.01	As-Built Drawings	1	LS	$2,500	$2,500
10.02	Bonding / Admin			2.5%	$116,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$5,132,000**
Contingency [1]	$1,540,000
City of College Place Sales Tax (8.8%)	$588,000
Planning, Engineering, & Administrative Costs [2]	$ 1,815,000
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$9,075,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Storm Drain**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$31,000
2.00	**Traffic Control**			5.0%	$20,000
3.00	Catch Basin Type 1		EA	$2,500	$0
4.00	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	500	LF	$85	$42,500
5.00	Stormwater Treatment Device (CDS or Aquaswirl)		EA		$0
6.00	Swales	6,000	LF	$50	$300,000
7.00	Pond excavation, mulch, seeding	1,000	CY	$50	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 444,000**
	Contingency [1]				**$ 133,000**
	City of College Place Sales Tax (8.8%)				**$ 51,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 157,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 785,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Utilities**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$88,000
2.00	**Traffic Control**			5.0%	$55,000
	Electrical				$0
3.00	Primary Electrical Vaults	15	EA	$10,000	$150,000
4.00	Primary Electrical Conduit & Wire	8,500	LF	$40	$340,000
5.00	Transformer for Primary Service	0	EA	$100,000	$0
	Fiber Optic				$0
6.00	Fiber Optic	1.6	MI	$100,000	$160,000
7.00	Fiber Service Vaults	29	EA	$2,000	$58,000
	Gas				$0
8.00	4" Natural Gas Main	12,000	LF	$20	$240,000
9.00	Natural Gas Regulator	1	EA	$150,000	$150,000
				ESTIMATED CONSTRUCTION SUBTOTAL	**$ 1,241,000**
				Contingency [1]	**$ 372,000**
				City of College Place Sales Tax (8.8%)	**$ 142,000**
				Planning, Engineering, & Administrative Costs [2]	**$ 439,000**
				TOTAL PROBABLE COST IN 2025 DOLLARS[3]	**$ 2,194,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

2 Planning, Engineering, & Administrative costs include: Geotechnical Evaluations, Design, Survey, Construction Management, O&M Manuals, Record Drawings, and Administration. Estimated at 25% of construction subtotal, including contingency.

3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

Dedication Ceremony

LIONS PARK

All Are Welcome!!!

The City of College Place and our esteemed government officials invite the community to the Grand Re-Opening of the renovated Lions Park!

Join us for this momentous occasion!

May 29, 2025 at 4:30PM

CP
COLLEGE PLACE
WALLA WALLA VALLEY

Lions Park

801 SE Larch Avenue,
College Place, WA 99324

2025 EVENTOS DE LA CUIDAD

18 MAYO, 2025

BLOCK PARTY DE LA CUIDAD

1-6 PM

WALLA WALLA UNIVERSITY & COLLEGE AVENUE

29 MAYO, 2025

MERCADO EN EL PARQUE

THURSDAYS 4-7 PM
EXCLUDES 6/19, ENDS 9/25

LIONS PARK - 801 SE LARCH AVE

21 JUNIO, 2025

PELICULAS AL PARQUE

DOMINGOS AL ATARDECER
7/12, 8/2, 8/23 & 9/13

LIONS PARK - 801 SE LARCH AVE

29 JUNIO, 2025

FESTIVAL DE LIBERTAD

6-10 PM

FOOTBALL FIELD & TRACK FACILITY- COLLEGE PLACE HIGH SCHOOL

31 OCT, 2025

TRUNK -OR- TREAT

3-6 PM

COLLEGE PLACE CITY HALL
625 S COLLEGE AVE, 99324

04 DEC, 2025

WINTERFEST

6-8 PM

COLLEGE PLACE CITY HALL
625 S COLLEGE AVE, 99324

COLLEGE PLACE
MARKET
IN THE PARK

2025 EVENT SCHEDULE

18 MAY, 2025

CITY BLOCK PARTY

1-6 PM

WALLA WALLA UNIVERSITY & COLLEGE AVENUE

29 MAY, 2025

MARKET IN THE PARK

THURSDAYS 4-7 PM
EXCLUDES 6/19, ENDS 9/25

LIONS PARK -
801 SE LARCH AVE

21 JUNE, 2025

MOVIES @ THE PARK

SUNDAYS AT SUNDOWN
7/12, 8/2, 8/23 & 9/13

LIONS PARK -
801 SE LARCH AVE

29 JUNE, 2025

FREEDOM FESTIVAL

6-10 PM

FOOTBALL FIELD & TRACK FACILITY-
COLLEGE PLACE HIGH SCHOOL

31 OCT, 2025

TRUNK -OR- TREAT

3-6 PM

COLLEGE PLACE CITY HALL
625 S COLLEGE AVE, 99324

04 DEC, 2025

WINTERFEST

6-8 PM

COLLEGE PLACE CITY HALL
625 S COLLEGE AVE, 99324

COLLEGE PLACE
MARKET
IN THE PARK

USTED Y SU FAMILIA ESTÁN INVITADOS A UNA

Evento de Dedicación PARA LIONS PARK

ACTIVIDADES, FOOD TRUCKS, REGALOS, MANUALIDADES Y MÁS – ¡DIVERSIÓN PARA TODOS!

4–7 PM — **DERBI DE PESCA**
College Place Lions Club

4–7 PM — **MERCADO EN EL PARQUE**
Bienvenidos Distinguidos Invitados

4:10 PM — **HIMNO NACIONAL**
Isaiah Garcia

4:15 PM — **TIERRA BIENVENIDA**
Invitada Especial Jeanine Gordon

4:30 PM — **CEREMONIA DE CORTE DE CINTA**
Walla Walla Valley Chamber of Commerce

LIONS PARK
801 SE LARCH AVE
99324

JUEVES
MAYO 29, 2025

4:00 PM – 7:00 PM

YOU & YOUR FAMILY ARE INVITED TO A

Dedication Event FOR LIONS PARK

ACTIVITES, FOOD TRUCKS, GIFTS, CRAFTS & MORE – *FUN FOR EVERYONE!!!*

4–7 PM
FISHING DERBY
College Place Lions Club

4–7 PM
MARKET IN THE PARK
Welcome Distinguished Guests

4:10 PM
NATIONAL ANTHEM
Isaiah Garcia

4:15 PM
LAND WELCOME
Special Guest Jeanine Gordon

4:30 PM
RIBBON CUTTING CEREMONY
Walla Walla Valley Chamber of Commerce

LIONS PARK
801 SE LARCH AVE
99324

THURSDAY, MAY 29, 2025

4:00 PM – 7:00 PM

Chakis
com.mx

WWV Chamber 2025 Community Charrette Report

1. Purpose and Overview

This report synthesizes insights, questions, and themes gathered by eleven scribes during the Walla Walla Valley Chamber's Community Charrette. It is designed to serve as a resource for City and County officials who hosted and participated in the discussions, as well as for entities currently conducting general plan updates, strategic planning, or interagency collaborations.

The charrette brought together a cross-section of the Walla Walla Valley community to explore shared challenges and brainstorm innovative solutions. This report aims to:

- Summarize critical themes and recurring topics
- Reflect public sentiment and priorities
- Capture open-ended questions for continued analysis
- Offer actionable ideas and next steps

A complete, anonymized set of notes is included in the appendix to ensure transparency and allow jurisdictions to explore topic-specific commentary. These aggregated notes have been scrubbed of personal identifiers and negative comments and de-duplicated for clarity.

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2. Methodology

- **Date of Charrette:** March 5, 2025
- **Participants:** Approximately 90 community members representing sectors such as local government, education, agriculture, healthcare, small business, nonprofits, and civic groups
- **Format:** Facilitated round-table conversations with City and County leadership
- **Data Collection:** Notes from eleven scribes were aggregated, grouped thematically, and synthesized into key findings. Full notes are included in the appendix.

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3. Key Themes & Community Insights

3.1 Infrastructure & Development

Concerns:

- Confusion around contractor selection, oversight, and accountability
- Zoning inconsistencies inhibiting both housing and business growth

Community Aspirations:

- Transparent public contracting processes
- Development standards that reflect community values (e.g., walkability, workforce access)
- Balanced growth that protects neighborhood character

Unanswered Questions:

- What tools can increase oversight of public contracts?
- How can we better align infrastructure projects with land use goals?

3.2 Housing & Zoning

Challenges Identified:

- Persistent shortage of affordable and workforce housing
- Zoning and permitting processes seen as outdated or inflexible

Ideas Shared:

- Support for zoning reform to allow for greater density and housing diversity
- Incentives for infill development and accessory dwelling units (ADUs)
- Proactive code enforcement to maintain housing standards

Considerations:

- Legal limits on rent control and landlord regulation
- Balancing growth with the capacity of existing services and infrastructure

3.3 City Services & Operations

Public Sentiment:

- Broad satisfaction with essential services including libraries, utilities, parks, and public safety

Requested Improvements:

- Enhanced sidewalk repair, tree canopy coverage, and proactive debris cleanup

Operational Notes:

- Recognition of staffing challenges and funding constraints

3.4 Youth Engagement & Retention

Community Worries:

- Limited non-wine-related activities for youth
- Young residents leaving the area post-graduation

Proposed Strategies:

- Strengthen internship pipelines and technical training
- Host youth-focused events and non-alcoholic social spaces
- Expand rural transit options and access to community hubs

3.5 Funding & Capacity Building

Identified Needs:

- Centralized support for grant writing and collaboration
- Resource-sharing among nonprofits and public entities

Opportunities for Action:

- Develop a regional grant readiness program
- Facilitate cooperative funding efforts for joint projects

3.6 Regional Collaboration & Governance

Concerns Raised:

- Redundant efforts across jurisdictions
- Misalignment in planning and communication

Suggestions:

- Regular cross-jurisdictional planning sessions
- Shared frameworks for tourism, workforce development, and emergency response

3.7 Transportation & Mobility

Public Requests:

- Safer infrastructure for pedestrians and cyclists
- Better rural transit and real-time scheduling tools

Innovative Concepts:

- Free transit for students and seniors
- Ride-share subsidies in underserved areas
- Exploration of smart transit pilots

Action Step:

- Convene a multi-jurisdictional transportation working group

3.8 Agriculture & Wine Economy

Growth Opportunities:

- Expanded agritourism (farm-to-table dinners, tours, seasonal events)
- Youth outreach and AgTech innovation

Emerging Trends:

- Shift toward sustainable farming practices
- Declining tasting room foot traffic
- Increased demand for non-alcoholic and eco-conscious offerings

3.9 Education & Workforce Development

Key Issues:

- Rising food insecurity among students
- Early learning and vocational access disparities
- Enrollment declines in rural districts

Community Solutions:

- Stronger school-employer partnerships
- Multilingual family engagement
- Increased mentorship and hands-on training programs

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4. Outstanding Questions & Considerations

- What are viable models for regional event or convention centers?
- How can cities monitor and report real-time planning and development data?
- How will short-term rental policies evolve with state legislation?
- Are there peer regions demonstrating successful zoning reform or smart growth?
- How might budget shortfalls impact long-range infrastructure or housing plans?

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5. Additional Community Observations

- Walla Walla employs a full-time arborist
- Countywide population growth is modest at 0.8% annually
- Death rates now outpace birth rates in the region
- Current kindergarten enrollment trails high school graduation rates by over 100 students

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6. Long-Term Planning: Vision to 2050

- Balancing updated safety codes with affordability in housing retrofits
- Rescaling government functions to align with demographic shifts
- Fostering trust through open, shared data platforms
- Protecting rural landscapes while accommodating growth
- Ensuring infrastructure and housing supply align with projected workforce needs

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7. Recommendations & Next Steps

1. **Commission legal and policy reviews** to clarify open questions.
2. **Translate themes into tactical work plans** by agency or department, with defined milestones.
3. **Host follow-up meetings or webinars** to maintain momentum and public engagement.
4. **Develop a public-facing dashboard** with community KPIs and project timelines.
5. **Pursue targeted funding opportunities** aligned with the community's identified priorities.
6. **Distribute tailored summary briefs** to each jurisdiction for internal planning.
7. **Promote ongoing coordination** through interagency forums and rotating working groups.

Appendix:

- Aggregated scribe notes (edited for anonymity and clarity) are included to support further study and reporting by interested jurisdictions and partners.
- Executive Summary included

WWV Chamber 2025 Community Charrette Aggregated Scribe Data / Report Appendix

City of Walla Walla Comments

How does the City determine if your contractor is a good choice?

- Previous jobs: if the relationship exists, they look at previous projects.
- Without a relationship: question partners and collaborators.

Need for separate areas/zoning

- Separate areas/zoning for wine, commercial, and residential, and how to construct more in each category to create both housing and jobs.

How does WW address a balanced plan for growth? Table discussion suggestions

- Reactive, not proactive, enforcement.
- Development flexibility.
- Get rid of single-family homes.
- Allow duplexes and condos everywhere.
- Share more data.
- Create environment for growth and jobs.
- What are you doing with the educational system to grow a good workforce?
- 1% a year reported growth is basically none; how do we fix this?

Government and taxation

- Government is limited on what taxes can be implemented at a City level.

Would the city be open to allowing VRBOs if the state approves the pending bill?

- City Council would need to determine allowability.

How can you regulate housing rental costs?

- Property management organizations and state laws largely provide that regulation; cities are limited.
- Local government cannot implement rent control; it is state regulated.

- City is understaffed and staff overworked: no personnel available for inspections and cannot inspect private property (generally owners and property management companies).

Controlling unkempt and overgrown housing

- Government has limited ability to regulate housing conditions and overgrowth at all levels.

What services and programs are provided by the City of Walla Walla?

- Public works (water, sewer, roads)
- Emergency services (fire, police)
- Parks & Recreation
- Waste Management
- Library
- Planning
- Livability
- Safety

How do you assess the City's performance?

- **Satisfactory**: "great," "very good," "no complaints," "pretty darn well." Strengths include three colleges, penitentiary, VA, Corps of Engineers, airport, several manufacturing companies, wine industry, and other ag production.
- **Opportunities for Improvement**:
    - Need for improved road and other infrastructure maintenance.
    - Need for "beautification" of the city to improve appeal. Suggestions:
        - Trees or other barriers to block industrial areas.
        - Zoning enforcement to remove "clutter."
        - Improved leaf removal.

How can you create an environment to keep youth engaged and caring about our WW community? What can youth do that is not alcohol or winery related?

- Jobs for youth

- Affordable youth housing
- Museums
- Pools
- Concerts
- Singular events
- YMCA
- See it remain warm & friendly and keep small-town feel as we grow
- Good housing with realistic property taxes
- Keep talent here (youth jobs)
- Need much better and larger medical care for all ages
- Need to attract tech sector
- Find ways to keep our youth from fleeing the community
- Higher paying wages and tech jobs
- Cultural development opportunities
- Residents discuss becoming part of Tri-Cities often
- Colleges and universities to work together more collaboratively
- Business incubation
- Intentional conversation between schools and colleges for collaboration
- Better transportation at no cost or limited cost throughout the county with greater connectivity to Tri-Cities
- Enhance the Fairgrounds and create higher usage to provide activities for more locals, youth, and visitors
- Wa-Hi enhancements (physical and programmatic)
- Ice skating rink
- Tech sectors in community to afford more programs in educational systems
- Multi-utility sports facility:
    - Raise funds for start-up then turn over to City and Parks to grow and maintain

- Metro region parks and trails system

Do we have landmark cities we want to grow to be like?

What does the community think it needs—results of your surveys

- We think taxes on back-end of new businesses opening.
- VRBO areas for revenue for taxes.
- Better housing regulations.
- Parking at business areas (walking problem).
- Tourist issues:
    - No place to take kids while visiting.
    - Family-friendly concierge.
    - Day-care drop-in for kiddo's.
    - Recycling service outside of the city limits and implement glass recycling, making environmentally conscious businesses and employees more attracted to the community.
- Additionally, a community sports complex (current facilities utilized at capacity; demand for indoor sports not being serviced, which would bring additional commerce to the city).
- Provide Art Commission funding; seek grants for the arts.
- Embrace cultural aspects of the community.
- Enhance walking trail network and natural spaces.
- Road safety and bike safety.

How would these services and events get funded?

- Federal and state grants
- Private grants
- Private donations
- Fees
- Rents

- Taxing
- In-kind contributions

Interesting Facts

- The city has a full-time arborist who manages trees in Walla Walla.
- The county is growing at 0.80% annually.
- The birth rate in Walla Walla is lower than the death rate.
- There are 100 fewer kindergarteners than high-school graduates in the district.

City of College Place

- CP is growing faster than rest of the county but no longer cheaper.
- Population is shifting.
- How do we cut red tape in government and housing specifically?
- School superintendents are struggling and overburdened and have to continue to bring in expensive consultants.
- Need to update housing and education to modern times.
- Build work-life balance for all in WWV.
- Walkable, connected community; better interconnection of biking paths.
- CP water challenges particularly related to agricultural usage; 600 new homes on schedule increasing water demand.
- Schools struggling to get new bonds for needed construction, modernization and expansion.
- CP needs more schools and more affordable housing for families.
- More retail and varied businesses for residents.
- Align school schedules throughout the county.
- CP needs more childcare—a great deal more for daytime and nighttime use.
- Improve parks including Lions; multiplex sports center.
- Revitalize College Avenue; mixed-use housing needed.
- 20% of CP is non-taxable as longtime residents leave property willed to the church.

- Create incentives to move business to CP—small and large.
- Create jobs in CP.
- CP is going in the right direction but needs to continue to work on challenges and diversification.
- Interesting incorporation docs to “create a sin-free city”: tell the story as new residents don’t know the developmental story of CP.

County-Focused Commentary

- We need a strategic water plan for the Valley providing for residential, commercial, and agricultural use.
- Focus on Canada and contract for Columbia River agreement.
- County needs to update codes for childcare and remove barriers for desperately needed childcare which is blocking business growth and attraction throughout the County.
- Incentives and support growth.
- Code redefinitions and revisions for workforce housing and affordable housing options.
- Public voting on more issues.
- Better communication from county to residents.
- Too many tax increases to cover county business which makes it difficult to keep the doors open.
- Fees too high for county permits generally restricting business and growth.
- More trails and structured outdoor experiences are needed.
- Connecting existing trails (Bennington, Mill Creek, out to College Place).
- Improve collaboration and communication between counties and all cities.
- Need to protect our farms we were founded on agriculture and need to protect our current farms as well as proving adequate water resources over time.
- Encourage agritourism.
- How is county revenue shortfall being addressed in short and long-term for sustainability without taxing business and people out of the county?

Port & Regional Questions

How can we make region more attractive to young families?

- Barriers:
    - Housing
    - Family activities
    - Declining school enrollments and consolidations
    - Downtown housing challenges, NIMBY, permitting, rising costs, lack of political support of growth.
- Questions on sustainability of wine & tourism industry relative to diversity and sustainability.

Critical Infrastructure & Economic Branding

- We cannot have opportunities without internet infrastructure.
- Critical infrastructure: broadband, water, wastewater codes.
- Need better economic development and regional branding/marketing to broaden branding to attract business & industry.
- Broaden education to show youth what we have in this community and connect them to it.
- Who are we? What is our brand? We were wheat, now we are wine. How do we balance agriculture and other business sectors?
- What is our target growth and how do we get there? What are the community's values and culture? How do we leverage that in marketing?
- What industry in the Valley can we capitalize on?
- How do we keep the diversity of industry we have and make it sustainable while we increase growth opportunities?

Education Barriers & Solutions

Barriers to success

- Food insecurity.
- 30% of students are below poverty line in the Valley.

- Childcare and early education opportunities gaps.
- Outdated governmental regulations.
- Zoning restrictions and building codes.
- Conflict resolution skills needed.
- Parental engagement is lacking or nonexistence.
- Lack of CTE integration in the Valley.
- Too few students entering the system causing school closures and potential downsizing and closures in some areas of the county and more idle school space needed in rapidly growing College Place.
- Lack of access to opportunity for many students.
- Multi-lingual access for all and early language training.
- Sports costs and timings are barriers to a large sector of WWV students.

Needs to overcome challenges

- Community education by districts ongoing, not just bonding requests.
- Encourage community engagement.
- Additional mentors for students through community programs like Friends for Children, Boys and Girls Clubs etc. at no cost to families.
- Valley-wide improved school infrastructure.
- CTE expansion throughout the Valley and coordination with WWCC and other post-secondary entities and trade opportunities.
- If we do not remedy this long before 2050 our community will continue to bleed students and with lack of growth, lose desirability, business and workforce.

City Development & Planning Challenges

- Challenges with housing availability and affordability need short and long-term solutions, plans and implementation.
- Solve the mix of new and older homes and weird additions with some code.
- Provide for a variety of sizes and price points perhaps with builder incentives.
- Address the need for tiny home villages and research viable solutions.

- Streamline the planning process and costs and provide builder incentives to encourage use of WW's progressive codes and density expansion.
- Public education on benefits to distill NIMBY attitude prevent in community.
- Rezone empty downtown buildings for housing or mixed-use with incentives for conversion.
- Growth is inevitable.
- Get out ahead of growth and encourage growth.
- Councils and commissions need to move forward with a solid collaborative growth plan.
- Increase rental property inventory and workforce affordable housing at all levels.
- Residents and visitors have concerns about parking.
- Increased walkability areas and connectivity of trail system to encourage live-work-play-centric lifestyle.
- Builders and developers complain about the Valley processes and prefer to build in the Tri-Cities. What processes are they using that we could implement?
- Lack of care of many properties—inspections? Violations?

Transportation Needs

- Increased transportation options may require fewer private vehicles and more housing options.
- Addition of route development critical.
- Governmental regulation challenges transportation.
- Funding is a serious challenge that is not improving currently.
- Should we encourage Lyft and similar ride-share services to engage in our community and provide for that?
- Better marketing of availability of WWV transportation routes and ability for transportation to Tri-Cities.
- Desperately needed additional accessibility options and expansion.
- Assist unhoused with access and free transport to facilities with available free showers, food, resources.

- Public transport for all flights from WWV airport to hotels and other locations for all flights inbound and outbound.
- PR, education and collateral for all routes and maps—not everyone can google.
- Keep transit free and advise public that it is for many that is a huge incentive to leave their vehicle at home or facilitate those without vehicles to work in locations that are not walkable.

Agriculture & Wine Industry

- There is a City of WW Master Tourism Plan that we can share—good to look at that and the Rural Tourism Support Program. Wine is core to our visitor economy and part of our community agricultural industry, but how does that broaden?
- Ag has been everything for this county to date—wheat, barley, lentils, peas—and now it's wine; needs to evolve and change; think produce is key especially in current tariff situation; need to enhance produce.
- Need to have programs to reach youth so they understand where food comes from; maybe there are existing programs for elementary-aged kids—learning to grow and/or cook their own foods; or bring in their home experience to the school or broader audience, be more inclusive of cultures.
- Looking at 2050…tourism identity, need more agriculture intermixed. Like every 5th grader toured the Foundry—could we expand to field trips to apple orchards, wheat fields, etc.
- Growing up everyone used to work harvest, even if you weren't living on a farm. Now tech doesn't require as large a crew so less opportunity for exposure. State of WA on cutting edge of ag technology. Look at online resources to see how many are in the area. Wheat growers are foundation to ag industry in the area.
- It's not all about tourism but is a piece about connecting people to land and experience of it. And bring the experience to the hub of the wheel, e.g., bring to our Farmers Market.
- How is wine industry doing here?
- LK: Market trends are changing and make wine as a "future"; correcting now for oversupply; interest in non-alcoholic lifestyle(s) and nutritional labeling and organic; people drinking less and some replacement with other products (e.g., cannabis). Locally, there are a lot of wineries and tasting rooms (45 downtown alone). During pandemic, worked to expand winery experiences for higher revenue per guest.

People spending more time at fewer wineries. Wineries seeing about 20% less traffic, so looking at ways to fill the gap, especially recruiting next wine consumers. During 2022, very strong year—even higher than 2017.

- Still a lot of potential for agritourism—people want experiences, especially city dwellers.
- Agrihood concept: One owner (Steve) from Des Moines, Iowa, 4th generation farmer, started land real estate company; in 4-5th year in Iowa on an "Agri-hood" with 300 acres, four quadrants of houses with dense & diverse housing, parks, central working farm where residents have plots and classes; example: https://agrihoodliving.com/
- WWV Chamber hosts on the last Wednesday of each month at Chamber—Agribusiness Roundtable encompassing all aspects of sector.
- Do an Ag Charrette? Maybe integrate into some Chamber event: AgTech—SmartFarm. Even look at technology—KEY Technologies! Water Tech is our community's industrial future. Nelson Irrigation. Smart technologies—smart cities (track traffic patterns to be more efficient; all about sensing and patrolling). In farming, tractors that are GPS-aligned and self-driving, measure moisture, remove weeds, etc.
- Ag Tech center—maybe out at Airport District or College Place.
- Wine connects to agriculture—cornerstone of this community.
- Grow ag technologies HERE. How do we build the next generation of companies here? The three factors to get companies to WW Valley—vision, financial support, mentoring support.

2025 WWV Chamber Community Charette
Executive Summary

In early 2025, the Walla Walla Valley Chamber of Commerce hosted a Community Charrette to give residents, businesses, and local agencies the chance to speak directly with government and community leaders about shared regional challenges. Held at the Courtyard by Marriot., The Charrette brought together nearly 90 participants for a series of roundtable conversations on key topics like housing, youth retention, infrastructure, transportation, and economic development.

This report captures the main themes that emerged from those discussions. It highlights where community voices aligned, identifies areas of concern or uncertainty, and lifts up questions that deserve further exploration. The findings are based on scribe notes from eleven simultaneous roundtables. Comments were reviewed and grouped by topic to reflect both how often ideas were mentioned and the range of perspectives offered. Personally identifying details and non-constructive feedback were removed to keep the focus on meaningful input.

Designed as a working tool, this report aims to support local governments and partner organizations as they plan next steps and continue public engagement. It includes a summary of long-term challenges, questions for future discussion, and actionable ideas. For full transparency, the appendix contains all scribe notes in their original form.

Chapter 10.18

TRUCK ROUTES

Sections:
10.18.010 Definitions.
10.18.020 Application of regulation.
10.18.030 Exceptions.
10.18.040 Truck route established.
10.18.050 Truck traffic in the city – Outside origin.
10.18.060 Truck traffic in the city – Inside origin.
10.18.070 Maps.
10.18.080 Signs.
10.18.090 Weigh-in.
10.18.100 Violation – Penalty.

10.18.010 Definitions.

"City" is the city of College Place.

A "Deviation truck" is a truck that leaves and departs from a truck route while traveling inside the city.

"Person" is any person, firm, partnership, association, corporation, company, or organization of any kind.

"Truck" is any vehicle designed or operated for the transportation of property, and whose body weight or whose combined body and load weight or whose gross vehicle weight rating exceeds 26,000 pounds.

"Truck route" and "supporting truck route" are a way over certain streets, as designated in this chapter, over and along which trucks coming into and going out of the city must operate.

10.18.020 Application of regulation.

No person may operate a truck within the city except upon a truck route established in this chapter.

10.18.030 Exceptions.

This chapter does not prohibit:

A. Operation on the Street of Destination. The operation of a truck upon any street where necessary to the conduct of business at a destination point, provided streets upon which such traffic is permitted are used until reaching the intersection nearest the destination point;

B. Perishable Commodities. The operation of a truck while transporting a perishable commodity;

C. Government Vehicles. The operation of a truck owned and operated by a government agency;

D. Emergency Vehicles. The operation of an emergency vehicle upon any street in the city;

E. Public Utilities. The operation of a truck owned or operated by the city, public utilities, any contractor or materialman while engaged in the repair, maintenance, or construction of streets, street improvements, or street utilities within the city;

F. Recreational Vehicles. The operation of a recreational vehicle, including a motor home, a camper, or a travel trailer;

G. Solid Waste. The operation of a truck while engaged in the collection of solid waste within the city or

H. Detoured Trucks. The operation of a truck upon any officially established detour.

10.18.040 Truck route established.
A. The city council establishes the following truck routes:

1. State Route 125

2. Myra Rd

3. West Whitman Drive (Western City Limits to NW Evans Avenue)

4. SW Mojonnier Rd (Western City Limits to S College Avenue)

5. S College Avenue (SW Mojonnier Rd to State Route 125)

6. NW Evans Avenue (Blalock to West Whitman Drive)

7. Wallula Avenue

8. NE Rose Street (Lambert to Eastern City Limits)

9.SW Meadowbrook Blvd (Sydnee Lane to State Route 125)

B. A truck entering the city for a destination point outside the city may only operate over and along a route designated in this section.

10.18.050 Truck traffic in the city – Outside origin.
A. One Inside Destination Point. A truck entering the city for a destination point within the city must proceed only over an established truck route and may deviate only at the intersection with the street nearest to the destination point. Upon leaving the destination point, a deviating truck must return to the truck route by the shortest permissible route.

B. Multiple Inside Destination Points. A truck entering the city for multiple destination points must proceed only over established truck routes and may deviate only at the intersection with the street nearest to the first destination point. Upon leaving the first destination point, a deviating truck must proceed to other destination points by the shortest direction. Upon leaving the last destination point, a deviating truck must return to the truck route by the shortest permissible route.

10.18.060 Truck traffic in the city – Inside origin.
A. Outside Destination Point. A truck, on a trip originating in the city and traveling in the city for a destination point outside the city, must proceed in the shortest direction over streets on which such traffic is permitted to a truck route as established in this chapter.

B. Inside Destination Points. A truck on a trip originating in the city and traveling in the city for destination points within the city, must proceed as provided in CPMC 10.18.050.

10.18.070 Maps.
The city council directs the city clerk to keep and maintain an accurate map setting out truck routes and streets upon which truck traffic is permitted. The city clerk must keep the map on file at the office of the city clerk and must publish it on the city's website.

10.18.080 Signs.
The city council directs the city engineer to post clearly marked signs along the designated truck routes to give notice that this chapter is in effect.

10.18.090 Weigh-in.
A police officer may require a person driving or in control of a truck, not proceeding over a truck route, to proceed to any public or private scale available for the purpose of weighing and determining whether this chapter has been complied with.

10.18.100 Violation – Penalty.

Violation of any provisions of this chapter is a traffic infraction punishable by a fine not to exceed $200.00.

WELCOME

College Place's Newest Nonprofit!

DOWNTOWN COLLEGE PLACE ASSOCIATION

Values:

- Community & Connection
- Local Business Support
- Economic Development
- Health, Wellness, & Sustainability
- Education & Growth

Mission: to create a dynamic, inclusive, and prosperous downtown that honors College Place's history while fostering new opportunities for businesses, residents, and visitors alike.

Vision: DCPA aims to preserve and celebrate the distinctive character of College Place's downtown and its rich history while embracing future growth. We emphasize small business development, wellness initiatives, a strong educational presence, and thoughtfully designed public spaces that encourage connection, commerce, and a sense of place.

Email: downtowncollegeplace@gmail.com

City of College Place: Development Activity - May 2025				
Project Name	**Use**	**Location**	**Status**	**Lead Generated**
Commericial/Industrial				
Project Murph	Gas Station	Meadowbrook	- June 2024 Interested in establishing gas station in outlot of Walmart. - August 2024 Getting permission from corporate. -May 2025 Planning to turn in site plan soon.	ICSC Las Vegas
Project Cobble	Hotel	Whitman & Myra	- November 2023 Hotelier working out development agreement with property owner. Still trying to hammer out road access. - May 2024 Purchase and Sale agreement in place. Dependent upon roundabout. - September 2024 Gave them new Hotel STudy. Going after TIB roundabout grant. - May 2025 Roundabout grant didn't get awarded. City is self funding engineering of roundabout.	ICSC Las Vegas
Project LK	Senior Assisted Living	Myra & Garrison Village Way	-May 2025 Assisted Living operator interested in buying vacant parcel on northwest corner for development of senior village.	Developer on another project in town.
Project Bullseye	Big Box	Whitman & Myra	- March 2024 Option agreement exists. - May 2025 Tied to project Cobble and its success.	ICSC Las Vegas

Project OPH	Breakfast Restaurant	Whitman & Myra	- November 2023 Option for breakfast restaurant. Dependent upon hotel. -March 2024 Signed agreement based on hotel coming in adjacent. -May 2025 Tied to Project Cobble.	Property Owner.
Project Y	Grocer	Whitman & Myra	- June 2024 Is going to Board of Company for site approval. -May 2025 On back burner for now. Operator is trying to sell store up in Spokane area and use funds to do new store here. In process.	Cold Call
Project Smile	Industrial	West Whitman Drive	-May 2025 Due diligence on warehousing and production.	Cold Call
Project FM	Medium sized grocery and general merchandise store.	College Avenue, across from College Place High School.	- June 2024 Continue monitoring progress of Lakeside development before making decision. - May 2025 Evaluating property near SR 125 and College.	ICSC Las Vegas

Project Flight	Aerospace	Martin Airfield	- Nov 2023 Project is now annexed into the City. Working with property owner on future planning. - August 2024 Working with developer via State CERB Grant for infrastructure planning. - November 2024 Aiming to have study completed by end of year. - May 2025 Conceptual Airfield Area Planning Study Draft out.	Property owner.
Residential				
Homestead Subdivision Phase 3C, 3D, and 3E.	Residential subdivision constructed by Hayden Homes.	Homestead and Doans Street south of Fourth Street.	- May 2025 Waiting for plans to get turned in.	Hayden Homes has owned property for the last decade.
NW Residential	20 Apartments	SW Oakwood Pl off of SW 6th	- June 2024 Going through entitlement process. - July 2024 Company decided to buy eight homes on market in town to rehab and will be putting site with plans up for sale. - May 2025 Expecting plan submittal by Summer.	NW Residential Properties

Villages at Fort Walla Walla	180 multi-family apartment units.	South side of Whitman Drive/Deccion intersection.	- Jan 2019 Plan submittal is being reviewed by development staff. Spring 2019 construction. - June 2024 Getting last minute additional financing to make reality. - September 2024 - Under deadline by end of September to get something out of the ground to fall in old building codes. - May 2025 First two apartment buildings and clubhouse to start construction this summer.	Port of Walla Walla was approached by Farran Group about property and was directed to Bob Price and the City.
Sirmon Development	Multi-family apartments.	942 NE Spitzenburg St	- Jan 2019 Plan submittal is being reviewed by development staff. - - April 2021 Awaiting final engineering drawings. - Dec 2022 Project appears to be on ice for now. Tad asked about vesting rights. - Feb 2024 Talked to developer. Expecting dirt to be turned this year. -August 2024 Buildings are being built. - May 2025 First two structures have Certificate of Occupancy.	Property owner.

Lakeside/College Holdings Development	Single & Multi-Family	197 Mojonnier Rd	-August 2024 Expecting Master Planned Development application is planned for July 2024. Engineering on East-West Rd has started. - September 2024 Master Planned Development Application filed. Staff reviewing. - May 2025 Waiting for last couple of memos to get turned in to review and then issue completeness notice and forward to Hearing Examiner if ok.	Property owner.
Villages at Garrison Creek Phase 11 and 13	Single Family	Villages at Garrison Creek development.	- December 2021 Received submittal for 72 lot single family in vacant middle donut hole to finish up development. - Sept 2023 Engineer for developer is working on site issues. - Dec 2023 Expecting infrastructure to go in soon. - May 2024 Infrastructure being installed. -October 2024 Still working on site infrastructure. - November 2024 Getting ready to file plats. - May 2025 Under construction.	Property developer.

Deer Meadows Subdivision	Townhome	SW 12th	- December 2021 Developer Jeff Kelly out of Tri Cities is planning townhomes for site purchased from Marc Maiuri - Sept 2022 SEPA out now. 13 lot subdivision proposed by Jeff Kelly out of Pasco. - October 2022 Hearing Examiner meeting held. - December 2022 Going through final entitlements. - February 2023 Planning for a Summer start. - May 2024 Have turned in plans for grading permits. - May 2025 No Update.	Developer
Martin Airfield/Tarrgon Development	Airfield Update, Flex Facilities, Residential	West Whitman Drive	- Feb 2024 Project is now annexed into the City. Working with property owner on future planning. - May 2024 Martin Airfield study is starting. - July 2024 Working with City on area study. Also, Tarragon bought Hinshaw Ranch property. - February 2025 Early negotiations on development agreement. - May 2025 No Update.	Developer
Project Sod	Residential	Wallua Avenue	- August 2024 Property owners wants to do affordable housing. Wants into UGA next time it opens up.	Land Owner

Salerno Estates	Single Family Homes	359 SW 12th	- May 2023 Had public comment period for this development. 8 homes on approximately half acres. Reviewing comments and finalizing conditions of approval. - June 2023 Site plans approved. Past appeal period. - Dec 2023 Working with developer on issues. - Feb 2024 Infrasturcture plans getting turned in. - March 2024 Expecting construction to start soon. - May 2024 Working on site utilities. -August 2024 Working on area utilities. - November 2024 Continuing development. - May 2025 Continuing to develop.	Developer

College Place Economic Development, Tourism, and Events Commission - Hybrid (In-Person & Electronic) (Monday, March 3, 2025)
Generated by Maryelizabeth Garcia on Wednesday, February 26, 2025

1. Opening Items

Procedural: 1.01 Call To Order

Commission Chair Peck called the meeting to order at 5:00 PM.

Information: 1.02 Roll Call

PRESENT:		
	Commission Members	Tracy Warner; Doug Case; Teri Lesmeister; Allison Peck; Kirk Amick;
	Ex - Officio	Arlene Alen - Walla Walla Valley Chamber of Commerce City Administrator, Michael Rizzitiello
	Staff	City Clerk, Maryelizabeth Garcia Deputy City Clerk, Rhett Beardemphl
Also Present:		Paul Saldana, Economic Growth Strategies; Stradd Herrera, Economic Growth Strategies
MEMBERS EXCUSED:		
MEMBERS ABSENT:		Kelli Leen;

Procedural: 1.03 Public Comment - None.

2. Consent Agenda

Action (Consent): 2.01 Approve Agenda for March 3, 2025
Action (Consent), Minutes: 2.02 Approve Minutes from February 3, 2025
Action (Consent): 2.03 Approve Consent Agenda - Our adopted rules of Parliamentary Procedure, The Standard Code of Parliamentary Procedure, provide for a consent agenda listing items for approval of the Commission by a single motion. Typically the items listed under the consent agenda are the minutes from previous meetings and the agenda for the current meeting. Documentation concerning these items has been provided to all Commission Members and the public in advance to assure an extensive and thorough review. Items may be removed from the consent agenda at the request of any Commission Member.

Commission Member Case made a motion to approve the Consent Agenda. Second by Commission Member Alen and the motion passed 6-0.

3. Guest Presentations

Discussion, Information: 3.01 Update on Comprehensive Economic Development Strategy (CEDS) Update - Mr. Saldana
Mr. Saldana reported that the primary components of the Analysis are completed and the project is now moving into the draft plan phase. Mr. Saldana reviewed draft vision and foundational goals, and asked for commission feedback. Mr. Rizzitiello clarified that the periphery of the community is supportive of big box stores and other ancillary projects relating to the diversity of businesses. Mr. Rizzitiello further stated the need for light industrial flex space and family wage jobs. Mr. Saldana reviewed next steps and stated a 70% draft will be produced and presented to the commission for Council adoption.

Discussion ensued.

4. Action Agenda - None.

5. Staff Reports

Discussion, Information: 5.01 Downtown Association Formation Update- Ms. Garcia

DRAFT

Ms. Garcia informed the Commission of updates to the Downtown College Place Association formation. Ms. Garcia presented the logo, bylaws, Board of Directors, organizational structure, and planned activities for 2025.

Discussion: 5.02 Youth Advisory Commission Project for 2025 - Ms. Garcia
Ms. Garcia informed the Commission of the prospective Sister City Committee project chosen by the Youth Advisory Commission.

Information, Reports: 5.03 2025 Meetings & Events Calendar
Ms. Garcia presented the updated Meetings and Events Calendar to the Commission, citing changes in meeting dates and times, as well as event date changes. Ms. Garcia reviewed City of College Place notable events as well as marketing flyers for the Market in the Park.

6. Closing Items
Information: 6.01 Next Meeting: April 7, 2025 at 5PM.
Procedural: 6.02 Conclude

Commission Member Amick made a motion to conclude the meeting at 5:22PM. Second by Commission Member Lesmeister and, with no objection, the meeting concluded.

Approved:

_____
Allison Peck – Chair

Attest:

_____
Maryelizabeth E. Garcia – City Clerk

The foregoing minutes are the official record of the Economic Development, Tourism, and Events Commission meeting that occurred March 3, 2025. Further detail may be obtained by reviewing the actual audio recording made during this session.

DRAFT

MARTIN AIRFIELD AREA PLANNING STUDY 2025

CP
COLLEGE PLACE
WALLA WALLA VALLEY

J·U·B ENGINEERS, INC.

OTHER J-U-B COMPANIES

THE LANGDON GROUP

GATEWAY MAPPING INC.

TheMettsGroup

EXECUTIVE SUMMARY

The City of College Place has retained J-U-B ENGINEERS, Inc. to conduct a planning study evaluating the feasibility and site readiness to establish industrial development on approximately 64.5 acres of property near Martin Airfield. The City desires to attract light industrial development at Martin Airfield, which will create new jobs and private investment in growing market sectors to support the community.

Currently, the City lacks sufficient light industrial and employment lands to meet demand, making this area an essential and increasingly scarce resource for future economic development. Given this limitation, maximizing the potential of Martin Airfield for industrial use is a strategic priority.

This planning study serves as a strategic roadmap, reviewing the area's history and objectives, evaluating current infrastructure, and envisioning future scenarios necessary to draw the desired development. It offers a thorough analysis of site due diligence, highlighting both challenges and opportunities ahead. Ultimately, the aim is to assess the viability and readiness of Martin Airfield as a hub for light industrial use.

A review of existing infrastructure highlights necessary improvements to support development. These improvements include upgrades to transportation facilities, earthwork, and utility infrastructure. The study also presents preliminary cost estimates for these enhancements.
The following sections provide a detailed breakdown of each critical development component:

- **Conceptual Layout** – Overview of the planned site configuration and land use.
- **Transportation Facilities** – Assessment of existing and required road networks.
- **Earthwork** – Site grading and preparation requirements.
- **Utility Requirements** – Infrastructure needs for water, electricity, and other essential services.
- **Preliminary Cost Estimate** – Estimated financial investment for proposed improvements.

By addressing these factors, this document provides a framework for informed decision-making in the development of the study area, ensuring long-term success and sustainability.

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INTRODUCTION

Background

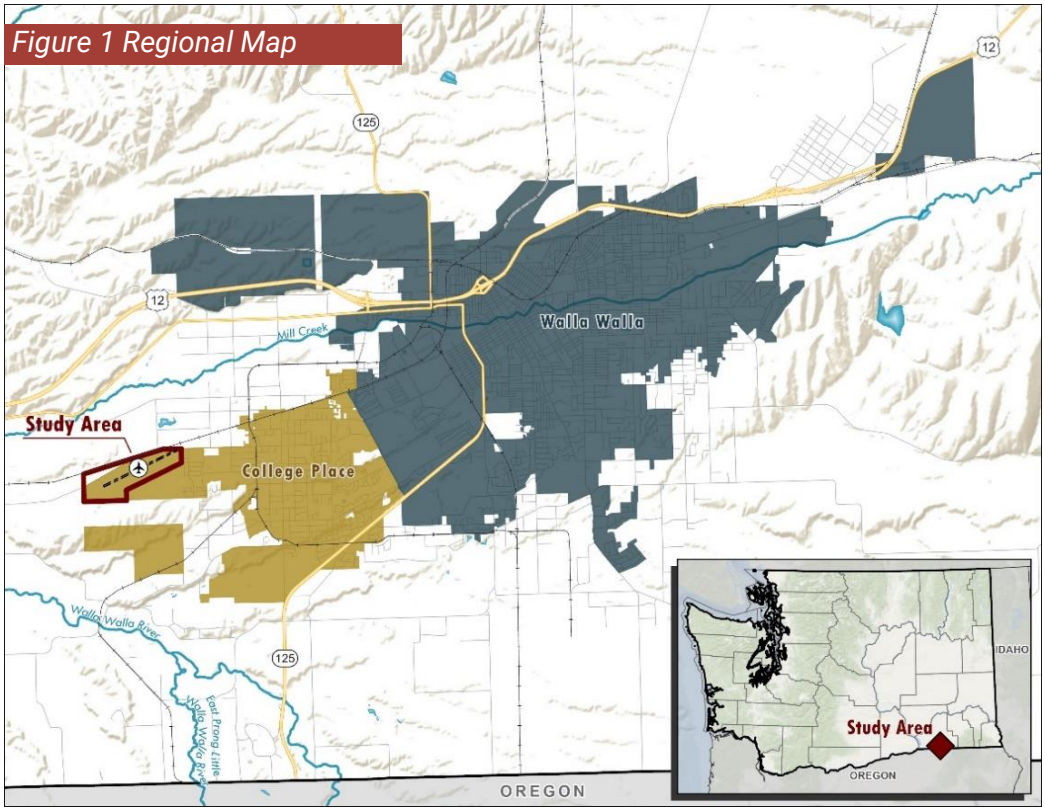
The Martin Airfield Area includes approximately 64.5 acres surrounding the Martin Airfield Airport. In March 2024, the Washington State Community Economic Revitalization Board (CERB) awarded College Place funding for economic development and research to identify infrastructure improvements needed to spur business growth and job creation.

Martin Airfield is a privately owned, public-use airport in College Place, a city in Walla Walla County. Today, Martin Airfield is a general aviation airport for private, student, and experimental aircraft pilots. Martin Airfield was historically developed as a training ground for U.S. Navy aviators. Following World War II, the airport returned to civilian use. Since returning to civilian use, the airport has been underutilized, and the city is excited to take action to identify proactive development opportunities.

Purpose of the Plan

The City of College Place has initiated the Martin Airfield Feasibility Study to assess on-site infrastructure needs, evaluate the development layout options, and provide guidelines for future development. This Feasibility Study examines the opportunities and challenges of developing the site. The Study identifies a long-term vision of Martin Airfield with flexible plan implementation approaches that respect market conditions and interests within the Study's anticipated build-out period.

Figure 1 Regional Map



EXISTING CONDITIONS

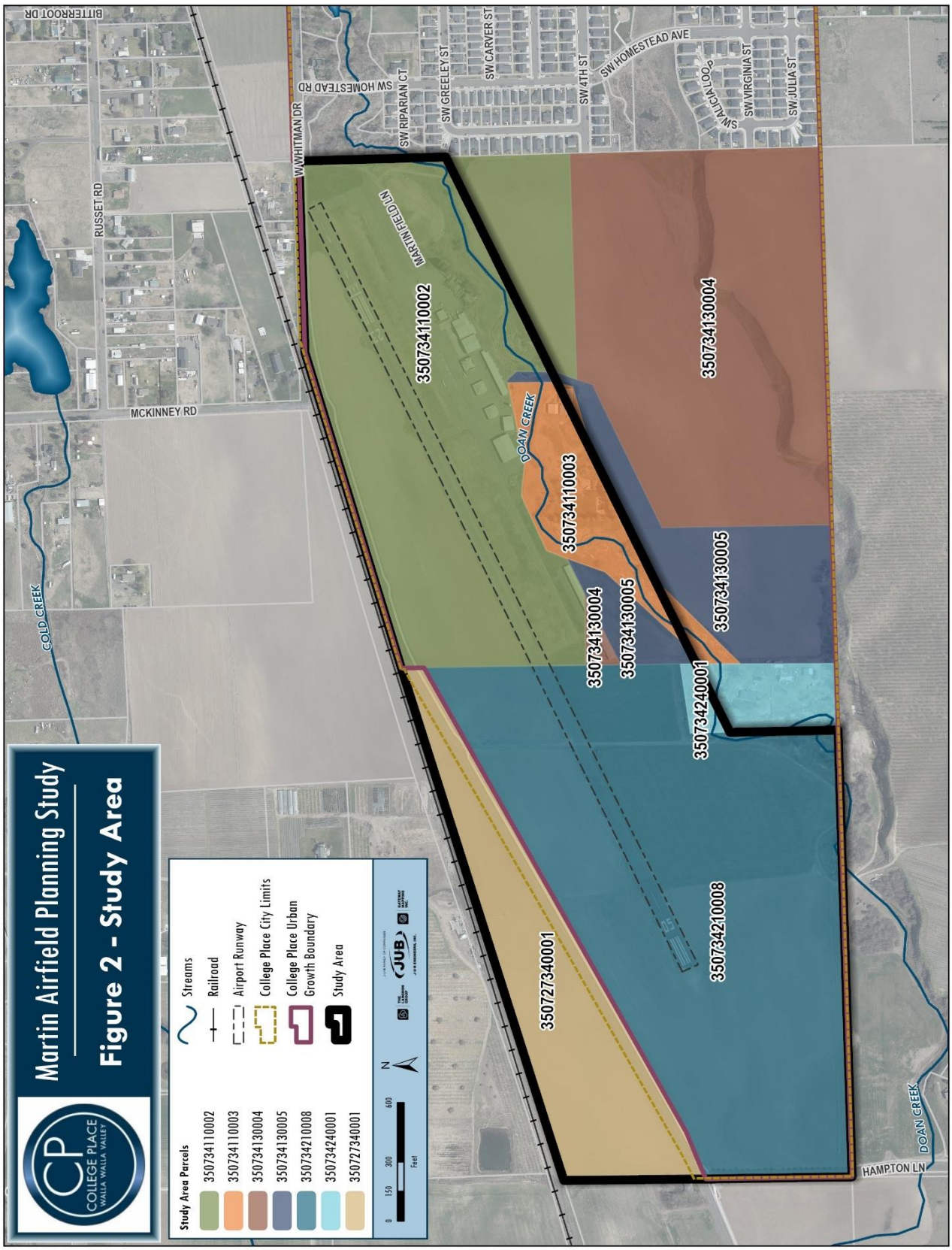
The Existing Conditions chapter provides an overview of the current state of various aspects relevant to the planning process and project development. It gives a detailed description of a wide range of topics within Martin Airfield.

The Existing Conditions chapter is arranged in the following sections:

- Existing Property Description
- Land Use and Planning
- Airport Requirements
- Environmental Overview
- FAA Airspace Analysis
- Transportation
- Utility Availability
- Economic Analysis

Existing Property Description

The land being evaluated for the Martin Airfield Master Plan consists of seven parcels, totaling nearly 180 acres, located in the City of College Place and Walla Walla County. The study area is situated on the western edge of the City of College Place. The Columbia Walla Walla (CWW) Railroad bounds the study area to the north, Doan Creek to the south, Homestead Village to the east, and Hampton Lane to the west, as shown in the Study Area Figure 2 below.


Martin Airfield Planning Study
Figure 2 - Study Area
COLLEGE PLACE
WALLA WALLA VALLEY
Study Area Parcels
350734110002
350734110003
350734130004
350734130005
350734210008
350734240001
350727340001
Streams
Railroad
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
BUTTERCUP DR
RUSSET RD
MCKINNEY RD
COLD CREEK
W WHITMAN DR
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTINFIELD LN
DOAN CREEK
HAMPTON LN
350734110002
350734110003
350734130004
350734130005
350734210008
350734240001
350727340001

Land Use and Planning

Land Use Evaluation

Current Land Uses

The property is owned by a private entity and is farmed under a lease agreement. In addition to farming activities, Martin Airfield accommodates a variety of aviation-related uses including:

- Landside facilities – Elements supporting aviation use at an airport include terminals, hangars, tie-down spaces, fuel systems, signs, fencing, and automobile parking.
- Airside facilities – Elements at an airport that enable the safe movement and operation of aircraft between the air and ground include runways, taxiways, taxi lanes, aprons, visual aids, and weather reporting.

These facilities are depicted in the Landside and Airside Facilities (Figure 3) below.

Zoning Districts

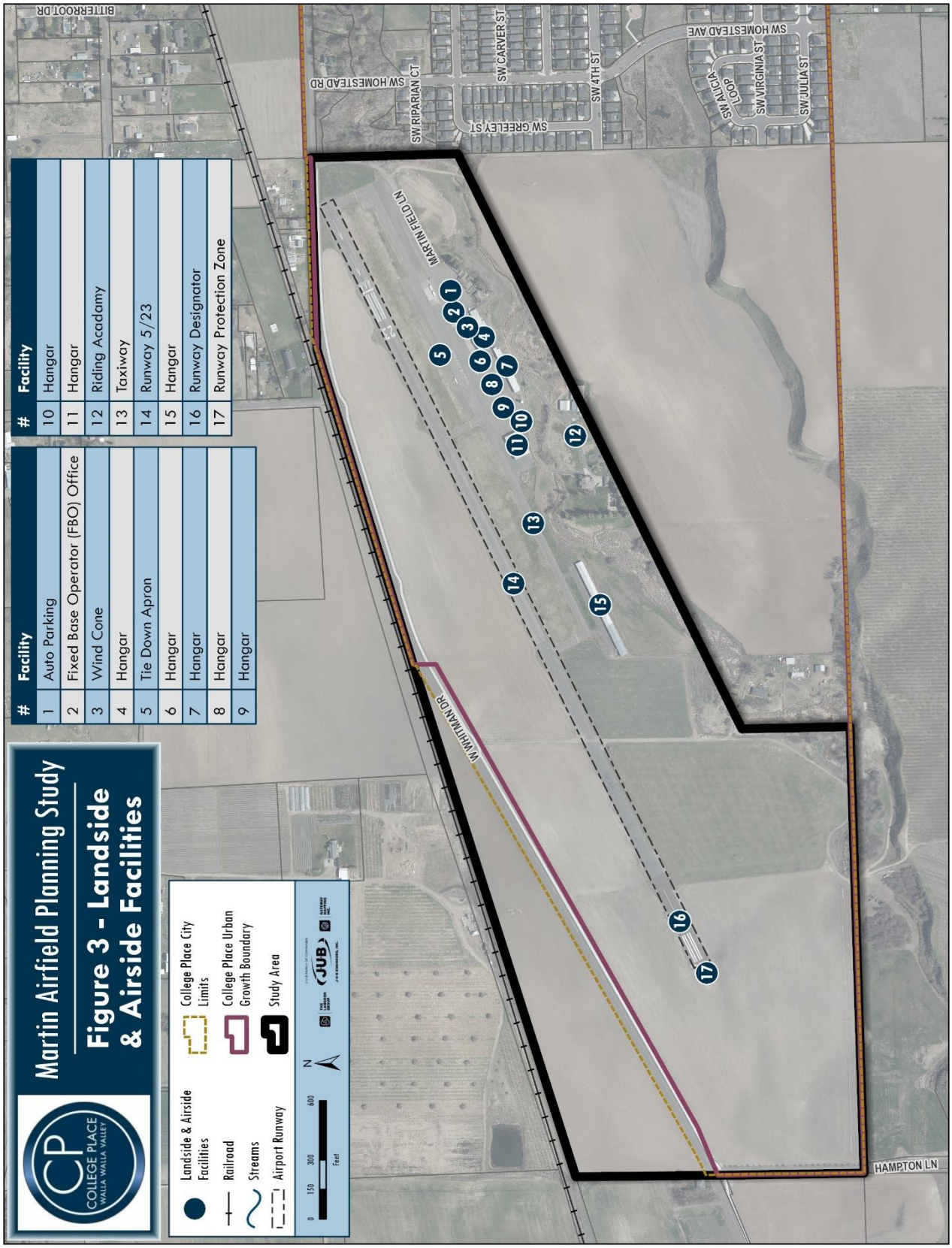
Martin Airfield has two zoning districts within the study area (see Figure 4):

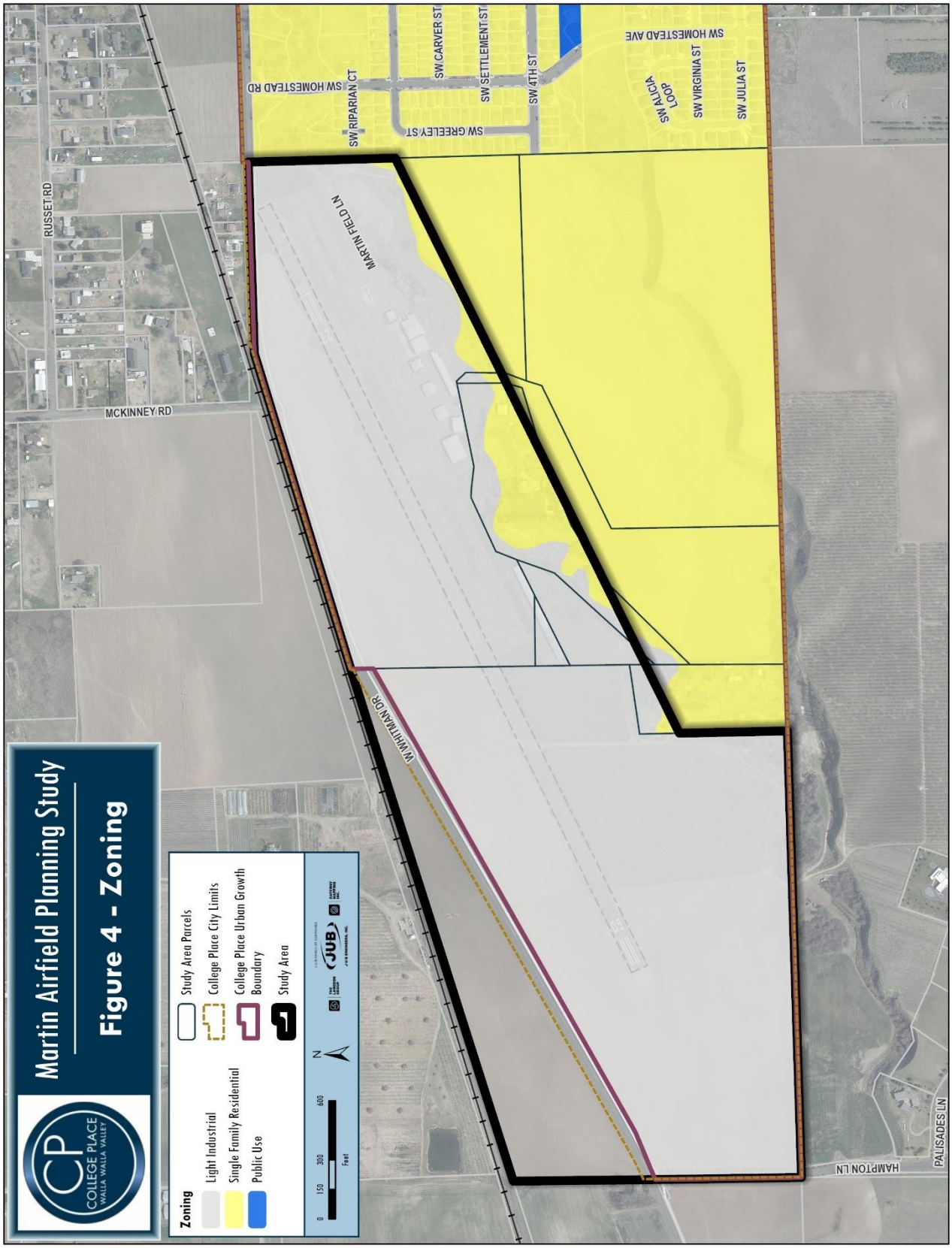
- City Zoning Districts
  - Light Industrial (LI)
- County Zoning District
  - Agriculture Residential 10 (AR-10).

The purpose of the LI and AR-10 zoning districts are described in College Place Municipal Code (CPMC) 14.50.020 or Walla Walla County Code (WWCC) 17.12.030 and summarized below.

- Light Industrial (LI) – The purpose of the light industrial activities that do not generate offensive external impacts such as excessive noise, pollution or emissions, involve limited assembly, fabrication and handling of products, include research and technological processes and do not create exceptional demands upon public facilities and services. A further purpose is to afford protection to the industries so located by prohibiting the intrusion of incompatible influences.
- Agriculture Residential-10 (AR-10) – All lands in this district are lands of long-term commercial significance. The purpose of this district is to maintain the viability of agricultural uses. Land in this district is located adjacent to existing rural lands, rural activity centers, and urban growth areas. Uses are distinctive of the agricultural sector. Large-scale natural resource processing industry is discouraged. Limited commercial-tourism and businesses that support agriculture are permitted. Residences are an allowed use and clustering to preserve large tracts of resource land is the preferred method of residential land development.

The City of College Place does not have an Airport Overlay Zone with additional requirements. Code recommendations for an Airport Overlay Zone are described in the Airport Requirements section.


Martin Airfield Planning Study
Figure 3 - Landside & Airside Facilities
COLLEGE PLACE
WALLA WALLA VALLEY
Landside & Airside Facilities
Railroad
Streams
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
Facility
1 Auto Parking
2 Fixed Base Operator (FBO) Office
3 Wind Cone
4 Hangar
5 Tie Down Apron
6 Hangar
7 Hangar
8 Hangar
9 Hangar
10 Hangar
11 Hangar
12 Riding Academy
13 Taxiway
14 Runway 5/23
15 Hangar
16 Runway Designator
17 Runway Protection Zone
BITTERROOT DR
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
SW HOMESTEAD AVE
MARTIN FIELD LN
W WHITMAN DR
HAMPTON LN


Martin Airfield Planning Study
Figure 4 - Zoning
COLLEGE PLACE
WALLA WALLA VALLEY
Zoning
Light Industrial
Single Family Residential
Public Use
Study Area Parcels
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
MARTIN FIELD LN
W WHITMAN DR
MCKINNEY RD
RUSSET RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW SETTLEMENT ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
HAMPTON LN
PALISADES LN

Allowed Uses

The permitted uses for the LI and AR-10 zones are listed below.

Light Industrial

- Appliance repair shop
- Automobile service/repair(1)
- Bakery
- Business park
- Communications center/facility
- Contractor/construction yard
- Electric vehicle infrastructure
- Industry, light
- Manufactured home
- Manufacturing/assembly, light
- Master planned development
- Mini-storage
- Mobile vendor
- Nursery/greenhouse
- Parking lot
- Public utility
- Salvage/wrecking operations
- School, vocational/trade
- Shipping/receiving center
- Storage of flammable material/liquid
- Storage, outdoor
- Technology center
- Warehouse/shipping
- Winery
- Wireless communication facility, academic
- Wireless communication facility, minor

Agriculture Residential 10

- Dwelling Units (One Family, Mobile Home, Manufactured Home)
- Adult Family Home
- Bed & Breakfast Type I
- Produce Stand
- Commercial Greenhouses
- Day Care, Family
- Distillery, production facility
- Storage/Packing agricultural produce
- Crop Maze
- Park
- Growing of Crops
- Hatcheries
- Timber Harvesting
- Airports and Aircraft Landing Field—Agricultural
- Helistops
- Railroad Terminals

Development Standards

The City of College Place and Walla Walla County have adopted zoning regulations and development standards (CPMC Title 14 and WWCC Title 17, respectively) that are consistent with and serve to implement the City's and County's Comprehensive Plan (2018). Below is a summary of the development standards identified in CPMC Chapter 14.60 and WWCC Chapter 17.18.

Table 1 Development Standards

Zone	Lot Size (min.)	Lot Width (min.)	Density (dwelling units/Acre)	Building Height	Front Yard	Side Yard	Rear Yard
LI	No minimum[1]	50'	-	None	None	None[2]	None[2]
AR-10	10 AC	330'	0.10	35'[3]	30'[3]	10'[3]	-

Notes

1. On corner lots, the exterior side yard setback shall be at least 15 feet from the property line.
2. No setback required except when abutting a SFR, MFR, or PUD then a landscaped buffer equal to the height of the building at eave shall be required in accordance with the provisions of Section 14.60.040, landscaping, fences and visibility standards.
3. Buildings housing domestic animals or any use that produces offensive noise, vibration, smoke, dust, odors, heat or glare shall maintain a seventy-five feet front yard setback and fifty feet side and rear yard setbacks.

Planning Process

The City of College Place has jurisdiction over the Martin Airfield and will process all permitting and entitlements necessary for development. The City (or its representative) will initiate the permit review and send it to the Airport Engineer for additional review and comment. The City of College Place will respond and provide a review following the College Place Municipal Code.

SEPA

Any future development of the property will require environmental review. College Place will be the lead agency for the State Environmental Policy Act (SEPA) Process. SEPA is a State of Washington policy intended to ensure that state and local agencies consider environmental values during decision-making. SEPA requires state and local agencies to consider the potential environmental consequences of a proposal before approving or denying the proposal. Once the City receives a SEPA Checklist, a public notice will be sent out for a 14-day public comment period and a 14-day appeal period. Notices are sent out to the following:

- The Department of Ecology
- All agencies with jurisdiction (state, local, and federal)
- Affected tribes; and
- All local agencies whose public services would be affected by the proposal.

Because Martin Airfield is a privately owned airport, it is exempt from following federal regulations, such as the National Environmental Policy Act (NEPA), unless a federal nexus is triggered otherwise during development.

Platting Process

The City has three options for the division, redivision, or alternating lots within the Martin Airfield Study Area. These options are discussed briefly below. The complete Permitting Classification Table can be found in **Appendix 1**. CPMC Chapter 14.90 Subdivisions contains the standards and procedures for dividing land in accordance with the City of College Place Municipal Code.

- Subdivision/Short Plat
- Binding Site Plans
- Lot Line Adjustments (Boundary Line Adjustments)

Subdivision/Short Plat

A subdivision or short plat is used when an applicant desires to subdivide land. This process is guided by the number of lots the applicant wants to create. A subdivision is used when ten or more lots will be created. A short plat is used when nine or fewer lots will be created.

Binding Site Plans

The binding site plan process is an alternative to the subdivision process to divide property for sale, lease, or transfer of ownership as an alternative method of land division into two or more lots, parcels, or tracts in a commercial or industrial zoning district.

Lot Line Adjustments (Boundary Line Adjustments)

A boundary line adjustment is a mechanism by which the city may approve the alteration of a boundary line between legally created lots, provided that:

1. Such an adjustment shall not create any additional lot, tract, parcel, site, or division, nor create lots which are nonconforming or more nonconforming than exists; and
2. A boundary line adjustment may consolidate lots under common ownership.

Environmental Overview

Water Resources

Wetlands

The Clean Water Act (CWA) defines wetlands as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Wetlands include swamps, marshes, bogs, and similar areas.

The U.S. Fish and Wildlife National Wetlands Inventory identifies one wetland within the study area. It is a 3.96-acre Freshwater Emergent Wetland habitat classified as a PEM1C. A Freshwater Emergent Wetland habitat classified as PEM1C refers to a specific type of wetland in the United States National Wetland Classification System. The following is an outline of the classification:

- PEM: Stands for "Palustrine Emergent," which indicates a wetland characterized by non-woody plants (emergent vegetation) such as grasses, sedges, and reeds.
- 1: This number typically denotes the subclass of the wetland, indicating it is dominated by persistent emergent vegetation.
- C: This letter signifies a specific community type within the subclass, often indicating factors like hydrology or the dominant plant species present.

In summary, a PEM1C wetland is a type of freshwater wetland dominated by persistent emergent vegetation, usually found in seasonally or permanently flooded areas. These habitats are vital in biodiversity, water quality, and flood regulation. Before any development activities in the vicinity, a field verification of this area should be completed.

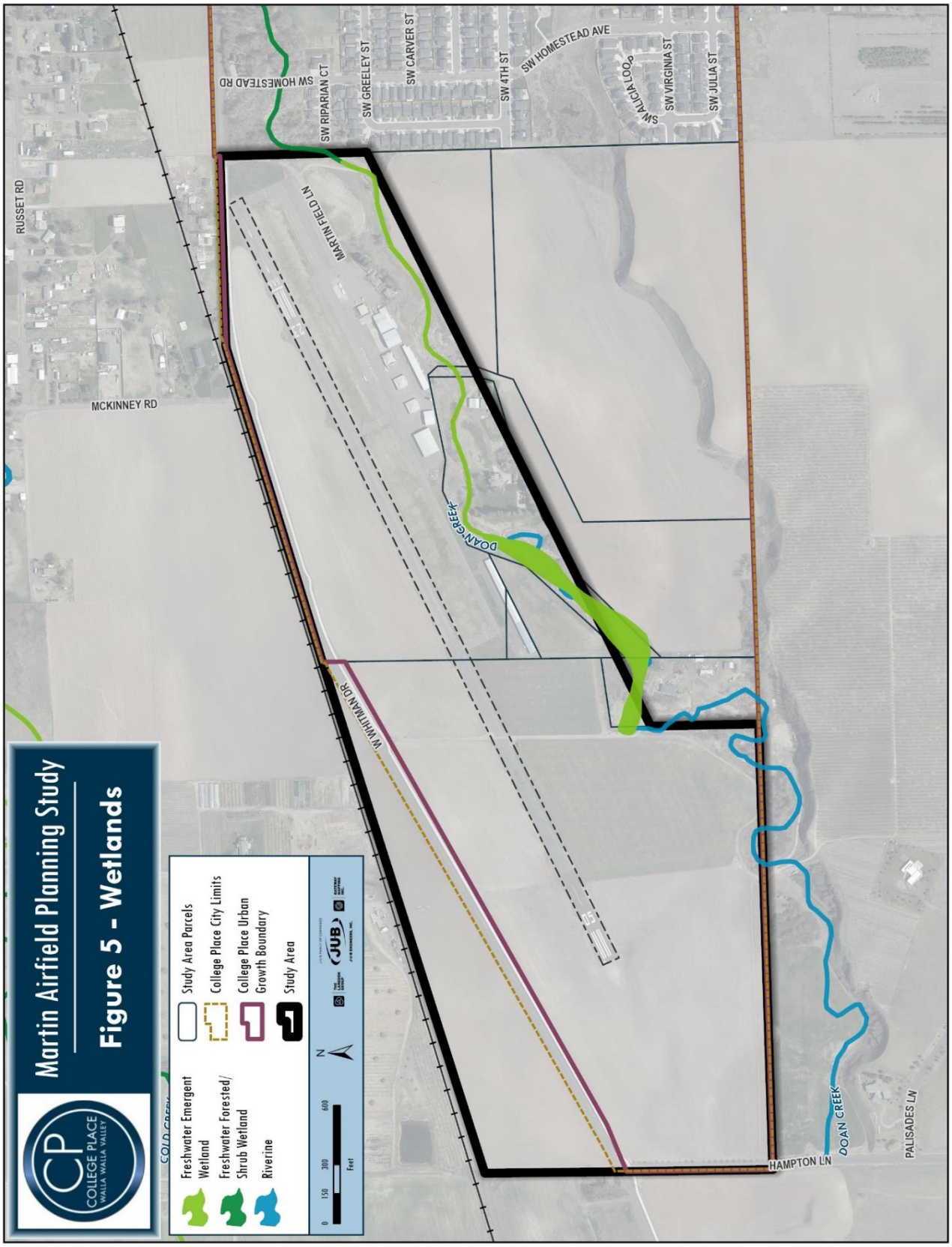
The appropriate regulatory agencies have final authority regarding jurisdictional determinations and acceptance of wetland delineations. If proposed development would permanently impact federal and/or state jurisdictional wetlands, permitting with the U.S. Army Corps of Engineers (USACE) and the Washington State Department of Ecology (WDOE) would be required, and compensatory mitigation may be required.

Floodplains

Floodplains are defined as lowland areas adjoining inland and coastal waters which are periodically inundated by floodwater. Floodplains are discussed in terms of the 100-year flood, 500-year flood, coastal flood, or underdetermined/undesignated areas. The study area is in Zone C (areas of minimal flooding), per the FEMA FIRM (Flood Insurance Rate Map) 530194 0440 B.

Surface Waters

Rivers, streams, lakes, oceans, ponds, and estuaries are examples of surface waters. The study area has one primary surface water feature: Doan Creek. Doan Creek is a small freshwater stream that flows through a mix of residential and natural areas. It typically features riparian zones with diverse vegetation, which support local wildlife. The creek plays a vital role in the local ecosystem, providing habitat for various species and helping with water drainage.


Martin Airfield Planning Study
Figure 5 - Wetlands
COLLEGE PLACE
WALLA WALLA VALLEY
Study Area Parcels
College Place City Limits
College Place Urban Growth Boundary
Study Area
Freshwater Emergent Wetland
Freshwater Forested/ Shrub Wetland
Riverine
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW ALICIA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTIN FIELD LN
DOAN CREEK
W WHITMAN DR
HAMPTON LN
DOAN CREEK
PALISADES LN

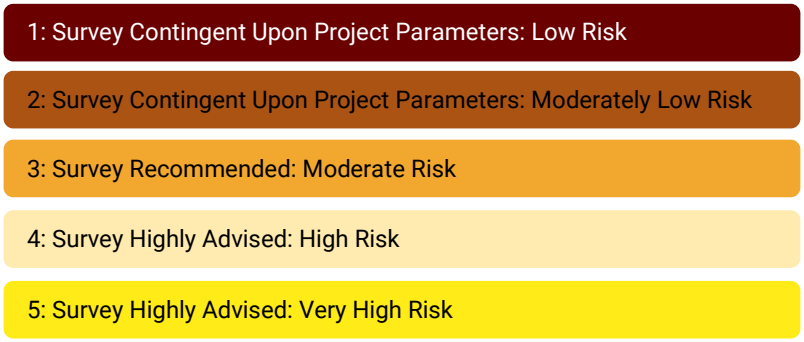
Critical Areas Ordinance

Per City of College Place Municipal Code 14.070.030.A, "The entire City of College Place is hereby designated as a critical aquifer recharge area, and the provisions of this chapter shall apply to all proposed development activities unless specifically exempted or otherwise provided.

Cultural Resources

This study does not include a cultural resource report, but it should be considered before development.

Using the predictive model, the Washington State Department of Archaeology & Historic Preservation (DAHP) mapping system, WISAARD (Washington Information System for Architectural and Archeological Records Data) identifies the study area with a value of 3, 4, and 5. The values are defined below:



Because the site is identified as Moderate to Very High Risk for survey recommendations, consulting with a cultural resource specialist or archaeologist before development is advised.

In addition to the WISAARD mapping and its recommendation for a cultural resource survey prior to development, it is also important to note that the Whitman Monument is approximately 2 miles west of the study area. The Whitman Mission National Historic Site preserves the site of the 19th-century mission established by Marcus and Narcissa Whitman to convert the Cayuse people to Christianity. The mission became a point of cultural conflict, culminating in the 1847 Whitman Massacre, in which the Whitmans and several others were killed by Cayuse members following an outbreak of measles that devastated the Native population. Today, the site includes a visitor center, interpretive trails, and a memorial, offering insight into the complex history of early missionary efforts, westward expansion, and Native resistance.

Air Quality

The Clean Air Act (CAA) sets the general policy for regulating air quality throughout the U.S. Under the CAA, the Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) to protect human health and the environment against the detrimental effects of outdoor air pollution. NAAQS exists for the following criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO2), ozone (O3), sulfur dioxide (SO2), particulate matter (PM¬2.5 and PM10), and lead (Pb).

Under the CAA, the EPA assesses air quality conditions within all areas of a state based on NAAQS. Areas that exceed NAAQS are considered "nonattainment" areas. Areas once considered nonattainment but currently meet NAAQS and CAA requirements are designated as

"maintenance" areas. As of July 2024, Walla Walla County is not in nonattainment or maintenance for any criteria pollutants (EPA 2024).

Soils Assessment

The National Resource Cooperative Service (NRCS) online web soil survey was used to identify Martin Airfield Properties soil types, see Figure 6 below. Complete mapping and soil details are contained in **Appendix 2**.

Table 2 Soil Assessment

Soil Type	Map Unit Symbol	% of Area of Interest	Acres
Pedigo silt loam, 0 to 3 percent slopes	PmA	11.4%	20.2
Umapine silt loam, 0 to 3 percent slopes	UmA	86.5%	153.2
Umapine silt loam, leached surface, 0 to 3 percent slopes	UpA	2.1%	3.8
	Total	100%	177.2

Airport Requirements

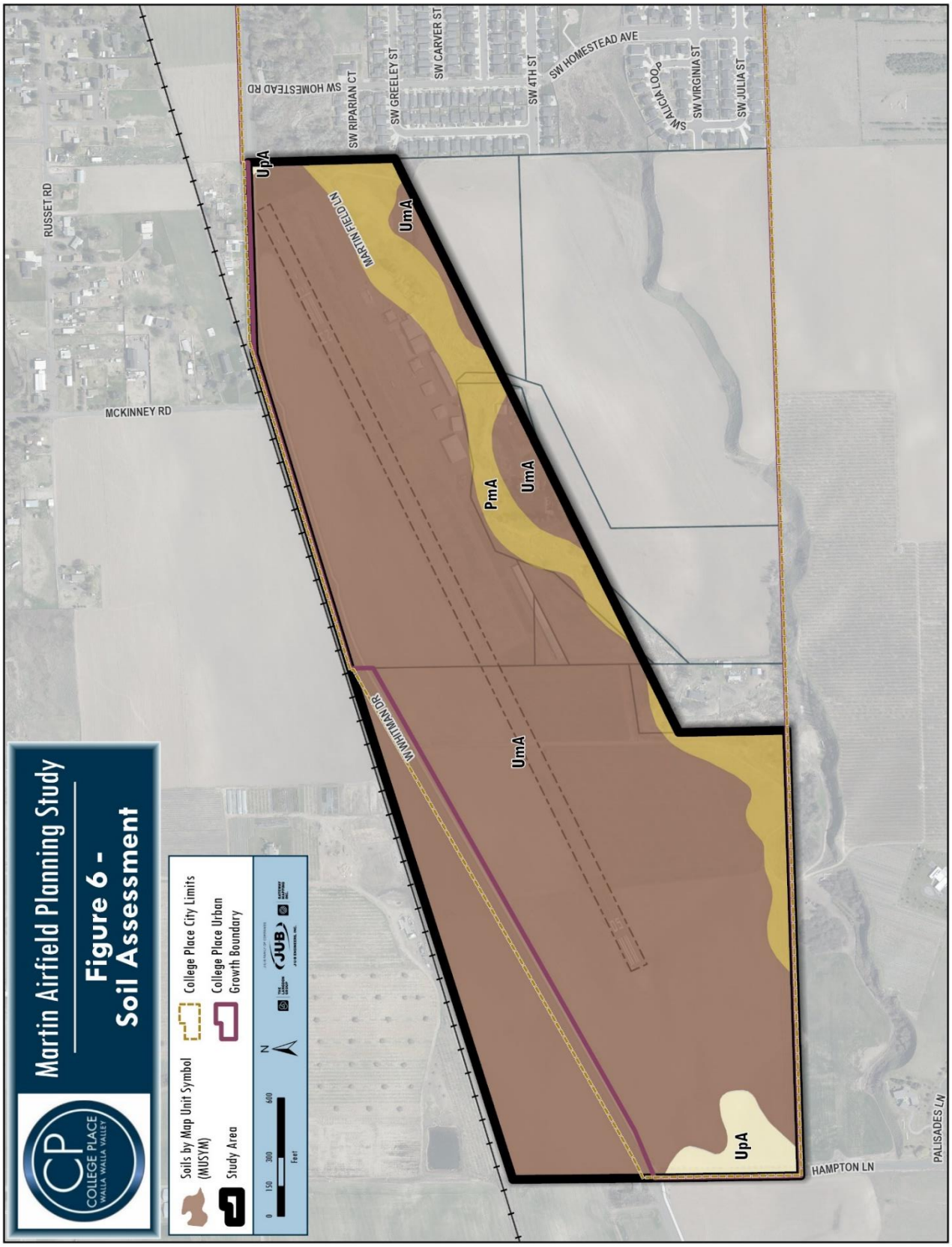
The best approach to promoting land use compatibility at and around an airport is using a combination of regulatory tools. There are two types of zoning overlays that are designed to achieve different purposes.

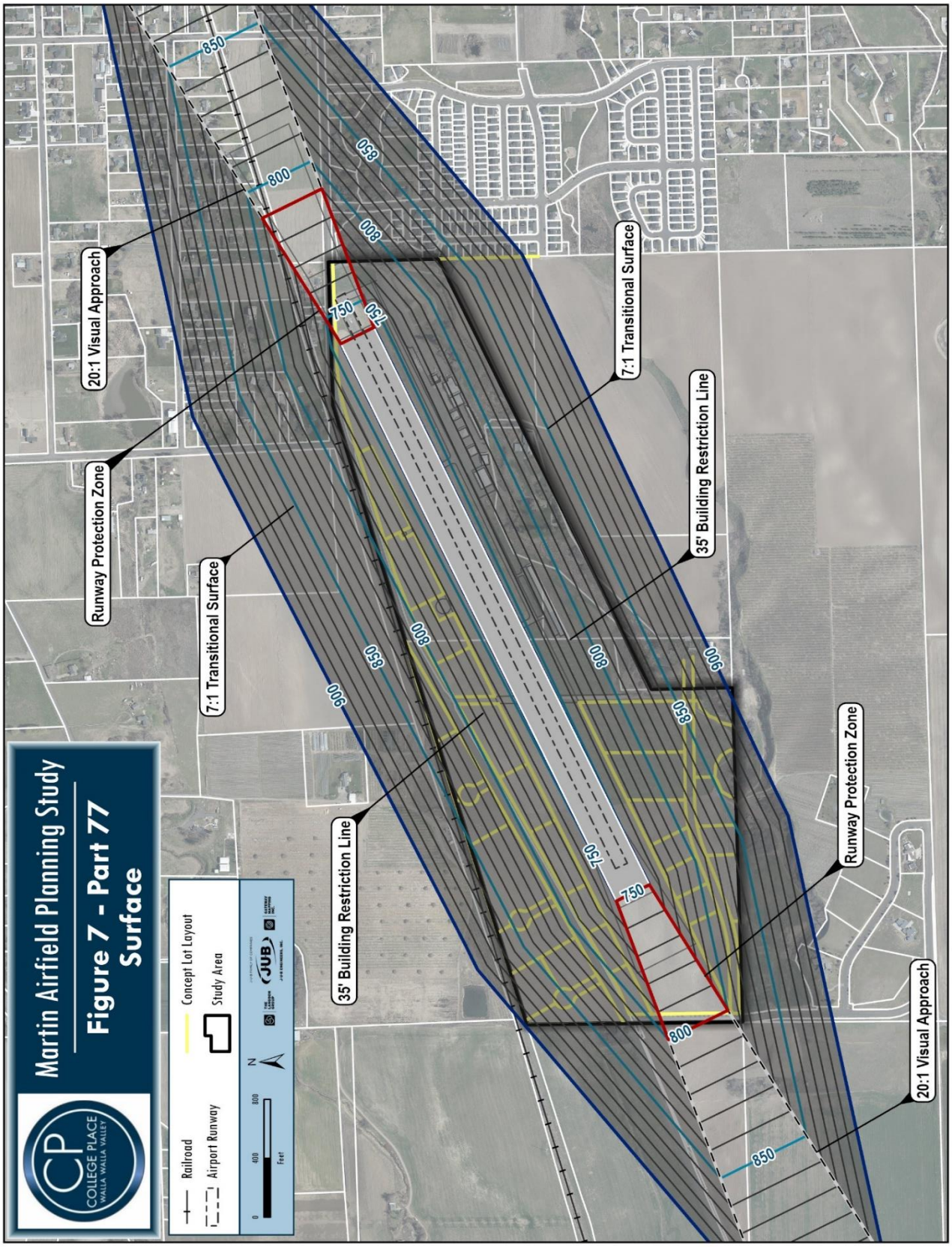
1. One that is designed and shaped to address critical air space surfaces depicted in federal regulations FAA Part 77 Imaginary Surfaces.
2. The other addresses land use compatibility zones or the general operating environment of the airport.

Key Features of an Airport Compatibility Overlay Zone:

- **Height Restrictions** – Limits the height of buildings, towers, and other structures to prevent hazards to aircraft.
- **Noise Compatibility** – Regulates land uses to minimize conflicts, such as restricting residential developments near high-noise areas.
- **Land Use Restrictions** – Controls activities that could pose risks, such as wildlife attractants (e.g., landfills, bodies of water) or emissions that could affect visibility.
- **Approach and Safety Zones** – Establishes buffer areas where certain developments or uses are restricted to protect aircraft on takeoff and landing.

Local governments often establish these regulations in coordination with the Federal Aviation Administration (FAA) or relevant aviation authorities.


Martin Airfield Planning Study
Figure 6 -
Soil Assessment
COLLEGE PLACE
WALLA WALLA VALLEY
Soils by Map Unit Symbol (MUSYM)
Study Area
College Place City Limits
College Place Urban Growth Boundary
0 150 300 600
feet
N
JUB
RUSSET RD
MCKINNEY RD
SW HOMESTEAD RD
SW RIPARIAN CT
SW GREELEY ST
SW CARVER ST
SW 4TH ST
SW HOMESTEAD AVE
SW VALICA LOOP
SW VIRGINIA ST
SW JULIA ST
MARTINFIELD LN
W WHITMAN DR
HAMPTON LN
PALISADES LN
UpA
UmA
PmA
UmA
UmA
UpA


Martin Airfield Planning Study
Figure 7 - Part 77 Surface
COLLEGE PLACE
WALLA WALLA VALLEY
Railroad
Airport Runway
Concept Lot Layout
Study Area
0
400
800
Feet
N
JUB
20:1 Visual Approach
Runway Protection Zone
7:1 Transitional Surface
35' Building Restriction Line
850
800
750
600
900

Land Use Compatibility Zones

In a 2018 Walla Walla County Staff Report, WSDOT requested that the County begin working with the City to propose, at some later date, the establishment of an Airport Compatibility Zoning structure and development guidelines around Martin Field, per the Martin Field Airport Layout Plan (2020). Currently, the Martin Field Airport Layout Plan conforms with the *WSDOT Airports and Compatible Land Use Guidebook* for compatibility criteria and design.

Six land use compatibility/safety zones are identified below:

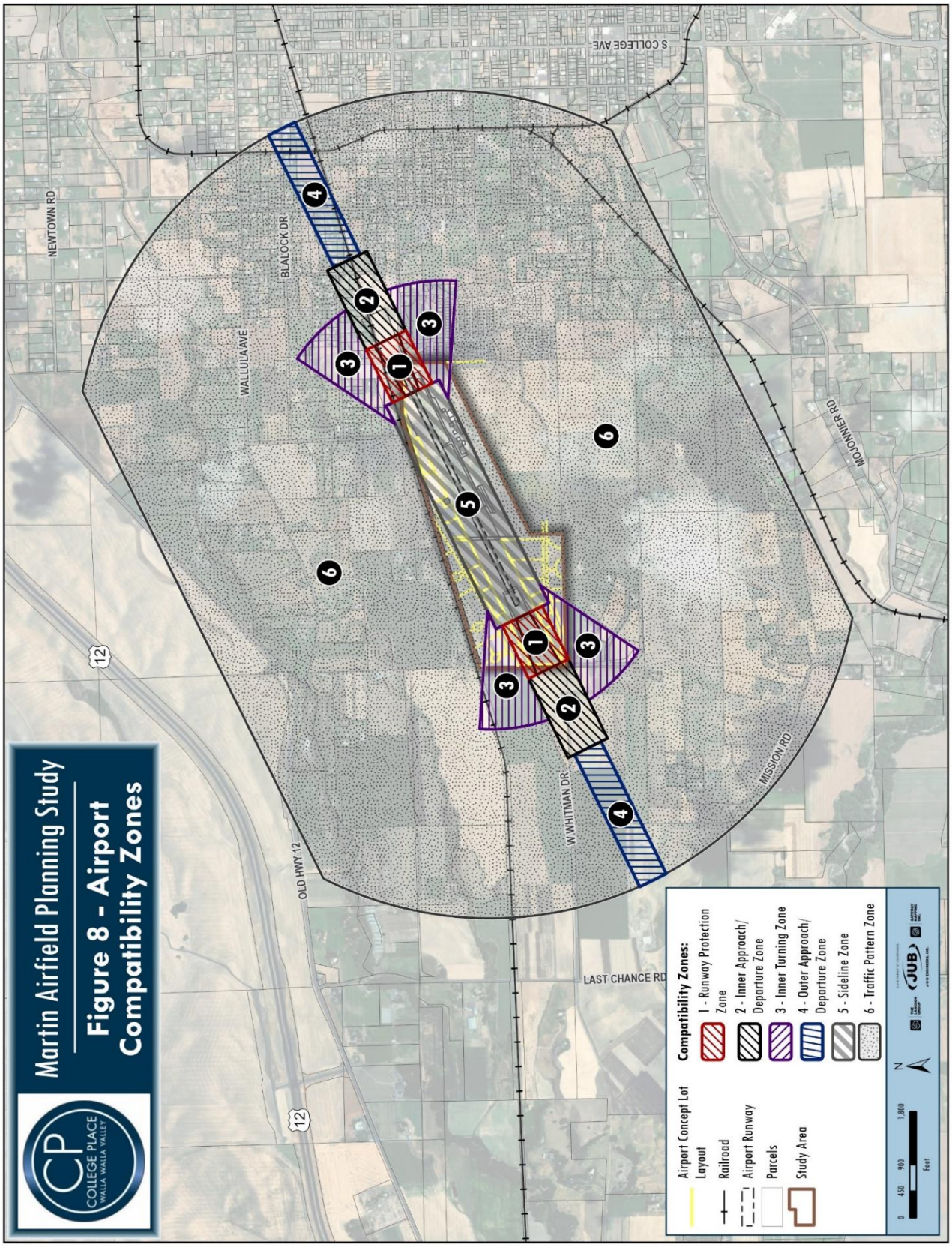
- **Zone 1, Runway Protection Zone**—This zone encompasses the runway protection zone (RPZ) at each end of the runway and should use the RPZ dimensions established in accordance with FAA standards. Also included in the zone are the strips of land immediately adjacent to the runway where FAA standards preclude structures.
- **Zone 2, Inner Approach/Departure Zone—**This zone wraps around and extends beyond Zone 1 along the runway centerline. Next to the RPZ, it represents the area where the risk of aircraft accidents is the greatest. On departure, aircraft are typically at full power in the initial phase of climb. On approach, they are at low altitude as they prepare for landing.
- **Zone 3, Inner Turning Zone**—This zone is a wedge-shaped area lying along the sides of Zone 2. When operating visually, departing aircraft may begin turning over this area to fly toward their destination or to remain in the traffic pattern. Arriving aircraft often overfly this area as well, especially if they are flying a tight pattern.
- **Zone 4, Outer Approach/Departure Zone—**This area lies beyond Zone 3 along the extended runway centerline. Aircraft flying straight out or in overfly this area at low altitude.
- **Zone 5, Sideline Zone—**Lying in narrow bands along each side of the runway, aircraft do not normally fly over the sideline zone. The principal risk is from aircraft that lose directional control while landing or just after take off.
- **Zone 6, Traffic Pattern Zone**—The final zone contains the remainder of the airport environment where aircraft fly as they approach and depart the airport or are engaged in flight training. In area, Zone 6 is typically larger than the other zones combined.

Figure 8 is a graphic depiction of land use compatibility/ safety zones surrounding Martin Field.

Permitted land uses within these zones are consistent with the criteria described by the WSDOT Airports and Compatible Land Use Criteria located in **Appendix 3**.

Importance of these Overlays

Implementing these overlays is vital for the new development around Martin Field. They ensure that land use is compatible with airport operations, thereby protecting the public from potential hazards and minimizing conflicts between airport activities and surrounding developments. By coordinating with local governments and the FAA, these measures help maintain a safe airport environment while supporting sustainable growth in the area.


Martin Airfield Planning Study
Figure 8 - Airport Compatibility Zones
COLLEGE PLACE
WALLA WALLA VALLEY
NEWTOWN RD
BLALOCK DR
WALLULA AVE
S COLLEGE AVE
MOJONNIER RD
MISSION RD
W WHITMAN DR
LAST CHANCE RD
OLD HWY 12
12
Compatibility Zones:
1 - Runway Protection Zone
2 - Inner Approach/ Departure Zone
3 - Inner Turning Zone
4 - Outer Approach/ Departure Zone
5 - Sideline Zone
6 - Traffic Pattern Zone
Airport Concept Lot Layout
Railroad
Airport Runway
Parcels
Study Area
0 450 900 1,800
Feet
N

Transportation

Roadway Network

The roadway network surrounding Martin Airfield is consistent with a rural agricultural area. Whitman Drive is an east-west minor collector roadway adjacent to Martin Field on the north. The roadway was rebuilt by the county in 2020, incorporating a multi-use path and a gravel stormwater area between the roadway and the airfield. There are only local roads and driveways to the west of the airfield. To the east is the City of College Place, which has urban characteristics and a network of local and collector streets. Table 3 shows the study area roadways and their characteristics. The Existing Roadway Network Figure shows the roadway network, intersection traffic control, lane configurations at the nine study area intersections, and the existing PM Peak Hour Traffic Volumes at the study intersections (see Figure 9).

Traffic Volumes

All-day traffic counts for the City were collected in October 2024. All-day volumes on Whitman Drive range from under 700 west of Martin Field to nearly 4,700 west of College Avenue. College Avenue all-day traffic volumes are approximately 6,000 vehicles per day near Whitman Drive. Intersection turning movement volumes were collected on October 8, 2024, at the nine study intersections from 4:00 – 6:00 PM. The PM peak hour traffic varies at each intersection, but generally the east end of the Whitman Drive corridor occurred from 4:45 – 5:45 with the west end occurring from 4:15 – 5:15. The PM peak hour traffic volumes for the study intersections are shown in the figure below and in **Appendix 4**.

Traffic Operations

The Level-of-Service (LOS) analysis quantitatively describes 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 (MOEs) are used to quantify the LOS of a roadway element. For intersections, the MOE used is the 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 unsignalized intersections are: A < 10 seconds of average vehicle delay, B is 10 – 15 seconds, C is 15 – 25 seconds, D is 25 – 35 seconds, E is 35 – 50 seconds, and F is more than 50 seconds of average vehicle delay.

For unsignalized intersections, the 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 College Place is LOS "D".

An evaluation of existing traffic operations was performed for the PM peak hour using the Highway Capacity Software for unsignalized intersections. The analysis results indicate that each of all eight unsignalized study intersections currently function with good Level of Service (LOS) "A" or "B" with each intersection having less than 13 seconds of average vehicle delay during the PM peak hour. The one signalized intersection at Whitman Dr/College Avenue functions with LOS "C" which is also acceptable. The capacity analysis worksheets are included in **Appendix 4**.

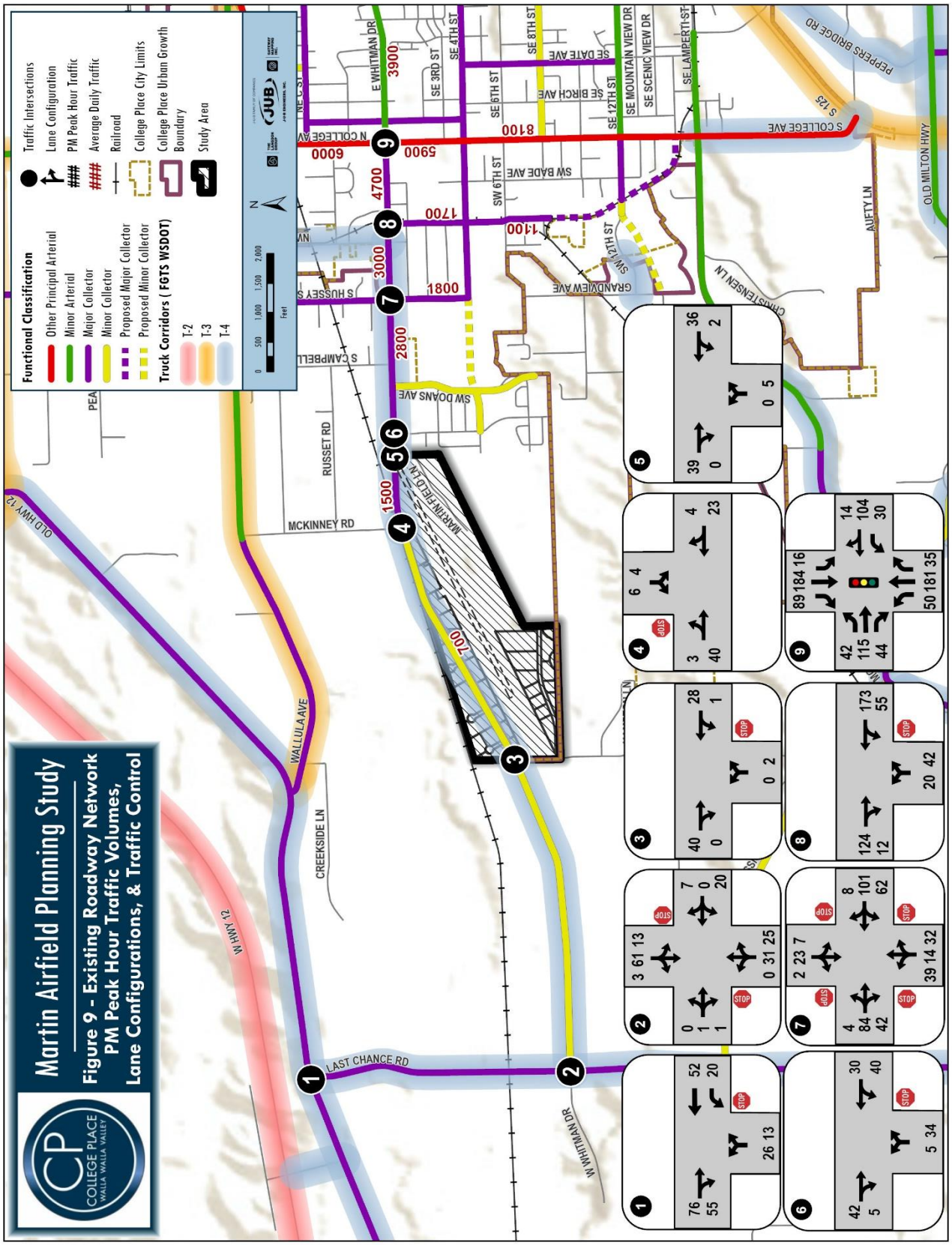

Martin Airfield Planning Study
Figure 9 - Existing Roadway Network
PM Peak Hour Traffic Volumes,
Lane Configurations, & Traffic Control
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Truck Corridors (FGTS WSDOT)
T-2
T-3
T-4
Traffic Intersections
Lane Configuration
PM Peak Hour Traffic
Average Daily Traffic
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
Feet
LAST CHANCE RD
MCKINNEY RD
RUSSET RD
WALLULA AVE
CREEKSIDE LN
MARIN FIELD LN
SW DOANS AVE
S CAMPBELL
S HUSSEY S
E WHITMAN DR
W WHITMAN DR
N COLLEGE AVE
S COLLEGE AVE
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE 12TH ST
SE DATE AVE
SE BIRCH AVE
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
SW 6TH ST
SW BADE AVE
SW 12TH ST
GRANDVIEW AVE
CHRISTENSEN LN
AUETY LN
PEPPERS BRIDGE RD
OLD MILTON HWY
OLD HWY 12
W HWY 12
6000
5900
8100
4700
1700
1100
3900
3000
1800
2800
1500
700

Table 3 Existing Transportation Network

Roadway	Functional Classification	Roadway Characteristics	Posted Speed
Whitman Drive *	**Major Collector east of McKinney Rd, Minor Collector west of McKinney Rd**	**College to Academy = ~ 36' wide with two lanes, allows parking has sidewalk on north and most of south. Academy to Martin Field Lane is ~30' wide with 2 lanes and asphalt path on south side. West of Martin Field Lane has 2 12' lanes with 4' shoulders and a separated concrete pathway on south side.**	**25 MPH College to Academy,30 MPH to Martin Field, 35 MPH to McKinney, 50 MPH west of McKinney**
Old US 12 *	Major Collector	two 12' lanes and 6' - 8' shoulders, turn lanes at most intersections.	50 MPH
Last Chance Road *	Major Collector	10'-12' lanes with minimal gravel shoulders. Has weight restrictions on a bridge.	Not posted
Hampton Lane *	**Local street**	**~20' wide with no pavement markings**	**Not posted**
McKinney Road *	Local street	~20' wide with no pavement markings, minimal gravel shoulders	25 MPH
Martin Field Lane	Local street	18' - 20' with no pavement markings	Not posted
Homestead Ave	**Local street**	**~22' - 36' wide no pavement markings, allows parking in some places, sidewalk on west side.**	**25 MPH**
Academy Street	**Major Collector**	**South of Whitman has ~36' wide with 2 lanes and a buffered two-directional bike lane on the west side, sidewalks on both sides and school zone. North of Whitman is ~22' with no pavement markings or sidewalks.**	**25 MPH, with 20 MPH school zone south of Whitman**
Davis Avenue	**Major Collector**	**~30' - 36' wide with no pavement markings, sidewalk on the east side.**	**Not posted**
College Avenue	**Principal Arterial**	**~36' wide with 4' painted median in places, allows parking in places, sidewalks on both sides, has pedestrian crossings**	**25 MPH**

City roadways are indicated in **bold** text, county roadways are marked with an (*), privately owned roadways are in regular text. Roadways that are **bold** and have an (*) are both city/county owned roadways.

Table 4 Summary of Existing Delay/LOS

Intersection	2024 Existing Delay (seconds)/ Level of Service	
	Overall Intersection	Worst Movement
Old US 12/Last Chance	*	NB--9.7/A
Whitman/Last Chance	*	WB--9.4/A
Whitman/Hampton	*	NB--8.5/A
Whitman/McKinney	*	SB--8.7/A
Whitman/Martin Field	*	NB--8.5/A
Whitman/Homestead	*	NB--8.9/A
Whitman/Hussey	*	SB--12.5/B
Whitman/Davis	*	NB--10.6/B
Whitman/College	23.8/C	WB--50.1/D

Legend
EB = Eastbound, WB = Westbound NB = Northbound, SB = Southbound
32.6/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled

Rail

The study area is immediately adjacent to a rail line owned by Columbia Walla Walla (CWW) Railroad. At this time, no rail spurs exist within the study area. No additional crossings or improvements are planned for the railroad. Two crossings exist near the study area at Last Chance Road and McKinney Road, but fall outside of the study area.

Other Modes

Valley Transit provides fixed-route bus services in the Walla Walla Valley, with two College Place routes. The College Place Circulator, Route 2, provides the closest service to Martin Field, with half-hour service throughout the day as far west on Whitman Drive as Academy Way. Existing sidewalks and pathways in the study area were described above in the description of the street network.

Utility Availability

The Utility Availability section will describe the existing utilities and capacities in and near the study area. Research was completed by coordinating directly with utility providers, reviewing online mapping, and researching existing system plans. The summary below is of the utility availability and whether additional coordination and/or expansion may be required/planned for future development.

Information reported in this Feasibility Study was sourced from several planning documents from the City of College Place, including:

- *City of College Place Comprehensive Water System Plan Update*, prepared by RH2 Engineering, Inc., December 2021.
- *City of College Place General Sewer Plan*, prepared by J-U-B ENGINEERS, Inc., March 2022.
- *City of College Place Wastewater Treatment Facility Plan*, prepared by J-U-B ENGINEERS, Inc., September 2018.
- *Technical Memorandum: Reservoir No. 4 Storage Capacity Evaluation*, prepared by RH2 Engineering, Inc., August 2023.

Sanitary Sewer Service

Existing on-site sewage systems (OSS) or septic systems serve existing users within the Martin Airfield study area. The Walla Walla County Health District (WWCHD) is the primary one responsible for permitting and policing residential and small-flow commercial discharges using OSS within the city's urban growth area (UGA).

The City of College Place owns a sanitary sewer collection system and Wastewater Treatment Plant (WWTP) that serves properties within the City limits and a neighboring Walla Walla Housing Authority property. Jacobs has been contract operating the collection system and WWTP facilities since April 2016.

Sanitary sewage generated in the City is collected and transported to the WWTP via gravity collection sewers and pump stations. The City's public collection system has expanded from an initial series of pipelines serving the old downtown area to a system containing over 40 miles of gravity pipelines, 960 manholes, and 5 active pumping stations providing public sanitary sewer service to a residential population of approximately 9,780. The total area that can be provided with public sanitary sewer service totals approximately 1,907 acres or about 3.0 square miles. The existing wastewater collection system consists of gravity pipelines ranging in size from 6 inches in diameter up to 30 inches in diameter, of which a majority are over 30 years old.

The City's existing collection system extends to the eastern boundary of the study area. The City's Sewer Basin B, adjacent to the east of the study area, consists of existing 8-inch collector piping that serves the Homestead Village residential development. Sewer Basin B flows are collected at an existing pump station (Lift Station No. 3) at the west end of SW 4th Street, and then pumped to the east along SW 4th Street. Existing 8-inch collector pipe terminates at the eastern boundary of the study area at SW 4th Street and SW Virginia Street. A preliminary analysis of the Martin Airfield study area was conducted in the City's 2022 General Sewer Plan (GSP). The preliminary analysis indicated the Martin Airfield study area would require new infrastructure to be served by gravity flow to a low point to the southwest. Later in this report, the buildout infrastructure analysis will evaluate the optimal location, depth, and capacity required to serve the study area.

The City's activated sludge WWTP is located approximately one mile southwest of city limits, and approximately 5,000 feet south of Martin Airfield. The WWTP currently discharges to a land treatment system during the critical periods (May through October) and to Garrison Creek during the non-critical periods (November through April). The City's WWTP operates under National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit No. WA-0020656. The permit was effective on March 1, 2014, and expired on February 28, 2019, the City is currently working with the Department of Ecology to update the permit. The existing NPDES permit has the following limitations:

Table 5 NPDES Permit Limitations

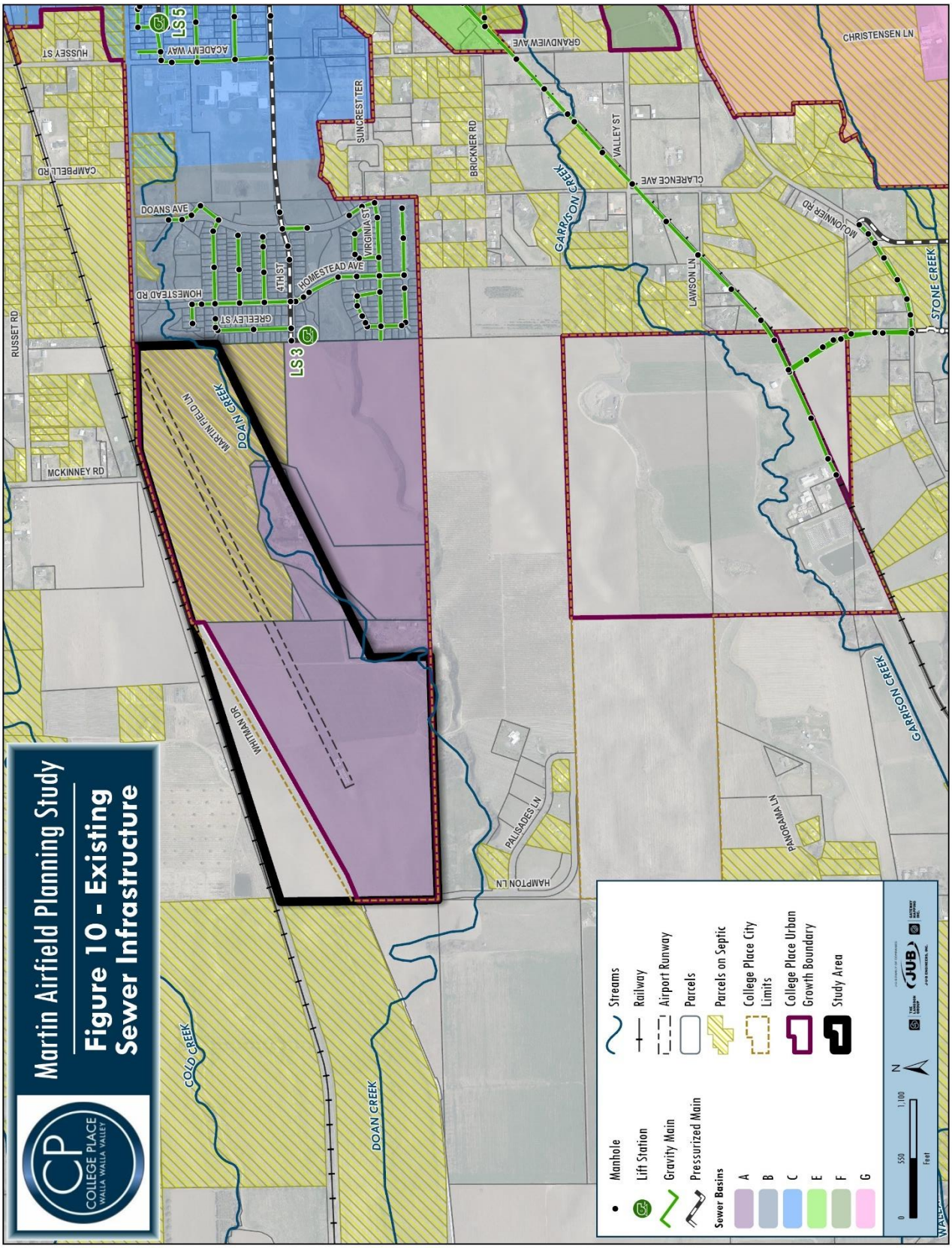
Category	Limit
Annual Average Flow	1.5 MGD
Maximum Month Design Flow	1.65 MGD
Peak Instantaneous Design Flow	5.7 MGD
Irrigation Discharge for Maximum Month	1.65 MGD
BOD_5 Influent Loading for Maximum Month	4,500 lb/day
TSS Influent Loading for Maximum Month	3,400 lb/day
Influent Ammonia-nitrogen Max Month	500 lb/day
Design Population Equivalents (People)	11,813

The City's 2018 Wastewater Treatment Plant Facility Plan (Facility Plan) has the following flows and loads (from 2015 to 2016):

Table 6 WTP Flows and Loads (2015 to 2016)

Category	Limit
Maximum Month Flow	1.55 MGD
Peak Instantaneous Flow	3.16 MGD
BOD_5 Influent Loading for Maximum Month	1,997 lb/day
TSS Influent Loading for Maximum Month	2,086 lb/day

Existing sanitary sewer infrastructure can be seen on the exhibit below.


Martin Airfield Planning Study
Figure 10 - Existing Sewer Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
LS 5
LS 3
ACADEMY WAY
HUSSEY ST
CAMPBELL RD
RUSSET RD
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
CHRISTENSEN LN
MCDONNIER RD
STONE CREEK
GARRISON CREEK
LAWSON LN
DOANS AVE
VIRGINIA ST
4TH ST
HOMESTEAD AVE
HOMESTEAD RD
GREELEY ST
MARTIN FIELD LN
DOAN CREEK
MCKINNEY RD
WHITMAN DR
COLD CREEK
PALISADES LN
HAMPTON LN
PANORAMA LN
Manhole
Lift Station
Gravity Main
Pressurized Main
Sewer Basins
A
B
C
E
F
G
Streams
Railway
Airport Runway
Parcels
Parcels on Septic
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
550
1,100
Feet
N

Industrial Wastewater Service

In accordance with the City's 2018 Wastewater Treatment Plant Facility Plan (Facility Plan); the City does not currently have any significant industrial users (SIUs) that are permitted with the Department of Ecology. Additionally, there is currently no separate industrial wastewater collection system in the City to convey flows to the Wastewater Treatment Plant (WWTP). The Facility Plan did not consider additions of any SIUs in the 20-year planning period and assumed the growth of the WWTP demands to match the general service population growth rate. The impact of the addition of an SIU to the City's wastewater collection system and WWTP will require careful evaluation and planning as the flows and loads of industrial users vary based on the proposed industry.

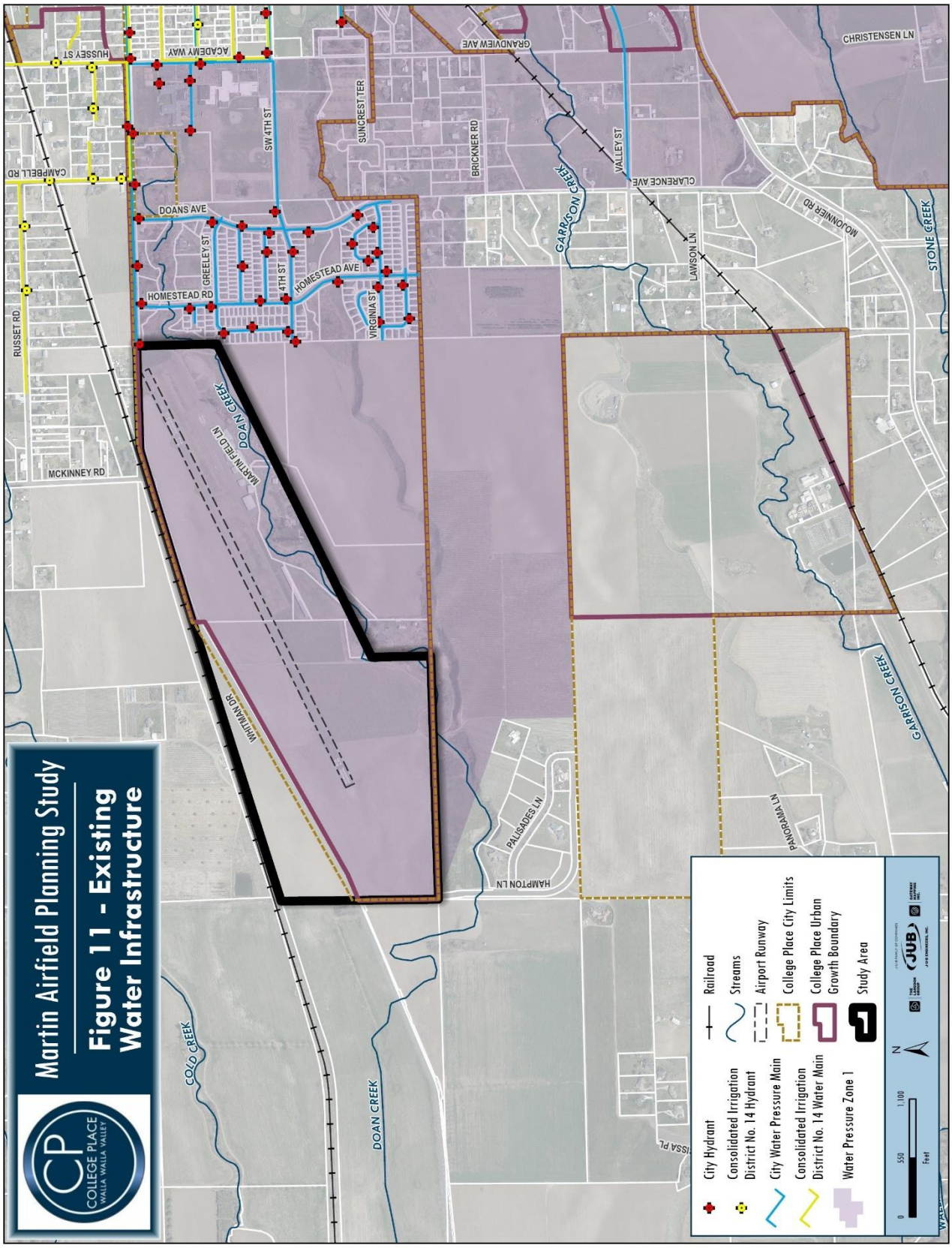
Potable Water Service

Privately owned wells currently serve the airport and residences in the study area. The nearest publicly owned water system, City of College Place, is adjacent to the study area. The College Place Water Department, public water system (PWS) ID 14050K, is a group A community water system publicly owned and managed by the City of College Place. As reported in the 2021 Comprehensive Water System Plan (WSP), the City provides water service to approximately 3,639 customer connections within the City's water service area. The City limits encompass approximately 3.0 square miles, and the existing retail water service area is approximately 3.6 square miles. In accordance with the WSP, in 2019 the system served a population of 8,302 residents.

The City's system includes three pressure zones (Zone 1, 2, and 3), four wells (Wells No. 2, 3, 4, and 6), three reservoirs (Reservoir No. 1, 2, and 3), one booster station (East Side Booster), and various pressure reducing valves. In addition to the City's water system, there are several other water purveyors within the City limits and surrounding areas that the City has intertie agreements with. The City's system contains over 48 miles of water main, ranging in size from 2 inches in diameter to 24 inches in diameter. Approximately 68% of all distribution piping is either 8-inch or 12-inch pipe.

In accordance with the WSP, the Martin Airfield study area partially lies within the City's retail service area and lies fully within the City's future service area. The study area is within the Zone 1 pressure zone, approximately ranging in elevation from 695 feet to 790 feet. The Zone 1 pressure zone serves elevations lower than 935 feet in elevation and is served by Wells No. 3 (2,400 gpm), 4 (1,700 gpm), and 6 (2,750 gpm) for a total capacity of 6,850 gpm. Well No. 2 (1,500 gpm) is an emergency back-up well only. Reservoir No. 1 provides storage for Zone 1, and is a 500,000-gallon elevated steel multi-column tank. The nearest waterlines are east of the study area, see Figure 11. The City's existing 12-inch water mains terminate at the west end of SW 4th Street and at the northeast study area boundary on W Whitman Drive. Additionally, there is existing 8-inch distribution pipe at the intersection of SW Virginia Street and SW Alicia Loop, approximately 100 feet east of the study area boundary.

Existing potable water infrastructure can be seen on the exhibit below Figure 10.


Martin Airfield Planning Study
Figure 11 - Existing Water Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
City Hydrant
Consolidated Irrigation District No. 14 Hydrant
City Water Pressure Main
Consolidated Irrigation District No. 14 Water Main
Water Pressure Zone 1
Railroad
Streams
Airport Runway
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
550
1,100
Feet
N
JUB
DOAN CREEK
COLD CREEK
GARRISON CREEK
STONE CREEK
MARTIN FIELD LN
WHITMAN DR
MCKINNEY RD
RUSSET RD
CAMPBELL RD
HUSSEY ST
ACADEMY WAY
SW 4TH ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
CHRISTENSEN LN
MOUNTAIN RD
LAWSON LN
DOANS AVE
GREELEY ST
4TH ST
HOMESTEAD AVE
HOMESTEAD RD
VIRGINIA ST
PALISADES LN
HAMPTON LN
PANORAMA LN

Surface and Storm Water Management

This area has no known formal drainage facilities or flooding issues. The area south of Martin Airfield generally drains to Doan Creek, which runs south of the study area and flows northeast to southwest before eventually joining Mill Creek. Doan Creek also contains some wetlands, as noted previously. High groundwater is assumed to be present in low-lying areas near the creek. The areas north of Martin Airfield drain east to west and infiltrate runoff in low-lying areas onsite, such as the ditches associated with Whitman Drive, the railroad, and Hampton Lane, which forms the western border.

Other Utilities

Power

Columbia Rural Electric Association (Columbia REA) provides power to Martin Airfield with underground, 3-phase available. The study area is located off an express feed on the south side of Whitman Drive that can provide ample power to future development. Pacific Power can also provide service with both single-phase and 3-phase power.

Natural Gas

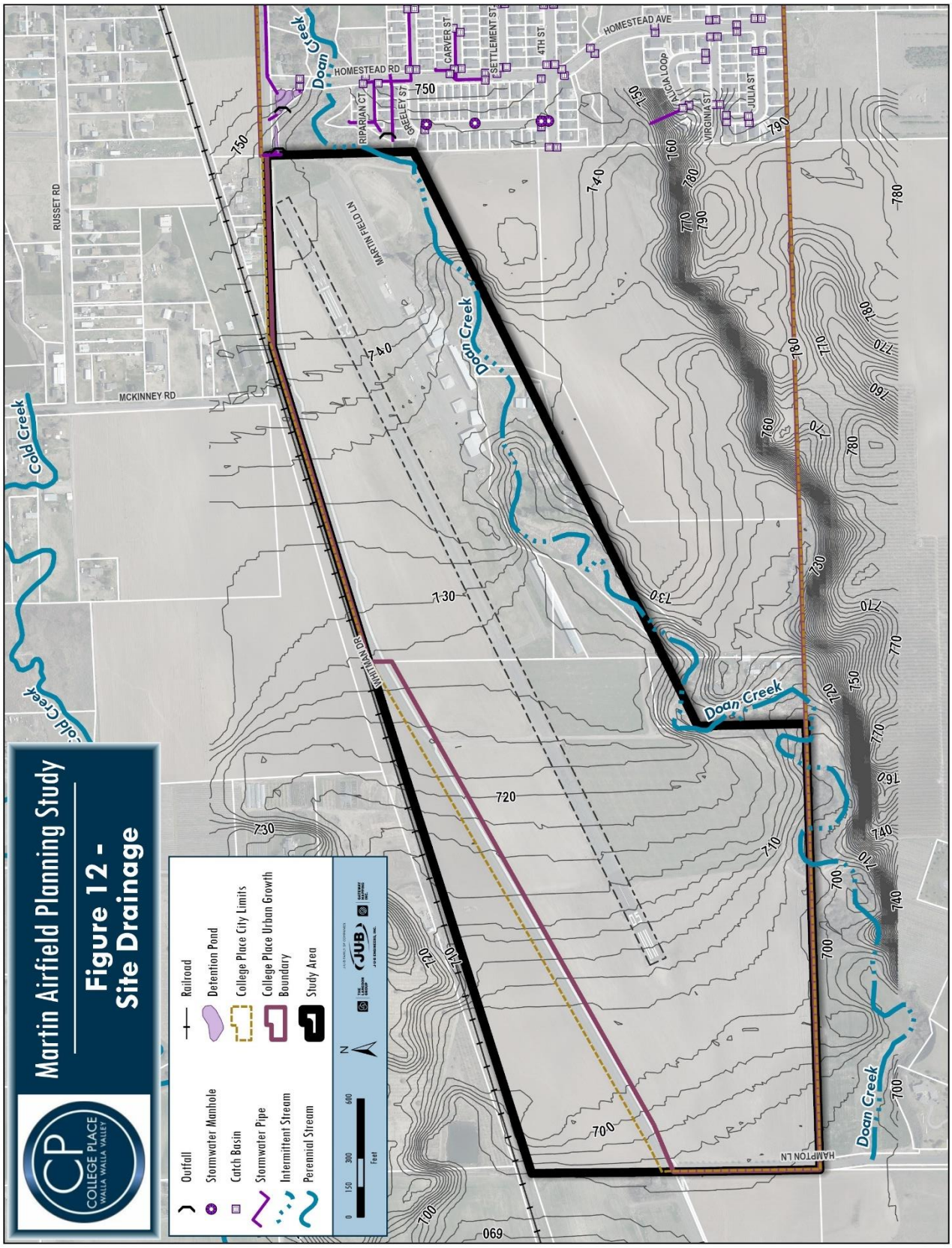
Cascade Natural Cas Corporation (CNGC) has gas service to the Martin Field hangar buildings, including a recent extension west to serve all of the eastern airport building cluster. This 2-inch line could be extended as needed to serve future needs in some capacity, but the 2-inch line is not looped and its capacity is currently limited. There are looping and line upsizing options available if sufficient need is anticipated.

Telecommunications and Fiber Optic Communication

There are a variety of telecommunication services available in the area, including national satellite carriers. Century Link has cable internet immediately available to the site and Spectrum appears to have good coverage nearby, as well as PocketiNet, Columbia iConnect, and 360 Communications.

Irrigation

Irrigation water from an irrigation district or the City is not currently available at the site, but there appear to be five wells and a surface diversion off of Doan Creek within or near the study area that may be tied to the study parcels. The assessor lists all of the parcels except the hangar parcel as “irrigated” in various forms. One of the water rights is listed to Martin H. L. and is for 400 gpm of irrigation over 60 acres, so this water right could potentially be transferred to a new area of use for irrigation of proposed landscape areas. Additionally, these water rights should have existing pumps (or a diversion structure) that could be put into use with varying levels of improvement required.


Martin Airfield Planning Study
Figure 12 -
Site Drainage
COLLEGE PLACE
WALLA WALLA VALLEY
Outfall
Stormwater Manhole
Catch Basin
Stormwater Pipe
Intermittent Stream
Perennial Stream
Railroad
Detention Pond
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
Doan Creek
Cold Creek
HOMESTEAD RD
HOMESTEAD AVE
RUSSET RD
MCKINNEY RD
MARTIN FIELD LN
HAMPTON LN
RIPARIAN CT
GREELEY ST
CARVER ST
SETTLEMENT ST
4TH ST
ALICIA LOOP
VIRGINIA ST
JULIA ST

Economic Analysis

The Metts Group conducted an Economic Analysis for the Feasibility Study. The following is a summary of the results. The full report can be found in Appendix 5.

The Martin Airfield Economic Feasibility analysis focuses on the potential for growth and development at Martin Airfield. College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.

Jobs

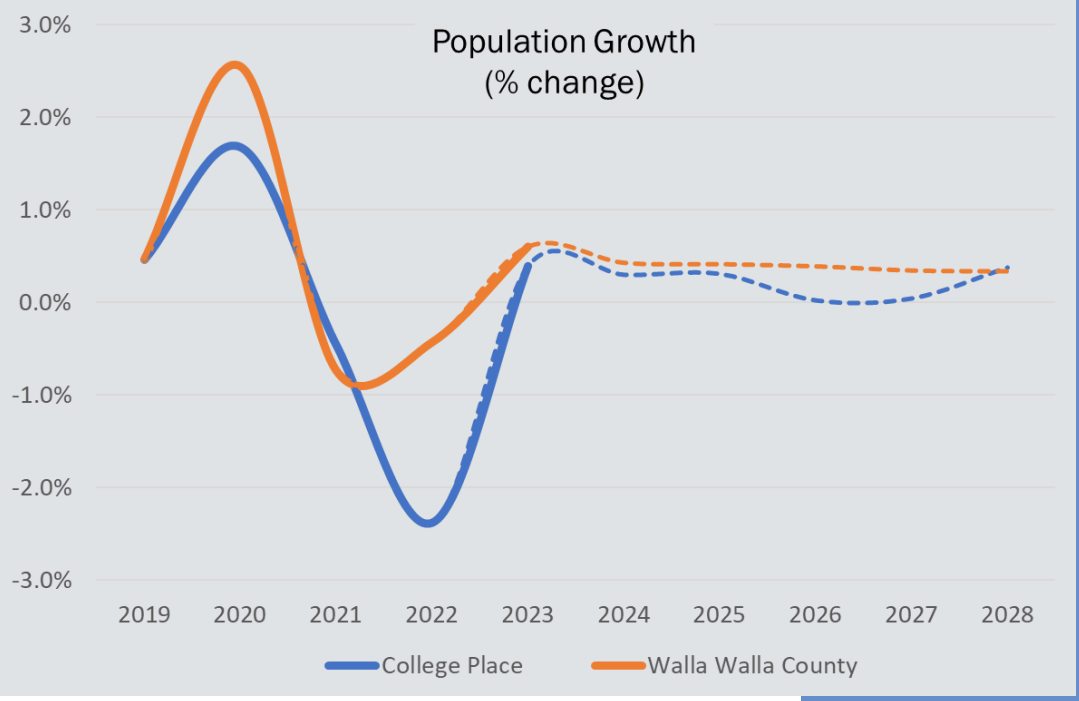
3,900

14% ⇧

(2018-2023)

Largest Contributing Industries:

- Government (Higher Ed)
- Retail
- Accom. & Food Svcs
- Health Care
- Finance & Insurance



A target industry analysis was conducted in order to narrow down the types of uses most suitable for the project site. The target industry analysis was assessed by four critical factors and conducted at the county level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

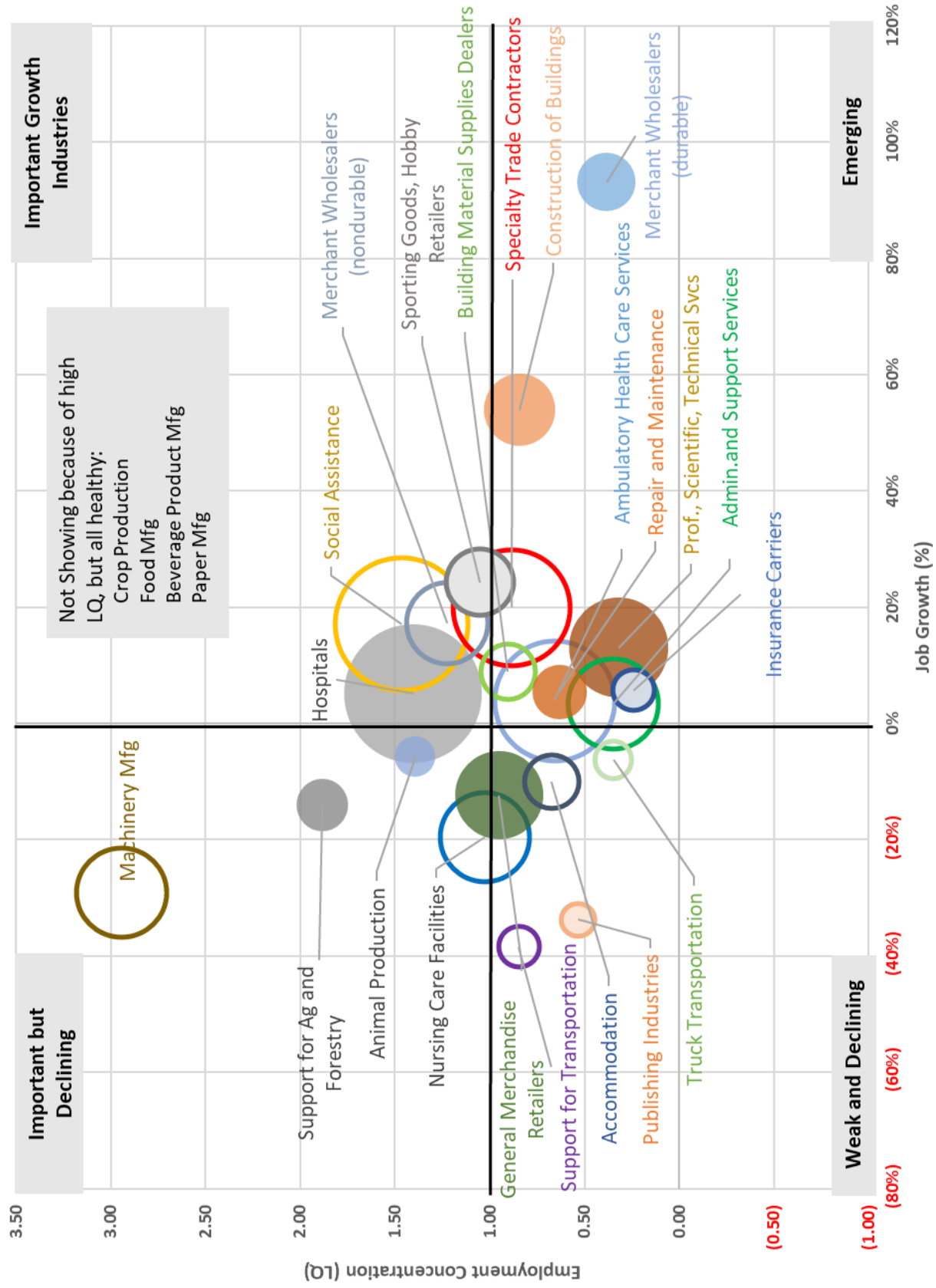
Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 marks but showing job loss, were deemed "Important and Requiring Attention," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Key industries identified within the region that exhibit both strength and growth potential include crop production, food and beverage manufacturing, hospitals, social assistance, and merchant wholesalers, while emerging industries such as specialty trade contractors, construction, professional services, and insurance carriers show promise. On the other hand, sectors like general merchandise retail, truck transportation, publishing, and accommodations are on the decline.


Important Growth Industries
Emerging
Important but Declining
Weak and Declining
Not Showing because of high LQ, but all healthy:
Crop Production
Food Mfg
Beverage Product Mfg
Paper Mfg
Machinery Mfg
Support for Ag and Forestry
Animal Production
Nursing Care Facilities
General Merchandise Retailers
Support for Transportation
Accommodation
Publishing Industries
Truck Transportation
Insurance Carriers
Admin.and Support Services
Prof., Scientific, Technical Svcs
Repair and Maintenance
Ambulatory Health Care Services
Construction of Buildings
Specialty Trade Contractors
Building Material Supplies Dealers
Sporting Goods, Hobby Retailers
Merchant Wholesalers (nondurable)
Social Assistance
Hospitals
Merchant Wholesalers (durable)
Employment Concentration (LQ)
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
(0.50)
(1.00)
Job Growth (%)
120%
100%
80%
60%
40%
20%
0%
(20%)
(40%)
(60%)
(80%)

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

The following table outlines the key industries or areas of the economy that are central to the operations and growth of major area employers. These sectors typically provide the foundation for job creation, innovation, and economic stability, influencing the competitive advantages of businesses within them.

Table 7 Major Employers

Key Sectors Driving Major Employers' Success
Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

The commercial real estate market is healthy across the region, with a current industrial space inventory of 4.6 million square feet, a low vacancy rate of 5.6%, and stable rental rates around $8.71 per square foot. Future development includes the construction of 223,720 square feet of industrial space, slated for completion by 2025. Approximately 3,070 acres of industrial land are available in the region. A list of competing sites is summarized in the following table.

Table 8 Competing Sites

Address	City	Year Built	Bldg. SF	Acres (Land Only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Martin Airfield is viewed as a prime location for a variety of potential uses, including light industrial development such as wholesaling, truck transportation, and food manufacturing, as well as aerospace-related services, aircraft maintenance, and testing. Emerging technologies like sustainable aviation fuels, hydrogen research, and advanced air mobility offer further opportunities for innovation. The site's strategic location also lends itself to agricultural technology advancements, including an ag-logistics testing hub. The site has the potential for a logistics hub to ease congestion from Seattle and Tacoma ports. However, infrastructure improvements will be essential to support future development and maximize job creation and economic impact, as outlined in the main report.

Potential Light Industrial Uses

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
    - R&D or Professional & Technical Services
    - Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
    - Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

The following recommendations are designed to promote sustainable long-term growth and development at Martin Airfield, capitalizing on its unique assets and strategic location to drive economic expansion and foster collaborative opportunities across public and private sectors.

- **Strategic Development**: Focus on aligning industry recruitment efforts with current market trends and growth sectors.
- **Leveraging Assets**: Capitalize on Martin Airfield's strategic proximity to major transportation networks, including highways, rail, and ports, as well as its location within an Opportunity Zone.
- **Public-Private Partnerships**: Engage with both public and private stakeholders to foster collaboration and support long-term growth and development.

DEVELOPMENT CONSIDERATIONS

This section outlines the essential components required to fully develop the study area, including necessary improvements to support its growth. It covers the conceptual layout, existing and proposed transportation and utility networks, and cost estimates. These elements are crucial for ensuring the area is properly equipped for future development.

The Development Considerations are arranged in the following Sections:

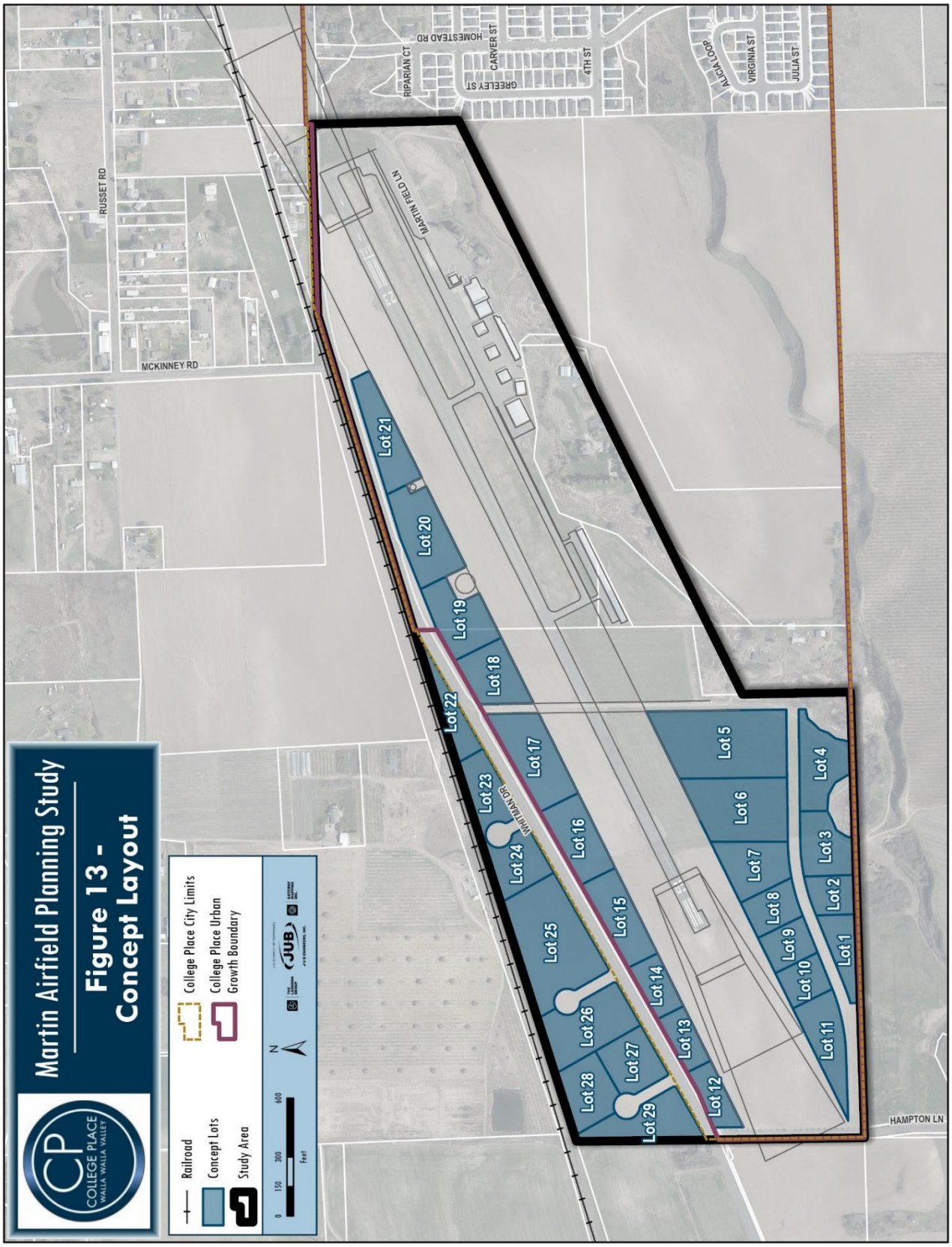
- Conceptual Layout
- Transportation Facilities
- Rail
- Earthwork
- Utility Requirements
- Preliminary Cost Estimate

Conceptual Layout

The Martin Airfield Study Area are designed to support medium and large industrial users, with parcel sizes ranging from approximately 1 to 5 acres. The preliminary lot layout includes 29 lots in total. 18 lots with access from Whitman Drive use cul-de-sacs or shared driveways to limit the number of direct access points to Whitman Drive. The remaining 11 lots will have access off of Hampton Lane with a future access point crossing Doan's Creek to the east to the residentially zoned land. The estimated roadway improvement costs for roadway, grading, pavement, curb and gutter, streetlights, and storm drainage systems is located **Appendix 6**.

The proposed lot layout is preliminary and flexible, allowing adjustments to meet the needs of future developers. As development progresses, existing parcel boundaries will be reviewed, and modifications such as boundary line adjustments (BLAs), lot consolidations (LCs), or preliminary plat may be required to accommodate different lot sizes. The preliminary lot layout was informed by a site analysis of existing conditions, input from the City of College Place and a general understanding of the project area's needs. Rail spurs are not proposed at this time, but can be incorporated into the concept layout if there is a need from a future developer.

The exhibit below depicts the preliminary lot layout.


Martin Airfield Planning Study
Figure 13 - Concept Layout
COLLEGE PLACE
WALLA WALLA VALLEY
Railroad
Concept Lots
Study Area
College Place City Limits
College Place Urban Growth Boundary
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
MARTIN FIELD LN
RIPARIAN CT
HOMESTEAD RD
CARVER ST
GREELEY ST
4TH ST
ALDA LOOP
VIRGINIA ST
JULIA ST
WHITMAN DR
HAMPTON LN
Lot 1
Lot 2
Lot 3
Lot 4
Lot 5
Lot 6
Lot 7
Lot 8
Lot 9
Lot 10
Lot 11
Lot 12
Lot 13
Lot 14
Lot 15
Lot 16
Lot 17
Lot 18
Lot 19
Lot 20
Lot 21
Lot 22
Lot 23
Lot 24
Lot 25
Lot 26
Lot 27
Lot 28
Lot 29

Transportation Facilities

Planned Internal Roadway Network

As mentioned above, future industrial lots created between Martin Field and the railroad tracks to the north will be served by cul-de-sacs that access Whitman Drive. These cul-de-sacs should meet city standards and should be constructed opposite each other so as to minimize turning conflicts.

Access to lots south of Martin Field will be provided by a new east-west road that will connect to Hampton Lane south of Whitman Drive. A future extension of this new road is planned that would connect to land zoned residential to the east that could give secondary access to the area.

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.

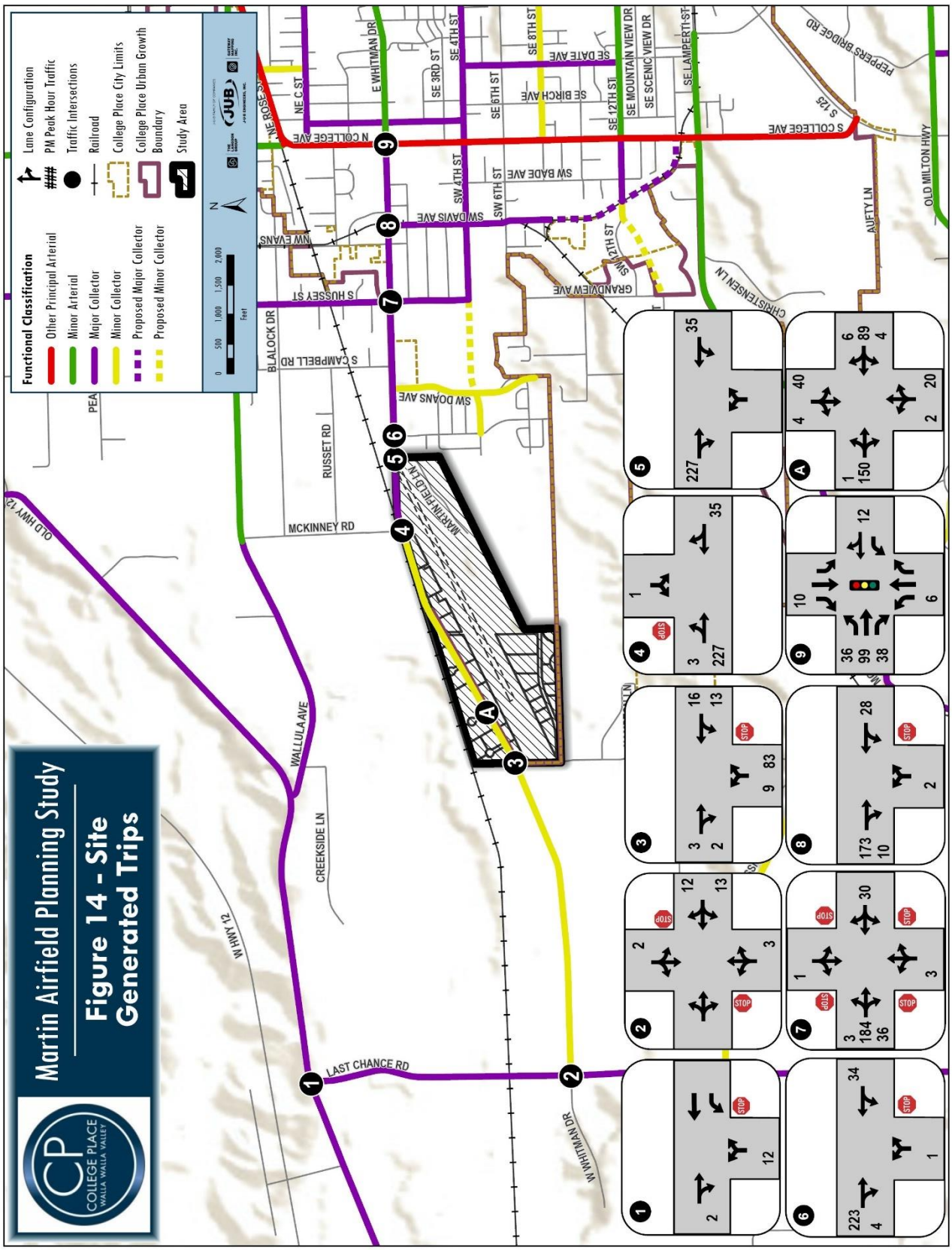
Traffic growth in College Place is typically 1.5% per year. To be conservatively high, a growth rate of 2% per year was assigned to traffic volumes shown in Figure 9 for all study intersections to represent growth occurring in the region that is not within the study for 20-year analysis.

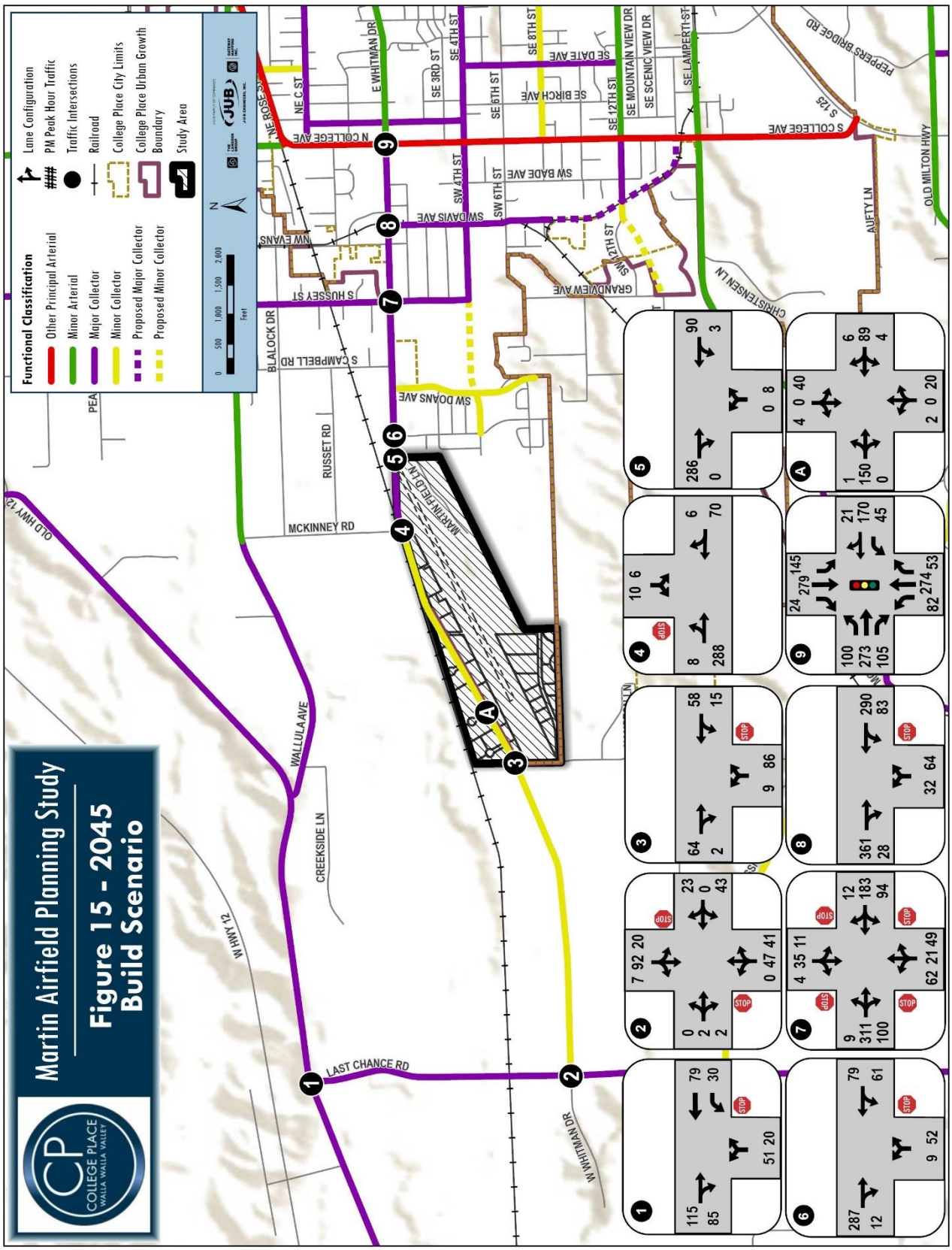
Trip Generation and Trip Distribution

To estimate the new trips that could be added to the transportation network the development concept shown in Figure 13 that shows approximately 59.43 acres of industrial land that could be developed after roads are constructed. The Institute of Transportation Engineers *Trip Generation Manual* 11th Edition was used to estimate the number of trips that could be generated using Land Use 110 General Light Industrial. The fitted curve equation was used and the building size was estimated by using Floor Area Ratio of 40% of the acreage, totaling over 1 million square feet of industrial development. The PM peak hour trips were calculated for four areas, including the worst driveway off of Whitman Drive to be able to ensure that driveways would function acceptably, with the resulting trips shown below.

- Worst Driveway, north side – 51 trips (7 inbound, 44 outbound)
- Worst Driveway, south side – 26 trips (4 inbound, 22 outbound)
- Whitman Drive (includes the worst driveway) – 189 trips (26 inbound, 163 outbound)
- Hampton Drive – 107 trips (15 inbound, 92 outbound)

These trips were added to the roadway network using existing traffic patterns to estimate the percentages of trips throughout the roadway network. This evaluation indicated that approximately 13% of traffic in the Whitman Drive Corridor turned westbound and 87% turned eastbound, which was used for the purposes of this study. The resulting new trips at each study intersection are shown in Figure 14. The new trips were added to the 2045 No-Build Scenario volumes with the resulting Build Scenario volumes shown in Figure 15. Trip Generation and trips for all scenarios at all intersections are included in **Appendix 4**.


Martin Airfield Planning Study
Figure 14 - Site Generated Trips
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Lane Configuration
PM Peak Hour Traffic
Traffic Intersections
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
LAST CHANCE RD
W HWY 12
WALLULA AVE
CREEKSIDE LN
MCKINNEY RD
RUSSET RD
BLALOCK DR
S CAMPBELL RD
S HUSSEY ST
NW EVANS
NE ROSE ST
NE C ST
N COLLEGE AVE
E WHITMAN DR
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE DATE AVE
SE BIRCH AVE
SE 12TH ST
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
S COLLEGE AVE
S 125
PEPPERS BRIDGE RD
OLD MILTON HWY
AUFTY LN
CHRISTENSEN LN
SW 4TH ST
SW 6TH ST
SW 12TH ST
SW DAVIS AVE
SW BADE AVE
GRANDVIEW AVE
SW DOANS AVE
MARTIN FIELD LN
W WHITMAN DR
OLD HWY 12


Martin Airfield Planning Study
Figure 15 - 2045 Build Scenario
COLLEGE PLACE
WALLA WALLA VALLEY
Functional Classification
Other Principal Arterial
Minor Arterial
Major Collector
Minor Collector
Proposed Major Collector
Proposed Minor Collector
Lane Configuration
PM Peak Hour Traffic
Traffic Intersections
Railroad
College Place City Limits
College Place Urban Growth Boundary
Study Area
LAST CHANCE RD
MCKINNEY RD
RUSSET RD
BLALOCK DR
WALLULA AVE
CREEKSIDE LN
W HWY 12
W WHITMAN DR
OLD HWY 12
MARTIN FIELD LN
S HUSSEY ST
S CAMPBELL RD
SW DOANS AVE
NW EVANS
NE ROSE ST
NE C ST
N COLLEGE AVE
E WHITMAN DR
SE 3RD ST
SE 4TH ST
SE 6TH ST
SE 8TH ST
SE DATE AVE
SE BIRCH AVE
SE 12TH ST
SE MOUNTAIN VIEW DR
SE SCENIC VIEW DR
SE LAMPERTI ST
S COLLEGE AVE
S 125
PEPPERS BRIDGE RD
OLD MILTON HWY
AUFTY LN
CHRISTENSEN LN
SW 4TH ST
SW 6TH ST
SW DAVIS AVE
SW BADE AVE
SW 12TH ST
GRANDVIEW AVE

Traffic Operations and Mitigation Summary

Capacity analysis of the 2045 No-Build and Build scenarios was performed. A few seconds of delay is observed at each intersection in the No-Build Scenario with two intersections dropping one Level of Service (LOS) and all intersections functioning with acceptable LOS. For the Build Scenario, additional delay is anticipated, with five intersections dropping one LOS, the most notable being the intersection of Whitman/Hussey/Academy which falls to LOS "D", but is still an acceptable LOS. Interestingly, the only signalized intersection of Whitman Drive/College Ave actually improves, which is counter-intuitive, but this is the result of the intersection working more efficiently because of the addition of traffic to movements that were underutilized which influences the average delay. These capacity analysis is summarized in Table 9 with detailed capacity worksheets included in Appendix 4. No mitigation for the purposes of traffic operations is anticipated.

Table 9 Summary of 2045 Delay (seconds)/Level Of Service

Movement	2045 No-Build		2045 Build	
	Overall Intersection	Worst Movement	Overall Intersection	Worst Movement
Old US 12/Last Chance	*	NB--10.5/B	*	NB--10.8/B
Whitman/Last Chance	*	WB--9.9/A	*	WB--10.0/B
Whitman/Hampton	*	NB--8.6/A	*	NB--9.2/A
Whitman/McKinney	*	SB--8.8/A	*	SB--9.7/A
Whitman/Martin Field	*	NB--8.7/A	*	NB--10.2/B
Whitman/Homestead	*	NB--9.3/A	*	NB--11.5/B
Whitman/Hussey/Academy	*	SB--16.2/C	*	NB--17.9/D
Whitman/Davis	*	NB--12.9/B	*	NB--17.4/C
Whitman/College	25.9/C	WB--54.7/D	27.6/C	WB--44.3/D
Whitman/new driveway	N/A	N/A	*	10.9/B

Legend
EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound
25.9/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled Intersections
25.9/C = seconds of delay/Level of Service
* Not provided for Two-Way Stop-Controlled Intersections

Rail

The study area includes rail; however, it does not encompass rail spurs or connections to the rail, owned by Columbia Walla Railroad. No recommendations are made to extend or develop a spur as part of this study. Any future spur development would be at the discretion of an individual developer seeking rail access for their specific parcel. Existing rail crossings were evaluated based on existing traffic capacity and deemed suitable. No improvements are recommended.

Earthwork

The existing site topography slopes at approximately 1-3% from northeast to southwest and is generally planar. Minimal grading will be required to construct the new access roads and will consist primarily of stripping and removing topsoil and importing crushed rock and pavement. No site mass grading is recommended.

Utility Requirements

Sanitary Sewer Service

For the purposes of this study, it is assumed that the airport will continue being served by the existing privately owned septic system. The infrastructure in this section is specifically sized to serve the lots shown in the concept lot layout, see Figure 15. Additionally, there are known parcels outside of the study area that may be developed in the future, such as the Walla Walla University properties, that would rely on the sanitary sewer infrastructure in this study. The sanitary sewer infrastructure discussed in this section or any previous analysis, did not accommodate any growth outside the study area. Further evaluation of the study area and any growth outside of it will need to be analyzed independently of this study.

Sanitary sewer flows for prospective users include domestic discharges such as onsite toilets, sinks, and floor drains and industrial demands such as process, washdown, or other sewer needs. The Average Daily Flows (ADF) and Peak Hour Flows (PHF) for domestic sanitary sewer flows were estimated based on acreage and unit flows designated in the City's 2022 General Sewer Plan. The General Sewer Plan's domestic sanitary sewer unit demand for Commercial/Light Industrial is 520 gallons per acre per day (GPAD).

The sanitary sewer infrastructure will accommodate the domestic sanitary sewer flows and the industrial sanitary sewer flows anticipated by users in the study area. This is contingent on all industrial wastewater being pretreated within typical sanitary sewer strength before entering the sanitary sewer system. Pretreatment requirements and regulations are provided in Chapter 13.12 of the City's municipal code.

Typically, the industrial sanitary sewer flows are dependent on the type of light industrial facility. Since the exact kinds of facilities that could develop are unknown, the industrial sanitary sewer flows were estimated based on acreage unit flows defined in *Wastewater Engineering: Treatment and Reuse*, Fourth Edition by Metcalf & Eddy. Industrial flows are categorized as either light industrial or medium industrial. Light industrial water demands range from 1,000 to 1,500 GPAD, and medium industrial water demands range from 1,500 to 3,000 GPAD. Industrial wastewater flows are typically no more than 95% of water demands; therefore, light industrial flows range from 950 to 1,425 GPAD and medium industrial flows range from 1,425 to 2,850 GPAD (Metcalf & Eddy, 2003). To be conservative, the highest end of each range was used when estimating flows in the study area. Since the exact location of each type of use within the study area is unknown, a weighted average of the potential industrial sanitary sewer unit flows was determined and applied to all lots within the study area. The estimated industrial sanitary sewer flows by anticipated land use are summarized in Table 9.

Table 9 Industrial Sanitary Sewer Unit Flows

Land Use[1]	Portion of Study Area[1]	Industrial Wastewater Type	Industrial Wastewater Unit Flow (GPAD)	Weighted Industrial Wastewater Unit Flow (GPAD)
Wholesalers	25%	None	0	0.0 GPAD
Truck Transportation	15%	None	0	0.0 GPAD
Manufacturing	20%	Light	1,425	285.0 GPAD
Food Processing	15%	Medium	2,850	427.5 GPAD
Lab & Testing Facilities	10%	Light	1,425	142.5 GPAD
R & D	15%	None	0	0.0 GPAD
Total	**100%**			**855.0 GPAD**

1. Land use determinations in accordance with Figure 13.

The estimated sanitary sewer unit flows are summarized in Table 10 and the estimated sanitary sewer flows per lot are summarized in Table 11.

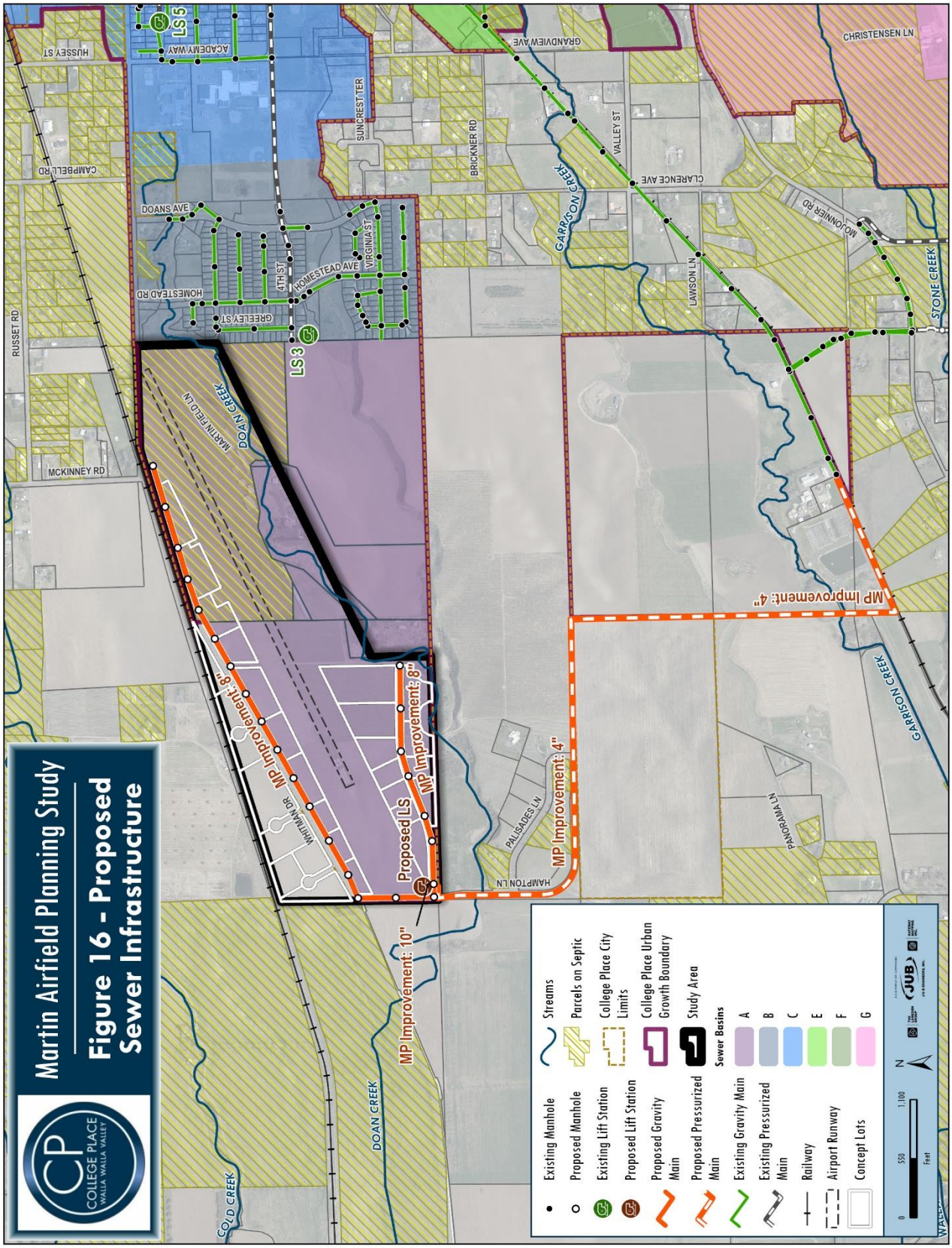
Table 10 Sanitary Sewer Unit Flows

Domestic ADF[1] (GPAD)	Industrial ADF[2] (GPAD)	Total Potable ADF (GPAD)	Total PHF[3] (GPAD)
520.0	855.0	1,375.0	5,362.5

1. Based on Commercial/Light Industrial unit flow of 520 gallons per acre per day (2022 General Sewer Plan).
2. Based on Weighted Industrial Wastewater Unit Flow from Table 9.
3. Based on Peak Hour Flow peaking factor of 3.90 (2022 General Sewer Plan).

Lot	ADF (gpm)[1]	PHF (gpm)[2]	Lot	ADF (gpm)[1]	PHF (gpm)[2]
1	1.27	4.96	**16**	1.92	7.49
2	1.06	4.14	**17**	2.61	10.17
3	1.70	6.63	**18**	1.78	6.93
4	2.04	7.94	**19**	2.00	7.79
5	4.78	18.63	**20**	2.51	9.80
6	3.35	13.08	**21**	1.98	7.71
7	1.88	7.34	**22**	1.30	5.07
8	1.18	4.58	**23**	1.70	6.63
9	1.09	4.25	**24**	1.70	6.63
10	1.02	3.99	**25**	4.76	18.56
11	1.86	7.27	**26**	2.71	10.58
12	1.00	3.91	**27**	1.69	6.60
13	0.97	3.76	**28**	1.83	7.15
14	1.05	4.10	**29**	2.12	8.27
15	1.92	7.49			
			Total	**56.78**	**221.46**

1. Based on Commercial/Light Industrial unit flow of 855 gallons per acre per day (Table 9).
2. Based on Peak Hour Flow peaking factor of 3.90 (2022 General Sewer Plan).


Martin Airfield Planning Study
Figure 16 - Proposed Sewer Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
LS 5
LS 3
Proposed LS
MP Improvement: 8"
MP Improvement: 8"
MP Improvement: 4"
MP Improvement: 4"
MP Improvement: 10"
DOAN CREEK
COLD CREEK
GARRISON CREEK
STONE CREEK
MARTIN FIELD LN
MCKINNEY RD
RUSSET RD
CAMPBELL RD
HUSSEY ST
ACADEMY WAY
DOANS AVE
HOMESTEAD RD
GREELEY ST
4TH ST
HOMESTEAD AVE
VIRGINIA ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
LAWSON LN
MOJONNIER RD
CHRISTENSEN LN
WHITMAN DR
PALISADES LN
HAMPTON LN
PANORAMA LN
Existing Manhole
Proposed Manhole
Existing Lift Station
Proposed Lift Station
Proposed Gravity Main
Proposed Pressurized Main
Existing Gravity Main
Existing Pressurized Main
Railway
Airport Runway
Concept Lots
Streams
Parcels on Septic
College Place City Limits
College Place Urban Growth Boundary
Study Area
Sewer Basins
A
B
C
E
F
G
N
0
550
1,100
Feet
JUB

Potable Water Service

For the purposes of this study, it is assumed that the airport will continue being served by the existing privately owned wells. The infrastructure in this section is specifically sized to serve the lots shown in the concept lot layout, see Figure 17. Additionally, there are known parcels outside of the study area that may also be developed in the future, such as the Walla Walla University properties, that would rely on the potable water infrastructure sized in this study. The potable water infrastructure discussed in this section or any previous source or storage analysis, did not accommodate any growth outside of the study area. Further evaluation of the study area and any growth outside of it will need to be analyzed independently of this study.

Potable water demands for prospective users include both domestic demands such as sinks, toilets, drinking water, as well as industrial demands such as process, washdown, or other water needs. Since these values are not known at this time, the Average Day Demand (ADD), Maximum Daily Demand (MDD) and Peak Hour Demand (PHD) were estimated based on acreage and unit flows designated in the City's 2022 General Sewer Plan. The General Sewer Plan's domestic sanitary sewer unit demand for Commercial/Light Industrial is 520 gallons per acre per day (GPAD), it was assumed that domestic potable water demands would be 5% higher than the domestic sanitary sewer flows for a potable water unit demand of 546 GPAD. The unit demands from the City's 2021 Water System Plan, 854 gallons per day per connection (GPD) for Commercial users, were also considered, however, the General Sewer Plan unit demands were considered more conservative in regard to the planned Light Industrial use anticipated within the study area.

In addition to the domestic potable water demands, the potable water infrastructure will also accommodate the industrial potable water demands anticipated by users in the study area. Typically, the demand of industrial potable water is dependent on the type of light industrial facility. Since the exact types of facilities that could develop are unknown the industrial potable water demands were estimated based on acreage unit flows defined in *Wastewater Engineering: Treatment and Reuse*, Fourth Edition by Metcalf & Eddy. As noted in the industrial wastewater section, industrial demands are categorized as either light industrial or medium industrial. Light industrial potable water demands range from 1,000 to 1,500 gallons per acre per day (GPAD), and medium industrial water demands range from 1,500 to 3,000 GPAD (Metcalf & Eddy, 2003). To be conservative, the highest end of each range was used when estimating flows in the study area. Since the exact location of each type of use within the study area is unknown, a weighted average of the potential industrial potable water unit demands was determined and applied to all lots within the study area. The estimated industrial potable water demands by anticipated land use are summarized in Table 12.

Table 12 Industrial Potable Water Unit Demands

Land Use[1]	Portion of Study Area[1]	Industrial Potable Water Type	Industrial Potable Water Unit Demand (GPAD)	Weighted Industrial Potable Water Unit Demand (GPAD)
Wholesalers	25%	None	0	0
Truck Transportation	15%	None	0	0
Manufacturing	20%	Light	1,500	300
Food Processing	15%	Medium	3,000	450
Lab & Testing Facilities	10%	Light	1,500	151
R & D	15%	None	0	0
Total	**100%**			**901**

1. Land use determinations in accordance with Figure 13.

The estimated unit potable water demands are summarized in Table 13 and the estimated potable water demands per lot are summarized in Table 14.

Table 13 Potable Water Unit Demands

Domestic ADD[1] (GPAD)	Industrial ADD[1] (GPAD)	Total Potable ADD[1] (GPAD)	Total Potable MDD[2] (GPAD)[4]	Total Potable PHD[3] (GPAD)[4]
546	901	1,447	5,165	8,626

1. ADD = Average Day Demand.
2. MDD = Maximum Day Demand.
3. PHD = Peak Hourly Demand.
4. In accordance with the City's 2021 Water System Plan the potable water peaking factors are 3.57 (MDD/ADD) and 1.67 (PHD/MDD) respectively.

Table 14 Estimated Potable Water Demands

Lot	ADD[1] (GPM)	MDD[2] (GPM)	PHD[3] (GPM)	Lot	ADD[1] (GPM)	MDD[2] (GPM)	PHD[3] (GPM)
1	1.00	3.59	5.99	**16**	2.02	7.21	12.04
2	1.12	3.98	6.65	**17**	2.74	9.79	16.35
3	1.79	6.39	10.66	**18**	1.87	6.67	11.14
4	2.14	7.64	12.76	**19**	2.10	7.50	12.52
5	5.02	17.94	29.95	**20**	2.64	9.43	15.76
6	3.53	12.59	21.03	**21**	2.08	7.43	12.40
7	1.98	7.07	11.80	**22**	1.37	4.88	8.15
8	1.24	4.41	7.37	**23**	1.79	6.39	10.66
9	1.15	4.09	6.83	**24**	1.79	6.39	10.66
10	1.08	3.84	6.41	**25**	5.00	17.86	29.83
11	1.96	6.99	11.68	**26**	2.85	10.19	17.01
12	1.06	3.77	6.29	**27**	1.78	6.35	10.60
13	1.01	3.62	6.05	**28**	1.93	6.89	11.50
14	1.11	3.95	6.59	**29**	2.23	7.96	13.30
15	2.02	7.21	12.04				
				Total	**59.38**	**212.00**	**354.04**

1. ADD = Average Day Demand.
2. MDD = Maximum Day Demand.
3. PHD = Peak Hourly Demand.

In addition to the domestic and industrial water demands, the City's potable water system also provides fire flow. Fire flow demand is the amount of water required during firefighting as defined by applicable codes. Fire flow requirements are nationally established for individual buildings and expressed in terms of flow rate (gpm) and flow duration (hours). The City's planning-level fire flow requirement for Light Industrial land uses is 4,000 gpm for a duration of 4 hours.

The rate at which development occurs and the type of users added may have an impact on the City's ability and responsiveness in providing services related to fire and EMS. While this study did not evaluate details of these impacts in terms of response time, it does consider the ability to provide potable water for fire flow purposes. It is recommended that the City continue to work closely with the emergency services authorities to understand impacts to responsiveness, capacity, and service as development expands.

The study area is estimated to increase the City's Pressure Zone 1 Average Day Demands (ADD) by 59 gallons per minute (GPM) or 85,513 gallons per day (GPD). In accordance with the 2021 WSP, the City's Equivalent Residential Unit (ERU) demand is 325 GPD per connection. An ERU is defined as the approximate potable water demand of a single-family residential connection, ERUs are used to evaluate a system's capacity using a common unit of measurement. The proposed study area is estimated to add approximately 263 ERUs of growth to the City's system. In 2023,

the City retained RH2 Engineers to evaluate the impact of the increased growth rate of the Martin Airfield area compared to the 0.6% growth rate that had been anticipated in the 2021 WSP. In the 2023 technical memorandum (RH2 Engineers), the City's potable water demands were assumed to grow by 2,400 ERUs compared to the City's 2020 baseline demands with a majority of the growth being within the Martin Airfield study area. The 2023 memo indicated the additional demand to the Martin Airfield area would not require additional source improvements apart from those already indicated in the 2021 WSP. However, the increased demands to the Martin Airfield area did require additional storage capacity, thus increasing the capacity of the proposed Reservoir No. 4 from 0.50 MG to 1.0 MG. Reservoir No. 4 and the connecting transmission main are currently under design.

For the purposes of this study, the potable water infrastructure required to provide service to the study area will be limited to transmission water mains required to connect to the adjacent City distribution system, onsite distribution piping, service connections, fire hydrants and related appurtenances. Preliminary alignments for the potable water infrastructure were based on the proposed layout of lots and roadways within the study area. In accordance with the City's Water System Plan, the City's Standard Specifications, and common industry hydraulic criteria the following assumptions were made for the proposed infrastructure:

- Mains were assumed to be no smaller than 8-inches in diameter,
- Mains were sized to maintain a velocity of less than 8-feet per second during PHD conditions,
- Mains were sized to maintain a velocity of less than 10-feet per second during MDD plus Fire Flow conditions,
- Mains were looped, where practical, to increase liability and water quality,
- Fire hydrants were placed at all street intersections, at 350-foot spacings in the study area, or at 1,000-foot spacings in sections where hydrants were not needed for the protection of structures, in accordance with the International Fire Code Table C102.1,
- Isolation valves were placed at all legs of mainline tees, not including hydrants, or at 1,000-foot spacings elsewhere, and,
- Service connections were assumed to be 2-inch water meters

The proposed improvements can be seen in Figure 17. As shown in Figure 17, the proposed 16-inch water main loop will need to connect to the existing distribution system to server prospective users in the study area. As mentioned above, the system was looped to increase water system reliability by connecting to existing 12-inch water mains near the intersection of Whitman Drive and Martin Field Lane as well as at SW 4th Street. In addition to the 16-inch water main loop, connection to Reservoir No. 4, which is currently under design, is necessary to meet the storage demands of the study area. With the phasing/subdivision timing of the study area unknown, the proposed improvements will need to be evaluated as development occurs. If the study area develops in phases, further analysis of each phase will be required to evaluate a partial system's ability to meet the operational criteria for the development and for the long-term planning of the water system outside of the development. This includes meeting the City's Water system operational goals for minimum pressure, maximum pressure, and fire flows.

Surface and Storm Water Management

Minimal surface and stormwater improvements will be required to prepare the site for individual parcel development. The proposed roadways will require roadside swales and some small ponds

or swales at the low areas near the intersections to infiltrate roadway runoff. Culverts across the proposed shared driveways will also be required. Individual parcels will provide stormwater infiltration facilities for each site as they are developed. Stormwater improvements will need to be designed according to the Ecology Stormwater Management Manual for Eastern Washington and City Standards.

Other Utilities

Power

Electrical improvements will include running conduits and wires along the proposed roadways and shared driveways, which includes pull boxes and termination cabinets. Pacific Power has single-phase available, and both Pacific Power and Columbia REA have three-phase power available. Transformers will be required at each lot to serve the sites with their desired voltage.

Natural Gas

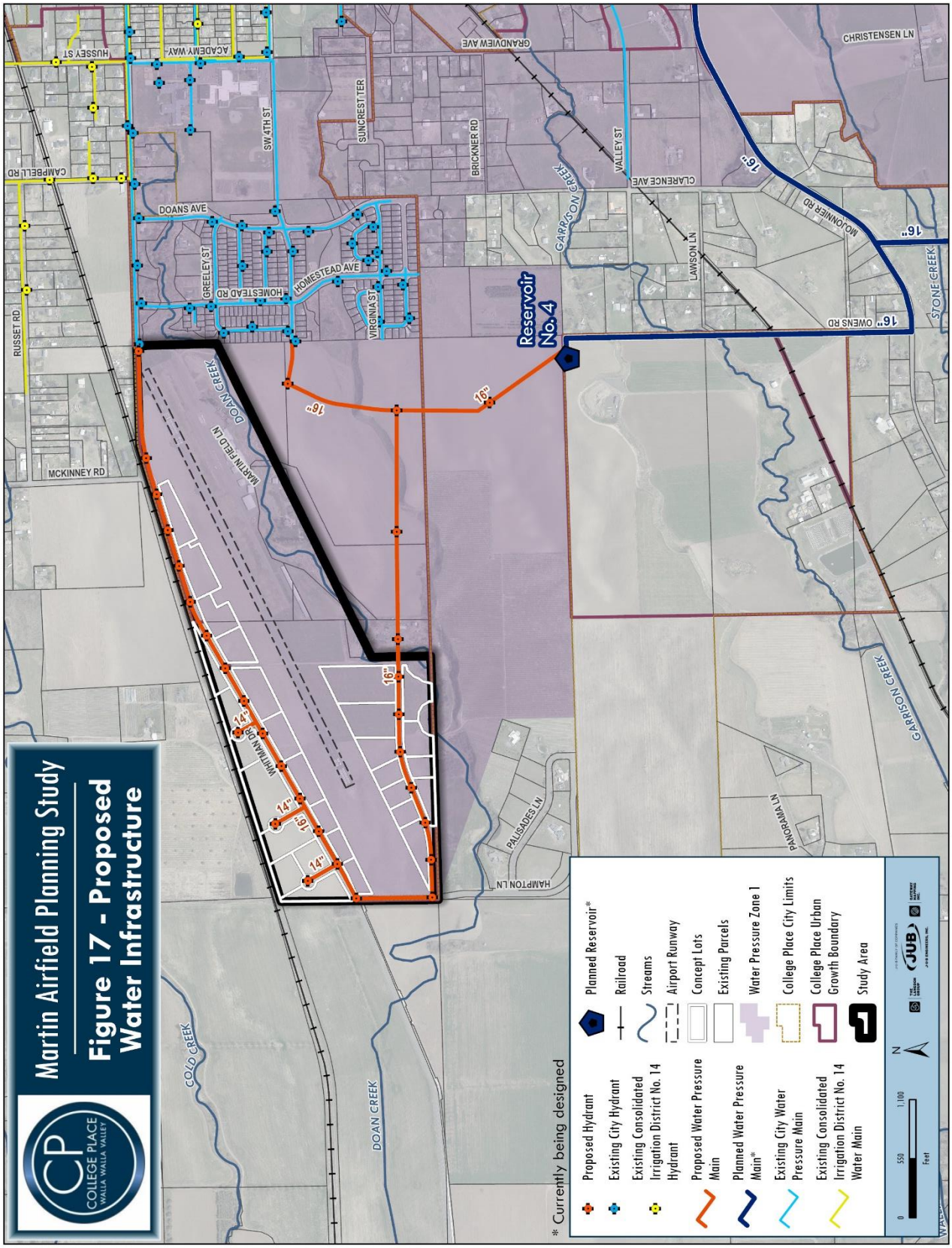
Natural gas improvements will depend on whether or not the project decides to provide gas service as part of the master development. If gas service is desired, proposed improvements will include increasing the gas line size east of the project and extending it to the site. It is assumed that a 4-inch gas line will be sufficient to serve the assumed customer base. Gas demands can vary significantly, so high-demand users may need to partner with CNGC to bring additional capacity to their site.

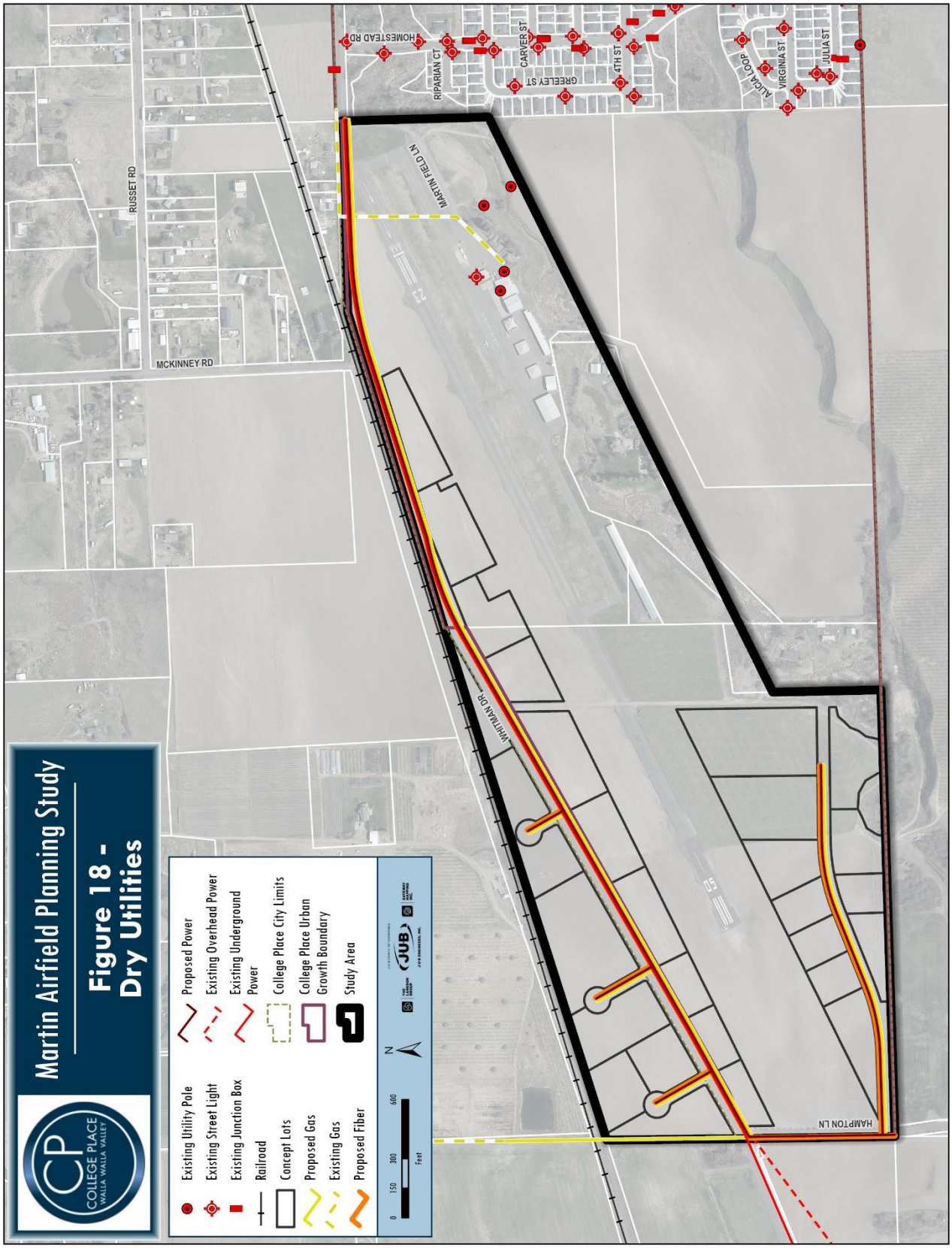
Telecommunications and Fiber Optic Communications

Communications improvements will include installation of new fiber optic lines along the proposed roadways by Century Link and/or Spectrum. Depending on the level of demand that the development can generate as it builds out, additional infrastructure improvements would be required to bring higher speed internet and communications to the project area. Development of the nearby housing will help generate the demand required to make this financially viable for communications providers.

Irrigation

No proposed irrigation improvements are anticipated. Light industrial users typically have minimal irrigation demand that does not justify the additional infrastructure cost. Additionally, unless the irrigation water rights that are tied to the existing airport parcels are transferred to the proposed industrial lots, no irrigation water is readily available. Irrigation lines could be installed, if desired, for future use of reclaimed water or irrigation via the existing water rights.


Martin Airfield Planning Study
Figure 17 - Proposed Water Infrastructure
COLLEGE PLACE
WALLA WALLA VALLEY
Reservoir No. 4
16"
14"
DOAN CREEK
COLD CREEK
GARRISON CREEK
STONE CREEK
MARTIN FIELD LN
WHITMAN DR
MCKINNEY RD
RUSSET RD
CAMPBELL RD
HUSSEY ST
ACADEMY WAY
SW 4TH ST
SUNCREST TER
BRICKNER RD
GRANDVIEW AVE
VALLEY ST
CLARENCE AVE
CHRISTENSEN LN
MOJONNIER RD
OWENS RD
LAWSON LN
DOANS AVE
GREELEY ST
HOMESTEAD RD
HOMESTEAD AVE
VIRGINIA ST
PALISADES LN
HAMPTON LN
PANORAMA LN
* Currently being designed
Proposed Hydrant
Existing City Hydrant
Existing Consolidated Irrigation District No. 14 Hydrant
Proposed Water Pressure Main
Planned Water Pressure Main*
Existing City Water Pressure Main
Existing Consolidated Irrigation District No. 14 Water Main
Planned Reservoir*
Railroad
Streams
Airport Runway
Concept Lots
Existing Parcels
Water Pressure Zone 1
College Place City Limits
College Place Urban Growth Boundary
Study Area
0
550
1,100
Feet
N


Martin Airfield Planning Study
Figure 18 -
Dry Utilities
COLLEGE PLACE
WALLA WALLA VALLEY
Existing Utility Pole
Existing Street Light
Existing Junction Box
Railroad
Concept Lots
Proposed Gas
Existing Gas
Proposed Fiber
Proposed Power
Existing Overhead Power
Existing Underground Power
College Place City Limits
College Place Urban Growth Boundary
Study Area
0 150 300 600
Feet
N
JUB
RUSSET RD
MCKINNEY RD
HOMESTEAD RD
RIPARIAN CT
CARVER ST
GREELEY ST
4TH ST
ALICIA LOOP
VIRGINIA ST
JULIA ST
MARTIN FIELD LN
WHITMAN DR
HAMPTON LN

Preliminary Cost Estimate

Development Costs

The following is a summary of infrastructure improvement costs in 2025 dollars. Detailed reports on improvement costs are shown in Appendix 6. These costs generally include engineering, construction administration, sales tax, and 30% contingency.

Table 15 Summary of Capital Improvement Costs

Description	Dollars
Internal Road Network	$4,385,000
Earthwork	$550,000
Sanitary Sewer Infrastructure	$7,214,000
Potable Water Infrastructure	$9,075,000
Surface and Storm Water Management	$785,000
Dry Utilities	$2,194,000
Total	**$24,203,000**

NEXT STEPS

The Next Steps Section provides an overview of what is recommended to be initiated to continue momentum and progress for development at Martin Airfield.

The Next Steps is arranged in the following sections:

- Airport Recommendations
- Transportation Recommendations
- Ongoing Communications with Utility Providers
- Funding and Revenue Sources

Airport Recommendations

A combination of regulatory rules can be used to establish and implement land use compatibility at and around Martin Airfield. Below is a list of items, recommendations to improve land use compatibility:

- **Establish Zoning Overlays** – Consider establishing the following regulations to address land use compatibility in the airport influence area: 1) Traditional or performance-based zoning regulations; 2) Compatible land use overlay; and 3) Height hazard overlay.
- **Utilize Building Restriction Line Map** – Utilize the included BRL map showing the maximum building heights for developable lands with contours.
- **Identify Part 77 Surface** – Use the airspace definitions provided in federal law to identify FAR Part 77 Surfaces for your airport and include in the development regulations language that prohibits penetration of these surfaces. Provide a map and instructions to assist community members, airport managers, and planning staff in implementing the regulations. The FAA relies on local jurisdictions with land use authority to keep critical airspace clear of obstructions. Washington State Legislature RCW 14.12 Airport Zoning gives local jurisdictions the authority to develop and adopt airspace regulations.
- **Establish Airport Compatibility Zones** – Each airport is unique. Thus, adjusting these safety zones to fit the airfield configuration is essential. Establishing an airport compatibility zone tailored to Martin Field's needs is recommended. Use the WSDOT Airports and Compatible Land Use Criteria to follow the suggested permitted land uses for each safety zone to guide recommended development around Martin Field.

Transportation Recommendations

Geotechnical Survey

Conducting a geotechnical survey to evaluate the subsurface conditions to determine soil stability, bearing capacity, and other geologic factors for roadways or rail crossings in the study area vicinity will aid the city in identifying if mitigation measures are needed as future development occurs.

Roadway Conditions Analysis

A roadway conditions analysis will determine the ability of roadways near the study area to accommodate industrial traffic as development occurs. If roadway upgrades are recommended, this analysis will identify necessary upgrades such as resurfacing, widening or new construction.

Ongoing Communications with Utility Providers

Sewer

It will be critical to have ongoing communication between developers and the City of College Place for the sanitary sewer improvements needed to serve the Martin Airfield Study Area. Design and construction of the lift station and forcemain will be required before any development in the study area can begin. Gravity sewer pipe to the lift station will need to be evaluated as development occurs and can be constructed in phases depending on the timing and rate of development. All improvements will need to be coordinated with the City of College Place to ensure the necessary infrastructure and capacity is available for each stage of development. It is also recommended that the City further develops a Pretreatment Code and places it in effect prior to development in the study area.

Water

As noted in the Utility Requirements section, connection to the City of College Place's existing water system is required to serve the Martin Airfield Study Area. Design and construction of transmission and distribution mains will need to be evaluated as development occurs. Phased system construction will be dependent on the timing and rate of development and will need to be coordinate with the City of College Place for conformance with the operational criteria of the on-site development as well as the long-term planning of the water system.

Funding and Revenue Sources

The following is a summary of the various revenue sources available to the City to help offset the site's development cost. It is intended that a variety of funding sources will be used to implement the master plan. A range of ways to fund the basic infrastructure, with the site-specific infrastructure connections being the responsibility of the developer of the individual sites, could be available, for example:

Department of Ecology Grants

The State of Washington supplies grants for various solid waste programs, including Remedial Action Grants to assist with local hazardous waste sites, Moderate Risk/Hazardous Waste Implementation Grants to manage local hazardous waste, and Food and Yard Waste Composting Grants.

Economic Development Administration (EDA)

The Economic Development Administration (EDA) has various programs and funding opportunities available. Through the competitive grant process, EDA evaluates all projects to determine the extent in which they align with EDA's investment priorities, effectively address the creation and/or retention of high-quality jobs, and provide a clear scope of work with specific, measurable project outputs. EDA's investment priorities provide an overarching framework to ensure its grant investment portfolio – from planning to infrastructure construction – contributes

to local efforts to build, improve, or better leverage economic assets that allow businesses to succeed and regional economies to prosper and become more resilient.

Federal Congressionally Directed Spending (CDS) and Community Project Funding (CPF)

In November 2021, the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), was passed. This established the Congressionally Directed Spending (CDS) program (as known in the Senate) and the Community Project Funding (CPF) program (as known in the House). These two terms are synonymous and created to support specific community projects as part of the annual appropriations process. For every year of funding, the CDS/CPF projects are solicited and selected by the members of the U.S. Congress and U.S. Senate. Once selected, the individual scope and funding amount for each of the selected projects is then written into law via the Annual Appropriations Bill. The CDS/CPF program is authorized through the 2026 Federal Fiscal Year (FFY).

Infrastructure Assistance Coordinating Council (IACC)

IACC is a nonprofit organization helping Washington communities identify and obtain infrastructure funding resources. It sponsors an annual statewide conference (typically in Wenatchee, WA) where state and federal programs convene to share funding information. Technical assistance is available for individual projects as part of this.

Local Improvement District (LID)

The City can work with purchasers/developers to establish a local improvement district that includes an agreed-upon repayment schedule based on agreed-upon equitable criteria. The City or County sells bonds to cover the costs of infrastructure to be built within the district, and the owners/developers pay off the bonds through regular payments, usually over a 10-20-year period.

Office of Economic Development & Competitiveness (OEDC)

The Office of Economic Development & Competitiveness (OEDC) is committed to providing businesses large and small with the specific solutions they need, wherever they are in the lifecycle, from conceptualization to an exit strategy. OEDC has a suite of services and programs that include Business Recruitment, Retention and expansion, Site Selection, foreign direct investment, Key Sector Support, Small Business Export Assistance, and Entrepreneurship and rural Business Assistance.

Public/Private Development Agreements

New development agreements between the county and/or city and a developer specify financing needs and responsibilities for infrastructure needs that serve a wider area than the developer is contemplating.

Public Works Board (PWB) Funding

In partnership with local governments, the Public Works Board (PWB) addresses infrastructure needs. PWB uses a dedicated funding pool to offer low-interest financing (interest rates as low as 0.5% over 20 years) in a revolving loan program to finance up to 85% of a project's cost. Applicants must have a capital facilities plan, be levying the 1/4% real estate excise tax, and comply with UGA requirements. Capital improvement planning projects are limited to planning for streets and utilities. PWB provides traditional financing and broadband specific financing. Ports are not eligible to apply for these funds and will be required to partner with the City when applying.

Tax Increment Financing (TIF)

Tax increment financing (TIF) is a tool that local governments in Washington State (cities, towns, counties, port districts, or any combination thereof) can use to fund public infrastructure in targeted areas to encourage private development and investment. A local government wishing to utilize TIF will designate an "increment area" surrounding the site of the public improvements. The property tax portion of increases in the assessed value of properties within the increment area is allocated toward paying for the public improvement costs.

Washington State Department of Commerce – Community Economic Revitalization Board (CERB) Grants

Department of Commerce funds are available via low-interest loans and grants to finance domestic and industrial water, stormwater, wastewater, public buildings, telecommunications, and port facilities.

Washington State Department of Commerce – Industrial Site Readiness Grant

This program offers grants of up to $500,000 to public entities such as counties, cities, port districts, or tribal governments. The funding supports pre-development planning for large manufacturing sites, including engineering studies, permitting, and site due diligence.

Washington State Transportation Improvement Board (TIB)

TIB funds high-priority transportation projects in communities throughout the state to enhance the movement of people, goods, and services. TIB is an independent state agency created by the Legislature that distributes and manages street construction and maintenance grants. Funding for TIB's grant programs comes from revenue generated by three cents of the statewide gas tax. This funding may be appropriate for transportation improvements such as the widening and frontage of Road 36.

Public Works Trust Fund (PWTF)

The PWTF provides low-interest loans to local governments for infrastructure projects, including those related to industrial development. The fund aims to assist municipalities in addressing infrastructure needs through a dedicated funding pool. (wacities.org)

Better Utilizing Investments to Leverage Development (BUILD) grant

A program administered by the U.S. Department of Transportation (DOT). It provides federal funding to support investments in infrastructure that enhance economic development and improve safety, mobility, and quality of life. The BUILD program is designed to support projects that have a significant impact on communities, especially in terms of regional economic growth, access to opportunities, and overall public welfare.

Appendix 1

Permit Classification Table

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 1 Review	• ADU Permit • Administrative Interpretation • Boundary Line Adjustment • Building Permit • Certificate of Occupancy • Certificate of Appropriateness (and waiver)(1) • Certificate of Design Review • Certificate of Zoning Compliance • Clearing and Grading Permit • Code Enforcement Action • Critical Area Authorization • Landscaping Plan Approval • Permit, Minor Amendment • Plats, Final (10+ lots)	None	None	Community Development Director or designee (unless otherwise noted)	Hearing Examiner

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
	• SEPA Action (no public notice required) • Sign Permit • Site Plan Approval • Special Property Tax Valuation [1] • Special Use Permit				
Type 2 Review	• Binding Site Plan • Critical Area Permit • SEPA Action (public notice required) • Short plat (9 lots or less) • Variance with Type 1/2 Permit	Yes	None, but written comments may be submitted	Community Development Director	Hearing Examiner

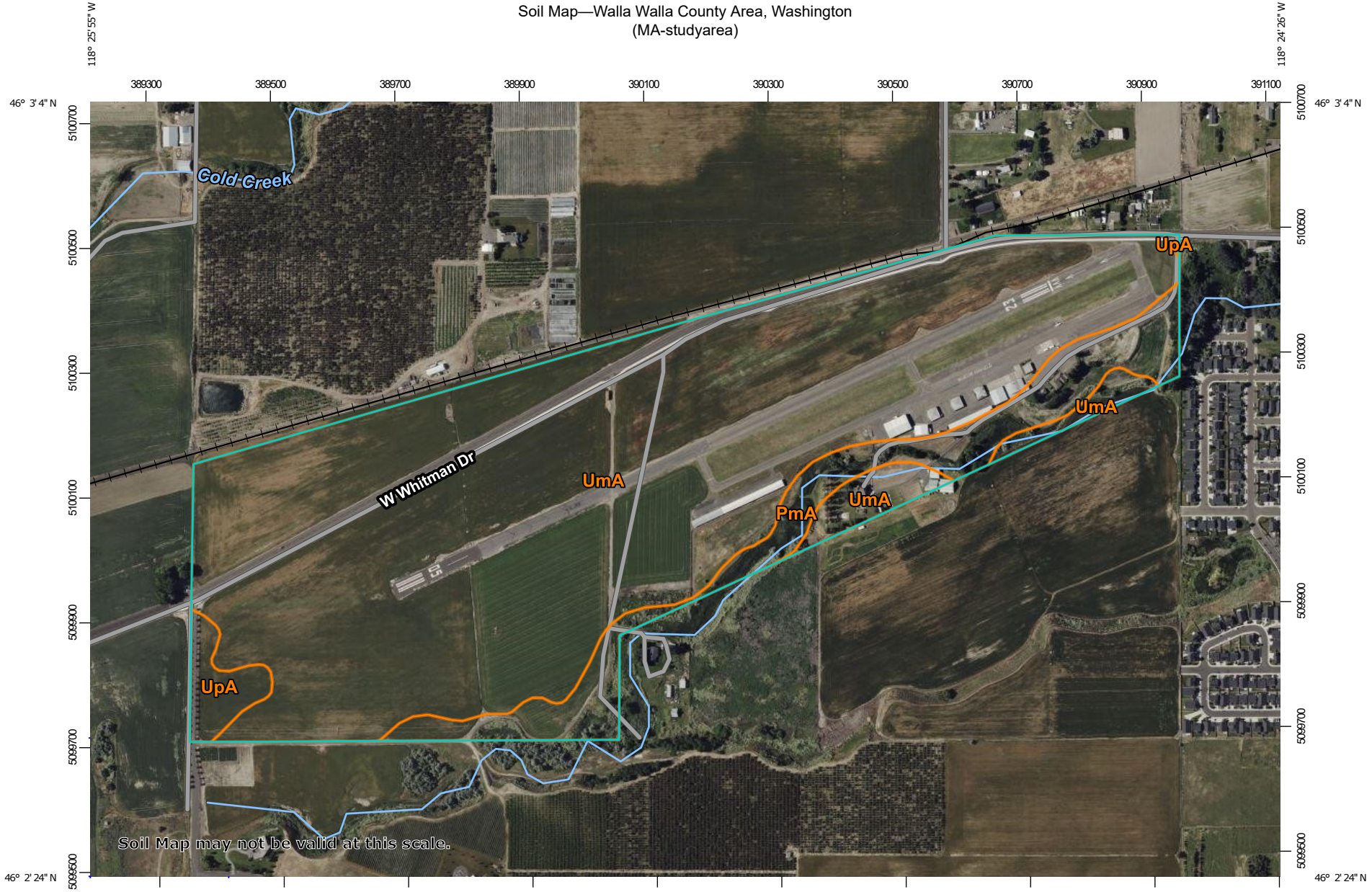
	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 3 Review	• Conditional Use Permit • Master Planned Development • Plat, Preliminary (10+ lots) • Permit, Major Amendment • Reasonable Use Exception • Rezone, Site Specific • Variance with Type 3 Permit	Yes	Hearing Examiner	Hearing Examiner	Superior Court

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 4 Review	• Comprehensive Plan Text Amendment • Development Agreement [5] • Future Land Use Map Amendment • Rezone, General • Shoreline Master Program Amendment [2] • Unified Development Code Amendment [4]	Yes	Planning Commission	City Council	Superior Court [3]

Appendix 2

Soil Assessment

Soil Map—Walla Walla County Area, Washington
(MA-studyarea)



Map Scale: 1:8,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:31,700.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walla Walla County Area, Washington
Survey Area Data: Version 9, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 25, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PmA	Pedigo silt loam, 0 to 3 percent slopes	20.4	11.5%
UmA	Umapine silt loam, 0 to 3 percent slopes	152.7	86.3%
UpA	Umapine silt loam, leached surface, 0 to 3 percent slopes	3.8	2.1%
Totals for Area of Interest		**176.8**	**100.0%**

Appendix 3

WSDOT Airports and Compatible Land Use Criteria

Table F-1

Maximum Residential Density						
Compatibility Zones	**Zone 1**	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
Maximum Residential Density						
	Average Number of Dwelling Units Per Gross Acre					
Agricultural (farmland/forest)	0	Maintain current comprehensive plan designation and zoning designation				
Rural (outside an urban growth boundary)	0	1 d.u. per 10 acres	1 d.u. per 10 acres[A]	1 d.u. per 5 acres[A]	1 d.u. per 10 acres[A]	1 d.u. per 5 acres
Urban (within the urban growth boundary)	0	0	B	C	B	C
Maximum Intensities for Nonresidential Uses (Commercial, Industrial, Offices, and Activities)						
	Average Number of People Units Per Gross Acre					
Agricultural (farmland/forest)	1-5[E]	D, E	D, E	D, E	D, F	D
Rural (outside an urban growth boundary)	1-5[E]	10-25[E]	10-25[E]	40-60[E]	100-150[E]	100-150[G]
Urban (within the urban growth boundary)	1-5[E]	50-75[E]	80-120[E]	100-150[E]	100-150[E]	No Limit[G]

Notes:

A Cluster to preserve open space to maintain open approach corridor at and near runway ends.

B Infill development up to average of surrounding residential area is allowed, but is appropriate only if nonresidential uses are not feasible

C Promote high density and intensity mixed use development (15 or more d.u. per acre)

D Maintain current comprehensive plan designation and zoning designation.

E Special Function Land uses should be prohibited.

F 50-100 people per acre allowed if on airport and aviation-related.

G Special Function Land uses should be avoided.

Table F-2
Airport Land Use Matrix

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
A. Resource Operations						
1. Agricultural (Commercial)						
Agriculture, horticulture, general farming (crops only, not feedlots and stockyards)	P	P	P	P	P	P
Agricultural building	L	L	P	P	P	P
Agricultural chemical sales/storage	X	L	P	P	P	P
Agricultural Housing/Farm labor	X	X	L	P	L	P
Agricultural housing/farm labor	X	X	L	P	L	P
Agricultural market	X	X	P	P	X	P
Agricultural related industries	X	L	P	P	P	P
Animal husbandry	X	L	L	L	X	P
Agricultural feeding operation or stockyards	X	X	X	X	X	X
Agriculture or food processing facility	X	L	P	P	L	P
Livestock auction	X	X	X	L	X	P
Fairgrounds	X	X	X	X	X	P
Floriculture, aquaculture	X	L	P	P	P	P
Fruit bin sales/storage	X	L	P	P	P	P
2. Forest (Commercial)						
General forest silver culture	L	L	P	P	P	P
Forest product processing	X	L	P	P	P	P
3. Mining/Refining/Offsite Hazardous Waste Treatment						
Asphalt paving and roofing materials, rock crushing	X	X	L	L	L	P
Mining including sand and gravel pits	X	L	L	L	X	P
Stockpiling of earthen materials	X	L	L	L	X	P
B. Rural Development						
1. Rural Residential						
Single-family dwelling (large lot, 5 acres or greater*)	X	L	L	P	X	P
Single-family dwelling, rural centers	X	X	L	L	X	L
Residential Cluster Development, 40% open	X	X	LSC	X	X	P
Multi-family dwelling	X	X	X	X	X	P
Temporary farm housing	X	X	P	P	L	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
- **"LSC" Limited Special Conditions** – Development should be moved away from the extended runway centerline. Open space should be devoted to areas that experience elevated risk.
- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
2. Rural Centers						
Single-family dwelling; up to 12 dwelling units/acre	X	X	L	L	X	L
Two - Four family dwelling (duplex) (*)	X	X	X	X	X	L
Multi-family dwelling; 12-20 units/acre	X	X	L	X	X	P
21+ units/acre	X	X	P	P	X	P
Agriculture/forest/mineral resources or industry (see item A)						
Community services (see item D2)						
Retail and commercial service (see items D4 & D5)						
Industrial/manufacturing (see item D4s & D5)						
C. Education Facilities						
1. Education Facilities						
Junior or community college	X	X	L	L	L	P
Schools, K-12 elementary, middle, senior high	X	X	X	X	X	X
Business school	X	L	L	L	L	P
Vocational schools	X	L	L	L	L	P
D. Urban Development						
1. Residential						
Single-family dwelling; up to 12 dwelling units/acre	X	X	X	X	X	L
Two - four-family dwelling (duplex)(*)	X	X	X	X	X	L
Multi-family dwelling(*): 15 or more	X	X	LSC	X	X	P
Mixed-use office/commercial/residential use	X	X	P	P	X	P
Residential development cluster 40% > open space	X	X	L	L	X	L
Residential infill	X	X	L	L	L	P
Mobile home parks	X	X	L	L	X	L
Boarding house	X	X	L	L	L	L
Retirement homes	X	X	X	X	X	L

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
2. Community Services						
Cemetery	P	P	P	P	L	P
Churches, synagogues, temples	X	X	L	L	X	L
Community center meeting halls, fraternal organizations	X	X	L	L	X	P
Convalescent, nursing home and group homes	X	X	X	X	X	L
Day care facilities, family in-home	X	X	L	L	X	L
Day care center	X	X	L	L	X	L
Funeral home	X	X	P	P	X	P
Police, fire stations, ambulance service	X	L	P	P	P	P
Hospital	X	X	X	X	X	X
Medical clinic	X	X	L	L	X	P
Correction facilities	X	L	L	L	L	L
Libraries	X	X	P	P	X	P
Museums and art galleries	X	X	L	P	P	P
Zoo	X	X	P	P	X	P
3. Amusement and Recreation						
Amusement park (permanent)	X	X	L	L	X	L
Bowling alleys	X	X	P	P	X	P
Campground	X	L	L	P	L	P
Recreational vehicle parks; short term	X	L	L	P	L	P
Drive-in theatres	X	X	L	L	X	P
Fairgrounds	X	X	P	L	L	P
Golf courses	X	L	P	P	X	P
Gymnasiums, exercise facilities	X	L	L	L	L	P
Horse racing tracks, speedways	X	X	X	X	X	X
Miniature golf courses	X	X	P	P	X	P
Movie theatres, auditoriums exhibition halls	X	X	L	L	X	P
Parks	L	L	P	P	L	P
Roller skating rink	X	X	L	L	X	P

Chart Symbols

- **"L" Limited** – Uses or activities that may be compatible with airport operations depending on their location, size, bulk, height, density and intensity of use.
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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
4. Retail Trade and Service						
Addressing, mailing, and stenographic services	X	L	P	P	L	P
Advertising agencies	X	L	P	P	L	P
Airport uses and activities commercial/industrial	L	P	P	P	P	P
Animal clinic/hospital	L	P	P	P	P	P
Antique stores	X	L	P	P	X	P
Automobile, truck, manufactured home, and travel trailer sales	L	P	P	P	P	P
Automobile and recreational vehicle (RV) sales; weekend	L	P	P	P	L	P
Automotive: car wash	L	P	P	P	L	P
Sales lot/auto center	L	P	P	P	P	P
Parking lots and garages	L	P	P	P	P	P
Maintenance and repair shops	X	P	P	P	P	P
Paint and body repair shops	L	P	P	P	P	P
Parts and accessories (tires, batteries, etc.)	X	P	P	P	P	P
Specialized repair shops (radiator, etc.)	L	P	P	P	P	P
Towing services	L	P	P	P	P	P
Wrecking and dismantling yard	L	P	P	P	L	P
Bakery	X	P	P	P	L	P
Beauty and barber shops	X	L	P	P	X	P
Bed and breakfast inn	X	X	L	L	X	P
Boats and marine accessories	X Except storage L	P	P	P	P	P
Books, stationery, office supplies	Storage only	P	P	P	L	P
Building and trade (plumbing, heating, electrical, painting, etc.)	Storage only	P	P	P	L	P
Clothing and accessories	X	L	P	P	L	P
Communication towers	X	X	L	L	L	L
Computer and electronic stores	X	L	P	P	L	P
Department, discount, variety stores	X	X	P	P	X	P
Drug stores (optical goods, orthopedic supplies)	X	L	P	P	L	P
Employment agencies (private)	X	P	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Farm and implements, tools and heavy construction equipment	X	L	P	P	P	P
Farm supplies	L	P	P	P	P	P
Financial institutions	X	P	P	P	L	P
Food store	X	P	P	P	L	P
Furniture, home furnishings, appliances	X	P	P	P	L	P
General hardware, garden equipment and supplies	X	P	P	P	L	P
Grocery and convenience stores	X	L	P	P	L	P
Heavy equipment storage, maintenance and repair	X	L	P	P	L	P
Insurance agents, brokers, and service agencies	X	P	P	P	L	P
Kennels	L	P	P	P	L	P
Laundries, laundromats, and dry cleaning plants	X	P	P	P	L	P
Liquor stores	X	P	P	P	L	P
Lumber yards	L	P	P	P	L	P
Medical and dental laboratory, offices and clinic	X	X	L	P	x	P
Mini Storage	L	P	P	P	P	P
Motels and Hotels	X	X	P	P	P	P
Motorcycles sales/repair (including maintenance)	X	P	P	P	L	P
Paint, glass, and wallpaper stores	X	P	P	P	L	P
Pet stores, pet supplies, and dog grooming	X	L	P	P	L	
Professional office buildings for architects, attorneys, government, etc.	X	L	P	P	P	P
Rental: auto, truck, trailer, fleet leasing services	L	P	P	P	L	P
Repairs: small appliances, tv, business machines, watches, etc.	L	P	P	P	L	P
Restaurant, cafe and drive-in eating facilities	X	L	P	P	P	P
Service station	X	L	P	P	L	P
Sporting goods, bicycle shops	X	P	P	P	P	P
Taverns, bars, dance establishments	X	L	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
5. Industry/Manufacturing						
Aircraft parts	Storage only	L	P	P	P	P
Aircraft industrial	Storage only	L	P	P	P	P
Apparel and accessories	X	L	P	P	X	P
Bakery products (wholesale)	Storage only	L	P	P	X	P
Beverage industry	Storage only	L	P	P	X	P
Canning, preserving, and packaging fruits, vegetables, and other foods	X	L	L	L	X	P
Cement and concrete plants	X	L	L	L	X	P
Chemicals (industrial, agricultural, wood, etc.)	X	X	L	L	X	L
Concrete, gypsum, and plaster products	Storage only	L	P	L	L	P
Confectionery and related products (wholesale)	Storage only	P	P	P	L	P
Mini storage	P	P	P	P	P	P
Product assembly	Storage only	L	P	P	L	P
Prefabricated structural wood products and containers	Storage only	P	P	P	L	P
Printing, publishing, and binding	Storage only	P	P	P	L	P
Rendering plants, slaughter houses	X	X	X	X	X	L
Rubber products	X	L	P	P	L	P
Sawmills and planing mills	Storage only	L	P	P	L	P
Sheet metal and welding shops	Storage only	P	P	P	L	P
Stone products (includes finishing of monuments for retail sale)	Storage only	P	P	P	L	P

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
6. Wholesale Trade-Storage						
Warehouses	Storage only	P	P	P	P	P
Wholesale trade	Storage only	P	P	P	P	P
Storage facilities; bulk	L	P	P	P	P	P
commercial	L	P	P	P	P	P
mini-storage	L	P	P	P	P	P
E. Transportation and Utilities						
1. Transportation						
Bus terminals	X	L	P	P	L	P
Transportation storage and maintenance facilities	Storage only	P	P	P	P	P
Transportation brokerage offices; without truck parking	X	P	P	P	P	P
with truck parking	L	P	P	P	P	P
Contract truck hauling, rental of trucks with drivers	L	P	P	P	P	P
Rail, truck terminals (for short-term storage, office)	L	P	P	P	P	P
Air storage and office use	Storage only	P	P	P	P	P
Railroad switch yards, maintenance, and repair facilities, etc.	X	P	P	P	P	P
Taxicab terminals, maintenance, and dispatching centers, etc.	X	P	P	P	P	P
2. Utilities						
Power generating facilities	L	L	L	L	L	L
Utility services (substations, etc.)	L	L	L	L	L	P
Wholesale trade	L	P	P	P	L	P
Storage facilities; bulk	L	P	P	P	P	P
Commercial	L	P	P	P	P	P

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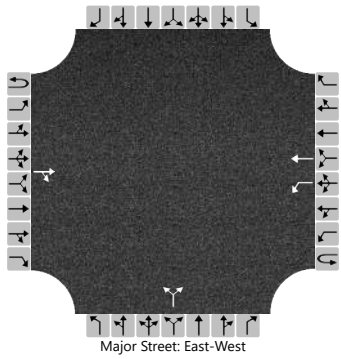
Appendix 4

Traffic Counts and Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

General Information		Site Information	Existing Conditions Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	11/4/2024	East/West Street	Old US 12
Analysis Year	2024	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			76	55		20	52			26		13				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22					42					
Capacity, c (veh/h)						1434					813					
v/c Ratio						0.02					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.5					9.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						2.1				9.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

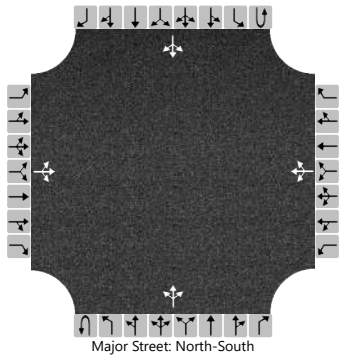
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	1		20	0	7		0	31	25		13	61	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				30			0				14		
Capacity, c (veh/h)			837				857			1524				1535		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
Control Delay (s/veh)			9.3				9.4			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)	9.3				9.4				0.0				1.3			
Approach LOS	A				A				A							

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HCS7 Two-Way Stop-Control Report

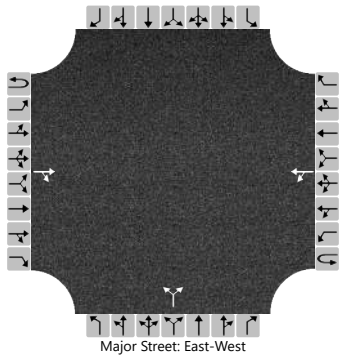
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			40	0		1	28			0		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					2					
Capacity, c (veh/h)						1557					1022					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.3				8.5							
Approach LOS					A											

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HCS7 Two-Way Stop-Control Report

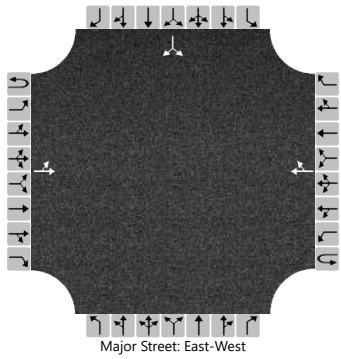
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	40				23	4						4		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													11	
Capacity, c (veh/h)		1577													991	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.3													8.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.5												8.7		
Approach LOS		A					A							A		

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HCS7 Two-Way Stop-Control Report

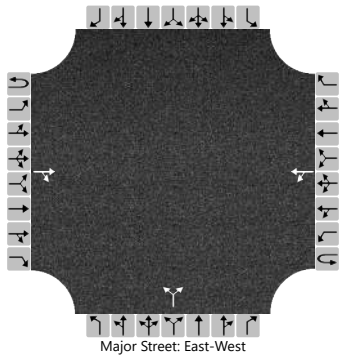
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			39	0		2	36			0		5				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					6					
Capacity, c (veh/h)						1556					1021					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.5						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

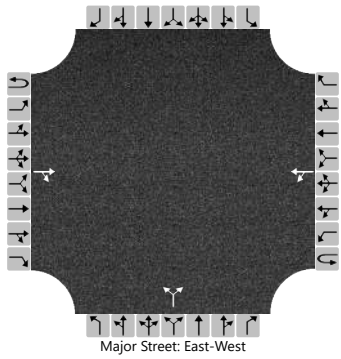
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			42	5		40	30			5		34				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						49					48					
Capacity, c (veh/h)						1540					970					
v/c Ratio						0.03					0.05					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.4					8.9					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.3				8.9						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

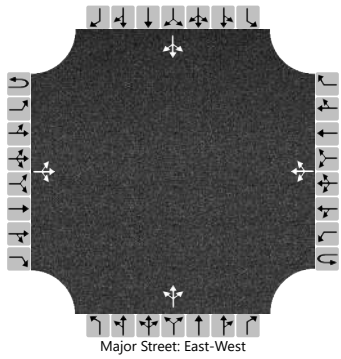
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	84	43		62	101	8		39	14	32		7	23	2
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				69					94				36	
Capacity, c (veh/h)		1460				1436					622				518	
v/c Ratio		0.00				0.05					0.15				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.2					0.5				0.2	
Control Delay (s/veh)		7.5				7.6					11.8				12.5	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.3				3.0				11.8				12.5			
Approach LOS	A				A				B				B			

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HCS7 Two-Way Stop-Control Report

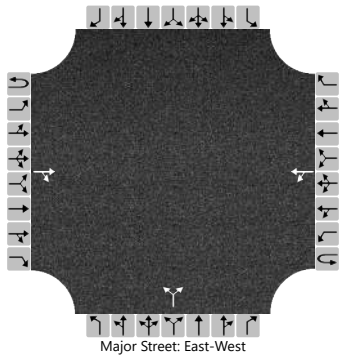
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			124	12		55	173			20		42				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						65					74					
Capacity, c (veh/h)						1411					715					
v/c Ratio						0.05					0.10					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.6					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.2				10.6						
Approach LOS										B						

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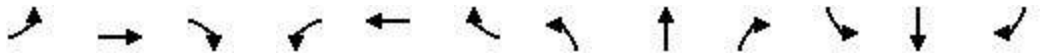
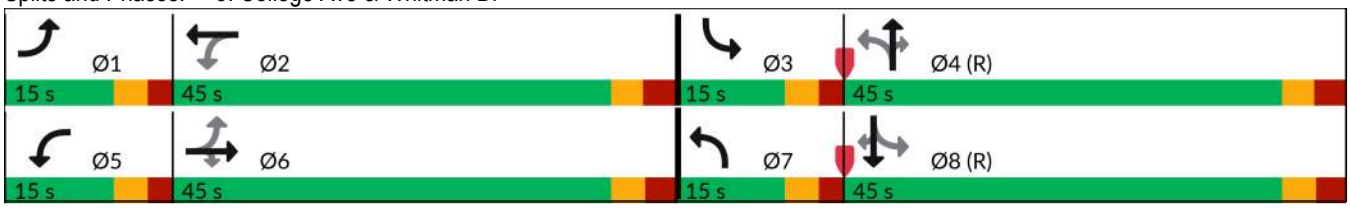


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Future Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.503			0.671			0.602			0.634		
Satd. Flow (perm)	937	1863	1583	1250	1829	0	1121	1863	1583	1181	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	125	48	33	113	15	54	197	38	17	200	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	125	48	33	128	0	54	197	38	17	200	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	22.3	16.4	16.4	20.2	13.4		83.2	79.4	79.4	79.6	74.3	74.3
Actuated g/C Ratio	0.19	0.14	0.14	0.17	0.11		0.69	0.66	0.66	0.66	0.62	0.62
v/c Ratio	0.20	0.49	0.15	0.14	0.61		0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
LOS	D	D	A	D	E		A	B	A	A	B	A
Approach Delay (s/veh)		38.9			55.1			8.7			9.1	
Approach LOS		D			E			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



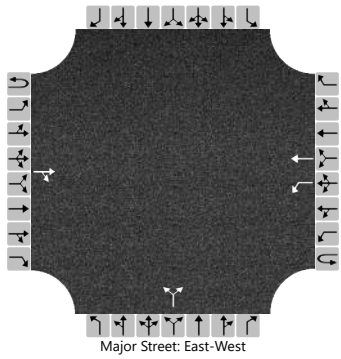
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	125	48	33	128	54	197	38	17	200	97
v/c Ratio	0.20	0.49	0.15	0.14	0.61	0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Length 50th (ft)	28	93	0	20	91	12	49	0	4	68	0
Queue Length 95th (ft)	56	150	0	45	150	31	122	0	14	128	18
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	272	601	837	1233	1088	861	1154	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.20	0.08	0.12	0.21	0.06	0.16	0.03	0.02	0.17	0.09

Intersection Summary

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 No-Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour No-Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	83		30	79			39		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					64					
Capacity, c (veh/h)						1349					714					
v/c Ratio						0.02					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

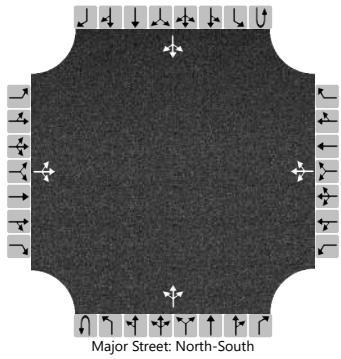
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		30	0	11		0	47	38		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				45			0				22		
Capacity, c (veh/h)			770				775			1478				1495		
v/c Ratio			0.01				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.0		
Control Delay (s/veh)			9.7				9.9			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.7				9.9				0.0				1.4		
Approach LOS		A				A										

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HCS7 Two-Way Stop-Control Report

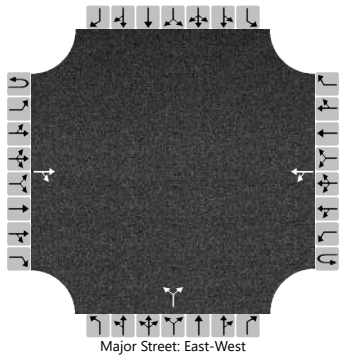
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			61	0		2	42			0		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					3					
Capacity, c (veh/h)						1526					992					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.6					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.3				8.6						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

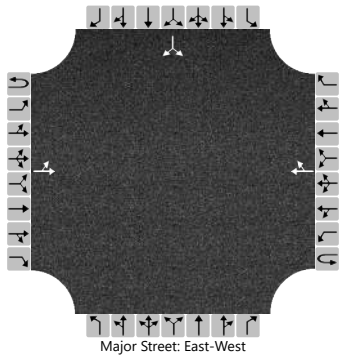
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	61				35	6						6		9
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													16	
Capacity, c (veh/h)		1557													958	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.3													8.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.6												8.8		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

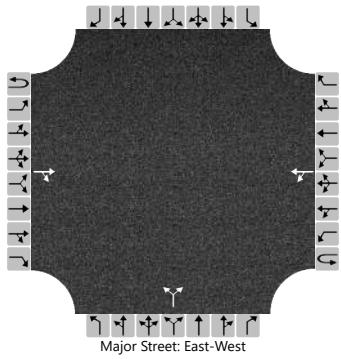
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			59	0		3	55			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1525					991					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

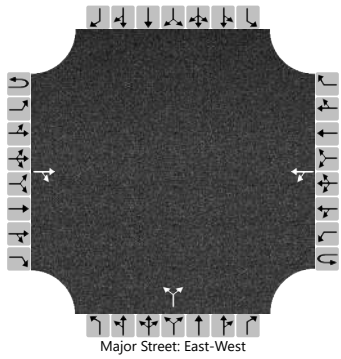
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	8		61	45			8		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					74					
Capacity, c (veh/h)						1500					915					
v/c Ratio						0.05					0.08					
95% Queue Length, Q_{95} (veh)						0.2					0.3					
Control Delay (s/veh)						7.5					9.3					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.5				9.3						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

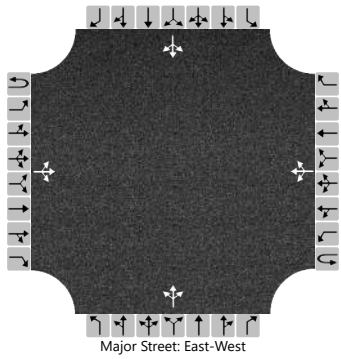
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	127	64		94	153	12		59	21	49		11	35	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				104					143				54	
Capacity, c (veh/h)		1386				1352					463				374	
v/c Ratio		0.00				0.08					0.31				0.15	
95% Queue Length, Q_{95} (veh)		0.0				0.3					1.3				0.5	
Control Delay (s/veh)		7.6				7.9					16.2				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				3.3				16.2				16.2			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

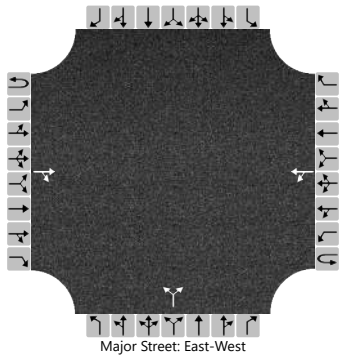
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			188	18		83	262			30		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					112					
Capacity, c (veh/h)						1315					565					
v/c Ratio						0.08					0.20					
95% Queue Length, Q_{95} (veh)						0.2					0.7					
Control Delay (s/veh)						8.0					12.9					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.5				12.9						
Approach LOS										B						

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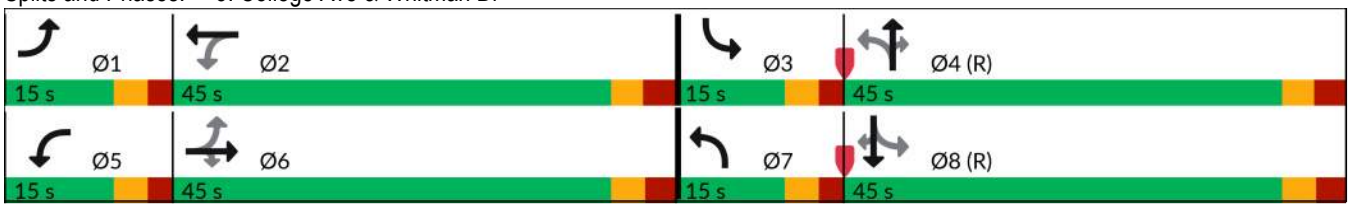
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Future Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.387			0.443			0.510			0.563		
Satd. Flow (perm)	721	1863	1583	825	1829	0	950	1863	1583	1049	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	189	73	49	172	23	83	298	58	26	303	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	189	73	49	195	0	83	298	58	26	303	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	26.5	18.6	18.6	25.2	17.9		77.7	71.9	71.9	74.0	68.4	68.4
Actuated g/C Ratio	0.22	0.16	0.16	0.21	0.15		0.65	0.60	0.60	0.62	0.57	0.57
v/c Ratio	0.30	0.65	0.21	0.21	0.70		0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
LOS	D	E	A	C	E		A	B	A	A	B	A
Approach Delay (s/veh)		41.0			54.7			12.3			13.2	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	70	189	73	49	195	83	298	58	26	303	147
v/c Ratio	0.30	0.65	0.21	0.21	0.70	0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Length 50th (ft)	41	138	0	28	141	23	121	0	7	127	10
Queue Length 95th (ft)	73	207	9	55	209	50	209	0	21	222	49
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	258	601	688	1116	996	729	1061	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.31	0.12	0.19	0.32	0.12	0.27	0.06	0.04	0.29	0.15

Intersection Summary

Martin Field Trip Generation

Area	Total Acres	Bldg. SF (1,000 SF)	PM Peak Hour Trips Generated		
			Total	Inbound	Outbound
North Driveway	18.65	325	95	13	82
South Driveway	18.56	323	94	13	81
Total Whitman	37.21	648	189	26	163
Total Hampton	22.22	387	107	15	92
TOTAL	59.43	1,036	296	41	255

Notes

Assumes 40% FAR

ITE Trip Generation Manual 11th Edition

Land Use 110 - General Light Industrial

Fitted equation =(ROUNDUP(EXP(0.72*LN(X)+0.38),0))

where X is the sq ft of the development

Worst Driveway - included in Total Whitman trips above

North Driveway	7.82	136	51	7	44
South Driveway	3.11	54	26	4	22

Martin Airfield Feeasibility Study

PM Peak Hour Turning Movement Volumes

Old US 12/Last Chance

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	26	0	13	0	0	0	0	76	55	20	52	0	242
2045 No-Build	39	0	20	0	0	0	0	115	83	30	79	0	366
20-year New Trips	12	0	0	0	0	0	0	0	2	0	0	0	14
2045 Build	51	0	20	0	0	0	0	115	85	30	79	0	380

Last Chance/Whitman Dr

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	31	25	13	61	3	0	1	1	20	0	7	162
2045 No-Build	0	47	38	20	92	5	0	2	2	30	0	11	247
20-year New Trips	0	0	3	0	0	2	0	0	0	13	0	12	30
2045 Build	0	47	41	20	92	7	0	2	2	43	0	23	277

Whitman Dr/Hampton

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	2	0	0	0	0	40	0	1	28	0	71
2045 No-Build	0	0	3	0	0	0	0	61	0	2	42	0	108
20-year New Trips	9	0	83	0	0	0	0	3	2	13	16	0	126
2045 Build	9	0	86	0	0	0	0	64	2	15	58	0	234

Whitman Dr/McKinney

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	4	0	6	3	40	0	0	23	4	80
2045 No-Build	0	0	0	6	0	9	5	61	0	0	35	6	122
20-year New Trips	0	0	0	0	0	1	3	227	0	0	35	0	266
2045 Build	0	0	0	6	0	10	8	288	0	0	70	6	388

Whitman Dr/Martin Field

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	5	0	0	0	0	39	0	2	36	0	82
2045 No-Build	0	0	8	0	0	0	0	59	0	3	55	0	125
20-year New Trips	0	0	0	0	0	0	0	227	0	0	35	0	262
2045 Build	0	0	8	0	0	0	0	286	0	3	90	0	387

Whitman Dr/Homestead

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	5	0	34	0	0	0	0	42	5	40	30	0	156
2045 No-Build	8	0	52	0	0	0	0	64	8	61	45	0	238
20-year New Trips	1	0	0	0	0	0	0	223	4	0	34	0	262
2045 Build	9	0	52	0	0	0	0	287	12	61	79	0	500

Whitman Dr/Hussey/Academy

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	39	14	32	7	23	2	4	84	42	62	101	8	418
2045 No-Build	59	21	49	11	35	3	6	127	64	94	153	12	634
20-year New Trips	3	0	0	0	0	1	3	184	36	0	30	0	257
2045 Build	62	21	49	11	35	4	9	311	100	94	183	12	891

Whitman Dr/Davis

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	20	0	42	0	0	0	1	124	12	55	173	1	428
2045 No-Build	30	0	64	0	0	0	2	188	18	83	262	2	649
20-year New Trips	2	0	0	0	0	0	1	173	10	0	28	0	214
2045 Build	32	0	64	0	0	0	3	361	28	83	290	2	863

Whitman Dr/College Ave

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	50	181	35	16	184	89	42	115	44	30	104	14	904
2045 No-Build	76	274	53	24	279	135	64	174	67	45	158	21	1370
20-year New Trips	6	0	0	0	0	10	36	99	38	0	12	0	201
2045 Build	82	274	53	24	279	145	100	273	105	45	170	21	1571

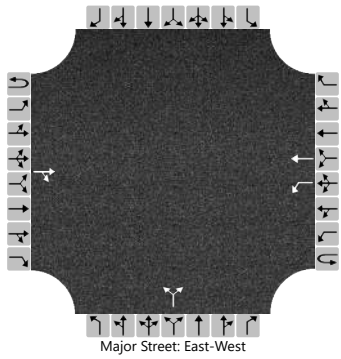
Whitman/New Driveway (busiest one)

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	0	0	0	0	43	0	0	42	0	85
2045 No-Build	0	0	0	0	0	0	0	65	0	0	64	0	129
20-year New Trips	2	0	20	40	0	4	1	85	0	4	25	6	187
2045 Build	2	0	20	40	0	4	1	150	0	4	89	6	316

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	85		30	79			51		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					77					
Capacity, c (veh/h)						1346					702					
v/c Ratio						0.02					0.11					
95% Queue Length, Q_{95} (veh)						0.1					0.4					
Control Delay (s/veh)						7.7					10.8					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.8						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

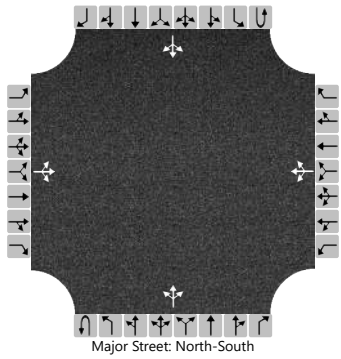
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		43	0	23		0	47	41		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				73			0				22		
Capacity, c (veh/h)			768				792			1478				1490		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
Control Delay (s/veh)			9.7				10.0			7.4				7.5		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.7				10.0				0.0				1.4		
Approach LOS		A				B										

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HCS7 Two-Way Stop-Control Report

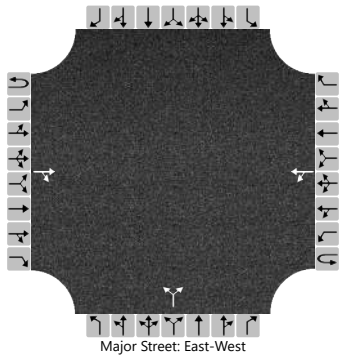
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	2		15	58			9		86				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						17					107					
Capacity, c (veh/h)						1519					966					
v/c Ratio						0.01					0.11					
95% Queue Length, Q_{95} (veh)						0.0					0.4					
Control Delay (s/veh)						7.4					9.2					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						1.6				9.2						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

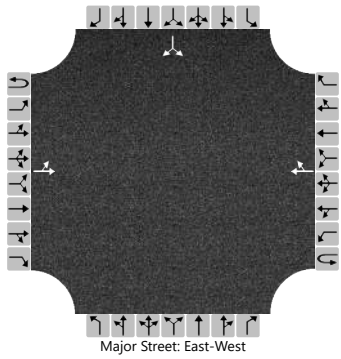
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	288				70	6						6		10
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9													18	
Capacity, c (veh/h)		1507													783	
v/c Ratio		0.01													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.4													9.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.3												9.7		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

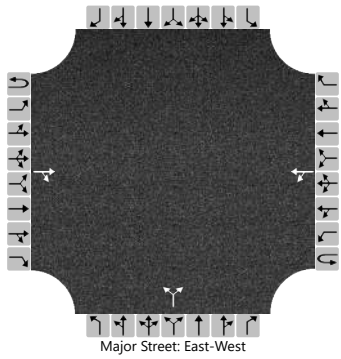
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			286	0		3	90			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1217					703					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						8.0					10.2					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						0.3				10.2						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

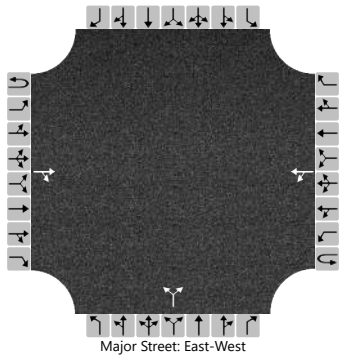
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			287	12		61	79			9		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					75					
Capacity, c (veh/h)						1184					625					
v/c Ratio						0.06					0.12					
95% Queue Length, Q_{95} (veh)						0.2					0.4					
Control Delay (s/veh)						8.2					11.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						3.9				11.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

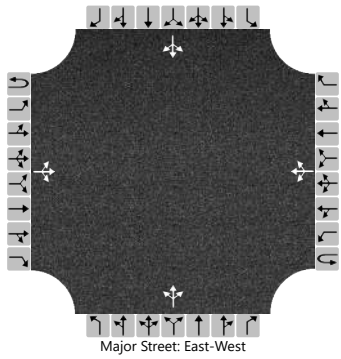
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	311	100		94	183	12		62	21	49		11	35	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				104					147				56	
Capacity, c (veh/h)		1347				1099					301				250	
v/c Ratio		0.01				0.10					0.49				0.22	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.5				0.8	
Control Delay (s/veh)		7.7				8.6					27.9				23.5	
Level of Service (LOS)		A				A					D				C	
Approach Delay (s/veh)	0.2				3.4				27.9				23.5			
Approach LOS									D				C			

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HCS7 Two-Way Stop-Control Report

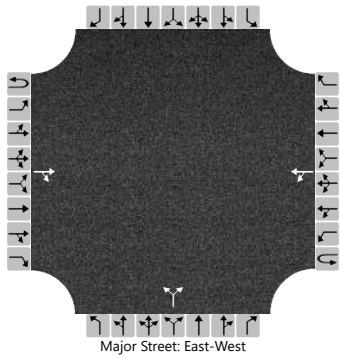
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			361	28		83	290			32		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					114					
Capacity, c (veh/h)						1093					405					
v/c Ratio						0.09					0.28					
95% Queue Length, Q_{95} (veh)						0.3					1.1					
Control Delay (s/veh)						8.6					17.4					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)						2.7				17.4						
Approach LOS										C						

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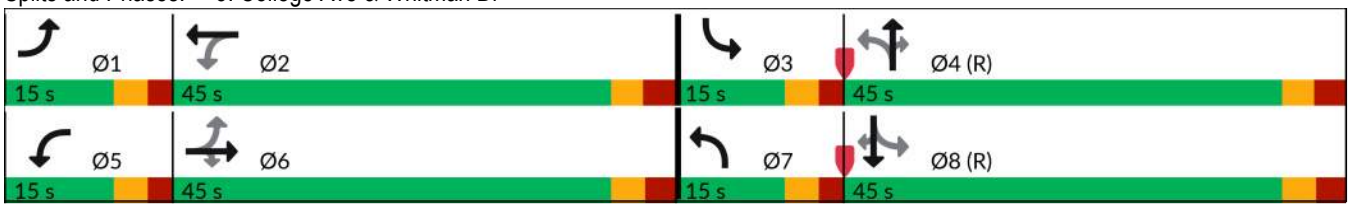
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Future Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.983				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1831	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.408			0.334			0.468			0.560		
Satd. Flow (perm)	760	1863	1583	622	1831	0	872	1863	1583	1043	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	297	114	49	185	23	89	298	58	26	303	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	297	114	49	208	0	89	298	58	26	303	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	35.0	26.7	26.7	31.3	22.9		70.0	63.8	63.8	64.4	57.6	57.6
Actuated g/C Ratio	0.29	0.22	0.22	0.26	0.19		0.58	0.53	0.53	0.54	0.48	0.48
v/c Ratio	0.36	0.72	0.26	0.21	0.59		0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
LOS	C	D	A	C	D		B	C	A	B	C	A
Approach Delay (s/veh)		38.4			44.3			16.1			17.6	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	297	114	49	208	89	298	58	26	303	158
v/c Ratio	0.36	0.72	0.26	0.21	0.59	0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Length 50th (ft)	61	219	0	26	144	28	135	0	8	142	15
Queue Length 95th (ft)	92	290	40	48	199	64	244	0	25	261	66
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	304	610	599	266	602	587	989	897	649	894	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.19	0.18	0.35	0.15	0.30	0.06	0.04	0.34	0.19

Intersection Summary

HCS7 Two-Way Stop-Control Report

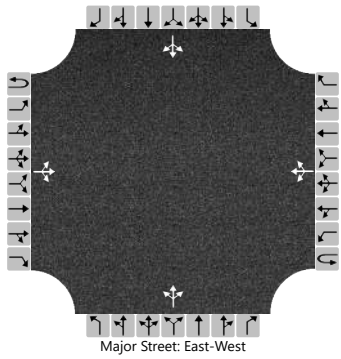
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	3/5/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/New Driveway
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	New Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	150	0		4	89	6		2	0	20		40	0	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				4					24				49	
Capacity, c (veh/h)		1479				1405					850				660	
v/c Ratio		0.00				0.00					0.03				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.4				7.6					9.4				10.9	
Level of Service (LOS)		A				A					A				B	
Approach Delay (s/veh)		0.1				0.3				9.4				10.9		
Approach LOS										A				B		

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Appendix 5

Economic Analysis

2025

Market Feasibility

MARTIN AIRFIELD

An analysis conducted by: TheMettsGroup

Prepared for: CP COLLEGE PLACE WALLA WALLA VALLEY

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Purpose

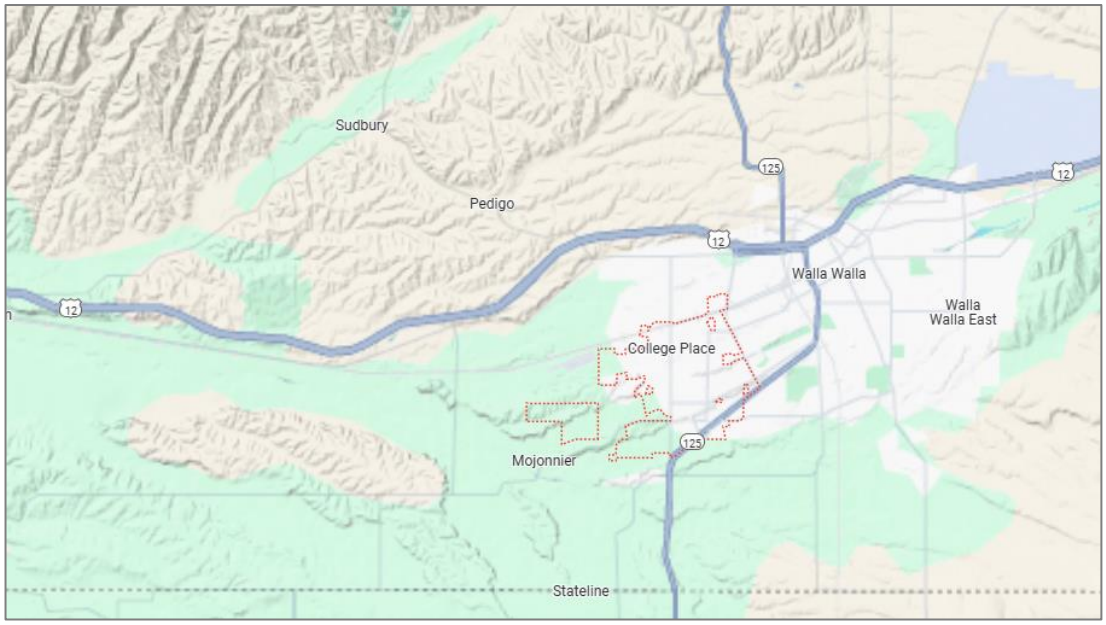
The purpose of this study is to analyze market feasible light industrial uses for the 233-acre site around Martin Airfield and bordered by Whitman Drive to the north, Hampton Lane to the west, Homestead Acres Subdivision to the east, and a bluff to the south. This study conforms to the minimum threshold criteria established by the Washington State Community and Economic Revitalization Board for potential grant funding opportunities.

The following outlines the scope within the above objectives:

1. Interview key stakeholders to gather and review pertinent project background data.
2. Assess the locational characteristics of the site relative to the industrial market.
3. Perform Market analysis for the site
4. Perform Job Benefit Analysis
5. Evaluate the overall City of College Place area economic outlook for industrial real estate development.
6. Conduct interviews with selected key persons in the College Place catchment area knowledgeable of demand potentials by various industrial uses (e.g. complementary agricultural processing/supplier needs, light manufacturing, warehouse distribution, flex space, etc.).
7. Identify and evaluate potentially competing sites and corresponding industrial uses.
8. Analyze which target industries may be located at the site.
9. Recommend specific companies that should be targeted to prospective tenants.
10. Forecast the economic impacts to the City of College Place if the site is fully tenanted with the prescribed potential industrial users.
11. Recommend a project marketing strategy for the site.
12. Prepare a corresponding Economic Feasibility Analysis and marketing strategy for the site.

Location

College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.



Economy Overview

The population of College Place is estimated at 9,945, reflecting a modest growth of 0.4% from 2020 to 2024. Population growth trends for both College Place and Walla Walla County show similar growth trends, with a sharp decline around 2022 in College Place, followed by gradual stabilization. Workforce characteristics indicate a labor force participation rate of 59%, which is below the national average of 63.5%. Additionally, 10% of the workforce consists of remote workers, and 71% of residents have some college education or higher, suggesting a relatively educated workforce.

Population

9,945

0.4% ⇧

(2020-2024 est.)

Workforce Characteristics

59%

Labor Force Participation Rate
(63.5% U.S.)

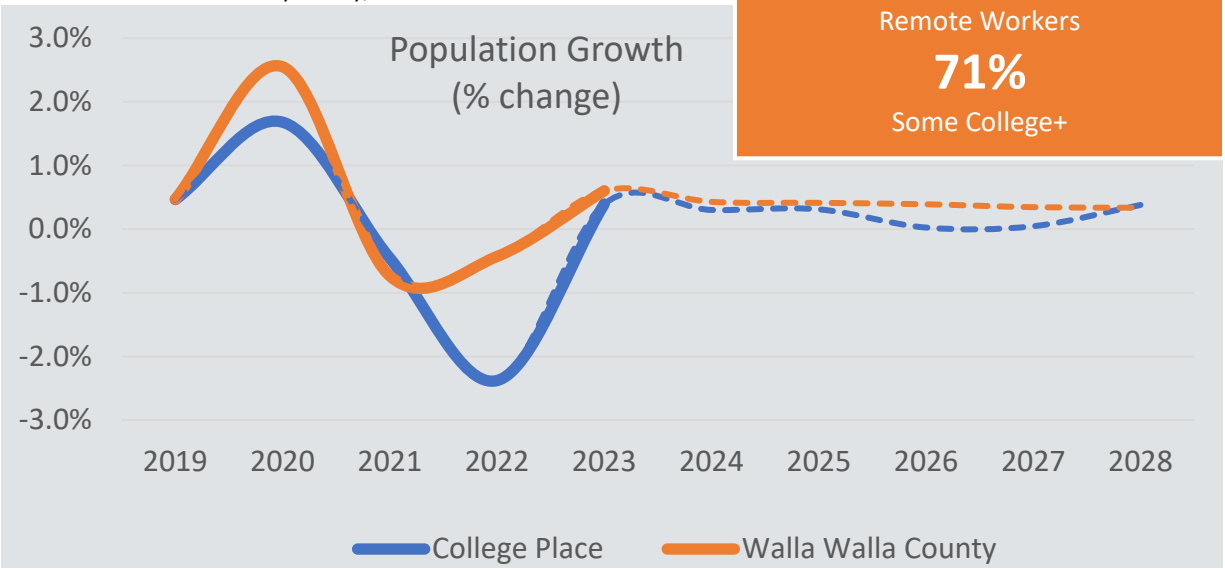
10%

Remote Workers

71%

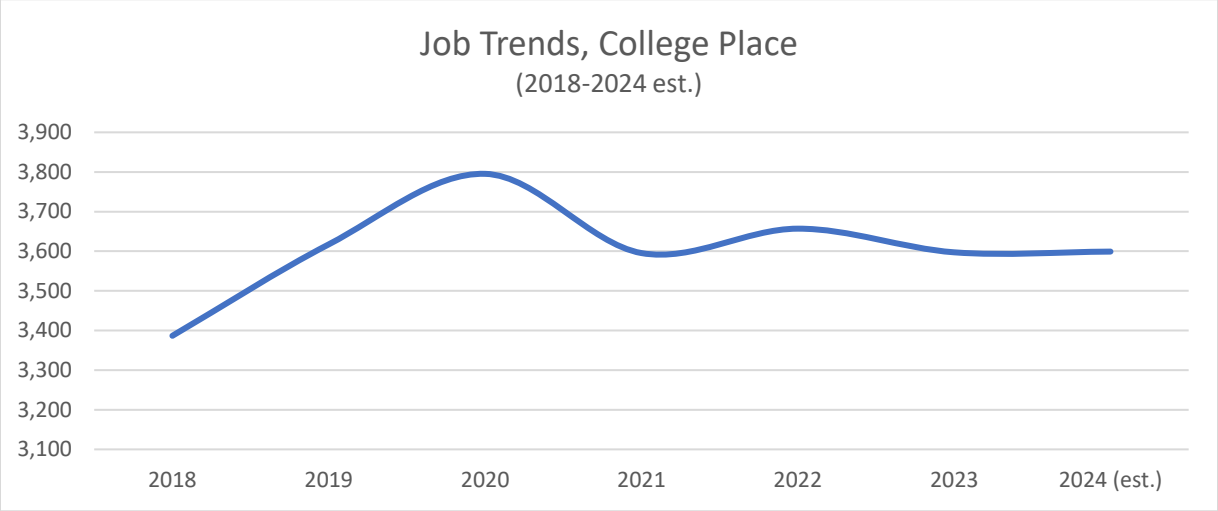
Some College+

Source: American Community Survey, 5-Year Estimates

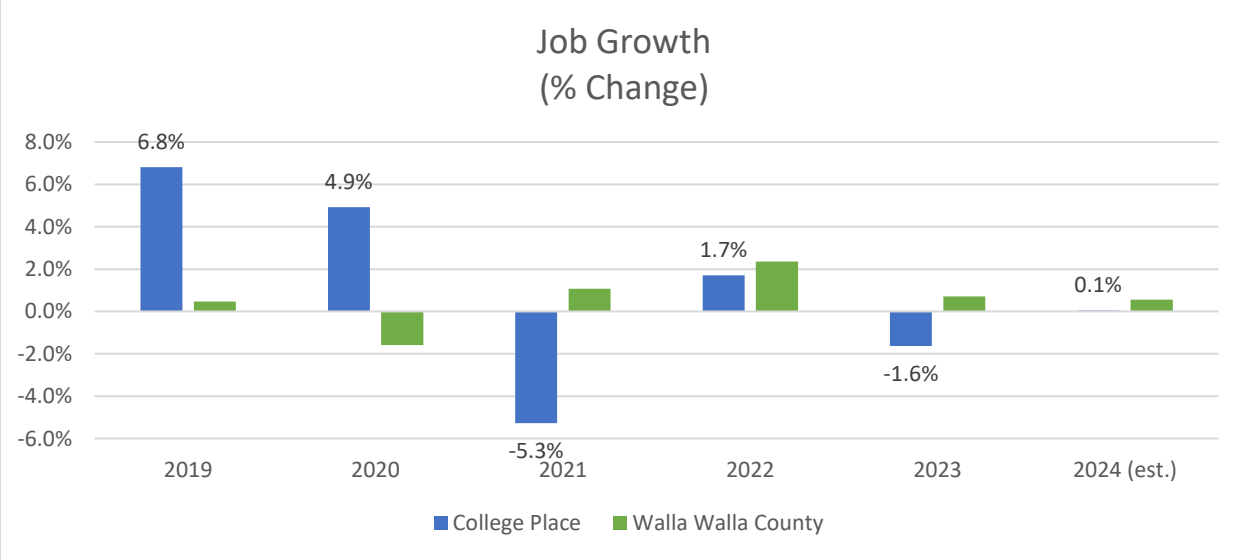


TheMettsGroup

The job market in College Place is still recovering from the pandemic. Between the peak in 2020 and the trough in late 2021, approximately 200 jobs were lost within the 99324 ZIP code, representing a 5.3% decline.



Source: Lightcast, QCEW, Non-QCEW, Self-employed



Source: Lightcast, QCEW, Non-QCEW, Self-employed

The largest contributing industries include government (primarily higher education), retail trade, accommodation and food services, health care, and finance and insurance. Government employment dominates the local labor market, followed by educational services, indicating the area's strong ties to public institutions and higher education. Retail and health care also play significant roles, supporting both local consumption and essential services.

The region's Gross Regional Product (GRP) stands at $417 million, accounting for 10% of the County's total economic output. The primary industries driving GRP are government, finance and insurance, retail, educational services, and health care. The data suggests a stable economy with growth in key service-oriented sectors, reinforcing the importance of education, health care, and retail as economic pillars.

GRP

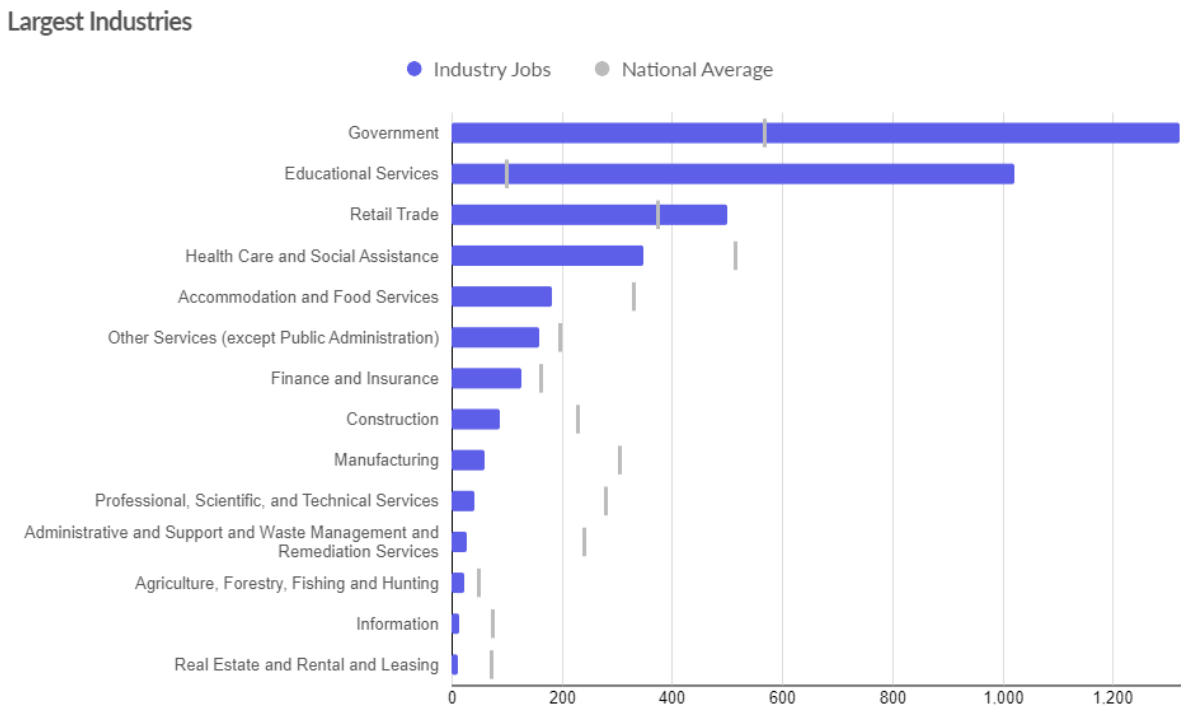
$417M

(10% of County)

Largest Contributing Industries:

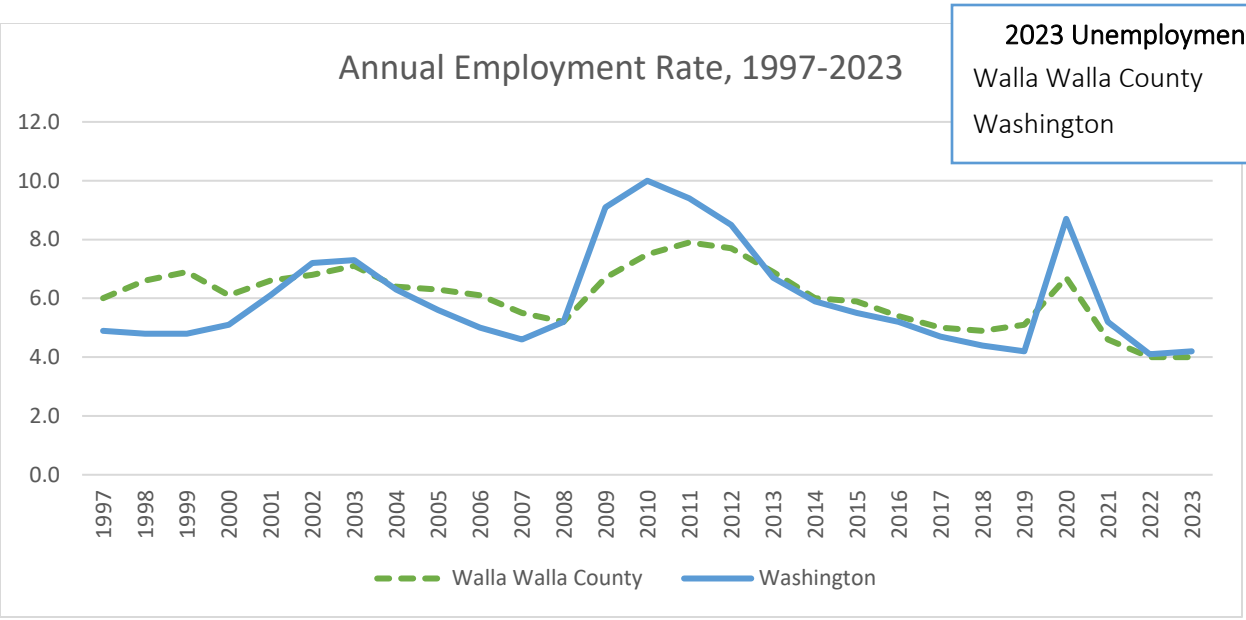
- Government
- Finance & Insurance
- Retail
- Educational Svcs
- Health Care

Source: Lightcast, College Place (zip code 99324)



Source: Lightcast, QCEW, Non-QCEW, Self-employed for College Place (zip code 99324)

The unemployment rate in Franklin County remains higher than the state, by 2.1 percentage points. The 2019 annual unemployment rate—the most recent annual number at the time of this report—in Franklin County was 6.4%, compared to 4.3% statewide and 3.7% for the nation.



2023 Unemployment Rate	
Walla Walla County	4.0%
Washington	4.2%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics program

According to the Bureau of Labor Statistics' Occupational Employment and Wage Statistics, the median hourly wage in Walla Walla County was $23.04 as of the latest available data (May 2023). Walla Walla County continues to trail the state in wages—20% below the state average.

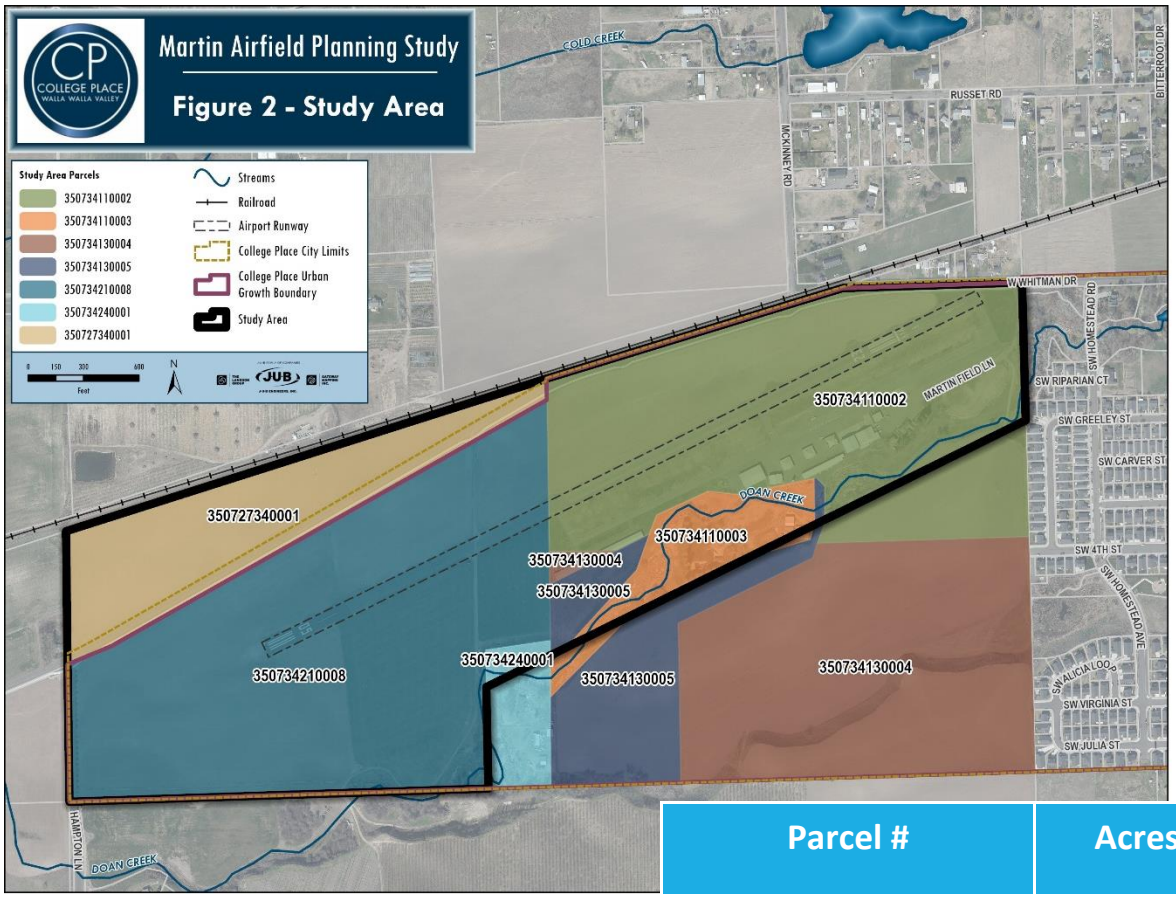
Median Hourly Wage

$23.04
(Walla Walla County)

$28.81
(Washington)

Commercial Real Estate Snapshot

The City of College Place only has three acres of active light industrial land. The project area consists of six (6) light industrial zoned parcels, totaling 233 acres.



Parcel #	Acres
350734210008	79.83
350734240001 (private)	6.61
350734130005	19.82
350734130004	54.58
350734110002	62.60
350734110003	10.00
Total	233.44

Industrial Inventory

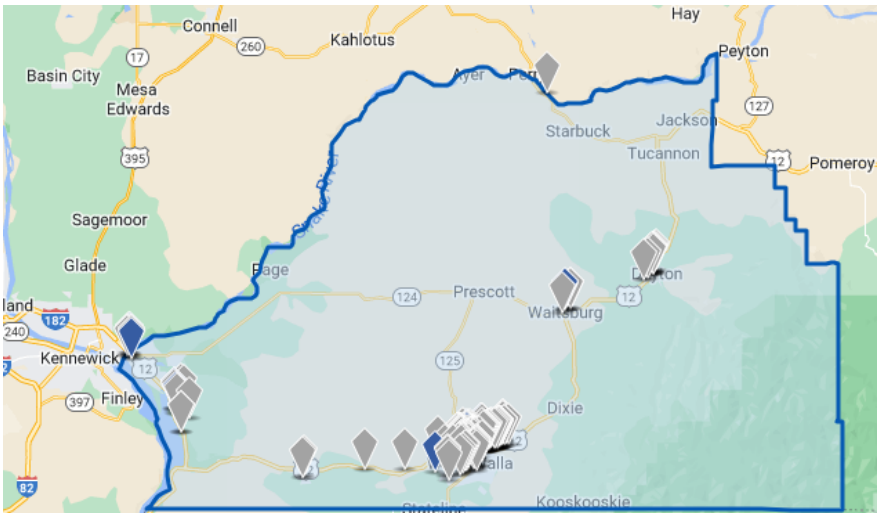
Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

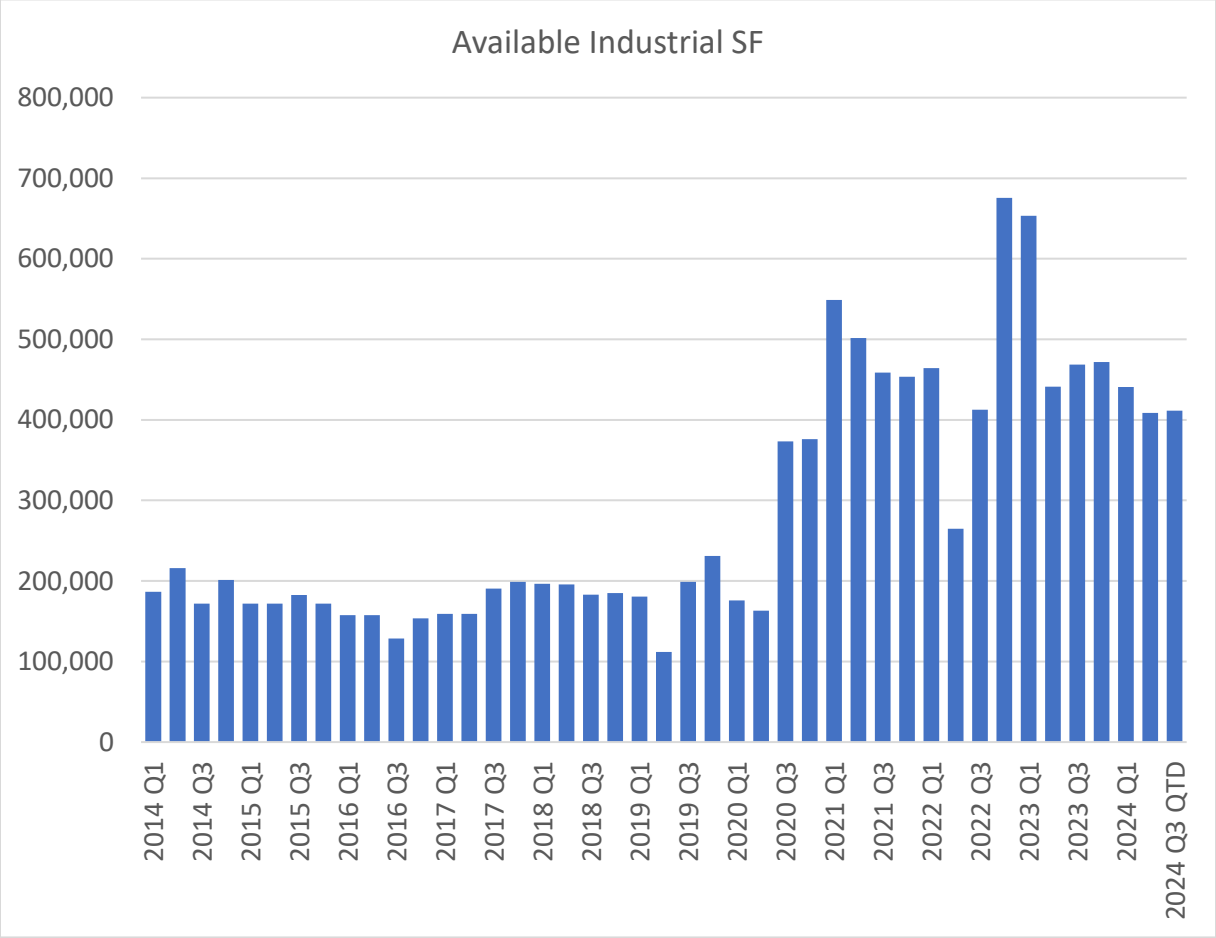
4.6M SF
inventory

411,260 SF
available space

5.6%
vacancy rate

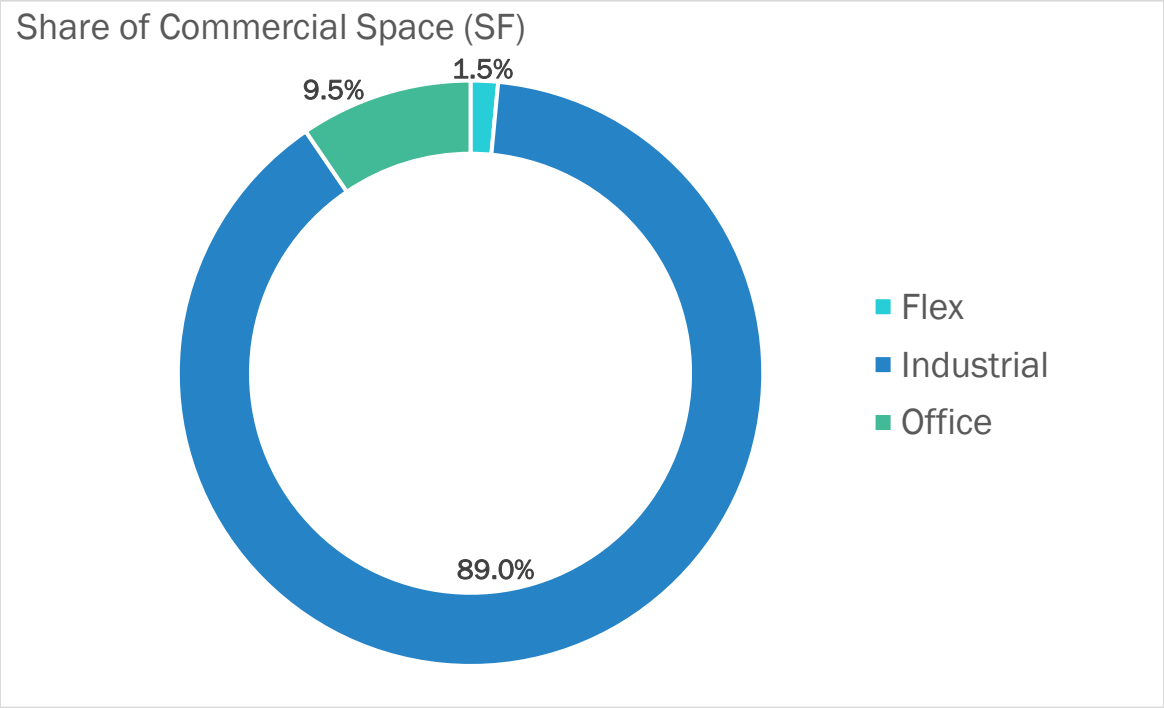
$8.71/SF
rental rate

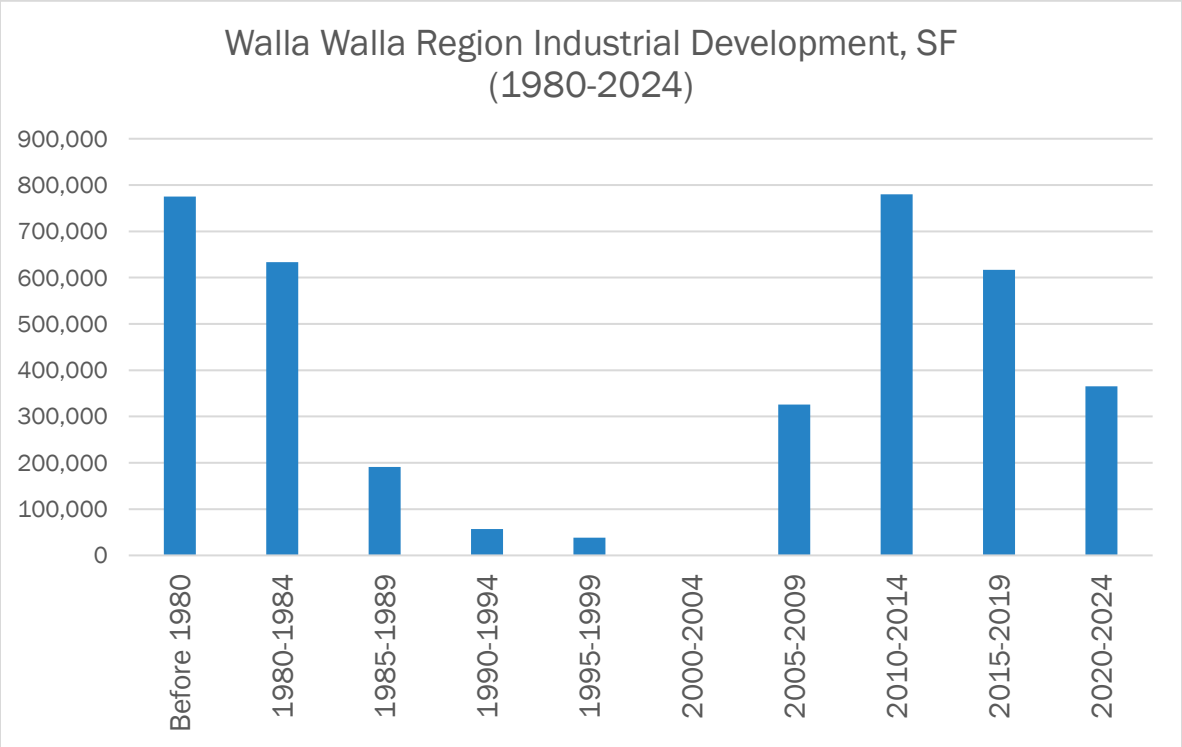




Source: Costar

Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

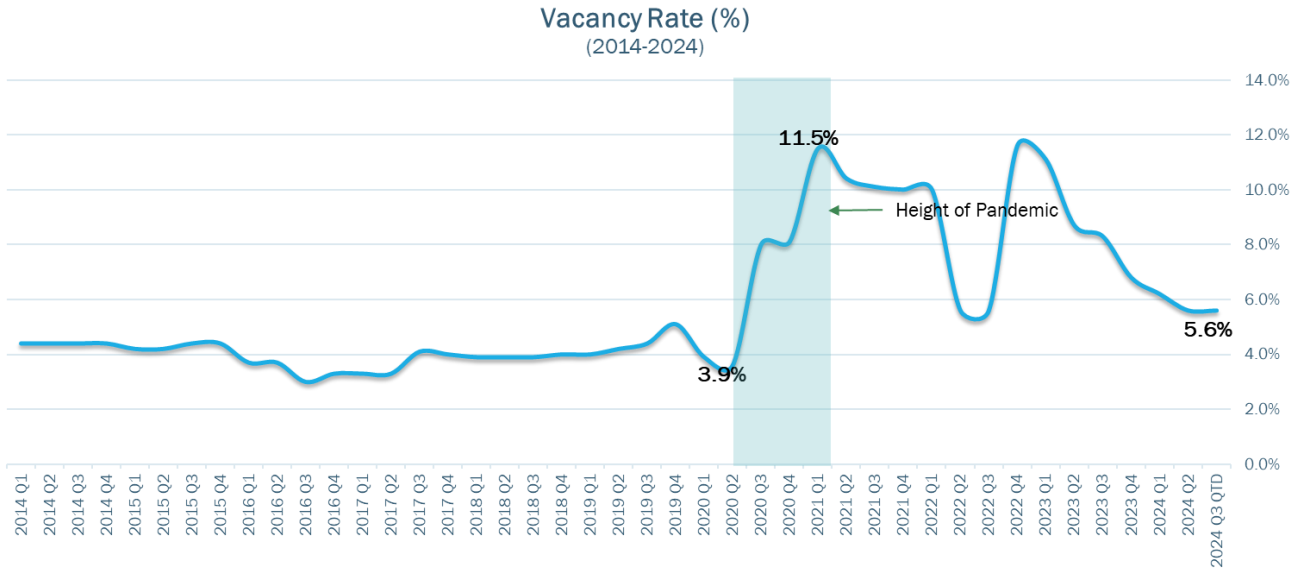




Source: Costar

Industrial Performance

Vacancy rates in the Walla Walla region are currently slightly above average at 5.6%. However, this is a significant improvement from the pandemic peak of 11.5%. Before the pandemic, vacancy rates typically ranged between 3% and 4%.

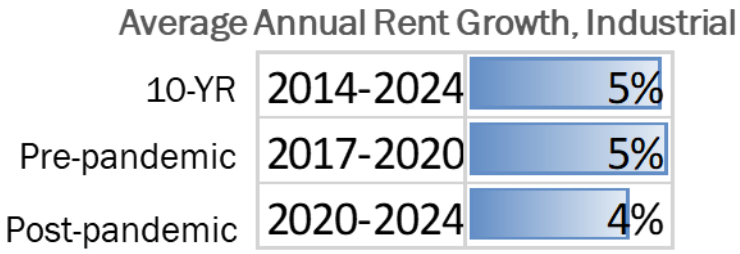


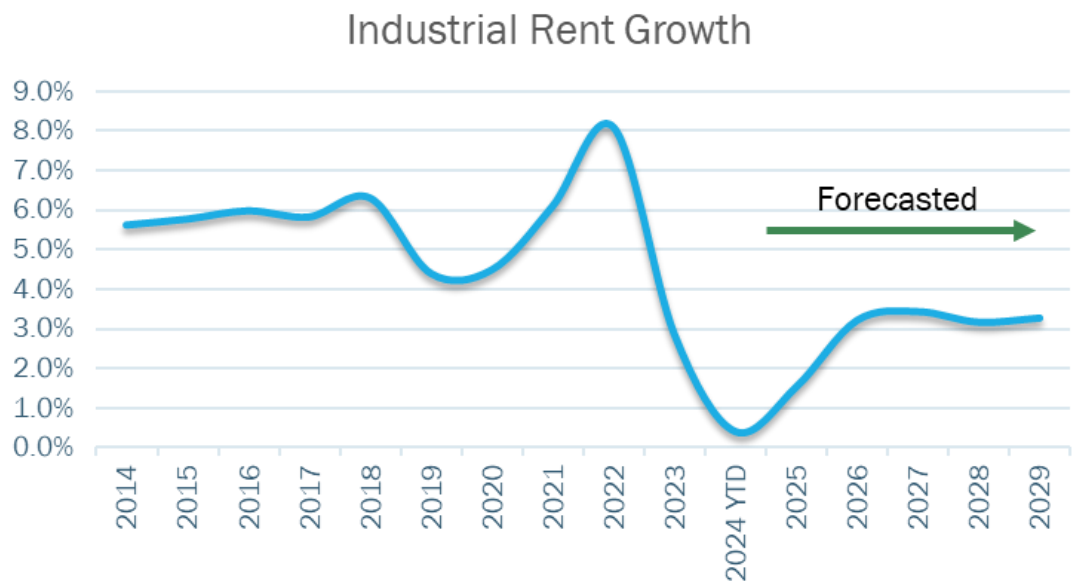
Source: Costar, Authors calculations

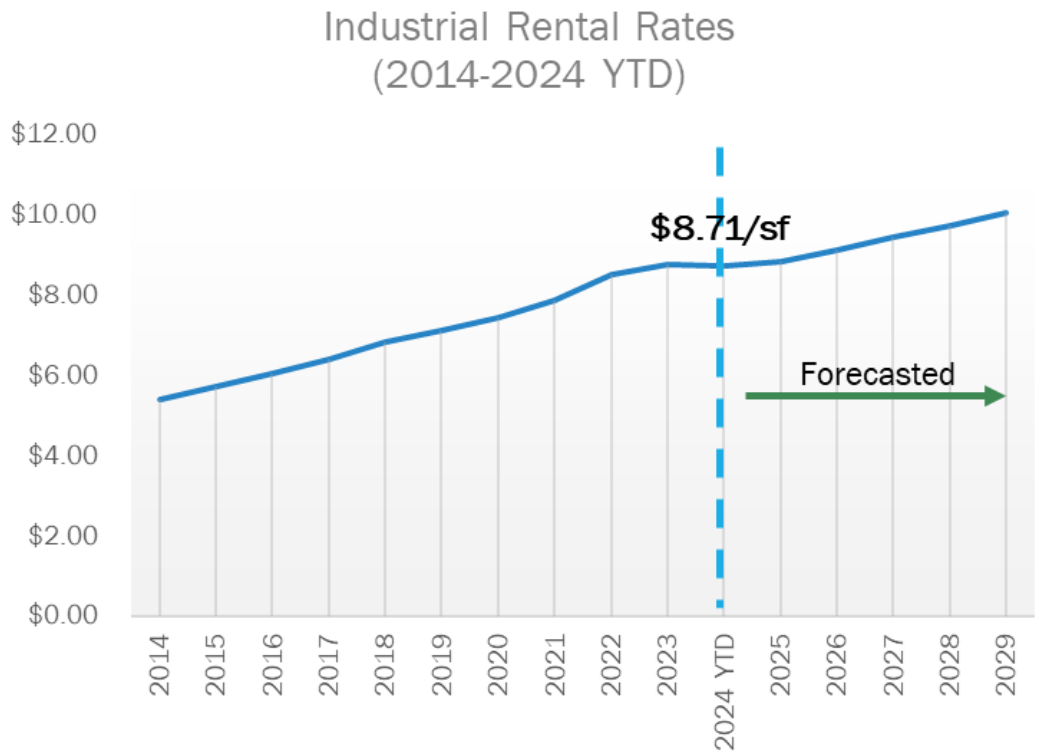
Rent growth for both industrial and office space has maintained a steady trajectory, defying the challenges posed by the pandemic.

While there was a slight deceleration in rent growth for office space during the pandemic, it managed to persevere and return to pre-pandemic levels of growth. In contrast, industrial rental rates continued their upward trend at a commendable pace.

This sustained growth, coupled with the constrained supply of new commercial inventory and low vacancy rates, underscores the demand for commercial space in Ellensburg.



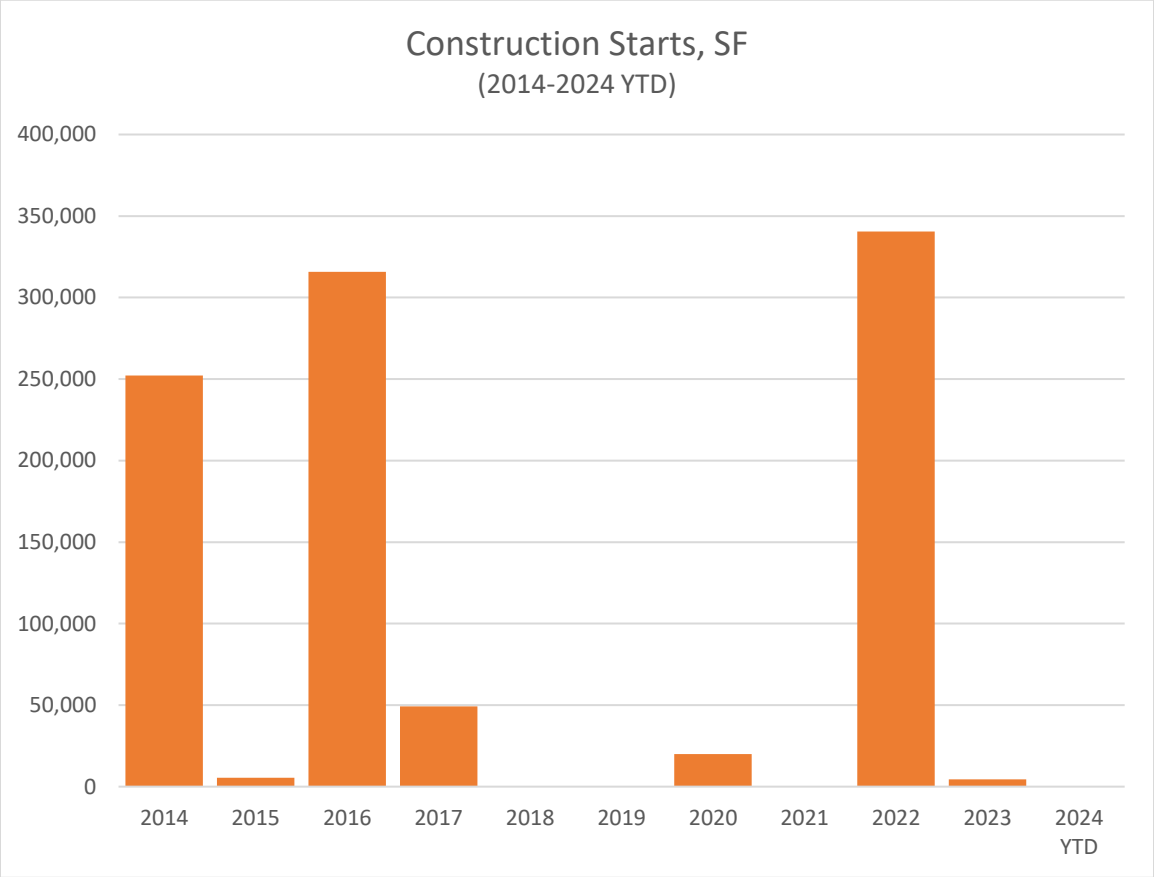




Source: Costar, Authors calculations

Industrial Pipeline

Based on information from Costar, there is 223,720 SF of industrial space under construction in the Walla Walla region. Majority of this activity started in 2022 and is anticipated to hit the market by 2025.



Source: Costar

Competing Sites

Address	City	Year Built	Building SF	Acres (Land only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Industrial Market Potential

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

Industry and Supply Chain Gap Analysis

An industry and supply chain gap analysis was conducted to determine the businesses and industry sectors that offer the most potential for growth around the region. This data was then ground-truthed with interviews from major businesses in the area, potential businesses, and other industry experts and stakeholders.

This analysis was assessed by four critical factors and conducted at the MSA level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 mark but showing job loss, were deemed "*Important and Requiring Attention*," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Industry Health Check

Agriculture and food processing remain central to the local economy, with crop production, food manufacturing, and beverage product manufacturing serving as core industries. The presence of these sectors suggests strong opportunities for value-added agriculture, food processing, and supply chain expansions such as packaging, cold storage, and distribution. Additionally, the region's healthcare sector, led by hospitals and social assistance, indicates an ongoing demand for medical services, elder care, and workforce training in healthcare-related fields. Retail and trade are also significant, with merchant wholesalers (nondurable goods) and sporting goods and hobby retailers playing a role in the local economy, pointing to potential growth in specialty retail and recreational markets.

To capitalize on these strengths, strategic investments should focus on targeted food and beverage processing infrastructure, support for healthcare workforce development, and logistics and wholesale distribution enhancements. Expanding retail and recreation offerings could further stimulate economic activity, particularly in outdoor and lifestyle industries.

Several industries are gaining traction in College Place, indicating new opportunities in construction, healthcare, professional services, and logistics. The construction sector, including building material supply dealers, specialty trade contractors, and construction of buildings, reflects increased demand for residential and commercial development. This growth underscores the need for real estate investment, workforce training in skilled trades, and green building technologies.

The expansion of ambulatory healthcare services points to a growing need for urgent care facilities, specialized outpatient clinics, and home health services, while repair and maintenance services highlight demand for auto repair, equipment servicing, and facility management. The rise of professional, scientific, and technical services, including computer systems design, engineering, custom programming, and R&D, suggests an increasing focus on technology-driven economic diversification. Encouraging the growth of tech startups, cybersecurity firms, and engineering consultancies could strengthen the region's innovation ecosystem.

Additionally, insurance carriers and durable goods wholesalers signal potential for expanded finance and logistics services, supporting regional supply chains and commercial trade. Investing in warehouse and distribution infrastructure could further position College Place as a logistics hub, particularly for durable goods related to agriculture, construction, and manufacturing.

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

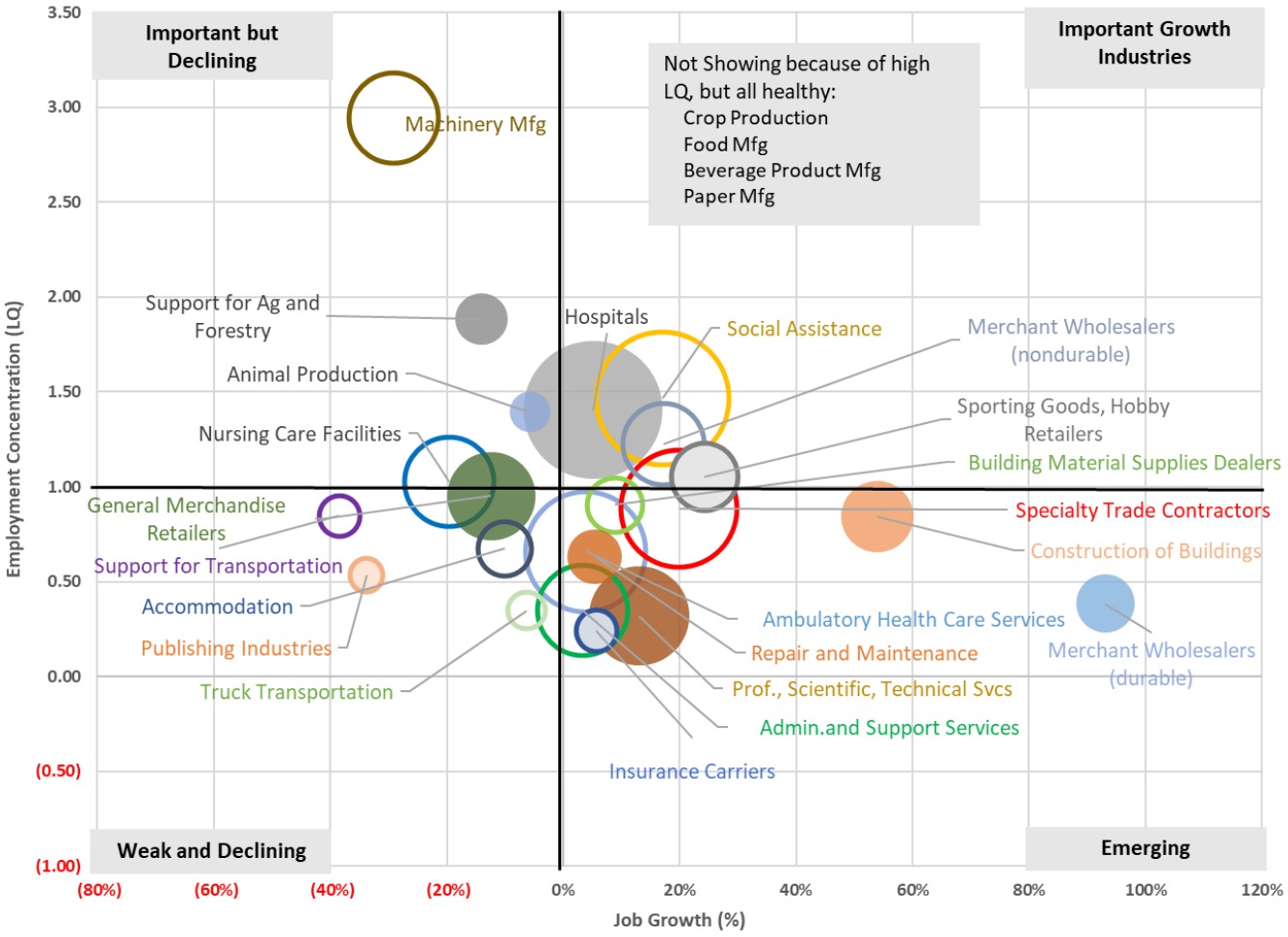
- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

Industry Health Check



Additionally, the following key sectors are driving the success of major employers in the region. By leveraging these industries, there is an opportunity to strengthen and expand local supply chains, attract complementary businesses, and enhance regional competitiveness through targeted infrastructure investments and workforce development.

Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

Potential Uses

Following the industry and supply chain gap analysis, we conducted interviews with local and regional businesses, higher education institutions, and key stakeholders to gather input on potential uses and validate the summarized data.

Based on the above analysis and insights gathered from interviews, the following uses were identified as having the greatest potential for the 233-acre site.

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
- R&D or Professional & Technical Services
- Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
- Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

Site Building Capacity

The following potential buildout scenario was estimated based on the potential uses identified in the analysis above, combined with industry standards for land requirements for different types of industrial facilities, focusing on site usage, building size, and ground coverage ratios. For each industry, the data outlines the percentage of the site utilized, the typical building square footage, and the corresponding potential number of buildings that could be accommodated on a given site. The total acreage potential across all industries is roughly 28 acres, with an average of 4 acres per building.

Use	% of Site	Ground Coverage Ratio	Typical Building SF (industry standard)	Potential Number of Buildings	Acres per Bldg	Typical Range (small to medium)
Wholesalers	25%	50%	50,000	6.7	4.6	2-5 acres
Truck Transportation	15%	30%	25,000	2.9	6.4	2-5 acres
Manufacturing	20%	50%	50,000	5.3	4.6	2-5 acres
Food Processing	15%	40%	50,000	2.6	7.2	2-5 acres
Lab & Testing Facilities	10%	30%	15,000	3.2	3.8	0.5-2 acres
R&D	15%	30%	10,000	7.2	2.6	0.5-2 acres
Total	100%			28	4	

Impacts

Economic impact analyses are used to estimate the overall economic activity, including spill-over and multiplier impacts, which occurs as a result of a particular business, development or event.

The economic activity related to the Martin Airfield site is the millions of dollars of goods and services purchased from local vendors and the wages and benefits paid to local workers. This initial injection of funds circulates to the business owners and employees that supply the materials, goods and services needed for the development. These contractors, businesses and households continue the economic ripple effect by hiring workers and buying goods and services to facilitate their business.

This analysis breaks down the overall project based on the results from the industry analysis and interviews. The project site layout will be further vetted by JUB Engineers based on infrastructure needs and requirements.

Once the development is completed and occupied, commercial activity and new residential households will spend millions of dollars annually in the course of their daily activities. This recirculation of the original expenditures multiplies their impact through these indirect and induced effects.

The extent to which the initial expenditures multiply is estimated using economic models that depict the relationships between industries and firms and their employees. These models are built upon expenditure patterns that are reported to the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Bureau of Economic Analysis. Data is regionalized so that it reflects and incorporates local conditions such as average wages, expenditure patterns and resource availability and costs.

The multipliers used in this analysis were generated by IMPLAN in coordination with the U.S. Bureau of Economic Analysis' RIMS II multipliers. Where appropriate, conservative estimates were used.

To further delineate, below are brief definitions of the three typical types of impacts.

> ***Direct impacts***: derive directly from an activity or event (first round supply chain)
>
> ***Indirect impacts***: generated as a result of business-to-business transactions (second tier supply chain)
>
> ***Induced impacts***: generated as a result of consumer-to-business transactions (a result from consumer spending)

Direct impacts are those economic impacts that occur as a consequence of direct activity and employment provided by the businesses that support the area, other businesses and government agencies that provide a range of related support services.

Indirect impacts are generated as a result of business-to-business transactions and induced impacts are a result of consumer-to-business transactions.

The economic impact results should be interpreted as those that are *attributable* to the proposed development at the subject site rather than assuming the new development will *generate* such new activities.

Given the desirable industries that have the potential of fulfilling existing business supply chain needs and interviews from industry experts, there is potential for several different users at this site. The impacts summarized below are indicative of different users in the identified industries, as outlined in the section above. The median wage for proposed jobs in these industries is $40.36 per hour in Walla Walla County, driven upward by manufacturing, lab and R&D positions. This is **72% higher than the CERB median hourly wage** of $23.04 for the County. Truck transportation and warehousing average $30.56 per hour, still above the median hourly wage for the County.

The 687 direct jobs estimated to be created at full build-out is expected to increase the labor force in Walla Walla County—assuming that some workers will reside in Walla Walla County. A small portion will most likely reside outside the area and, therefore, positively impacting their labor force numbers as well.

Impact on Jobs						
Impact on Jobs	Buildout Scenario					Total
	MFG	Truck Transp.	Wholesalers	Lab & Testing Facilities	R&D	
TOTAL JOBS	494	33	239	124	228	1,118
Direct	317	23	107	96	144	687
Indirect + Induced	177	10	132	28	84	430
SUBTOTAL	***494***	***33***	***239***	***124***	***228***	***1,118***

Source: Author's calculations using multipliers from IMPLAN; rounds to nearest thousand

Table 1. Labor Force Impacts as a result of Jobs Directly Created (687 new direct jobs)

Walla Walla County	Current	Impact from Direct Jobs	Percent Change
Labor Force	27,255	28,373	4.1%
Unemployed	1,357	239	-82.4%

[1]assuming that people that fill these jobs will reside in Walla Walla County (labor force data is based on "place of residence" and not place of work). Based on the current 5.0% unemployment rate (Jan 2025)
Source: Author's calculations based on BLS data

Conclusion

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

To support these emerging industries, incentives and policy strategies should focus on workforce development, business incubation, and infrastructure investment. Strengthening construction and trade workforce training programs can address the rising demand for skilled labor. Tech and business services growth could be encouraged through business incubators, coworking spaces, and startup funding for IT and cybersecurity firms. Expanding healthcare services and insurance offerings will be crucial in meeting the needs of a growing population. Finally, the development of logistics and wholesale trade infrastructure could enhance College Place's role as a regional distribution center.

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 City track the metrics set forth, and required by CERB, to determine if the desired outcomes are achieved and to help guide future development projects.

Overall, College Place is well-positioned for economic expansion through a combination of industrial diversification, strategic investments, and workforce development initiatives. By leveraging its strong agricultural base, growing healthcare sector, and emerging technical and construction industries, the region can sustain long-term economic growth and resilience.

Appendix 6

Detailed Cost Estimates

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Roads**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$176,000
2.00	**Traffic Control**			5.0%	$110,000
3.00	Crushed Surface Base Course	6,121	Tons	$35	$214,235
4.00	Crushed Surface Top Course	5,226	Tons	$35	$182,910
5.00	HMA CL 1/2" PG 64-28	3,983	Tons	$150	$597,450
6.00	Cement Conc. Traffic Curb and Gutter	8,138	LF	$25	$203,450
7.00	Cement Conc. Sidewalk	5,424	SY	$60	$325,440
8.00	Streetlights (includes wiring, J-Boxes, etc.)	27	EA	$7,500	$202,500
9.00	Street Trees	136	EA	$500	$68,000
10.00	Irrigation	1	LS	$100,000	$100,000
11.00	Stream Crossing - Does Not Include Row Acquisition For House	1	LS	$250,000	$250,000
12.00	Paint & Signage	1	LS	$50,000	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 2,480,000**
	Contingency [1]				**$ 744,000**
	City of College Place Sales Tax (8.8%)				**$ 284,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 877,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 4,385,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

1 Estimated at 30% of construction subtotal

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Earthwork**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$22,000
2.00	**Traffic Control**			5.0%	$14,000
3.00	Earthwork, Grading Site	8,000	CY	$30	$240,000
4.00	Clearing and Grubbiong	5	ACRE	$5,000	$25,000
5.00	Asphalt Pavement Restoration		SY	$70	$0
6.00	Hydroseeding	2	ACRE	$5,000	$10,000
7.00	Silt Fence		LF	$5	$0
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 311,000**
	Contingency [1]				**$ 93,000**
	City of College Place Sales Tax (8.8%)				**$ 36,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 110,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 550,000**

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	2/11/2025 30-24-031
ITEM:	Sewer Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$302,000
2.00	**Construction Traffic Control**			0.0%	$0
3.00	**Gravity Sewer Pipe**				
3.01	4" PVC Gravity Sewer Service Lateral	1,165	LF	$27	$31,455
3.02	8" PVC Gravity Sewer Service Lateral		LF	$41	$0
3.03	6" PVC Gravity Sewer Pipe		LF	$40	$0
3.04	8" PVC Gravity Sewer Pipe	7,400	LF	$47	$347,800
3.05	10" PVC Gravity Sewer Pipe		LF	$56	$0
3.06	12" PVC Gravity Sewer Pipe		LF	$67	$0
3.07	16" PVC Gravity Sewer Pipe		LF	$81	$0
3.08	18" PVC Gravity Sewer Pipe		LF	$98	$0
3.09	21" PVC Gravity Sewer Pipe		LF	$127	$0
3.10	24" PVC Gravity Sewer Pipe		LF	$152	$0
3.11	30" PVC Gravity Sewer Pipe		LF	$188	$0
3.12	36" PVC Gravity Sewer Pipe		LF	$238	$0
3.13	Bedding and Foundation Material	8,565	LF	$15	$128,475
3.14	Sewer Service Line Connection	29	EA	$500	$14,500
4.00	**Gravity Trench Excavation/Backfill**				
4.01	4-10 ft.	3,450	LF	$43	$148,350
4.02	10-16 ft.	5,115	LF	$74	$378,510
4.03	16-20 ft.		LF	$104	$0
4.04	20-24 ft.		LF	$135	$0
4.05	24-28 ft.		LF	$168	$0
4.06	28-30 ft.		LF	$207	$0
4.07	Import Backfill and Foundation Material	16,597	CY	$40	$663,880
5.00	**Surface Repair**				
5.01	Hydroseed		LF	$15	$0
5.02	Natural Ground	8,565	LF	$25	$214,125
5.03	Gravel Roadway		LF	$30	$0
5.04	Asphalt - Trench Patch Width per City Standards (Required for 4-16' Depth Sewer)		LF	$39	$0
5.05	Asphalt - 1/2 Street Width per City Standards (Required for 16-20' Depth Sewer)		LF	$160	$0
5.06	Asphalt - Full Street Width per City Standards (Required for 20-30' Depth Sewer)		LF	$319	$0
6.00	**Manholes**				
6.01	48" Manholes, 4-10 ft.	10	EA	$5,400	$54,000
6.02	48" Manholes, 10-16 ft.	14	EA	$5,900	$82,600
6.03	48" Manholes, 16-20 ft.		EA	$6,400	$0
6.04	60" Manholes, 20-24 ft.		EA	$12,650	$0
6.05	60" Manholes, 24-28 ft.		EA	$13,400	$0
6.06	60" Manholes, 28-30 ft.		EA	$13,750	$0
7.00	**Lift Stations**				
7.01	Site Work	1	LS	$154,000	$154,000
7.02	Yard Piping	1	LS	$134,000	$134,000
7.03	Lift Station - Structural	1	LS	$158,000	$158,000
7.04	Lift Station - Mechanical	1	LS	$716,000	$716,000
7.05	Lift Station - Electrical	1	LS	$452,000	$452,000
8.00	**Project Specific Considerations**				
8.01	Dewatering	1	LS	$8,000	$8,000
9.00	**Miscellaneous Other**				
9.01	Bypass Pumping			0.0%	$0
9.02	Bonding / Admin			2.5%	$92,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$**	**4,080,000**
Contingency [1]	**$**	**1,224,000**
City of College Place Sales Tax (8.8%)	**$**	**467,000**
Planning, Engineering, & Administrative Costs [2]	**$**	**1,443,000**
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$**	**7,214,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA 99337

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/6/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	Water Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8%	$380,000
2.00	**Construction Survey**	1	LS	$10,000	$10,000
3.00	**Erosion Control and Water Pollution Prevention**	1	LS	$10,000	$10,000
4.00	**Materials Testing**	1	LS	$5,000	$5,000
5.00	**Project Temporary Traffic Control**	1	LS	$5,000	$5,000
6.00	**Shoring and Trench Safety Systems**	1	LS	$2,500	$2,500
7.00	**Surface Repair**				
7.01	Removing Asphalt Concrete Pavement	625	SY	$5	$3,125
7.02	HMA Sawcut and Seal	4,070	LF	$2	$8,140
7.03	HMA Restoration	625	SY	$47	$29,375
8.00	**Water Pipe and Appurtenances**				
8.01	Connect to Existing Water Main 12 In. Diam.	2	EA	$5,000	$10,000
8.02	DI Pipe for Water Main 6 In. Diam.	1,500	LF	$90	$135,000
8.03	DI Pipe for Water Main 14 In. Diam.	830	LF	$186	$154,380
8.04	DI Pipe for Water Main 16 In. Diam.	14,395	LF	$221	$3,181,295
8.05	DI Tee 14 In. x 6 In.	3	EA	$2,300	$6,900
8.06	DI Tee 16 In. x 6 In.	27	EA	$3,500	$94,500
8.07	DI Tee 16 In. x 12 In.	1	EA	$4,600	$4,600
8.08	DI Tee 16 In. x 14 In.	3	EA	$4,800	$14,400
8.09	DI Tee 16 In.	1	EA	$11,500	$11,500
8.10	DI Cross 16" In.	1	EA	$4,400	$4,400
8.11	DI Reducer 16 In. x 12 In.	1	EA	$3,700	$3,700
8.12	DI 45° Bend 16 In.	4	EA	$3,100	$12,400
8.13	DI Cap 12 In.	2	EA	$710	$1,420
8.14	DI Cap 14 In.	3	EA	$890	$2,670
8.15	DI Cap 16 In.	3	EA	$1,550	$4,650
8.16	Blowoff Assembly 2 In.	8	EA	$2,500	$20,000
8.17	Butterfly Valve 12 In.	2	EA	$4,000	$8,000
8.18	Butterfly Valve 14 In.	3	EA	$5,400	$16,200
8.19	Butterfly Valve 16 In.	34	EA	$6,100	$209,810
8.20	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	2	EA	$11,000	$22,000
8.21	Hydrant Assembly	30	EA	$6,500	$195,000
8.22	Bollard	60	EA	$1,000	$60,000
8.23	Service Connection 2 In. Diam.	29	EA	$3,400	$98,600
8.24	Water Meter 2 In. Diam.	29	EA	$6,500	$188,500
9.00	**Project Specific Considerations**				
9.01	Doan Creek Crossing	1	LS	$100,000	$100,000
10.00	**Miscellaneous Other**				
10.01	As-Built Drawings	1	LS	$2,500	$2,500
10.02	Bonding / Admin			2.5%	$116,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$5,132,000**
Contingency [1]	$1,540,000
City of College Place Sales Tax (8.8%)	$588,000
Planning, Engineering, & Administrative Costs [2]	$ 1,815,000
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$9,075,000**

J-U-B ENGINEERS, INC.
3611 S. ZINTEL WAY, KENNEWICK, WA

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Storm Drain**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$31,000
2.00	**Traffic Control**			5.0%	$20,000
3.00	Catch Basin Type 1		EA	$2,500	$0
4.00	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	500	LF	$85	$42,500
5.00	Stormwater Treatment Device (CDS or Aquaswirl)		EA		$0
6.00	Swales	6,000	LF	$50	$300,000
7.00	Pond excavation, mulch, seeding	1,000	CY	$50	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 444,000**
	Contingency [1]				**$ 133,000**
	City of College Place Sales Tax (8.8%)				**$ 51,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 157,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 785,000**

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Utilities**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$88,000
2.00	**Traffic Control**			5.0%	$55,000
	Electrical				$0
3.00	Primary Electrical Vaults	15	EA	$10,000	$150,000
4.00	Primary Electrical Conduit & Wire	8,500	LF	$40	$340,000
5.00	Transformer for Primary Service	0	EA	$100,000	$0
	Fiber Optic				$0
6.00	Fiber Optic	1.6	MI	$100,000	$160,000
7.00	Fiber Service Vaults	29	EA	$2,000	$58,000
	Gas				$0
8.00	4" Natural Gas Main	12,000	LF	$20	$240,000
9.00	Natural Gas Regulator	1	EA	$150,000	$150,000
				ESTIMATED CONSTRUCTION SUBTOTAL	**$ 1,241,000**
				Contingency [1]	**$ 372,000**
				City of College Place Sales Tax (8.8%)	**$ 142,000**
				Planning, Engineering, & Administrative Costs [2]	**$ 439,000**
				TOTAL PROBABLE COST IN 2025 DOLLARS[3]	**$ 2,194,000**

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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

Appendix 1

Permit Classification Table

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 1 Review	• ADU Permit • Administrative Interpretation • Boundary Line Adjustment • Building Permit • Certificate of Occupancy • Certificate of Appropriateness (and waiver)(1) • Certificate of Design Review • Certificate of Zoning Compliance • Clearing and Grading Permit • Code Enforcement Action • Critical Area Authorization • Landscaping Plan Approval • Permit, Minor Amendment • Plats, Final (10+ lots)	None	None	Community Development Director or designee (unless otherwise noted)	Hearing Examiner

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
	• SEPA Action (no public notice required) • Sign Permit • Site Plan Approval • Special Property Tax Valuation [1] • Special Use Permit				
Type 2 Review	• Binding Site Plan • Critical Area Permit • SEPA Action (public notice required) • Short plat (9 lots or less) • Variance with Type 1/2 Permit	Yes	None, but written comments may be submitted	Community Development Director	Hearing Examiner

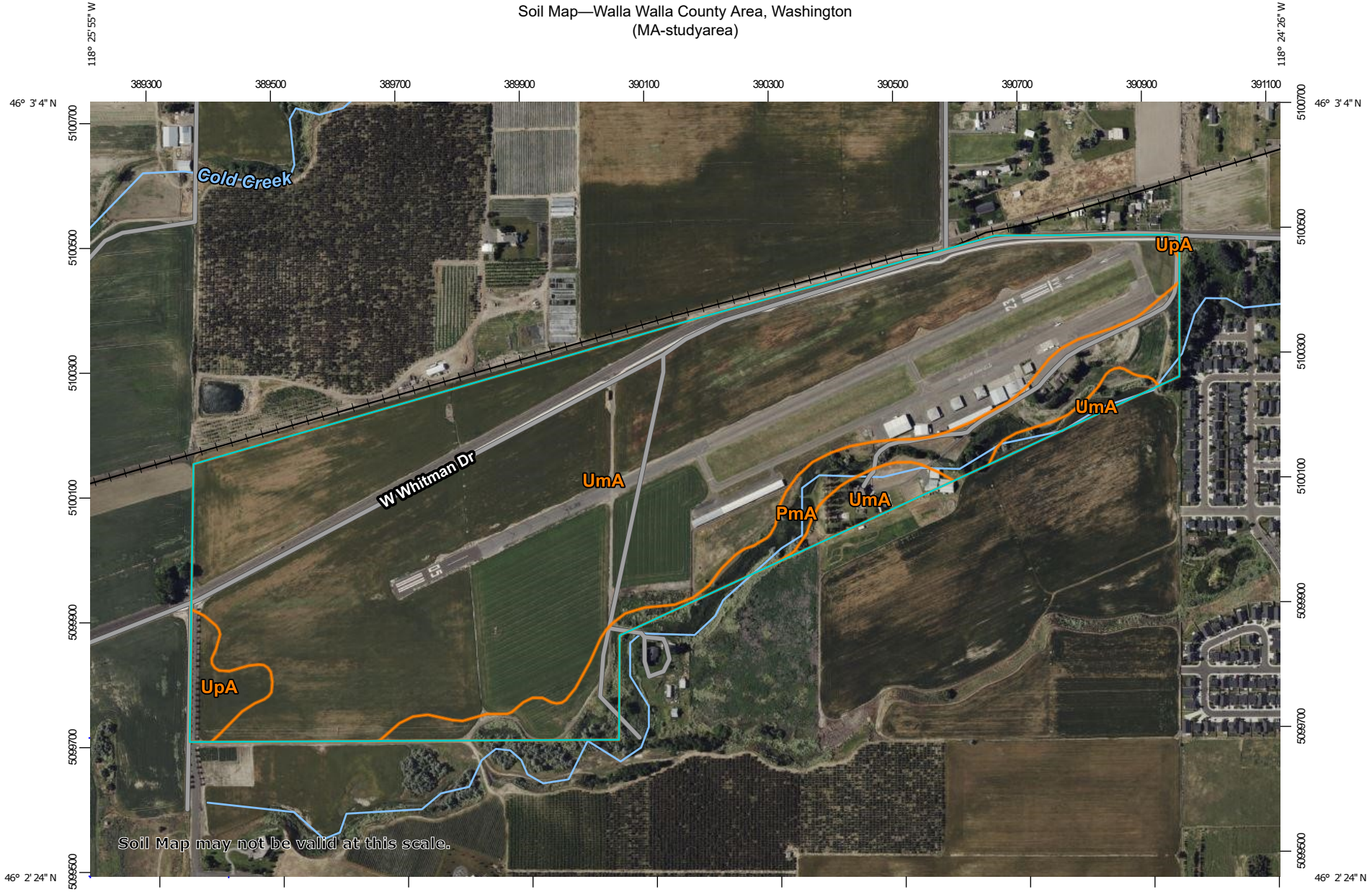
	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 3 Review	• Conditional Use Permit • Master Planned Development • Plat, Preliminary (10+ lots) • Permit, Major Amendment • Reasonable Use Exception • Rezone, Site Specific • Variance with Type 3 Permit	Yes	Hearing Examiner	Hearing Examiner	Superior Court

	Types of Permit/Approval/Action	Public Notice	Public Hearing	Decision Maker	Appellate Body
Type 4 Review	• Comprehensive Plan Text Amendment • Development Agreement [5] • Future Land Use Map Amendment • Rezone, General • Shoreline Master Program Amendment [2] • Unified Development Code Amendment [4]	Yes	Planning Commission	City Council	Superior Court [3]

Appendix 2

Soil Assessment

Soil Map—Walla Walla County Area, Washington
(MA-studyarea)



Map Scale: 1:8,750 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 100 200 400 600

Feet
0 400 800 1600 2400

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:31,700.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walla Walla County Area, Washington
Survey Area Data: Version 9, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 25, 2022—Jul 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PmA	Pedigo silt loam, 0 to 3 percent slopes	20.4	11.5%
UmA	Umapine silt loam, 0 to 3 percent slopes	152.7	86.3%
UpA	Umapine silt loam, leached surface, 0 to 3 percent slopes	3.8	2.1%
Totals for Area of Interest		**176.8**	**100.0%**

Appendix 3

WSDOT Airports and Compatible Land Use Criteria

Table F-1

Maximum Residential Density						
Compatibility Zones	**Zone 1**	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
Maximum Residential Density						
	Average Number of Dwelling Units Per Gross Acre					
Agricultural (farmland/forest)	0	Maintain current comprehensive plan designation and zoning designation				
Rural (outside an urban growth boundary)	0	1 d.u. per 10 acres	1 d.u. per 10 acres[A]	1 d.u. per 5 acres[A]	1 d.u. per 10 acres[A]	1 d.u. per 5 acres
Urban (within the urban growth boundary)	0	0	B	C	B	C
Maximum Intensities for Nonresidential Uses (Commercial, Industrial, Offices, and Activities)						
	Average Number of People Units Per Gross Acre					
Agricultural (farmland/forest)	1-5[E]	D, E	D, E	D, E	D, F	D
Rural (outside an urban growth boundary)	1-5[E]	10-25[E]	10-25[E]	40-60[E]	100-150[E]	100-150[G]
Urban (within the urban growth boundary)	1-5[E]	50-75[E]	80-120[E]	100-150[E]	100-150[E]	No Limit[G]

Notes:

A Cluster to preserve open space to maintain open approach corridor at and near runway ends.

B Infill development up to average of surrounding residential area is allowed, but is appropriate only if nonresidential uses are not feasible

C Promote high density and intensity mixed use development (15 or more d.u. per acre)

D Maintain current comprehensive plan designation and zoning designation.

E Special Function Land uses should be prohibited.

F 50-100 people per acre allowed if on airport and aviation-related.

G Special Function Land uses should be avoided.

Table F-2
Airport Land Use Matrix

	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
A. Resource Operations						
1. Agricultural (Commercial)						
Agriculture, horticulture, general farming (crops only, not feedlots and stockyards)	P	P	P	P	P	P
Agricultural building	L	L	P	P	P	P
Agricultural chemical sales/storage	X	L	P	P	P	P
Agricultural Housing/Farm labor	X	X	L	P	L	P
Agricultural housing/farm labor	X	X	L	P	L	P
Agricultural market	X	X	P	P	X	P
Agricultural related industries	X	L	P	P	P	P
Animal husbandry	X	L	L	L	X	P
Agricultural feeding operation or stockyards	X	X	X	X	X	X
Agriculture or food processing facility	X	L	P	P	L	P
Livestock auction	X	X	X	L	X	P
Fairgrounds	X	X	X	X	X	P
Floriculture, aquaculture	X	L	P	P	P	P
Fruit bin sales/storage	X	L	P	P	P	P
2. Forest (Commercial)						
General forest silver culture	L	L	P	P	P	P
Forest product processing	X	L	P	P	P	P
3. Mining/Refining/Offsite Hazardous Waste Treatment						
Asphalt paving and roofing materials, rock crushing	X	X	L	L	L	P
Mining including sand and gravel pits	X	L	L	L	X	P
Stockpiling of earthen materials	X	L	L	L	X	P
B. Rural Development						
1. Rural Residential						
Single-family dwelling (large lot, 5 acres or greater*)	X	L	L	P	X	P
Single-family dwelling, rural centers	X	X	L	L	X	L
Residential Cluster Development, 40% open	X	X	LSC	X	X	P
Multi-family dwelling	X	X	X	X	X	P
Temporary farm housing	X	X	P	P	L	P

Chart Symbols

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- **"P" permitted** – Uses or activities that should be permitted, however, these activities should be reviewed to ensure that they will not create height hazard obstructions, smoke, glare, electronic, wildlife attractants, or other airspace hazards.
- **"X" Prohibited** – uses or activities that should not be constructed near the airport.

All uses or activities identified herein are subject to intensity and density limitations set forth in Table F-1. Particular attention should be given to developments that when located in combination with other permitted or limited activities may create cumulative impacts on airport operations. All uses should be reviewed to ensure that they will not create airspace hazards.

	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
2. Rural Centers						
Single-family dwelling; up to 12 dwelling units/acre	X	X	L	L	X	L
Two - Four family dwelling (duplex) (*)	X	X	X	X	X	L
Multi-family dwelling; 12-20 units/acre	X	X	L	X	X	P
21+ units/acre	X	X	P	P	X	P
Agriculture/forest/mineral resources or industry (see item A)						
Community services (see item D2)						
Retail and commercial service (see items D4 & D5)						
Industrial/manufacturing (see item D4s & D5)						
C. Education Facilities						
1. Education Facilities						
Junior or community college	X	X	L	L	L	P
Schools, K-12 elementary, middle, senior high	X	X	X	X	X	X
Business school	X	L	L	L	L	P
Vocational schools	X	L	L	L	L	P
D. Urban Development						
1. Residential						
Single-family dwelling; up to 12 dwelling units/acre	X	X	X	X	X	L
Two - four-family dwelling (duplex)(*)	X	X	X	X	X	L
Multi-family dwelling(*): 15 or more	X	X	LSC	X	X	P
Mixed-use office/commercial/residential use	X	X	P	P	X	P
Residential development cluster 40% > open space	X	X	L	L	X	L
Residential infill	X	X	L	L	L	P
Mobile home parks	X	X	L	L	X	L
Boarding house	X	X	L	L	L	L
Retirement homes	X	X	X	X	X	L

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
2. Community Services						
Cemetery	P	P	P	P	L	P
Churches, synagogues, temples	X	X	L	L	X	L
Community center meeting halls, fraternal organizations	X	X	L	L	X	P
Convalescent, nursing home and group homes	X	X	X	X	X	L
Day care facilities, family in-home	X	X	L	L	X	L
Day care center	X	X	L	L	X	L
Funeral home	X	X	P	P	X	P
Police, fire stations, ambulance service	X	L	P	P	P	P
Hospital	X	X	X	X	X	X
Medical clinic	X	X	L	L	X	P
Correction facilities	X	L	L	L	L	L
Libraries	X	X	P	P	X	P
Museums and art galleries	X	X	L	P	P	P
Zoo	X	X	P	P	X	P
3. Amusement and Recreation						
Amusement park (permanent)	X	X	L	L	X	L
Bowling alleys	X	X	P	P	X	P
Campground	X	L	L	P	L	P
Recreational vehicle parks; short term	X	L	L	P	L	P
Drive-in theatres	X	X	L	L	X	P
Fairgrounds	X	X	P	L	L	P
Golf courses	X	L	P	P	X	P
Gymnasiums, exercise facilities	X	L	L	L	L	P
Horse racing tracks, speedways	X	X	X	X	X	X
Miniature golf courses	X	X	P	P	X	P
Movie theatres, auditoriums exhibition halls	X	X	L	L	X	P
Parks	L	L	P	P	L	P
Roller skating rink	X	X	L	L	X	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
4. Retail Trade and Service						
Addressing, mailing, and stenographic services	X	L	P	P	L	P
Advertising agencies	X	L	P	P	L	P
Airport uses and activities commercial/industrial	L	P	P	P	P	P
Animal clinic/hospital	L	P	P	P	P	P
Antique stores	X	L	P	P	X	P
Automobile, truck, manufactured home, and travel trailer sales	L	P	P	P	P	P
Automobile and recreational vehicle (RV) sales; weekend	L	P	P	P	L	P
Automotive: car wash	L	P	P	P	L	P
Sales lot/auto center	L	P	P	P	P	P
Parking lots and garages	L	P	P	P	P	P
Maintenance and repair shops	X	P	P	P	P	P
Paint and body repair shops	L	P	P	P	P	P
Parts and accessories (tires, batteries, etc.)	X	P	P	P	P	P
Specialized repair shops (radiator, etc.)	L	P	P	P	P	P
Towing services	L	P	P	P	P	P
Wrecking and dismantling yard	L	P	P	P	L	P
Bakery	X	P	P	P	L	P
Beauty and barber shops	X	L	P	P	X	P
Bed and breakfast inn	X	X	L	L	X	P
Boats and marine accessories	X Except storage L	P	P	P	P	P
Books, stationery, office supplies	Storage only	P	P	P	L	P
Building and trade (plumbing, heating, electrical, painting, etc.)	Storage only	P	P	P	L	P
Clothing and accessories	X	L	P	P	L	P
Communication towers	X	X	L	L	L	L
Computer and electronic stores	X	L	P	P	L	P
Department, discount, variety stores	X	X	P	P	X	P
Drug stores (optical goods, orthopedic supplies)	X	L	P	P	L	P
Employment agencies (private)	X	P	P	P	L	P

Chart Symbols

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	Compatibilty Zones					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Farm and implements, tools and heavy construction equipment	X	L	P	P	P	P
Farm supplies	L	P	P	P	P	P
Financial institutions	X	P	P	P	L	P
Food store	X	P	P	P	L	P
Furniture, home furnishings, appliances	X	P	P	P	L	P
General hardware, garden equipment and supplies	X	P	P	P	L	P
Grocery and convenience stores	X	L	P	P	L	P
Heavy equipment storage, maintenance and repair	X	L	P	P	L	P
Insurance agents, brokers, and service agencies	X	P	P	P	L	P
Kennels	L	P	P	P	L	P
Laundries, laundromats, and dry cleaning plants	X	P	P	P	L	P
Liquor stores	X	P	P	P	L	P
Lumber yards	L	P	P	P	L	P
Medical and dental laboratory, offices and clinic	X	X	L	P	x	P
Mini Storage	L	P	P	P	P	P
Motels and Hotels	X	X	P	P	P	P
Motorcycles sales/repair (including maintenance)	X	P	P	P	L	P
Paint, glass, and wallpaper stores	X	P	P	P	L	P
Pet stores, pet supplies, and dog grooming	X	L	P	P	L	
Professional office buildings for architects, attorneys, government, etc.	X	L	P	P	P	P
Rental: auto, truck, trailer, fleet leasing services	L	P	P	P	L	P
Repairs: small appliances, tv, business machines, watches, etc.	L	P	P	P	L	P
Restaurant, cafe and drive-in eating facilities	X	L	P	P	P	P
Service station	X	L	P	P	L	P
Sporting goods, bicycle shops	X	P	P	P	P	P
Taverns, bars, dance establishments	X	L	P	P	L	P

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
5. Industry/Manufacturing						
Aircraft parts	Storage only	L	P	P	P	P
Aircraft industrial	Storage only	L	P	P	P	P
Apparel and accessories	X	L	P	P	X	P
Bakery products (wholesale)	Storage only	L	P	P	X	P
Beverage industry	Storage only	L	P	P	X	P
Canning, preserving, and packaging fruits, vegetables, and other foods	X	L	L	L	X	P
Cement and concrete plants	X	L	L	L	X	P
Chemicals (industrial, agricultural, wood, etc.)	X	X	L	L	X	L
Concrete, gypsum, and plaster products	Storage only	L	P	L	L	P
Confectionery and related products (wholesale)	Storage only	P	P	P	L	P
Mini storage	P	P	P	P	P	P
Product assembly	Storage only	L	P	P	L	P
Prefabricated structural wood products and containers	Storage only	P	P	P	L	P
Printing, publishing, and binding	Storage only	P	P	P	L	P
Rendering plants, slaughter houses	X	X	X	X	X	L
Rubber products	X	L	P	P	L	P
Sawmills and planing mills	Storage only	L	P	P	L	P
Sheet metal and welding shops	Storage only	P	P	P	L	P
Stone products (includes finishing of monuments for retail sale)	Storage only	P	P	P	L	P

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	Compatibilty Zones					
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	**Zone 5**	**Zone 6**
6. Wholesale Trade-Storage						
Warehouses	Storage only	P	P	P	P	P
Wholesale trade	Storage only	P	P	P	P	P
Storage facilities; bulk	L	P	P	P	P	P
commercial	L	P	P	P	P	P
mini-storage	L	P	P	P	P	P
E. Transportation and Utilities						
1. Transportation						
Bus terminals	X	L	P	P	L	P
Transportation storage and maintenance facilities	Storage only	P	P	P	P	P
Transportation brokerage offices; without truck parking	X	P	P	P	P	P
with truck parking	L	P	P	P	P	P
Contract truck hauling, rental of trucks with drivers	L	P	P	P	P	P
Rail, truck terminals (for short-term storage, office)	L	P	P	P	P	P
Air storage and office use	Storage only	P	P	P	P	P
Railroad switch yards, maintenance, and repair facilities, etc.	X	P	P	P	P	P
Taxicab terminals, maintenance, and dispatching centers, etc.	X	P	P	P	P	P
2. Utilities						
Power generating facilities	L	L	L	L	L	L
Utility services (substations, etc.)	L	L	L	L	L	P
Wholesale trade	L	P	P	P	L	P
Storage facilities; bulk	L	P	P	P	P	P
Commercial	L	P	P	P	P	P

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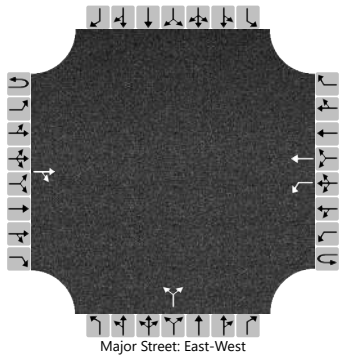
Appendix 4

Traffic Counts and Capacity Analysis Worksheets

HCS7 Two-Way Stop-Control Report

General Information		Site Information	Existing Conditions Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	11/4/2024	East/West Street	Old US 12
Analysis Year	2024	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			76	55		20	52			26		13				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						22					42					
Capacity, c (veh/h)						1434					813					
v/c Ratio						0.02					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.5					9.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						2.1				9.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

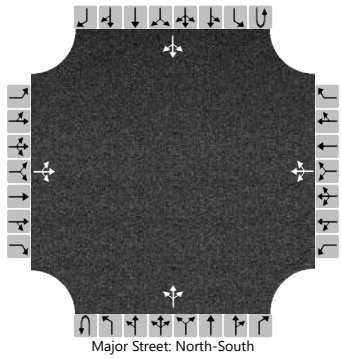
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	1		20	0	7		0	31	25		13	61	3
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			2				30			0				14		
Capacity, c (veh/h)			837				857			1524				1535		
v/c Ratio			0.00				0.03			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.1			0.0				0.0		
Control Delay (s/veh)			9.3				9.4			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)	9.3				9.4				0.0				1.3			
Approach LOS	A				A				A							

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HCS7 Two-Way Stop-Control Report

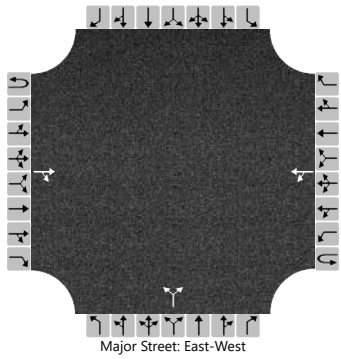
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			40	0		1	28			0		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					2					
Capacity, c (veh/h)						1557					1022					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.3				8.5							
Approach LOS					A											

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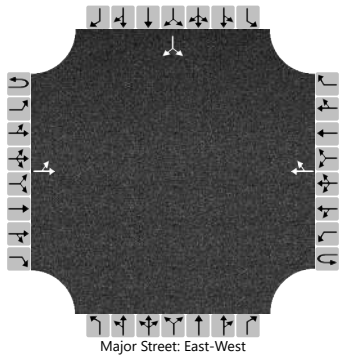
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		3	40				23	4						4		6
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3													11	
Capacity, c (veh/h)		1577													991	
v/c Ratio		0.00													0.01	
95% Queue Length, Q_{95} (veh)		0.0													0.0	
Control Delay (s/veh)		7.3													8.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.5												8.7		
Approach LOS		A					A							A		

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General Information

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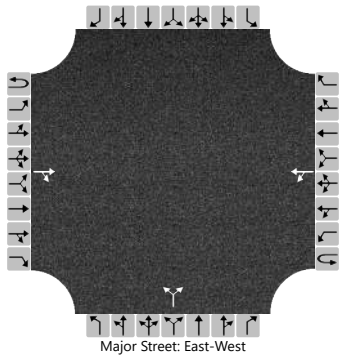
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			39	0		2	36			0		5				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					6					
Capacity, c (veh/h)						1556					1021					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.3					8.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.5						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

General Information

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Date Performed	11/4/2024
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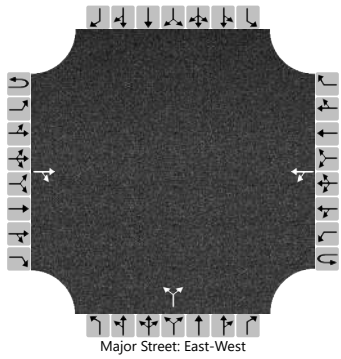
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			42	5		40	30			5		34				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						49					48					
Capacity, c (veh/h)						1540					970					
v/c Ratio						0.03					0.05					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.4					8.9					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.3				8.9						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

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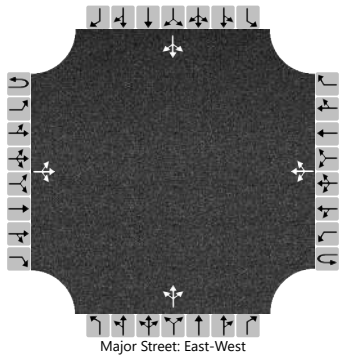
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		4	84	43		62	101	8		39	14	32		7	23	2
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4				69					94				36	
Capacity, c (veh/h)		1460				1436					622				518	
v/c Ratio		0.00				0.05					0.15				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.2					0.5				0.2	
Control Delay (s/veh)		7.5				7.6					11.8				12.5	
Level of Service (LOS)		A				A					B				B	
Approach Delay (s/veh)	0.3				3.0				11.8				12.5			
Approach LOS	A				A				B				B			

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Analyst	Montgomery
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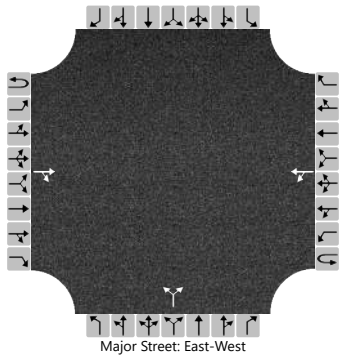
Date Performed	11/4/2024
Analysis Year	2024
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			124	12		55	173			20		42				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						65					74					
Capacity, c (veh/h)						1411					715					
v/c Ratio						0.05					0.10					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.6					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.2				10.6						
Approach LOS										B						

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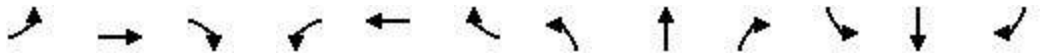
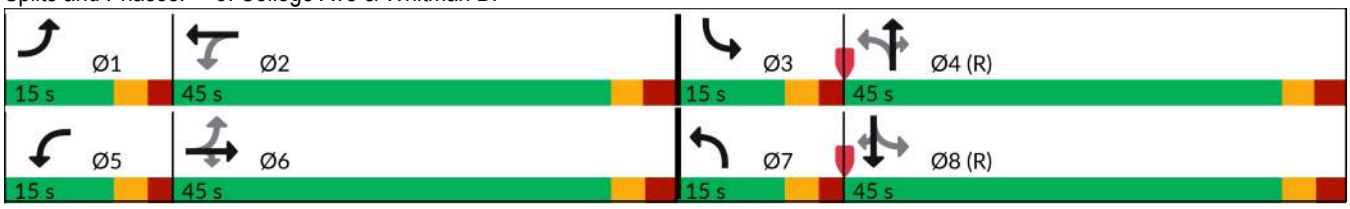


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Future Volume (vph)	42	115	44	30	104	14	50	181	35	16	184	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.503			0.671			0.602			0.634		
Satd. Flow (perm)	937	1863	1583	1250	1829	0	1121	1863	1583	1181	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	125	48	33	113	15	54	197	38	17	200	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	125	48	33	128	0	54	197	38	17	200	97
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	22.3	16.4	16.4	20.2	13.4		83.2	79.4	79.4	79.6	74.3	74.3
Actuated g/C Ratio	0.19	0.14	0.14	0.17	0.11		0.69	0.66	0.66	0.66	0.62	0.62
v/c Ratio	0.20	0.49	0.15	0.14	0.61		0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2		7.5	10.7	0.1	7.7	12.8	1.7
LOS	D	D	A	D	E		A	B	A	A	B	A
Approach Delay (s/veh)		38.9			55.1			8.7			9.1	
Approach LOS		D			E			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 23.2		Intersection LOS: C	
Intersection Capacity Utilization 35.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



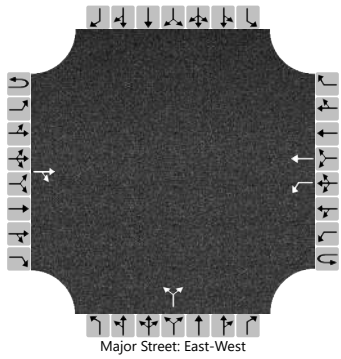
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	125	48	33	128	54	197	38	17	200	97
v/c Ratio	0.20	0.49	0.15	0.14	0.61	0.07	0.16	0.03	0.02	0.17	0.09
Control Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.7	54.2	1.0	35.5	60.2	7.5	10.7	0.1	7.7	12.8	1.7
Queue Length 50th (ft)	28	93	0	20	91	12	49	0	4	68	0
Queue Length 95th (ft)	56	150	0	45	150	31	122	0	14	128	18
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	272	601	837	1233	1088	861	1154	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.20	0.08	0.12	0.21	0.06	0.16	0.03	0.02	0.17	0.09

Intersection Summary

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 No-Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour No-Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	83		30	79			39		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					64					
Capacity, c (veh/h)						1349					714					
v/c Ratio						0.02					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.7					10.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

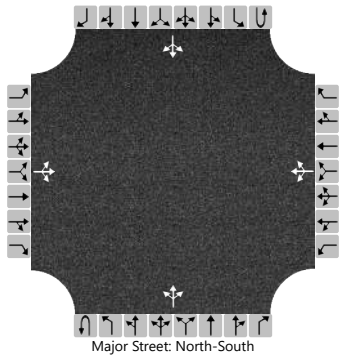
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		30	0	11		0	47	38		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				45			0				22		
Capacity, c (veh/h)			770				775			1478				1495		
v/c Ratio			0.01				0.06			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.2			0.0				0.0		
Control Delay (s/veh)			9.7				9.9			7.4				7.4		
Level of Service (LOS)			A				A			A				A		
Approach Delay (s/veh)		9.7				9.9				0.0				1.4		
Approach LOS		A				A										

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HCS7 Two-Way Stop-Control Report

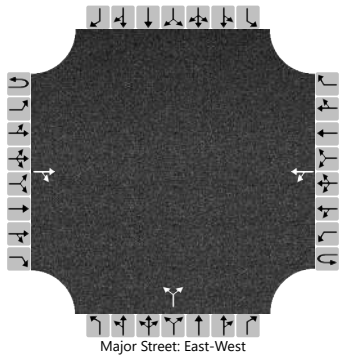
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			61	0		2	42			0		3				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					3					
Capacity, c (veh/h)						1526					992					
v/c Ratio						0.00					0.00					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.6					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.3				8.6						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

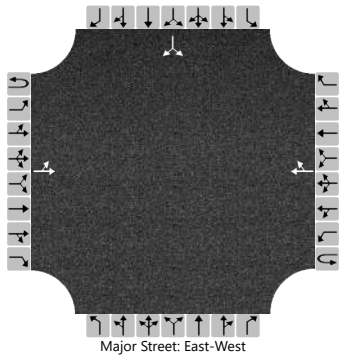
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		5	61				35	6						6		9
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		5													16	
Capacity, c (veh/h)		1557													958	
v/c Ratio		0.00													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.3													8.8	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.6												8.8		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

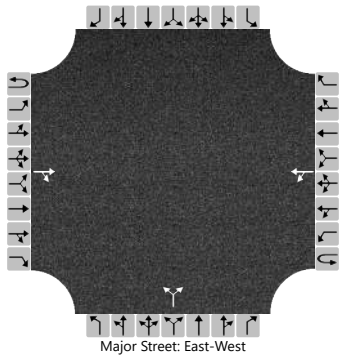
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			59	0		3	55			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1525					991					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						7.4					8.7					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						0.4				8.7						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

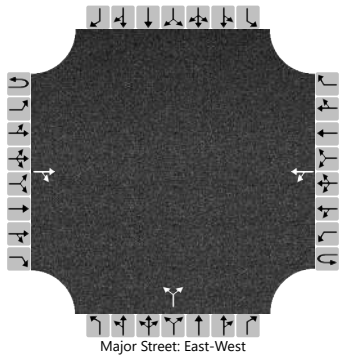
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	8		61	45			8		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					74					
Capacity, c (veh/h)						1500					915					
v/c Ratio						0.05					0.08					
95% Queue Length, Q_{95} (veh)						0.2					0.3					
Control Delay (s/veh)						7.5					9.3					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						4.5				9.3						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

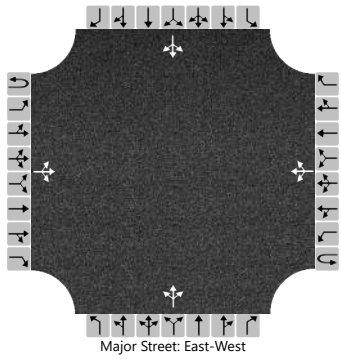
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	127	64		94	153	12		59	21	49		11	35	3
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		7				104					143				54	
Capacity, c (veh/h)		1386				1352					463				374	
v/c Ratio		0.00				0.08					0.31				0.15	
95% Queue Length, Q_{95} (veh)		0.0				0.3					1.3				0.5	
Control Delay (s/veh)		7.6				7.9					16.2				16.2	
Level of Service (LOS)		A				A					C				C	
Approach Delay (s/veh)	0.3				3.3				16.2				16.2			
Approach LOS									C				C			

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HCS7 Two-Way Stop-Control Report

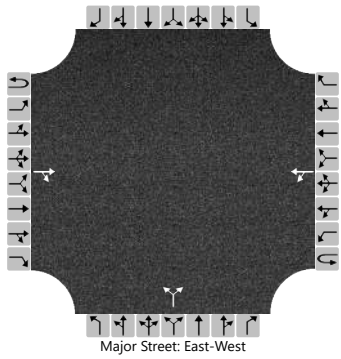
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour No-Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			188	18		83	262			30		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					112					
Capacity, c (veh/h)						1315					565					
v/c Ratio						0.08					0.20					
95% Queue Length, Q_{95} (veh)						0.2					0.7					
Control Delay (s/veh)						8.0					12.9					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.5				12.9						
Approach LOS										B						

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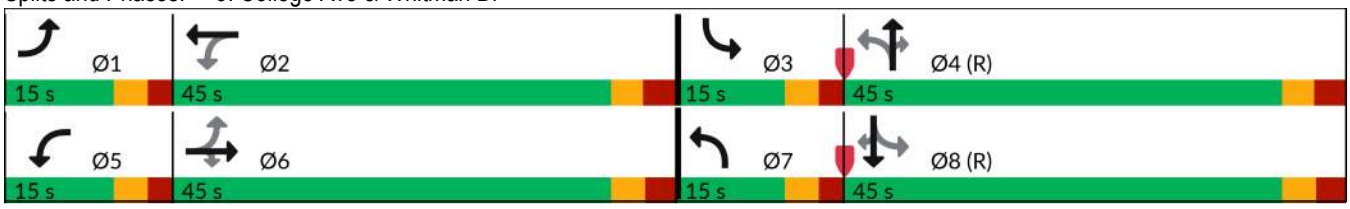
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Future Volume (vph)	64	174	67	45	158	21	76	274	53	24	279	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.982				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1829	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.387			0.443			0.510			0.563		
Satd. Flow (perm)	721	1863	1583	825	1829	0	950	1863	1583	1049	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	189	73	49	172	23	83	298	58	26	303	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	189	73	49	195	0	83	298	58	26	303	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	26.5	18.6	18.6	25.2	17.9		77.7	71.9	71.9	74.0	68.4	68.4
Actuated g/C Ratio	0.22	0.16	0.16	0.21	0.15		0.65	0.60	0.60	0.62	0.57	0.57
v/c Ratio	0.30	0.65	0.21	0.21	0.70		0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2		9.7	15.4	0.1	9.9	17.3	5.2
LOS	D	E	A	C	E		A	B	A	A	B	A
Approach Delay (s/veh)		41.0			54.7			12.3			13.2	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay (s/veh): 25.9		Intersection LOS: C	
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	70	189	73	49	195	83	298	58	26	303	147
v/c Ratio	0.30	0.65	0.21	0.21	0.70	0.12	0.27	0.06	0.04	0.29	0.15
Control Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.0	57.9	2.7	32.7	60.2	9.7	15.4	0.1	9.9	17.3	5.2
Queue Length 50th (ft)	41	138	0	28	141	23	121	0	7	127	10
Queue Length 95th (ft)	73	207	9	55	209	50	209	0	21	222	49
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	247	610	599	258	601	688	1116	996	729	1061	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.31	0.12	0.19	0.32	0.12	0.27	0.06	0.04	0.29	0.15

Intersection Summary

Martin Field Trip Generation

Area	Total Acres	Bldg. SF (1,000 SF)	PM Peak Hour Trips Generated		
			Total	Inbound	Outbound
North Driveway	18.65	325	95	13	82
South Driveway	18.56	323	94	13	81
Total Whitman	37.21	648	189	26	163
Total Hampton	22.22	387	107	15	92
TOTAL	59.43	1,036	296	41	255

Notes

Assumes 40% FAR

ITE Trip Generation Manual 11th Edition

Land Use 110 - General Light Industrial

Fitted equation =(ROUNDUP(EXP(0.72*LN(X)+0.38),0))

where X is the sq ft of the development

Worst Driveway - included in Total Whitman trips above

North Driveway	7.82	136	51	7	44
South Driveway	3.11	54	26	4	22

Martin Airfield Feeasibility Study

PM Peak Hour Turning Movement Volumes

Old US 12/Last Chance

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	26	0	13	0	0	0	0	76	55	20	52	0	242
2045 No-Build	39	0	20	0	0	0	0	115	83	30	79	0	366
20-year New Trips	12	0	0	0	0	0	0	0	2	0	0	0	14
2045 Build	51	0	20	0	0	0	0	115	85	30	79	0	380

Last Chance/Whitman Dr

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	31	25	13	61	3	0	1	1	20	0	7	162
2045 No-Build	0	47	38	20	92	5	0	2	2	30	0	11	247
20-year New Trips	0	0	3	0	0	2	0	0	0	13	0	12	30
2045 Build	0	47	41	20	92	7	0	2	2	43	0	23	277

Whitman Dr/Hampton

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	2	0	0	0	0	40	0	1	28	0	71
2045 No-Build	0	0	3	0	0	0	0	61	0	2	42	0	108
20-year New Trips	9	0	83	0	0	0	0	3	2	13	16	0	126
2045 Build	9	0	86	0	0	0	0	64	2	15	58	0	234

Whitman Dr/McKinney

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	4	0	6	3	40	0	0	23	4	80
2045 No-Build	0	0	0	6	0	9	5	61	0	0	35	6	122
20-year New Trips	0	0	0	0	0	1	3	227	0	0	35	0	266
2045 Build	0	0	0	6	0	10	8	288	0	0	70	6	388

Whitman Dr/Martin Field

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	5	0	0	0	0	39	0	2	36	0	82
2045 No-Build	0	0	8	0	0	0	0	59	0	3	55	0	125
20-year New Trips	0	0	0	0	0	0	0	227	0	0	35	0	262
2045 Build	0	0	8	0	0	0	0	286	0	3	90	0	387

Whitman Dr/Homestead

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	5	0	34	0	0	0	0	42	5	40	30	0	156
2045 No-Build	8	0	52	0	0	0	0	64	8	61	45	0	238
20-year New Trips	1	0	0	0	0	0	0	223	4	0	34	0	262
2045 Build	9	0	52	0	0	0	0	287	12	61	79	0	500

Whitman Dr/Hussey/Academy

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	39	14	32	7	23	2	4	84	42	62	101	8	418
2045 No-Build	59	21	49	11	35	3	6	127	64	94	153	12	634
20-year New Trips	3	0	0	0	0	1	3	184	36	0	30	0	257
2045 Build	62	21	49	11	35	4	9	311	100	94	183	12	891

Whitman Dr/Davis

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	20	0	42	0	0	0	1	124	12	55	173	1	428
2045 No-Build	30	0	64	0	0	0	2	188	18	83	262	2	649
20-year New Trips	2	0	0	0	0	0	1	173	10	0	28	0	214
2045 Build	32	0	64	0	0	0	3	361	28	83	290	2	863

Whitman Dr/College Ave

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	50	181	35	16	184	89	42	115	44	30	104	14	904
2045 No-Build	76	274	53	24	279	135	64	174	67	45	158	21	1370
20-year New Trips	6	0	0	0	0	10	36	99	38	0	12	0	201
2045 Build	82	274	53	24	279	145	100	273	105	45	170	21	1571

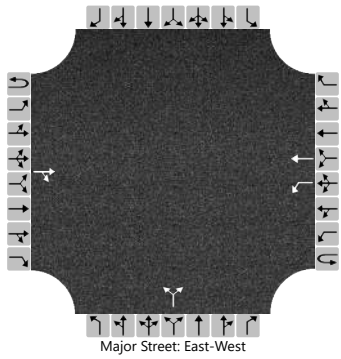
Whitman/New Driveway (busiest one)

	Northbound			Southbound			Eastbound			Westbound			
Scenario	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Left**	**Thru**	**Right**	**Total**
Existing	0	0	0	0	0	0	0	43	0	0	42	0	85
2045 No-Build	0	0	0	0	0	0	0	65	0	0	64	0	129
20-year New Trips	2	0	20	40	0	4	1	85	0	4	25	6	187
2045 Build	2	0	20	40	0	4	1	150	0	4	89	6	316

HCS7 Two-Way Stop-Control Report

General Information		Site Information	2045 Build Capacity Analysis
Analyst	Montgomery	Intersection	Old US 12/Last Chance
Agency/Co.	J-U-B Engineers	Jurisdiction	City of College Place
Date Performed	2/27/2025	East/West Street	Old US 12
Analysis Year	2045	North/South Street	Last Chance Road
Time Analyzed	PM Peak Hour Build	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Martin Airield Feasibility		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	1	1	0		0	1	0		0	0	0
Configuration				TR		L	T				LR					
Volume (veh/h)			115	85		30	79			51		20				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						33					77					
Capacity, c (veh/h)						1346					702					
v/c Ratio						0.02					0.11					
95% Queue Length, Q_{95} (veh)						0.1					0.4					
Control Delay (s/veh)						7.7					10.8					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						2.1				10.8						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

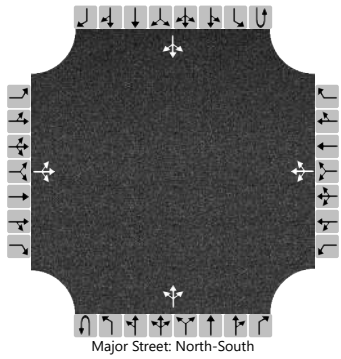
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	North-South
Project Description	Martin Airield Feasibility

Site Information

Intersection	Last Chance/Whitman
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Last Chance Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	2		43	0	23		0	47	41		20	92	5
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			4				73			0				22		
Capacity, c (veh/h)			768				792			1478				1490		
v/c Ratio			0.01				0.09			0.00				0.01		
95% Queue Length, Q_{95} (veh)			0.0				0.3			0.0				0.0		
Control Delay (s/veh)			9.7				10.0			7.4				7.5		
Level of Service (LOS)			A				B			A				A		
Approach Delay (s/veh)		9.7				10.0				0.0				1.4		
Approach LOS		A				B										

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HCS7 Two-Way Stop-Control Report

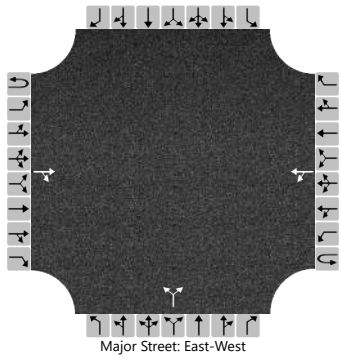
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hampton
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hampton Lane
Peak Hour Factor	0.89
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			64	2		15	58			9		86				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						17					107					
Capacity, c (veh/h)						1519					966					
v/c Ratio						0.01					0.11					
95% Queue Length, Q_{95} (veh)						0.0					0.4					
Control Delay (s/veh)						7.4					9.2					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)						1.6				9.2						
Approach LOS										A						

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HCS7 Two-Way Stop-Control Report

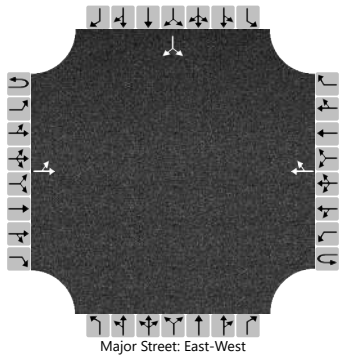
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/McKinney
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	McKinney Road
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		8	288				70	6						6		10
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		9													18	
Capacity, c (veh/h)		1507													783	
v/c Ratio		0.01													0.02	
95% Queue Length, Q_{95} (veh)		0.0													0.1	
Control Delay (s/veh)		7.4													9.7	
Level of Service (LOS)		A													A	
Approach Delay (s/veh)		0.3												9.7		
Approach LOS														A		

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HCS7 Two-Way Stop-Control Report

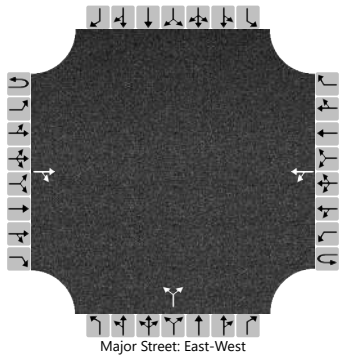
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Martin Field Ln
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Martin Field Lane
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			286	0		3	90			0		8				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					9					
Capacity, c (veh/h)						1217					703					
v/c Ratio						0.00					0.01					
95% Queue Length, Q_{95} (veh)						0.0					0.0					
Control Delay (s/veh)						8.0					10.2					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						0.3				10.2						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

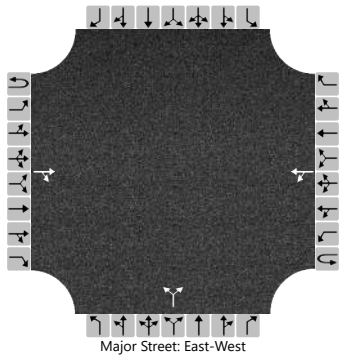
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Homestead
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Homestead Ave
Peak Hour Factor	0.81
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			287	12		61	79			9		52				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						75					75					
Capacity, c (veh/h)						1184					625					
v/c Ratio						0.06					0.12					
95% Queue Length, Q_{95} (veh)						0.2					0.4					
Control Delay (s/veh)						8.2					11.5					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)						3.9				11.5						
Approach LOS										B						

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HCS7 Two-Way Stop-Control Report

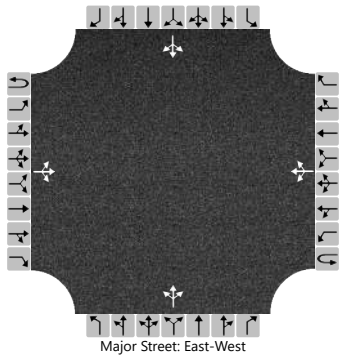
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	11/4/2024
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Hussey
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Hussey Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		9	311	100		94	183	12		62	21	49		11	35	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		10				104					147				56	
Capacity, c (veh/h)		1347				1099					301				250	
v/c Ratio		0.01				0.10					0.49				0.22	
95% Queue Length, Q_{95} (veh)		0.0				0.3					2.5				0.8	
Control Delay (s/veh)		7.7				8.6					27.9				23.5	
Level of Service (LOS)		A				A					D				C	
Approach Delay (s/veh)	0.2				3.4				27.9				23.5			
Approach LOS									D				C			

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HCS7 Two-Way Stop-Control Report

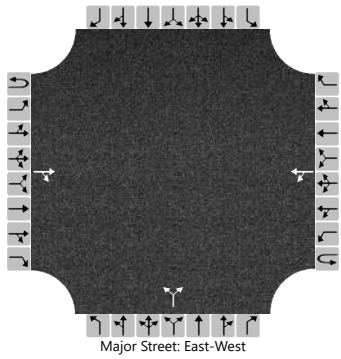
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	2/27/25
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/Davis
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	Davis Ave
Peak Hour Factor	0.84
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			361	28		83	290			32		64				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						99					114					
Capacity, c (veh/h)						1093					405					
v/c Ratio						0.09					0.28					
95% Queue Length, Q_{95} (veh)						0.3					1.1					
Control Delay (s/veh)						8.6					17.4					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)						2.7				17.4						
Approach LOS										C						

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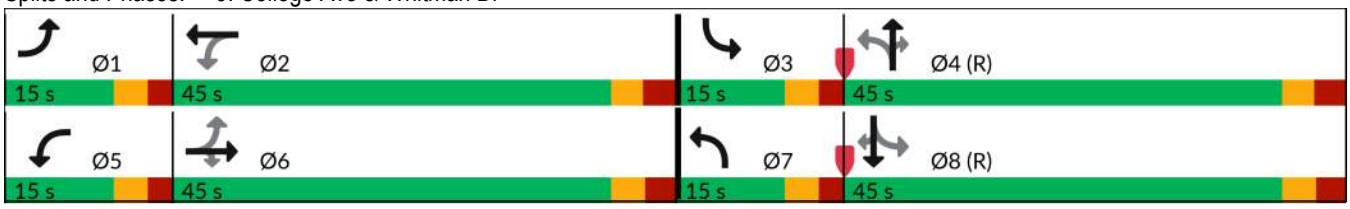
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Future Volume (vph)	100	273	105	45	170	21	82	274	53	24	279	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		75	145		0	100		100	100		100
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.983				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1831	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.408			0.334			0.468			0.560		
Satd. Flow (perm)	760	1863	1583	622	1831	0	872	1863	1583	1043	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120		6				120			120
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		667			695			651			629	
Travel Time (s)		18.2			19.0			17.8			17.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	297	114	49	185	23	89	298	58	26	303	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	297	114	49	208	0	89	298	58	26	303	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4		4	8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	4.0	8.0	8.0	4.0	8.0		4.0	8.0	8.0	4.0	8.0	8.0
Minimum Split (s)	9.5	27.7	27.7	9.5	30.8		9.5	30.8	30.8	9.5	27.7	27.7
Total Split (s)	15.0	45.0	45.0	15.0	45.0		15.0	45.0	45.0	15.0	45.0	45.0
Total Split (%)	12.5%	37.5%	37.5%	12.5%	37.5%		12.5%	37.5%	37.5%	12.5%	37.5%	37.5%
Maximum Green (s)	9.8	39.3	39.3	9.8	39.2		9.8	39.2	39.2	9.8	39.3	39.3
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.2	2.7	2.7	2.2	2.8		2.2	2.8	2.8	2.2	2.7	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.2	5.7	5.7	5.2	5.8		5.2	5.8	5.8	5.2	5.7	5.7
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0	7.0		7.0	7.0
Flash Don't Walk (s)		11.0	11.0		11.0			11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0	0		0	0
Act Effct Green (s)	35.0	26.7	26.7	31.3	22.9		70.0	63.8	63.8	64.4	57.6	57.6
Actuated g/C Ratio	0.29	0.22	0.22	0.26	0.19		0.58	0.53	0.53	0.54	0.48	0.48
v/c Ratio	0.36	0.72	0.26	0.21	0.59		0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3		13.1	20.1	0.1	13.3	23.3	7.6
LOS	C	D	A	C	D		B	C	A	B	C	A
Approach Delay (s/veh)		38.4			44.3			16.1			17.6	
Approach LOS		D			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 60.7 (51%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 27.6		Intersection LOS: C	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: College Ave & Whitman Dr



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	297	114	49	208	89	298	58	26	303	158
v/c Ratio	0.36	0.72	0.26	0.21	0.59	0.16	0.30	0.06	0.04	0.34	0.19
Control Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	53.1	6.9	27.6	48.3	13.1	20.1	0.1	13.3	23.3	7.6
Queue Length 50th (ft)	61	219	0	26	144	28	135	0	8	142	15
Queue Length 95th (ft)	92	290	40	48	199	64	244	0	25	261	66
Internal Link Dist (ft)		587			615		571			549	
Turn Bay Length (ft)	150		75	145		100		100	100		100
Base Capacity (vph)	304	610	599	266	602	587	989	897	649	894	822
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.19	0.18	0.35	0.15	0.30	0.06	0.04	0.34	0.19

Intersection Summary

HCS7 Two-Way Stop-Control Report

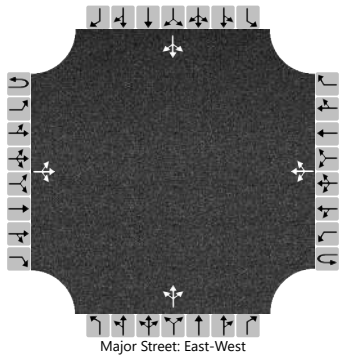
General Information

Analyst	Montgomery
Agency/Co.	J-U-B Engineers
Date Performed	3/5/2025
Analysis Year	2045
Time Analyzed	PM Peak Hour Build
Intersection Orientation	East-West
Project Description	Martin Airield Feasibility

Site Information

Intersection	Whitman/New Driveway
Jurisdiction	City of College Place
East/West Street	Whitman Drive
North/South Street	New Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		1	150	0		4	89	6		2	0	20		40	0	4
Percent Heavy Vehicles (%)		3				3				3	3	3		3	3	3
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.13				4.13				7.13	6.53	6.23		7.13	6.53	6.23
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.23				2.23				3.53	4.03	3.33		3.53	4.03	3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		1				4					24				49	
Capacity, c (veh/h)		1479				1405					850				660	
v/c Ratio		0.00				0.00					0.03				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		7.4				7.6					9.4				10.9	
Level of Service (LOS)		A				A					A				B	
Approach Delay (s/veh)		0.1				0.3				9.4				10.9		
Approach LOS										A				B		

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Appendix 5

Economic Analysis

2025

Market Feasibility

MARTIN AIRFIELD

An analysis conducted by: TheMettsGroup

Prepared for: CP COLLEGE PLACE WALLA WALLA VALLEY

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Purpose

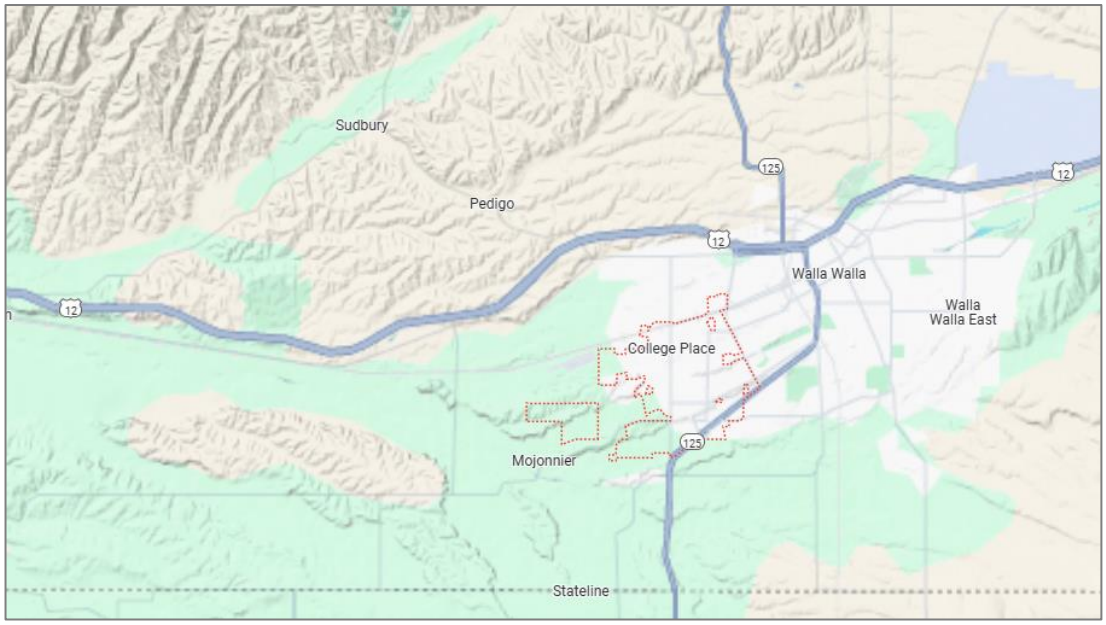
The purpose of this study is to analyze market feasible light industrial uses for the 233-acre site around Martin Airfield and bordered by Whitman Drive to the north, Hampton Lane to the west, Homestead Acres Subdivision to the east, and a bluff to the south. This study conforms to the minimum threshold criteria established by the Washington State Community and Economic Revitalization Board for potential grant funding opportunities.

The following outlines the scope within the above objectives:

1. Interview key stakeholders to gather and review pertinent project background data.
2. Assess the locational characteristics of the site relative to the industrial market.
3. Perform Market analysis for the site
4. Perform Job Benefit Analysis
5. Evaluate the overall City of College Place area economic outlook for industrial real estate development.
6. Conduct interviews with selected key persons in the College Place catchment area knowledgeable of demand potentials by various industrial uses (e.g. complementary agricultural processing/supplier needs, light manufacturing, warehouse distribution, flex space, etc.).
7. Identify and evaluate potentially competing sites and corresponding industrial uses.
8. Analyze which target industries may be located at the site.
9. Recommend specific companies that should be targeted to prospective tenants.
10. Forecast the economic impacts to the City of College Place if the site is fully tenanted with the prescribed potential industrial users.
11. Recommend a project marketing strategy for the site.
12. Prepare a corresponding Economic Feasibility Analysis and marketing strategy for the site.

Location

College Place is home to approximately 10,000 residents and has a growing local economy. The City's industries are anchored in government, higher education, retail, healthcare, and finance, contributing a Gross Regional Product (GRP) of $417 million, or 10% of the county's economy. With nearly 3,900 jobs in total, the City is positioned for further economic expansion, especially with its proximity to key transportation routes such as US 12, I-82, and I-84, as well as rail access, broadband availability, and the added benefit of being an Opportunity Zone.



Economy Overview

The population of College Place is estimated at 9,945, reflecting a modest growth of 0.4% from 2020 to 2024. Population growth trends for both College Place and Walla Walla County show similar growth trends, with a sharp decline around 2022 in College Place, followed by gradual stabilization. Workforce characteristics indicate a labor force participation rate of 59%, which is below the national average of 63.5%. Additionally, 10% of the workforce consists of remote workers, and 71% of residents have some college education or higher, suggesting a relatively educated workforce.

Population

9,945

0.4% ⇧

(2020-2024 est.)

Workforce Characteristics

59%

Labor Force Participation Rate
(63.5% U.S.)

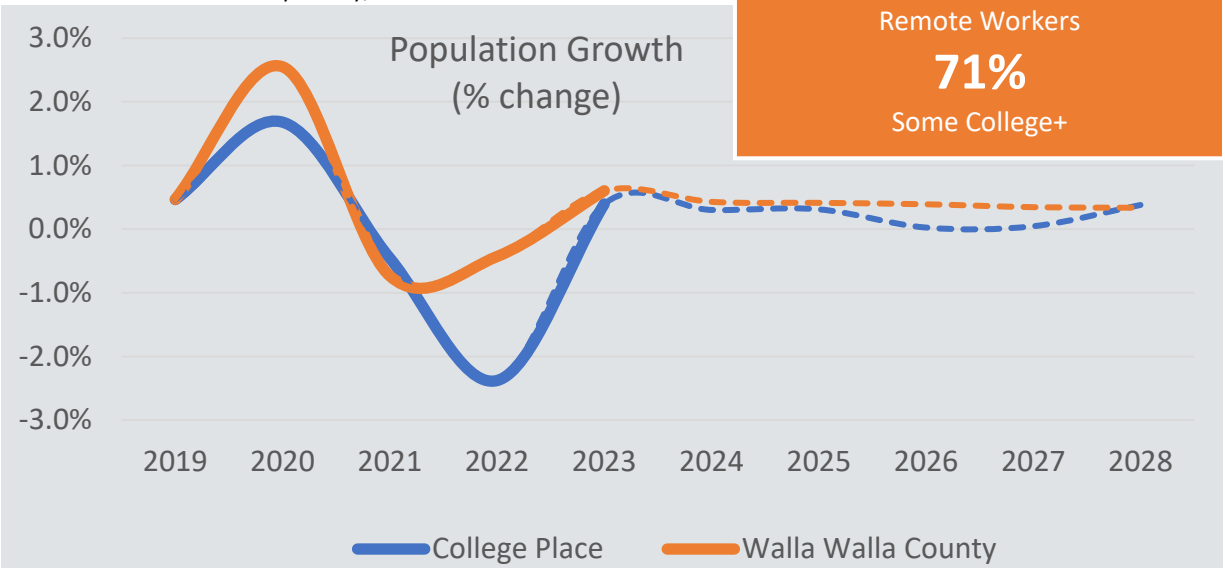
10%

Remote Workers

71%

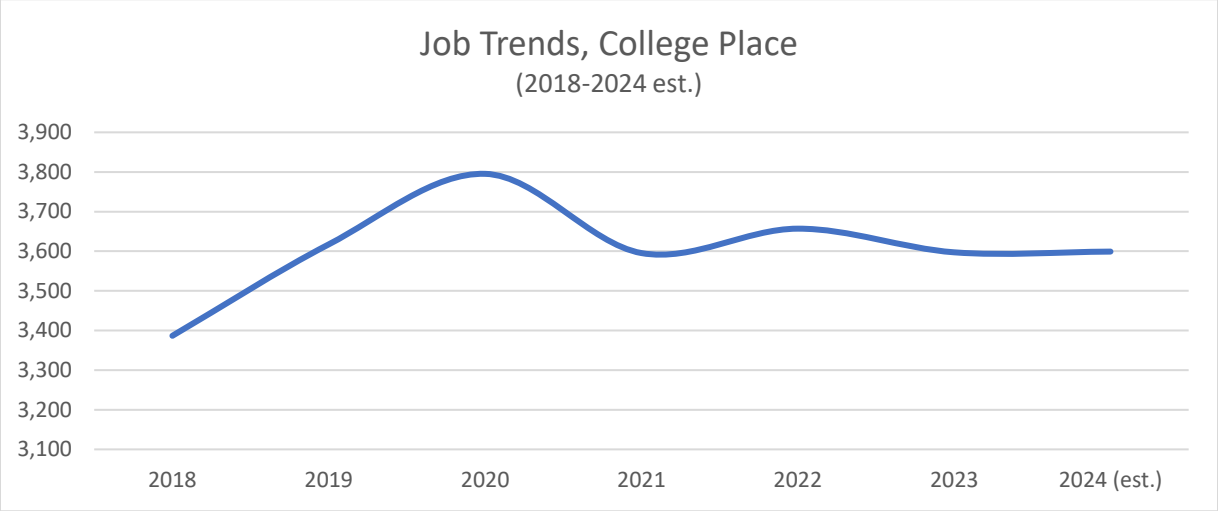
Some College+

Source: American Community Survey, 5-Year Estimates

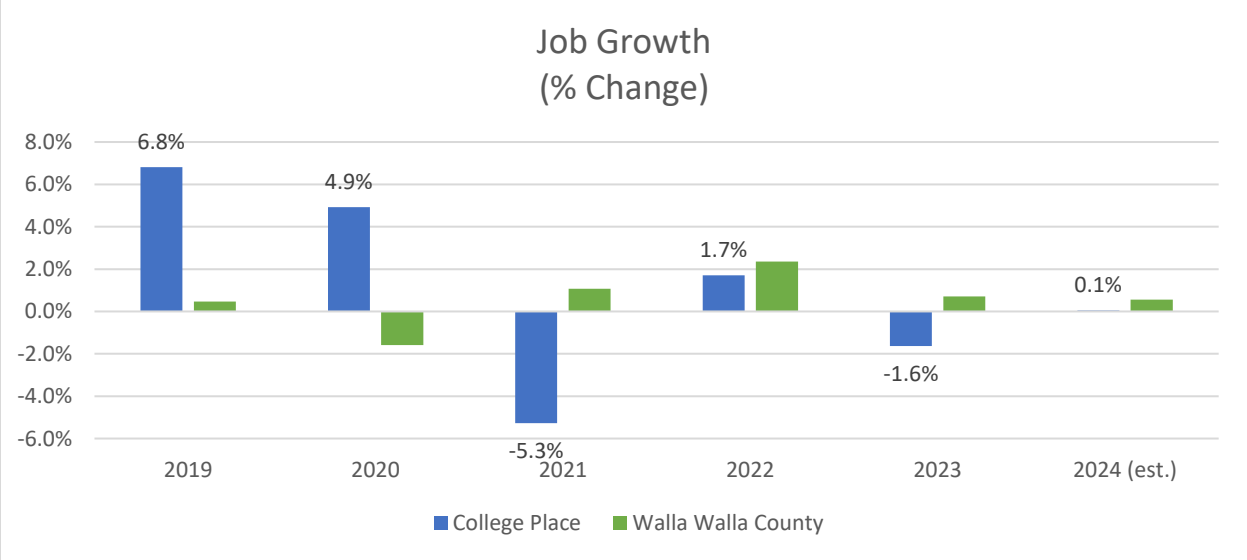


TheMettsGroup

The job market in College Place is still recovering from the pandemic. Between the peak in 2020 and the trough in late 2021, approximately 200 jobs were lost within the 99324 ZIP code, representing a 5.3% decline.



Source: Lightcast, QCEW, Non-QCEW, Self-employed



Source: Lightcast, QCEW, Non-QCEW, Self-employed

The largest contributing industries include government (primarily higher education), retail trade, accommodation and food services, health care, and finance and insurance. Government employment dominates the local labor market, followed by educational services, indicating the area's strong ties to public institutions and higher education. Retail and health care also play significant roles, supporting both local consumption and essential services.

The region's Gross Regional Product (GRP) stands at $417 million, accounting for 10% of the County's total economic output. The primary industries driving GRP are government, finance and insurance, retail, educational services, and health care. The data suggests a stable economy with growth in key service-oriented sectors, reinforcing the importance of education, health care, and retail as economic pillars.

GRP

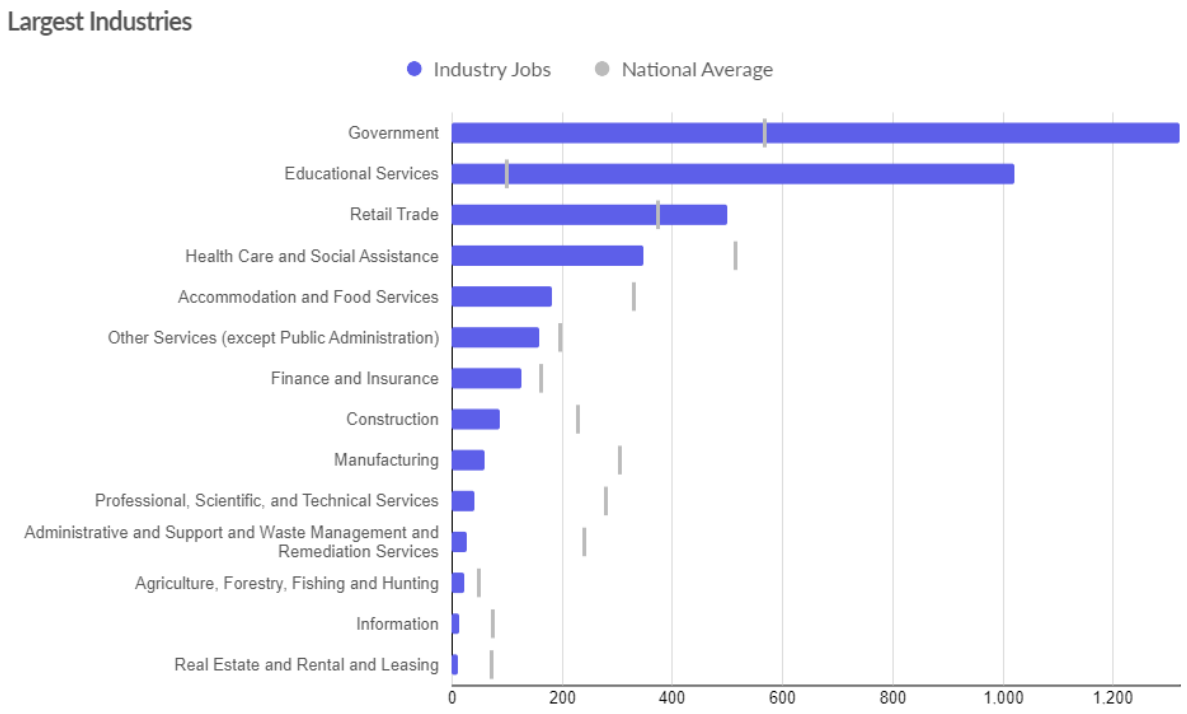
$417M

(10% of County)

Largest Contributing Industries:

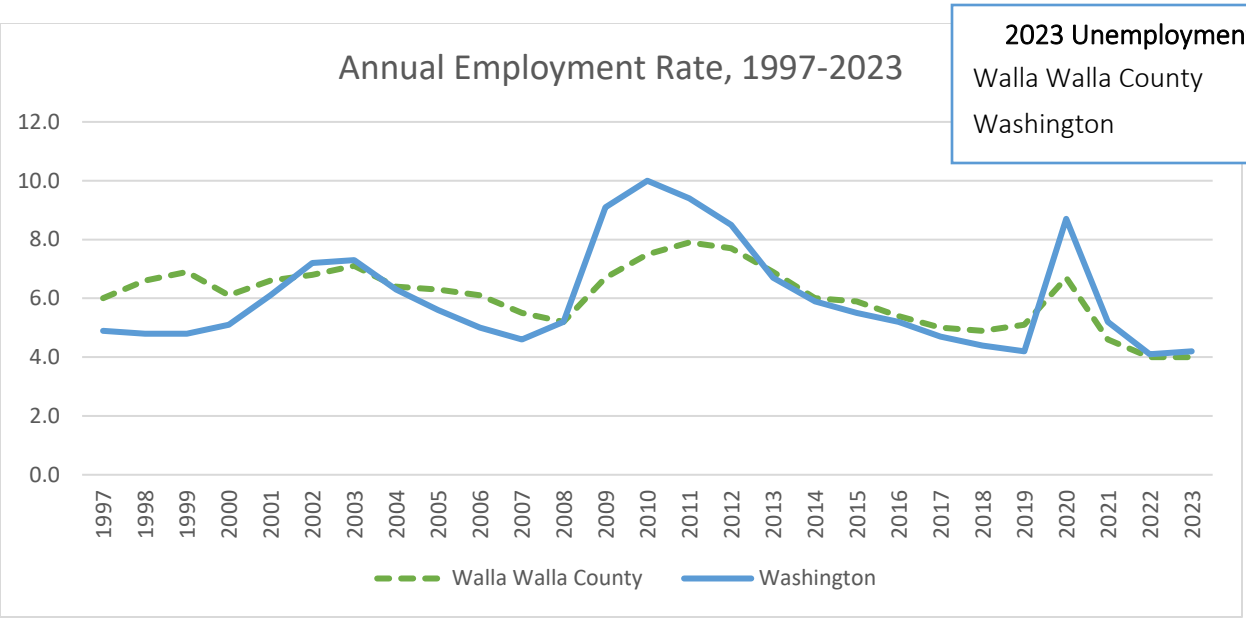
- Government
- Finance & Insurance
- Retail
- Educational Svcs
- Health Care

Source: Lightcast, College Place (zip code 99324)



Source: Lightcast, QCEW, Non-QCEW, Self-employed for College Place (zip code 99324)

The unemployment rate in Franklin County remains higher than the state, by 2.1 percentage points. The 2019 annual unemployment rate—the most recent annual number at the time of this report—in Franklin County was 6.4%, compared to 4.3% statewide and 3.7% for the nation.



2023 Unemployment Rate	
Walla Walla County	4.0%
Washington	4.2%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics program

According to the Bureau of Labor Statistics' Occupational Employment and Wage Statistics, the median hourly wage in Walla Walla County was $23.04 as of the latest available data (May 2023). Walla Walla County continues to trail the state in wages—20% below the state average.

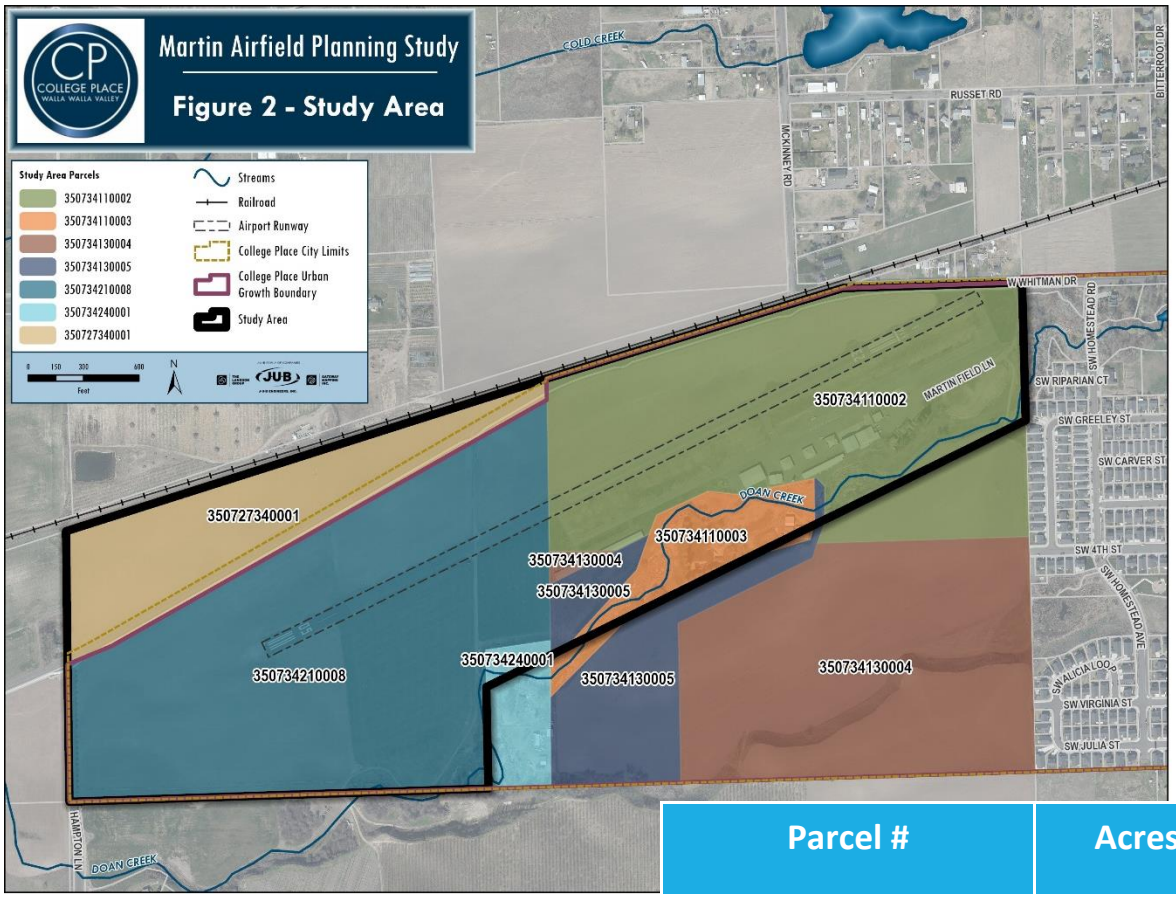
Median Hourly Wage

$23.04
(Walla Walla County)

$28.81
(Washington)

Commercial Real Estate Snapshot

The City of College Place only has three acres of active light industrial land. The project area consists of six (6) light industrial zoned parcels, totaling 233 acres.



Parcel #	Acres
350734210008	79.83
350734240001 (private)	6.61
350734130005	19.82
350734130004	54.58
350734110002	62.60
350734110003	10.00
Total	233.44

Industrial Inventory

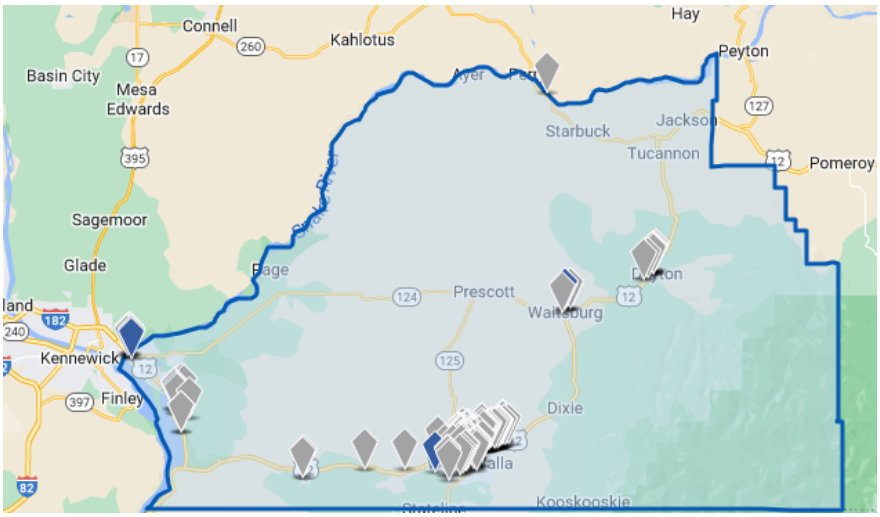
Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

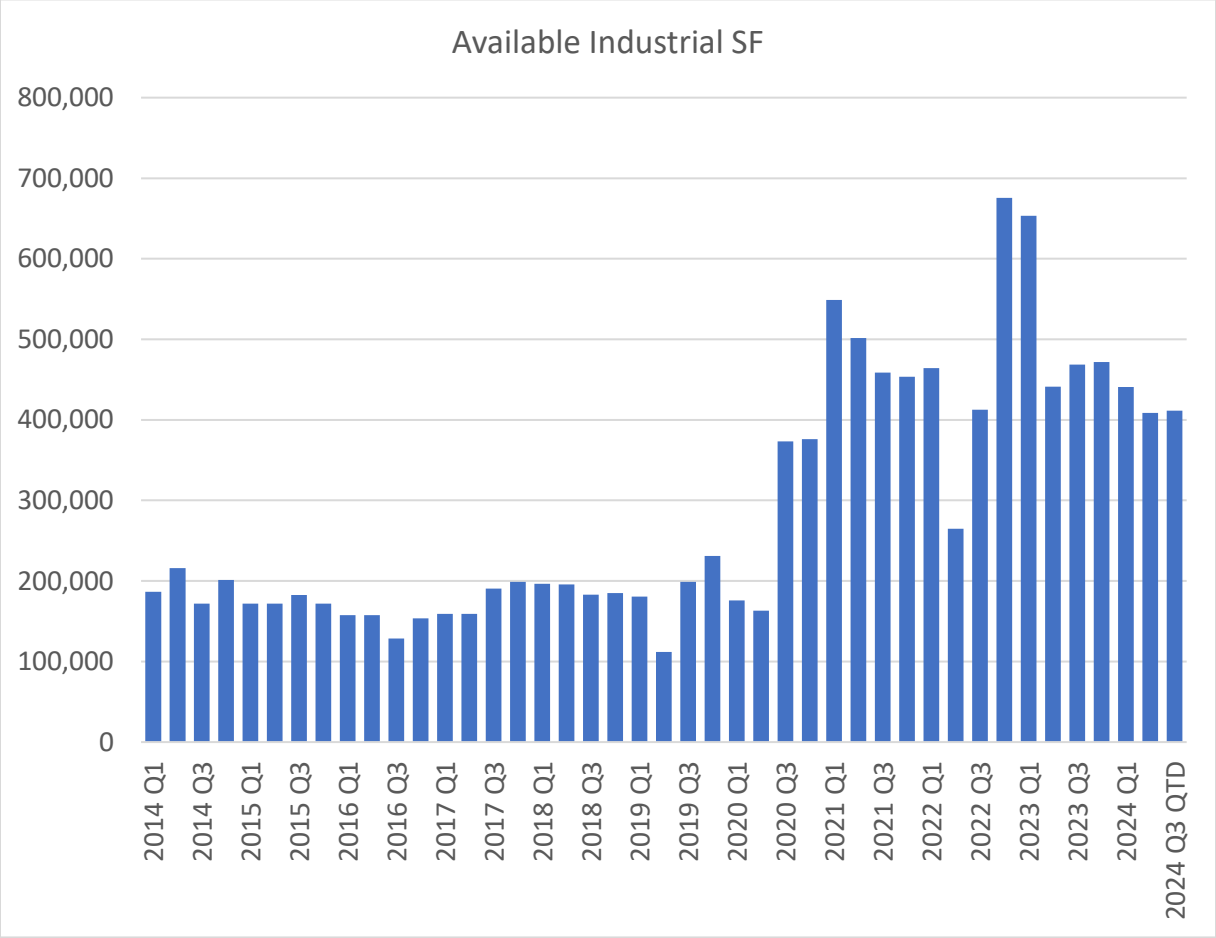
4.6M SF
inventory

411,260 SF
available space

5.6%
vacancy rate

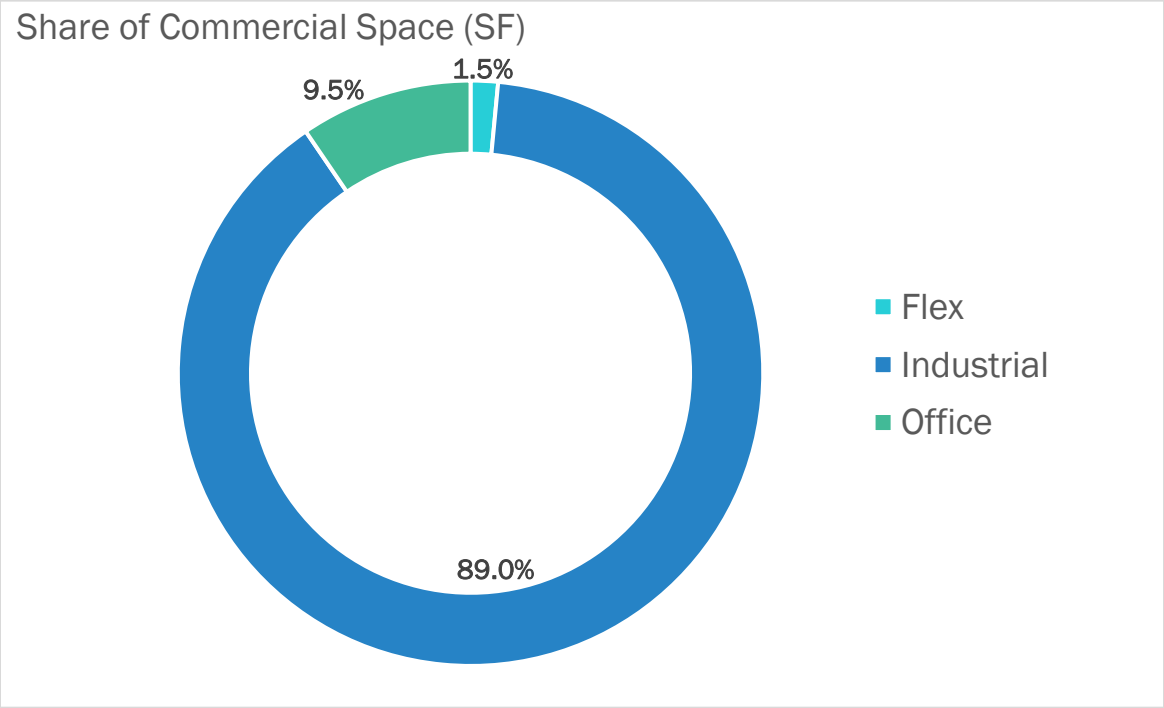
$8.71/SF
rental rate

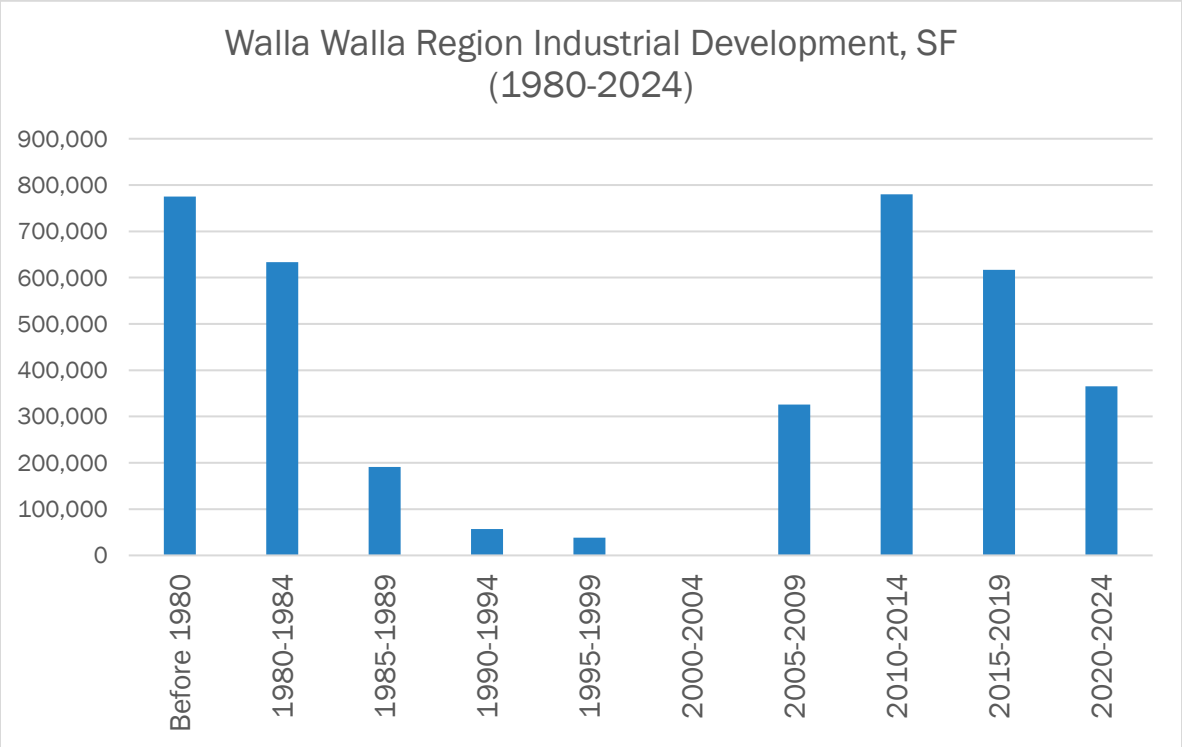




Source: Costar

Of the 4.6 million square feet of industrial and flex space in the Walla Walla region (Costar), only 29% has been built in the past 30 years.

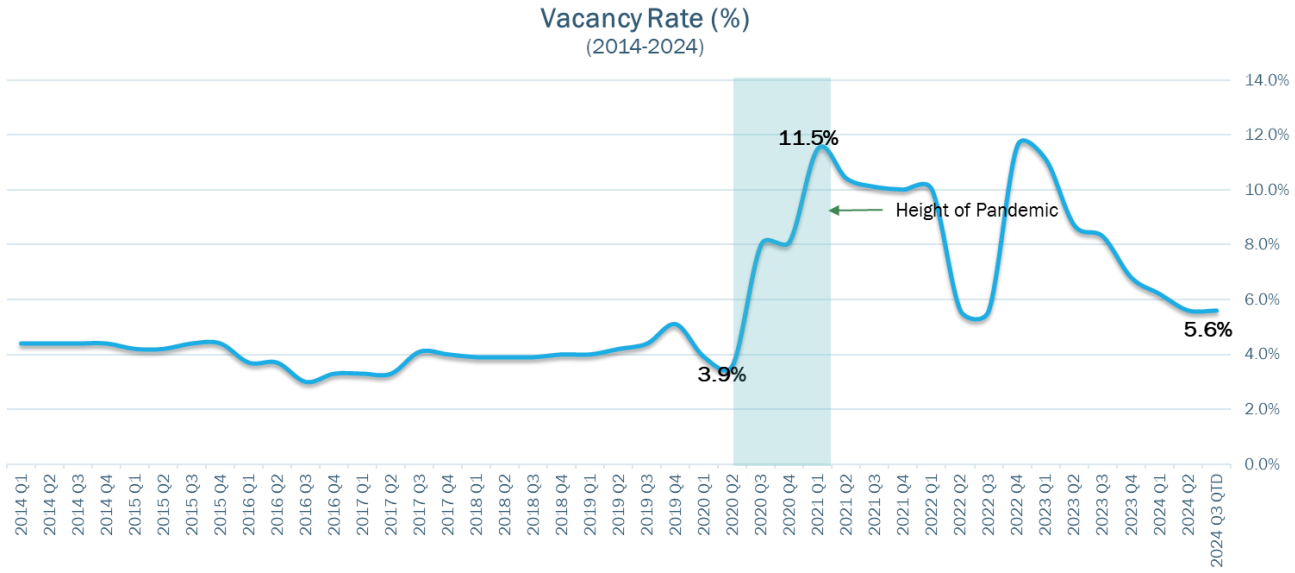




Source: Costar

Industrial Performance

Vacancy rates in the Walla Walla region are currently slightly above average at 5.6%. However, this is a significant improvement from the pandemic peak of 11.5%. Before the pandemic, vacancy rates typically ranged between 3% and 4%.

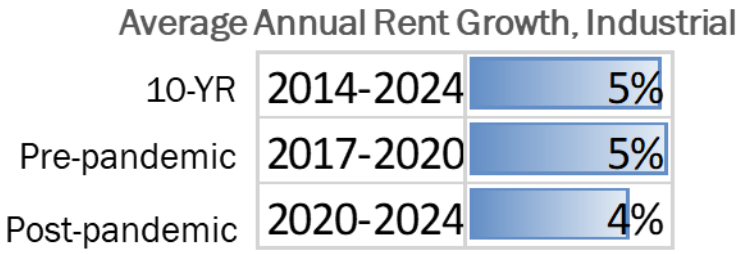


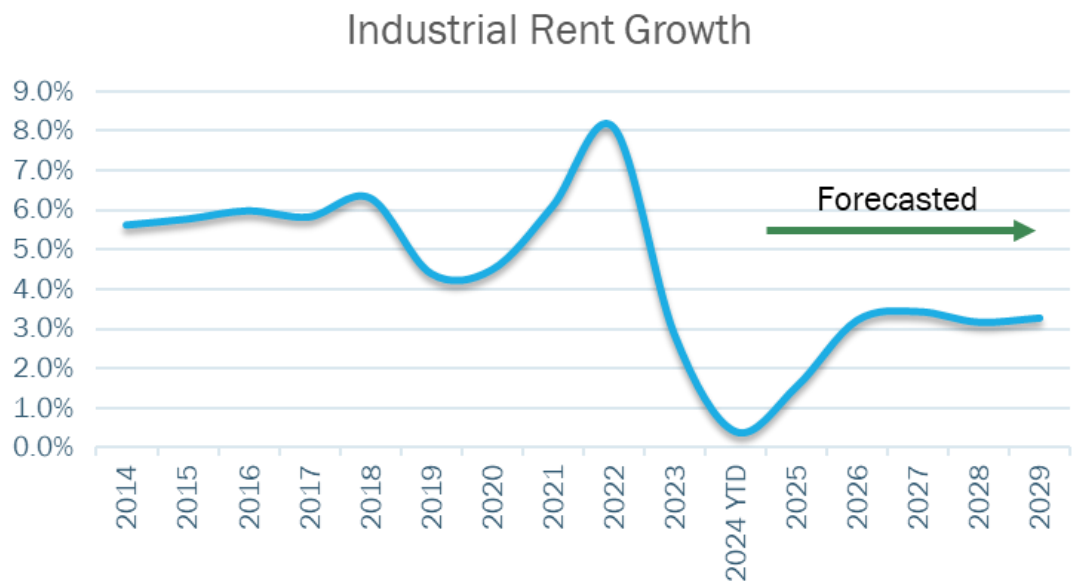
Source: Costar, Authors calculations

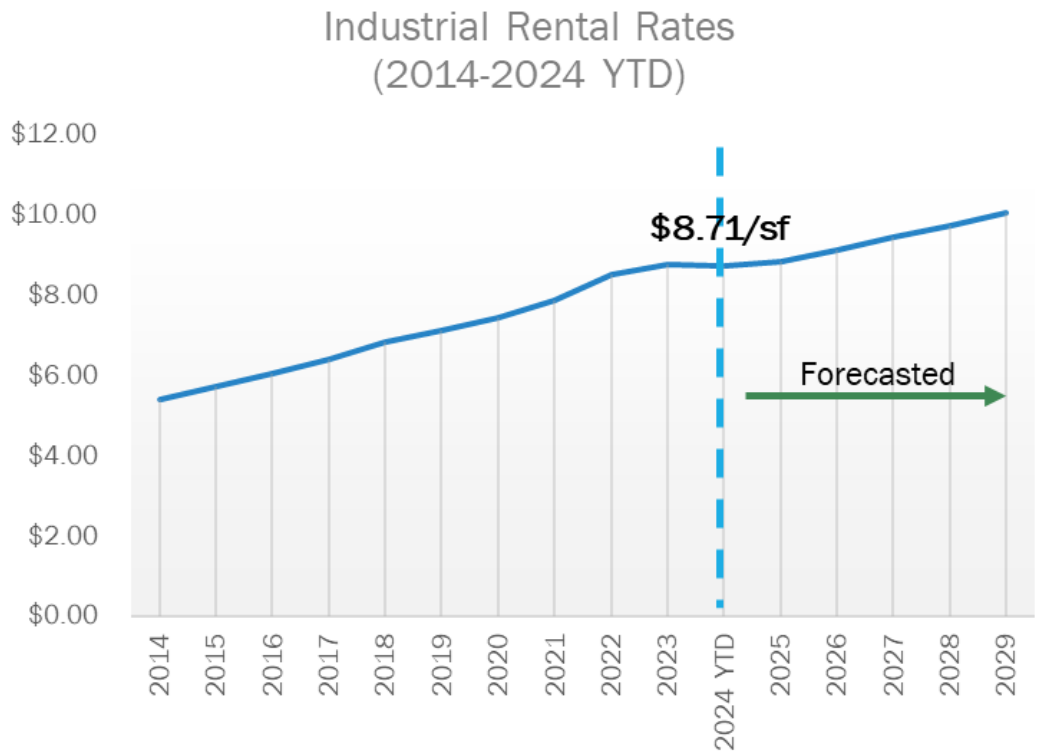
Rent growth for both industrial and office space has maintained a steady trajectory, defying the challenges posed by the pandemic.

While there was a slight deceleration in rent growth for office space during the pandemic, it managed to persevere and return to pre-pandemic levels of growth. In contrast, industrial rental rates continued their upward trend at a commendable pace.

This sustained growth, coupled with the constrained supply of new commercial inventory and low vacancy rates, underscores the demand for commercial space in Ellensburg.



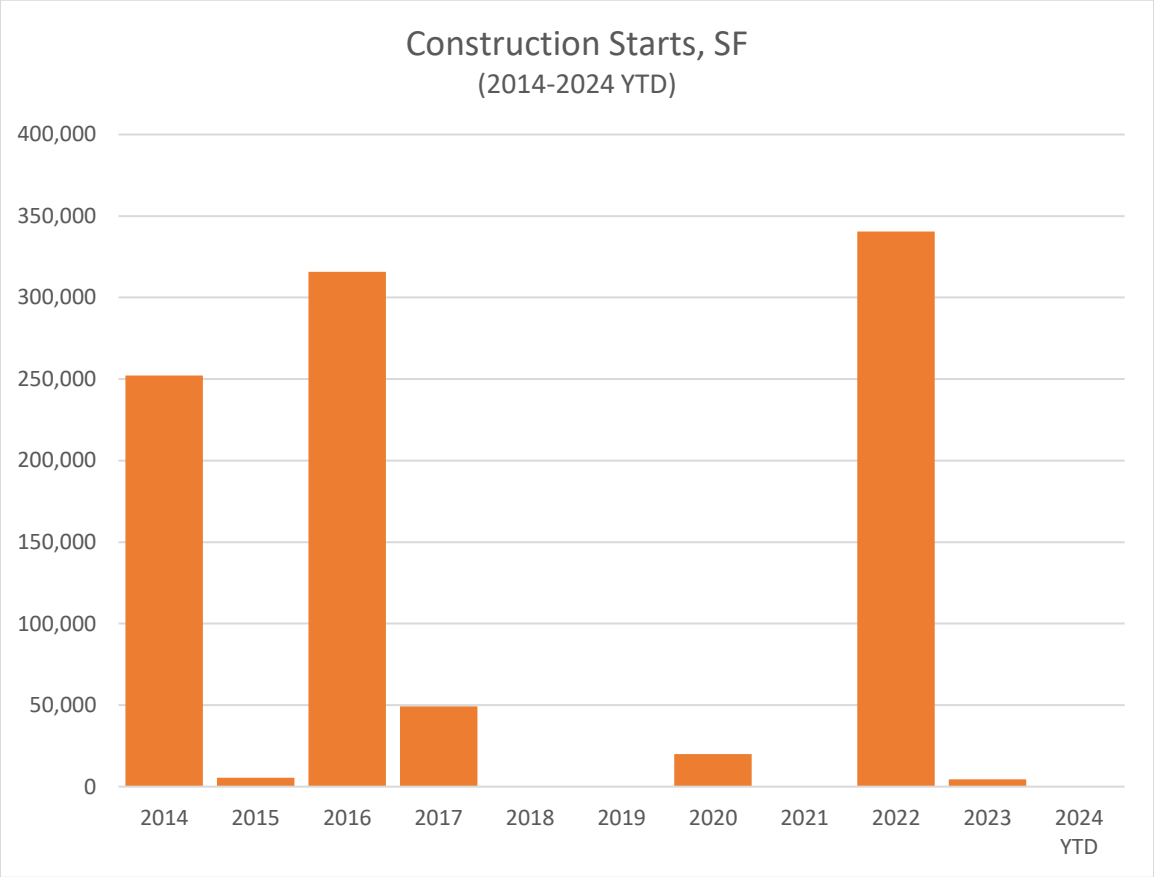




Source: Costar, Authors calculations

Industrial Pipeline

Based on information from Costar, there is 223,720 SF of industrial space under construction in the Walla Walla region. Majority of this activity started in 2022 and is anticipated to hit the market by 2025.



Source: Costar

Competing Sites

Address	City	Year Built	Building SF	Acres (Land only)	Use	Lease ($/SF)	For Sale ($/SF)
1832 Dell Ave	Walla Walla	2023	4,304		Industrial	$14.50	
1108 N 9th Ave	Walla Walla		2,700		Flex	$10.50	
102 E Poplar St	Walla Walla	1981	35,145		Flex		$85.00
2719 E Isaacs Ave	Walla Walla	2017	2,680		Industrial		$121.00
1012 N 9th Ave	Walla Walla	1980	8,633		Industrial		$93.00
Wallula Gap Business Park	Wallula	Land		1,900	Industrial		
Avery Business Park	Walla Walla	Land		12	Industrial		
Burbank Industrial Park	Burbank	Land		5	Industrial		
Burbank Business Park	Burbank	Land		112	Industrial		$4-$7/sf
Dodd Road Industrial Park	Wallula	Land		54	Industrial		
Melrose Industrial Park	Walla Walla	Land		37	Industrial		
Stearns Kelly Property	Wallula	Land		105	Industrial		
Waitsburg Business Park	Waitsburg	Land		10	Industrial		$1.50/sf
Walla Walla Regional Airport Business Park	Walla Walla	Land		832	Industrial		
Rock Hill Industrial Park	Dayton	Land		3.8	Industrial		

Industrial Market Potential

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

Industry and Supply Chain Gap Analysis

An industry and supply chain gap analysis was conducted to determine the businesses and industry sectors that offer the most potential for growth around the region. This data was then ground-truthed with interviews from major businesses in the area, potential businesses, and other industry experts and stakeholders.

This analysis was assessed by four critical factors and conducted at the MSA level to establish a more accurate depiction of the industry landscape:

- Number of Jobs
- Job Growth
- Job Concentration or Location Quotient (LQ)
- Total Demand

Industries with strong demand, a high LQ, and robust job growth were classified as "Thriving & Potential for Growth" signifying their resilient and important presence in the market.

Industries showing robust demand and considerable job growth were classified under the "Emerging Industries" category. This designation suggests significant potential for expansion due to a lower employment concentration.

Additionally, industries with notable demand and a substantial number of jobs in 2023, surpassing the 1,000 mark but showing job loss, were deemed "*Important and Requiring Attention*," warranting focused attention to ensure sustained growth and economic impact.

This systematic evaluation provides an understanding of each industry's standing, allowing for targeted strategies that align with their unique characteristics and potential for development.

Applying the above methodology, the following industries can be strategically categorized and prioritized based on their supply chain dynamics. This tailored approach ensures that economic development efforts are directed towards industries with specific characteristics and growth potential, fostering a strategic alignment between the regional economy and targeted sectors.

Industry Health Check

Agriculture and food processing remain central to the local economy, with crop production, food manufacturing, and beverage product manufacturing serving as core industries. The presence of these sectors suggests strong opportunities for value-added agriculture, food processing, and supply chain expansions such as packaging, cold storage, and distribution. Additionally, the region's healthcare sector, led by hospitals and social assistance, indicates an ongoing demand for medical services, elder care, and workforce training in healthcare-related fields. Retail and trade are also significant, with merchant wholesalers (nondurable goods) and sporting goods and hobby retailers playing a role in the local economy, pointing to potential growth in specialty retail and recreational markets.

To capitalize on these strengths, strategic investments should focus on targeted food and beverage processing infrastructure, support for healthcare workforce development, and logistics and wholesale distribution enhancements. Expanding retail and recreation offerings could further stimulate economic activity, particularly in outdoor and lifestyle industries.

Several industries are gaining traction in College Place, indicating new opportunities in construction, healthcare, professional services, and logistics. The construction sector, including building material supply dealers, specialty trade contractors, and construction of buildings, reflects increased demand for residential and commercial development. This growth underscores the need for real estate investment, workforce training in skilled trades, and green building technologies.

The expansion of ambulatory healthcare services points to a growing need for urgent care facilities, specialized outpatient clinics, and home health services, while repair and maintenance services highlight demand for auto repair, equipment servicing, and facility management. The rise of professional, scientific, and technical services, including computer systems design, engineering, custom programming, and R&D, suggests an increasing focus on technology-driven economic diversification. Encouraging the growth of tech startups, cybersecurity firms, and engineering consultancies could strengthen the region's innovation ecosystem.

Additionally, insurance carriers and durable goods wholesalers signal potential for expanded finance and logistics services, supporting regional supply chains and commercial trade. Investing in warehouse and distribution infrastructure could further position College Place as a logistics hub, particularly for durable goods related to agriculture, construction, and manufacturing.

Industry Health Check (3-digit NAICS Codes)

Important but Declining

- Machinery Manufacturing (333)
- Support activities for Ag and Forestry (115)
- **Animal Production (112)**
- Nursing Care Facilities (623)

Important & Growth Industries

- Crop Production (111)
- **Food Manufacturing (311)**
- Beverage Product Manufacturing (312)
- Hospitals (622)
- Social Assistance (624)
- **Merchant Wholesalers (nondurable) (424)**
- Sporting Goods, Hobby Retailers (459)

Weak and Declining

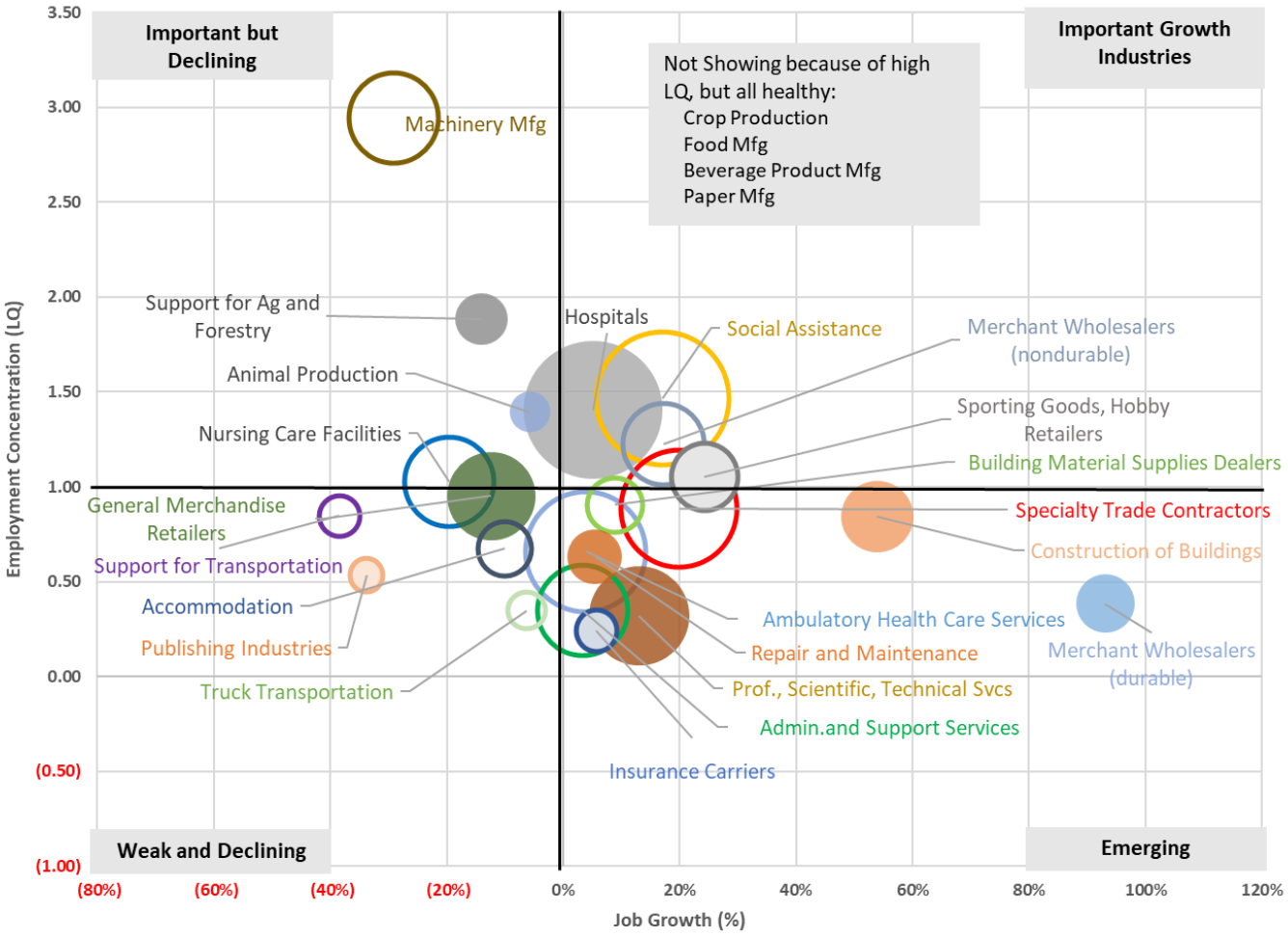
- General Merchandise Retailers (455)
- Support for Transportation (488)
- Accommodation (721)
- Publishing Industries (513)
- **Truck Transportation (484)**

Emerging

- Building Material Supplies Dealers (444)
- Specialty Trade Contractors (238)
- Construction of Buildings (236)
- Ambulatory Health Care Services (621)
- Repair and Maintenance (811)
- **Professional, Scientific, and Technical Services** (computer systems design services, engineering services, custom computer programming, R&D) (541)
- **Administrative and Support Services (561)**
- Insurance Carriers (524)
- **Merchant Wholesalers (durable) (423)**

*Industries highlighted in **bold** represent opportunities due to unmet higher demand within the region.

Industry Health Check



Additionally, the following key sectors are driving the success of major employers in the region. By leveraging these industries, there is an opportunity to strengthen and expand local supply chains, attract complementary businesses, and enhance regional competitiveness through targeted infrastructure investments and workforce development.

Animal Production
Support Activities for Animal Production
Food Manufacturing
Paperboard Manufacturing
Pesticide and Other Agricultural Chemical Manufacturing
Plastics Product Manufacturing
Glass Product Manufacturing Made of Purchased Glass
Packaging Machinery Manufacturing
Surgical and Medical Instrument Manufacturing
Industrial Machinery and Equipment Merchant Wholesalers
Drugs and Druggists' Sundries Merchant Wholesalers
Other Chemical and Allied Products Merchant Wholesalers
General Line Grocery Merchant Wholesalers
Wine and Distilled Alcoholic Beverage Merchant Wholesalers
Truck Transportation
General Warehousing and Storage
Software Publishers
Media Streaming Distribution Services
Data Processing, Hosting, and Related Services
Custom Computer Programming Services
Research and Development (including Biotechnology)

Potential Uses

Following the industry and supply chain gap analysis, we conducted interviews with local and regional businesses, higher education institutions, and key stakeholders to gather input on potential uses and validate the summarized data.

Based on the above analysis and insights gathered from interviews, the following uses were identified as having the greatest potential for the 233-acre site.

- Wholesalers
- Truck Transportation
- Manufacturing
    - Food
    - Glass
    - Packaging
- Aerospace-related (limited based on runway length to smaller, single-engine planes and larger general aviation aircraft, regional jets, and some small commercial aircraft)
    - Aircraft inspection services
    - Aircraft maintenance and repairs
    - Aircraft testing
    - Other aircraft parts & equipment manufacturing
    - Aircraft engine & engine parts manufacturing
    - Labs and Testing Facility (space, drones, etc.)
    - Emerging Technologies (SAF, hydrogen, etc.)
    - Advanced Air Mobility
- R&D or Professional & Technical Services
- Ag Tech: facilitate businesses and startups in testing new ideas related to agricultural logistics directly on-site, in collaboration with growers, shippers, warehouses, customers, and other relevant stakeholders.
- Logistics Hub: alleviate congestion from ports of Seattle and Tacoma
    - Intermodal transfer facility
    - Cross-dock

Site Building Capacity

The following potential buildout scenario was estimated based on the potential uses identified in the analysis above, combined with industry standards for land requirements for different types of industrial facilities, focusing on site usage, building size, and ground coverage ratios. For each industry, the data outlines the percentage of the site utilized, the typical building square footage, and the corresponding potential number of buildings that could be accommodated on a given site. The total acreage potential across all industries is roughly 28 acres, with an average of 4 acres per building.

Use	% of Site	Ground Coverage Ratio	Typical Building SF (industry standard)	Potential Number of Buildings	Acres per Bldg	Typical Range (small to medium)
Wholesalers	25%	50%	50,000	6.7	4.6	2-5 acres
Truck Transportation	15%	30%	25,000	2.9	6.4	2-5 acres
Manufacturing	20%	50%	50,000	5.3	4.6	2-5 acres
Food Processing	15%	40%	50,000	2.6	7.2	2-5 acres
Lab & Testing Facilities	10%	30%	15,000	3.2	3.8	0.5-2 acres
R&D	15%	30%	10,000	7.2	2.6	0.5-2 acres
Total	100%			28	4	

Impacts

Economic impact analyses are used to estimate the overall economic activity, including spill-over and multiplier impacts, which occurs as a result of a particular business, development or event.

The economic activity related to the Martin Airfield site is the millions of dollars of goods and services purchased from local vendors and the wages and benefits paid to local workers. This initial injection of funds circulates to the business owners and employees that supply the materials, goods and services needed for the development. These contractors, businesses and households continue the economic ripple effect by hiring workers and buying goods and services to facilitate their business.

This analysis breaks down the overall project based on the results from the industry analysis and interviews. The project site layout will be further vetted by JUB Engineers based on infrastructure needs and requirements.

Once the development is completed and occupied, commercial activity and new residential households will spend millions of dollars annually in the course of their daily activities. This recirculation of the original expenditures multiplies their impact through these indirect and induced effects.

The extent to which the initial expenditures multiply is estimated using economic models that depict the relationships between industries and firms and their employees. These models are built upon expenditure patterns that are reported to the U.S. Bureau of Labor Statistics, the U.S. Census Bureau and the Bureau of Economic Analysis. Data is regionalized so that it reflects and incorporates local conditions such as average wages, expenditure patterns and resource availability and costs.

The multipliers used in this analysis were generated by IMPLAN in coordination with the U.S. Bureau of Economic Analysis' RIMS II multipliers. Where appropriate, conservative estimates were used.

To further delineate, below are brief definitions of the three typical types of impacts.

> ***Direct impacts***: derive directly from an activity or event (first round supply chain)
>
> ***Indirect impacts***: generated as a result of business-to-business transactions (second tier supply chain)
>
> ***Induced impacts***: generated as a result of consumer-to-business transactions (a result from consumer spending)

Direct impacts are those economic impacts that occur as a consequence of direct activity and employment provided by the businesses that support the area, other businesses and government agencies that provide a range of related support services.

Indirect impacts are generated as a result of business-to-business transactions and induced impacts are a result of consumer-to-business transactions.

The economic impact results should be interpreted as those that are *attributable* to the proposed development at the subject site rather than assuming the new development will *generate* such new activities.

Given the desirable industries that have the potential of fulfilling existing business supply chain needs and interviews from industry experts, there is potential for several different users at this site. The impacts summarized below are indicative of different users in the identified industries, as outlined in the section above. The median wage for proposed jobs in these industries is $40.36 per hour in Walla Walla County, driven upward by manufacturing, lab and R&D positions. This is **72% higher than the CERB median hourly wage** of $23.04 for the County. Truck transportation and warehousing average $30.56 per hour, still above the median hourly wage for the County.

The 687 direct jobs estimated to be created at full build-out is expected to increase the labor force in Walla Walla County—assuming that some workers will reside in Walla Walla County. A small portion will most likely reside outside the area and, therefore, positively impacting their labor force numbers as well.

Impact on Jobs						
Impact on Jobs	Buildout Scenario					Total
	MFG	Truck Transp.	Wholesalers	Lab & Testing Facilities	R&D	
TOTAL JOBS	494	33	239	124	228	1,118
Direct	317	23	107	96	144	687
Indirect + Induced	177	10	132	28	84	430
SUBTOTAL	***494***	***33***	***239***	***124***	***228***	***1,118***

Source: Author's calculations using multipliers from IMPLAN; rounds to nearest thousand

Table 1. Labor Force Impacts as a result of Jobs Directly Created (687 new direct jobs)

Walla Walla County	Current	Impact from Direct Jobs	Percent Change
Labor Force	27,255	28,373	4.1%
Unemployed	1,357	239	-82.4%

[1]assuming that people that fill these jobs will reside in Walla Walla County (labor force data is based on "place of residence" and not place of work). Based on the current 5.0% unemployment rate (Jan 2025)
Source: Author's calculations based on BLS data

Conclusion

The industrial market potential in College Place is shaped by both established industries and emerging sectors, presenting significant opportunities for economic development. The region's foundation in agriculture, food manufacturing, healthcare, and retail trade positions it for continued growth, while construction, technical services, and logistics are emerging as key drivers of future expansion.

To support these emerging industries, incentives and policy strategies should focus on workforce development, business incubation, and infrastructure investment. Strengthening construction and trade workforce training programs can address the rising demand for skilled labor. Tech and business services growth could be encouraged through business incubators, coworking spaces, and startup funding for IT and cybersecurity firms. Expanding healthcare services and insurance offerings will be crucial in meeting the needs of a growing population. Finally, the development of logistics and wholesale trade infrastructure could enhance College Place's role as a regional distribution center.

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 City track the metrics set forth, and required by CERB, to determine if the desired outcomes are achieved and to help guide future development projects.

Overall, College Place is well-positioned for economic expansion through a combination of industrial diversification, strategic investments, and workforce development initiatives. By leveraging its strong agricultural base, growing healthcare sector, and emerging technical and construction industries, the region can sustain long-term economic growth and resilience.

Appendix 6

Detailed Cost Estimates

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Roads**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$176,000
2.00	**Traffic Control**			5.0%	$110,000
3.00	Crushed Surface Base Course	6,121	Tons	$35	$214,235
4.00	Crushed Surface Top Course	5,226	Tons	$35	$182,910
5.00	HMA CL 1/2" PG 64-28	3,983	Tons	$150	$597,450
6.00	Cement Conc. Traffic Curb and Gutter	8,138	LF	$25	$203,450
7.00	Cement Conc. Sidewalk	5,424	SY	$60	$325,440
8.00	Streetlights (includes wiring, J-Boxes, etc.)	27	EA	$7,500	$202,500
9.00	Street Trees	136	EA	$500	$68,000
10.00	Irrigation	1	LS	$100,000	$100,000
11.00	Stream Crossing - Does Not Include Row Acquisition For House	1	LS	$250,000	$250,000
12.00	Paint & Signage	1	LS	$50,000	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 2,480,000**
	Contingency [1]				**$ 744,000**
	City of College Place Sales Tax (8.8%)				**$ 284,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 877,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 4,385,000**

J-U-B ENGINEERS, INC.
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3 Costs are in 2025 dollars and should be inflated appropriately to the mid-point of construction for budgeting purposes. No easement acquisition or legal costs are included.

ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Earthwork**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$22,000
2.00	**Traffic Control**			5.0%	$14,000
3.00	Earthwork, Grading Site	8,000	CY	$30	$240,000
4.00	Clearing and Grubbiong	5	ACRE	$5,000	$25,000
5.00	Asphalt Pavement Restoration		SY	$70	$0
6.00	Hydroseeding	2	ACRE	$5,000	$10,000
7.00	Silt Fence		LF	$5	$0
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 311,000**
	Contingency [1]				**$ 93,000**
	City of College Place Sales Tax (8.8%)				**$ 36,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 110,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 550,000**

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	2/11/2025 30-24-031
ITEM:	Sewer Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$302,000
2.00	**Construction Traffic Control**			0.0%	$0
3.00	**Gravity Sewer Pipe**				
3.01	4" PVC Gravity Sewer Service Lateral	1,165	LF	$27	$31,455
3.02	8" PVC Gravity Sewer Service Lateral		LF	$41	$0
3.03	6" PVC Gravity Sewer Pipe		LF	$40	$0
3.04	8" PVC Gravity Sewer Pipe	7,400	LF	$47	$347,800
3.05	10" PVC Gravity Sewer Pipe		LF	$56	$0
3.06	12" PVC Gravity Sewer Pipe		LF	$67	$0
3.07	16" PVC Gravity Sewer Pipe		LF	$81	$0
3.08	18" PVC Gravity Sewer Pipe		LF	$98	$0
3.09	21" PVC Gravity Sewer Pipe		LF	$127	$0
3.10	24" PVC Gravity Sewer Pipe		LF	$152	$0
3.11	30" PVC Gravity Sewer Pipe		LF	$188	$0
3.12	36" PVC Gravity Sewer Pipe		LF	$238	$0
3.13	Bedding and Foundation Material	8,565	LF	$15	$128,475
3.14	Sewer Service Line Connection	29	EA	$500	$14,500
4.00	**Gravity Trench Excavation/Backfill**				
4.01	4-10 ft.	3,450	LF	$43	$148,350
4.02	10-16 ft.	5,115	LF	$74	$378,510
4.03	16-20 ft.		LF	$104	$0
4.04	20-24 ft.		LF	$135	$0
4.05	24-28 ft.		LF	$168	$0
4.06	28-30 ft.		LF	$207	$0
4.07	Import Backfill and Foundation Material	16,597	CY	$40	$663,880
5.00	**Surface Repair**				
5.01	Hydroseed		LF	$15	$0
5.02	Natural Ground	8,565	LF	$25	$214,125
5.03	Gravel Roadway		LF	$30	$0
5.04	Asphalt - Trench Patch Width per City Standards (Required for 4-16' Depth Sewer)		LF	$39	$0
5.05	Asphalt - 1/2 Street Width per City Standards (Required for 16-20' Depth Sewer)		LF	$160	$0
5.06	Asphalt - Full Street Width per City Standards (Required for 20-30' Depth Sewer)		LF	$319	$0
6.00	**Manholes**				
6.01	48" Manholes, 4-10 ft.	10	EA	$5,400	$54,000
6.02	48" Manholes, 10-16 ft.	14	EA	$5,900	$82,600
6.03	48" Manholes, 16-20 ft.		EA	$6,400	$0
6.04	60" Manholes, 20-24 ft.		EA	$12,650	$0
6.05	60" Manholes, 24-28 ft.		EA	$13,400	$0
6.06	60" Manholes, 28-30 ft.		EA	$13,750	$0
7.00	**Lift Stations**				
7.01	Site Work	1	LS	$154,000	$154,000
7.02	Yard Piping	1	LS	$134,000	$134,000
7.03	Lift Station - Structural	1	LS	$158,000	$158,000
7.04	Lift Station - Mechanical	1	LS	$716,000	$716,000
7.05	Lift Station - Electrical	1	LS	$452,000	$452,000
8.00	**Project Specific Considerations**				
8.01	Dewatering	1	LS	$8,000	$8,000
9.00	**Miscellaneous Other**				
9.01	Bypass Pumping			0.0%	$0
9.02	Bonding / Admin			2.5%	$92,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$**	**4,080,000**
Contingency [1]	**$**	**1,224,000**
City of College Place Sales Tax (8.8%)	**$**	**467,000**
Planning, Engineering, & Administrative Costs [2]	**$**	**1,443,000**
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$**	**7,214,000**

J-U-B ENGINEERS, INC.
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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/6/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	Water Infrastructure		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8%	$380,000
2.00	**Construction Survey**	1	LS	$10,000	$10,000
3.00	**Erosion Control and Water Pollution Prevention**	1	LS	$10,000	$10,000
4.00	**Materials Testing**	1	LS	$5,000	$5,000
5.00	**Project Temporary Traffic Control**	1	LS	$5,000	$5,000
6.00	**Shoring and Trench Safety Systems**	1	LS	$2,500	$2,500
7.00	**Surface Repair**				
7.01	Removing Asphalt Concrete Pavement	625	SY	$5	$3,125
7.02	HMA Sawcut and Seal	4,070	LF	$2	$8,140
7.03	HMA Restoration	625	SY	$47	$29,375
8.00	**Water Pipe and Appurtenances**				
8.01	Connect to Existing Water Main 12 In. Diam.	2	EA	$5,000	$10,000
8.02	DI Pipe for Water Main 6 In. Diam.	1,500	LF	$90	$135,000
8.03	DI Pipe for Water Main 14 In. Diam.	830	LF	$186	$154,380
8.04	DI Pipe for Water Main 16 In. Diam.	14,395	LF	$221	$3,181,295
8.05	DI Tee 14 In. x 6 In.	3	EA	$2,300	$6,900
8.06	DI Tee 16 In. x 6 In.	27	EA	$3,500	$94,500
8.07	DI Tee 16 In. x 12 In.	1	EA	$4,600	$4,600
8.08	DI Tee 16 In. x 14 In.	3	EA	$4,800	$14,400
8.09	DI Tee 16 In.	1	EA	$11,500	$11,500
8.10	DI Cross 16" In.	1	EA	$4,400	$4,400
8.11	DI Reducer 16 In. x 12 In.	1	EA	$3,700	$3,700
8.12	DI 45° Bend 16 In.	4	EA	$3,100	$12,400
8.13	DI Cap 12 In.	2	EA	$710	$1,420
8.14	DI Cap 14 In.	3	EA	$890	$2,670
8.15	DI Cap 16 In.	3	EA	$1,550	$4,650
8.16	Blowoff Assembly 2 In.	8	EA	$2,500	$20,000
8.17	Butterfly Valve 12 In.	2	EA	$4,000	$8,000
8.18	Butterfly Valve 14 In.	3	EA	$5,400	$16,200
8.19	Butterfly Valve 16 In.	34	EA	$6,100	$209,810
8.20	Comb. Air Release/Air Vacuum Valve Assembly 2 In.	2	EA	$11,000	$22,000
8.21	Hydrant Assembly	30	EA	$6,500	$195,000
8.22	Bollard	60	EA	$1,000	$60,000
8.23	Service Connection 2 In. Diam.	29	EA	$3,400	$98,600
8.24	Water Meter 2 In. Diam.	29	EA	$6,500	$188,500
9.00	**Project Specific Considerations**				
9.01	Doan Creek Crossing	1	LS	$100,000	$100,000
10.00	**Miscellaneous Other**				
10.01	As-Built Drawings	1	LS	$2,500	$2,500
10.02	Bonding / Admin			2.5%	$116,000

ESTIMATED CONSTRUCTION SUBTOTAL	**$5,132,000**
Contingency [1]	$1,540,000
City of College Place Sales Tax (8.8%)	$588,000
Planning, Engineering, & Administrative Costs [2]	$ 1,815,000
TOTAL PROBABLE COST IN 2025 DOLLARS [3]	**$9,075,000**

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place	**DATE:**	3/18/2025
	Martin Airfield Master Plan	**J-U-B PROJ. NO.:**	30-24-031
ITEM:	**Storm Drain**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$31,000
2.00	**Traffic Control**			5.0%	$20,000
3.00	Catch Basin Type 1		EA	$2,500	$0
4.00	Solid Wall PVC Storm Sewer Pipe 12 In. Diam.	500	LF	$85	$42,500
5.00	Stormwater Treatment Device (CDS or Aquaswirl)		EA		$0
6.00	Swales	6,000	LF	$50	$300,000
7.00	Pond excavation, mulch, seeding	1,000	CY	$50	$50,000
	ESTIMATED CONSTRUCTION SUBTOTAL				**$ 444,000**
	Contingency [1]				**$ 133,000**
	City of College Place Sales Tax (8.8%)				**$ 51,000**
	Planning, Engineering, & Administrative Costs [2]				**$ 157,000**
	TOTAL PROBABLE COST IN 2025 DOLLARS[3]				**$ 785,000**

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ENGINEER'S OPINION OF PROBABLE COST

PROJECT:	City of College Place Martin Airfield Master Plan	**DATE:** **J-U-B PROJ. NO.:**	3/18/2025 30-24-031
ITEM:	**Utilities**		

ITEM NO.	DESCRIPTION	SCHEDULE OF VALUES			
		QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1.00	**Mobilization**			8.0%	$88,000
2.00	**Traffic Control**			5.0%	$55,000
	Electrical				$0
3.00	Primary Electrical Vaults	15	EA	$10,000	$150,000
4.00	Primary Electrical Conduit & Wire	8,500	LF	$40	$340,000
5.00	Transformer for Primary Service	0	EA	$100,000	$0
	Fiber Optic				$0
6.00	Fiber Optic	1.6	MI	$100,000	$160,000
7.00	Fiber Service Vaults	29	EA	$2,000	$58,000
	Gas				$0
8.00	4" Natural Gas Main	12,000	LF	$20	$240,000
9.00	Natural Gas Regulator	1	EA	$150,000	$150,000
				ESTIMATED CONSTRUCTION SUBTOTAL	**$ 1,241,000**
				Contingency [1]	**$ 372,000**
				City of College Place Sales Tax (8.8%)	**$ 142,000**
				Planning, Engineering, & Administrative Costs [2]	**$ 439,000**
				TOTAL PROBABLE COST IN 2025 DOLLARS[3]	**$ 2,194,000**

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CP
COLLEGE PLACE
WALLA WALLA VALLEY

Folklorico Dancers!

Facepaint!

Fire Truck, Police Car, and Big Rig Tours!

Spring

BLOCK PARTY

COLLEGE PLACE, WA

Inflatables!

FREE FAMILY FUN | FOOD TRUCKS
LIVE ENTERTAINMENT | VENDORS

SUNDAY MAY 18TH, 2025

1:00-6:00PM

S. COLLEGE AVENUE

4TH ST. TO WHITMAN DR.

COLLEGE PLACE
MARKET
IN THE PARK

CITY OF COLLEGE PLACE

MARKET IN THE PARK

WE ACCEPT

- SNAP-EBT
- SNAP MARKET MATCH
- WIC FMNP
- SENIOR FMNP

29
MAY, 2025

MARKET IN THE PARK

THURSDAYS 4-7 PM
EXCLUDES 6/19, ENDS 9/25

LIONS PARK -
SE 8TH & LARCH AVE

(509) 394-8511 RBEARDEMPHL@CPWA.US

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WALLA WALLA VALLEY

MOVIES @ the Park

All Movies Start at Sunset

College Place
FREEDOM
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Columbia REA Fireworks Show!
*Vendors *Food Trucks *Live Music
Free Admission!
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COLLEGE PLACE
WALLA WALLA VALLEY
College Place High School Campus

City of College Place & Walla Walla
CoWalla Creative District

ARTFUL Celebration

YOUTH & ADULT ART EXHIBITIONS

ART ACTIVITIES FOR ALL AGES

LIVE PERFORMANCES

WINE/BEER GARDEN

FOOD TRUCKS

ART VENDORS

May 29th, 2025 @ 4-7PM

Sponsored By

CP COLLEGE PLACE WALLA WALLA VALLEY

City of Walla Walla

Pacific Power Foundation

LIONS' PARK COLLEGE PLACE

FREE!

ACTIVITIES!

FOOD FOR PURCHASE!

COLLEGE PLACE

TRUNK OR TREAT

FRIDAY, OCTOBER 31ST

3:00PM-6:00PM

FREE!

SANTA MEET-N-GREET

CP
COLLEGE PLACE
WALLA WALLA VALLEY

TREE LIGHTING CEREMONY WITH THE MAYOR

ACTIVITIES!

GINGERBREAD HOUSE DECORATING CONTEST

CAROLERS!

Winterfest

& LIGHTED PARADE!

THURSDAY, DECEMBER 4, 2025 FROM 6-8PM

HOLIDAY BAZAAR * FOOD & HOT DRINKS

Spring
BLOCK
PARTY
COLLEGE PLACE, WA
CP
COLLEGE PLACE
WALLA WALLA VALLEY

COME SIT WITH US!

DOWNTOWN
COLLEGE PLACE
ASSOCIATION

CP
COLLEGE PLACE
WALLA WALLA VALLEY

College Place
FREEDOM
Festival
CP
COLLEGE PLACE
WALLA WALLA VALLEY

COLLEGE PLACE

TRUNK OR TREAT

HALLOWEEN

CP
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HOME OF THE

HAWKS

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LIONS PARK
@ SUNSET

MOVIES
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THURSDAYS @ LIONS PARK

COLLEGE PLACE MARKET IN THE PARK

CP
COLLEGE PLACE
WALLA WALLA VALLEY

Winterfest

&

LIGHTED PARADE

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COLLEGE PLACE
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COLLEGE PLACE
MARKET
IN THE PARK

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