



**City Council Workshop Agenda**  
**Monday, December 15, 2025, 4:30 PM**  
**Council Chambers, 616 NE 4th AVE**

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*NOTE: The City welcomes public meeting citizen participation. TTY Relay Service: 711. In compliance with the ADA, if you need special assistance to participate in a meeting, contact the City Clerk's office at (360) 834-6864, 72 hours prior to the meeting so reasonable accommodations can be made (28 CFR 35.102-35.104 ADA Title 1)*

**To observe the meeting** (no public comment ability)

- go to <https://vimeo.com/event/5576444>

**To participate in the meeting** (able to public comment)

- go to <https://us06web.zoom.us/j/88548119347>

(public comments may be submitted to [publiccomments@cityofcamas.us](mailto:publiccomments@cityofcamas.us))

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**CALL TO ORDER**

**ROLL CALL**

**PUBLIC COMMENTS**

**WORKSHOP TOPICS**

1. [Columbia River Economic Development Council \(CREDC\) Report to Council](#)  
[Presenter: Eric Holmes, Sarah Laughlin and Ilana Cour](#)  
[Time Estimate: 15 minutes](#)
2. [Professional Services Agreement Amendment General Sewer Plan Update](#)  
[Presenter: Rob Charles, Utilities Manager](#)  
[Time Estimate: 10 minutes](#)
3. [Professional Services Agreement Amendment Water System Plan Update](#)  
[Presenter: Rob Charles, Utilities Manager](#)  
[Time Estimate: 10 minutes](#)
4. [Our Downtown Camas 2045 – Project Update](#)  
[Presenter: Alan Peters, Community Development Director](#)  
[Time Estimate: 15 minutes](#)
5. [SunCal Development Agreement and Master Plan](#)  
[Presenter: Robert Maul, Planning Manager](#)  
[Time Estimate: 30 minutes](#)
6. Staff Miscellaneous Updates  
Presenter: Doug Quinn, City Administrator  
Time Estimate: 10 minutes

**PUBLIC COMMENTS**

**COUNCIL COMMENTS AND REPORTS**

**CLOSE OF MEETING**



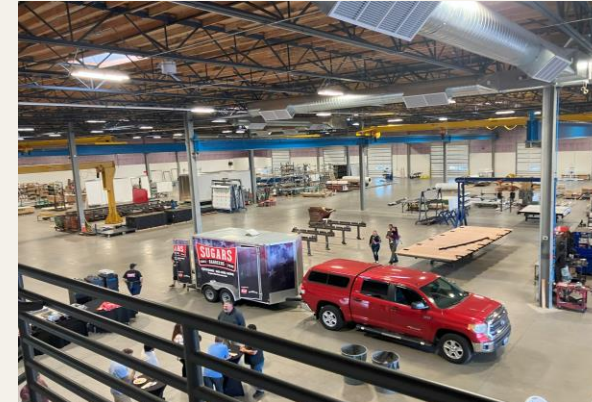
December 15, 2025

# City of Camas Council Meeting



# CREDC

Item 1.



# CREDC Impact in 2024

- CREDC helped generate \$1.68 billion in B2B activity over the last four years; Secured 3,926 jobs through 42 project wins
- Originated millions of top talent digital imprints through JustNorth brain gain initiative
- Stood up high-quality resources to build capacity for >200 public works vendors
- Stewarded the Clark County Economic Development Plan
- Delivered Objective Criteria on the Inventory of Employment/Production Supporting Land



# 2021-2024 ROI

\$34 New Business Activity  
per \$1 Invested



# 2024 Wins

## Recruitments and Expansions (9)

- 7 Recruitments (55 Currently Active)
- 2 Expansions (20 Currently Active)

\$338 million Capital Investment

445 New and Retained Jobs

343,506 Square Feet Subscribed

	CapEx	Jobs	Wins
4-Year Totals	\$1.68 billion	3,926	42



# Recent Camas Engagement





# APEX Accelerator



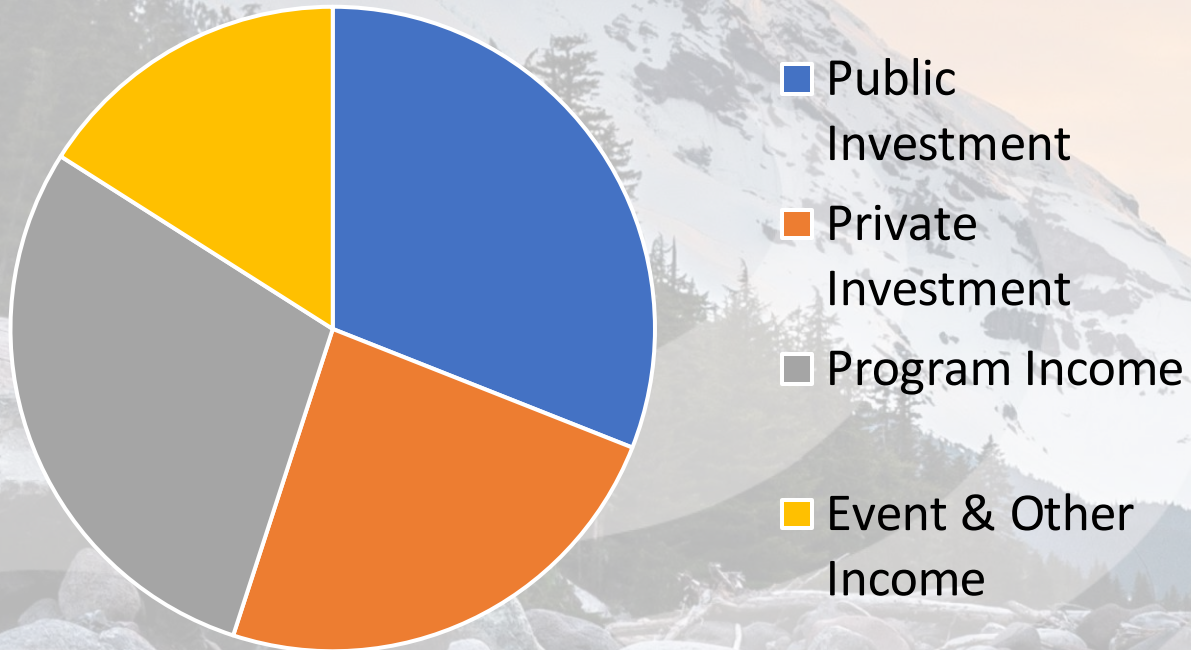
# APEX Accelerator – 2024 Impact

- **APEX Accelerator at CREDC provided personalized advising to 153 new clients and conducted 105 follow-up sessions with established businesses, totaling 312 hours of dedicated guidance.**
- **Clients served by WA APEX in Clark, Cowlitz, and Skamania counties secured 462 government contract awards, collectively valued at \$24,077,102.25.**
- **APEX hosted 19 events, attracting 641 attendees.**

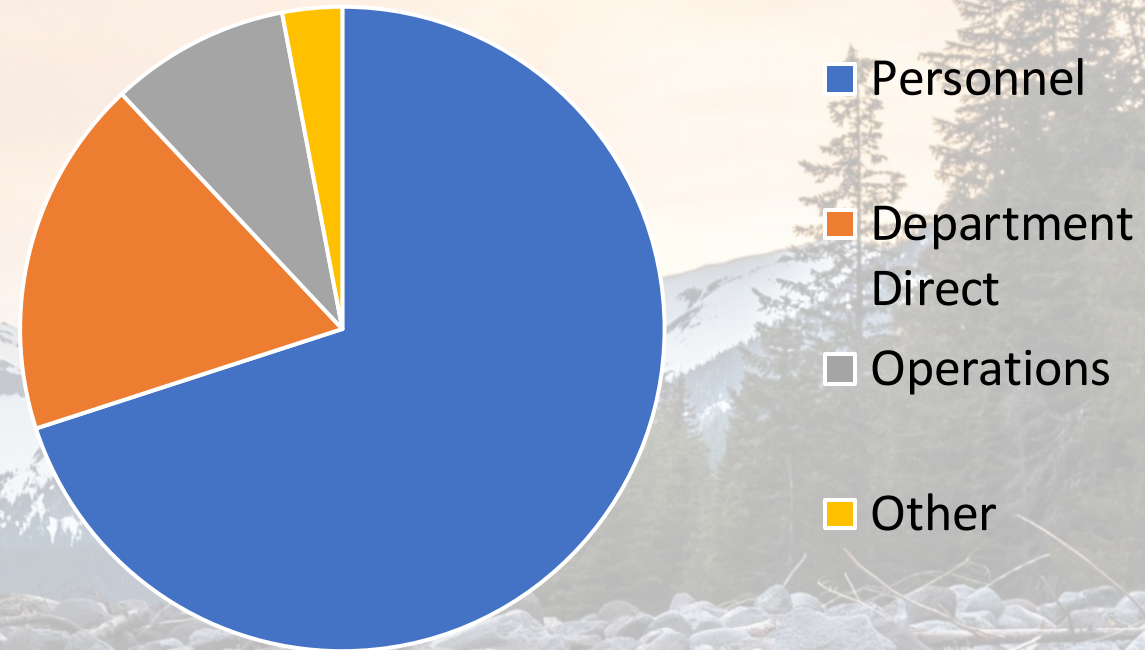


# 2024 Budget

## 2024 CREDC Total Revenue

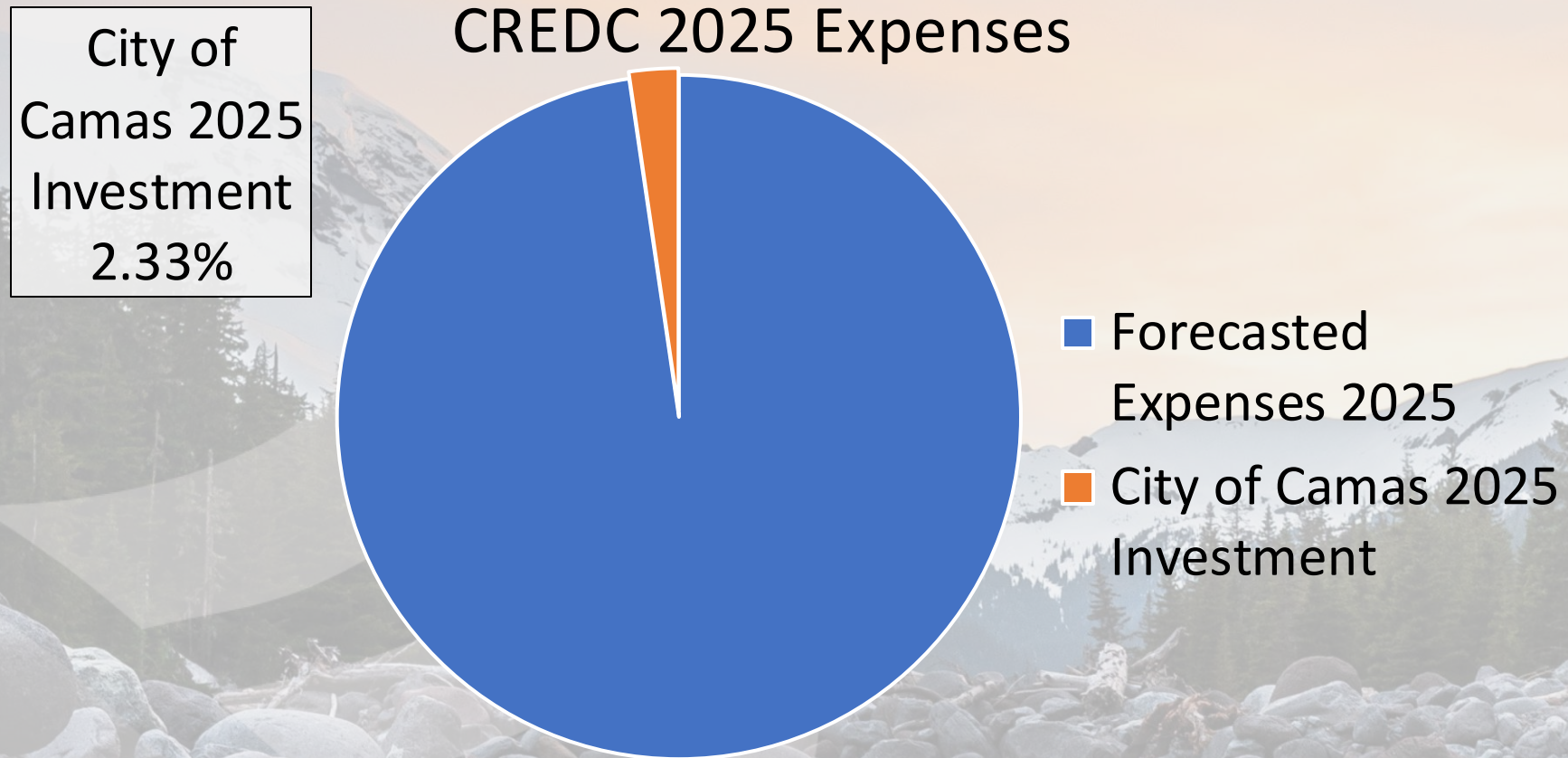


## 2024 CREDC Total Expenses





# Thank you for your investment in CREDC





# CREDC and Camas



- Collaboration
- Partnership
- Advancing Sustainable Economic Growth



## Staff Report

December 15, 2025 Council Workshop Meeting

Professional Services Agreement Amendment General Sewer Plan Update

Presenter: Rob Charles, Utilities Manager

Time Estimate: 10 minutes

Phone	Email
360.817.7003	rcharles@cityofcamas.us

**BACKGROUND:** The General Sewer Plan Update (GSPU) is a required chapter of the Comprehensive Plan Update showing that there is sufficient sewer capacity for growth demands in the City's 20 year planning period from 2026-2046. The plan models sewer lift station capacities, sewer pipe capacity and age, and reviews future growth areas for construction of new infrastructure. A separate facility plan is also required for the Waste Water Treatment Plant (WWTP) to address capacity needs at the plant. Recommendations for Capital Improvements are created for the GSPU within the planning period. A contract for Carollo was approved in November of 2024 to complete the GSPU in the amount of \$583,298.

**SUMMARY:** The following items have been identified as additional scope items needed to complete the GSPU;

- Review sewer system drawings and studies and meet with operators to define sewer basin boundaries that are not clear from GIS records. This includes Basins 10 and 11 in the southwest portion of the City, Basin 12 near Prune Hill, and future basins in North Shore. Redraw sewer basins. This effort will aid in the City's continued efforts to develop the GIS of the collection system and improve understanding of wastewater flow through the system.
- Update wastewater flow factors, future flow projections, and hydraulic model to reflect newly defined sewer basin boundaries and additional water billing information provided from the recently converted billing system.
- Identify parcels connected to the collection system using aerial imagery and water billing records.
- Check that the hydraulic model is within dry weather and wet-weather calibration parameters and update, as needed.
- Update the Wastewater Treatment Facility (WWTF) Hydraulix and Biowin models with updated future flow projections.
- All updates to the models and system analyses will be reflected in the GSP Update report deliverable.

**BENEFITS TO THE COMMUNITY:** The plan provides a roadmap for the City to build and maintain infrastructure necessary to meet growth demands over the next 20 years.

**STRATEGIC PLAN:** This project aligns with the Stewardship of City Assets from the City's Strategic Plan.

**POTENTIAL CHALLENGES:** None known.

**BUDGET IMPACT:** The cost of the amendment is \$162,667 and will be covered out of revenue from the sewer fund. There is sufficient revenue to cover this expense. The amendment will bring the total cost of the project to \$745,965.

**RECOMMENDATION:** Staff recommends this item be placed on the January 4<sup>th</sup> Regular Meeting Consent Agenda for Council's consideration.

**CITY OF CAMAS**  
**GENERAL SEWER PLAN UPDATE**  
**AMENDMENT 1 - SCOPE OF WORK**

Preliminary efforts on this project identified the need to incorporate the following services in this existing Contract. This Amendment shall become part of the Contract and provisions of the Contract apply.

The following sections are modified as indicated below.

**SCOPE OF SERVICES**

**ADD to Task 100: Project Management**

This amendment includes additional effort for project management and coordination with subconsultant associated with additional tasks presented herein. Project completion is being extended from March 31, 2026 to July 31, 2026.

**ADD to Task 400: Basis of Planning**

Additional effort for this task includes extending the future service area to include annexation areas beyond the existing Urban Growth Boundary (UGB) in alignment with the preferred UGB from the draft 2045 Comprehensive Plan. Additional flows from the annexation area were incorporated into the wastewater flow projections.

Additional effort also includes updating industrial flows and loads with data received on July 10, 2025. At the GSP Meeting No. 5 – Hydraulic Model Development and Capacity Evaluation held on October 20, 2025, additional information regarding flow routing was provided. These include changes to the hydraulic model in the following areas:

- Brady LS
- Prune Hill Park
- Neighborhood north of Leadbetter Rd LS
- Portion of the Basin STEP north of Round Lake (including Grove Field)

Additional effort for this task includes updating the hydraulic model, wastewater flow factors, wastewater flow projections, and draft Chapter 4 – Basis of Planning.

**ADD to Task 500: Existing System**

Parcels connected to the collection system were identified by reviewing aerial imagery to identify developed parcels in proximity to collection system pipelines and the use of laterals to identify connected parcels. Additional effort was needed to refine the connected parcels when new information, including excel based water billing data that could be linked geographically to parcels, was provided on July 10, 2025.

**ADD Subtask 505: Revise Draft Chapter 4 – Existing System**

The purpose of the additional subtasks to Task 500 Existing System is to revise the previously submitted draft Chapter 4 – Existing System. Comments on the revised draft Chapter will be documented in a comments log and incorporated into the City Draft Plan.

### Consultant Deliverables

- Revised Draft Chapter 4 – Existing System.

#### **ADD to Task 700 – Collection System**

Additional effort for this task is necessary to update the hydraulic model to reflect the updated understanding of the collection system provided by the City in November 2025. This includes additional effort in the following subtasks:

- Subtask 701: Updating the hydraulic model, dry weather calibration, and wet weather calibration.
- Subtask 702: Updating and running the capacity evaluation and results for the existing, 20-year, and buildout scenarios.
- Subtask 704: Updating TM 1 – Hydraulic Model Development and Calibration to reflect updated understanding of the collection system and changes in the model calibration results.
- Subtask 706: Presenting updated results to the City as part of the GSP Meeting No. 6 – Capacity Improvements.
- Subtask 707: Revising Draft Chapter 6 – Collection System to reflect updated understanding and revised model, model calibration results, and modeled deficiencies.

#### **ADD to Task 800 – Wastewater Treatment Facility**

Additional effort for this task includes updating the Wastewater Treatment Facility (WWTF) Hydraulix® model and BioWin model with the updated wastewater flow projections.

### **SCHEDULE**

- **ADD** the following:

Task	Name	Duration	Estimated Completion
100	Project Management	8 months (6 additional months)	September 2026
400	Basis of Planning	1 month	January 2026
500	Existing System	1 month	January 2026
700	Collection System	1 month	January 2026
800	Wastewater Treatment Facility	1 month	January 2026

### **BUDGET**

- **SUPPLEMENT** with the attached.

CITY OF Camas General Sewer Plan LEVEL OF EFFORT  4-Dec-25																	
TASK / DESCRIPTION	Jude Grounds	Jill Kjellsson	Sudhan Paranjape	Matt Huang	Kate Bandettini	Max Mozer	Katherine Sun	Kevin Christensen / Maggie Flynn	Varies	Total Hours	Carollo Labor Cost	SUBCONSULTANTS				PECE	TOTAL COST
	PIC	PM / Collections Lead	DPM / Treatment Lead	QA/QC	Staff Professional	Professional	Staff Professional	GIS / Graphics	DP			Rod Reardon Engineering	Total Subconsultant Cost	Total Subconsultant Markup	Total Subconsultant Cost with Markup		
														10%			
Task 100 – Project Management	3	22	16	10	0	8	0	0	6	65	\$ 16,393	\$ -	\$ -	\$ -	\$ -	\$ 1,027	\$ 17,420
101 Monthly Progress Reports and Invoices		10	6						6	22	\$ 4,962		\$ -	\$ -	\$ -	\$ 348	\$ 5,310
104 Project Management & Client Coordination	3	12	10	10		8				43	\$ 11,431		\$ -	\$ -	\$ -	\$ 679	\$ 12,110
Task 400 - Basis of Planning	0	16	15	6	0	17	67	10	4	135	\$ 27,323	\$ 1,200	\$ 1,200	\$ 120	\$ 1,320	\$ 2,133	\$ 30,776
402 Service Area Boundaries		1					2	2		5	\$ 915		\$ -	\$ -	\$ -	\$ 79	\$ 994
404 Industrial Flows and Loads		1	1			4	10			16	\$ 3,112		\$ -	\$ -	\$ -	\$ 253	\$ 3,365
406 Flow Projections		8	2	2		6	27	2		47	\$ 9,405		\$ -	\$ -	\$ -	\$ 743	\$ 10,148
407 WWTP Wastewater Flows and Loadings		2	8	2		4	22	2		40	\$ 8,358	\$ 600	\$ 600	\$ 60	\$ 660	\$ 632	\$ 9,650
410 Draft and Final Chapter 3 - Basis of Planning		4	4	2		3	6	4	4	27	\$ 5,533	\$ 600	\$ 600	\$ 60	\$ 660	\$ 427	\$ 6,620
Task 500 - Existing System	0	6	0	2	0	5	14	7	2	36	\$ 6,915	\$ -	\$ -	\$ -	\$ -	\$ 569	\$ 7,484
502 Study Area		2				1	4	1		8	\$ 1,561		\$ -	\$ -	\$ -	\$ 126	\$ 1,687
503 Existing System		2		1		2	6	4		15	\$ 2,887		\$ -	\$ -	\$ -	\$ 237	\$ 3,124
504 Draft and Final Chapter 4 - Existing System		2		1		2	4	2	2	13	\$ 2,467		\$ -	\$ -	\$ -	\$ 205	\$ 2,672
Task 700 - Collection System	1	14	0	7	0	36	80	18	4	160	\$ 30,642	\$ -	\$ -	\$ -	\$ -	\$ 2,528	\$ 33,170
701 Hydraulic Model Update and Calibration		2		4		10	36	8		60	\$ 11,272		\$ -	\$ -	\$ -	\$ 948	\$ 12,220
702 Capacity Evaluation		2				12	16	4		34	\$ 6,438		\$ -	\$ -	\$ -	\$ 537	\$ 6,975
704 Draft and Final TM 1 - Hydraulic Model Update and Calibration		2		2		6	12	2	2	26	\$ 4,984		\$ -	\$ -	\$ -	\$ 411	\$ 5,395
706 Meeting No. 6 - Capacity Improvements	1	4				4	8	2		19	\$ 3,869		\$ -	\$ -	\$ -	\$ 300	\$ 4,169
707 Draft and Final Chapter 6 - Collection System		4		1		4	8	2	2	21	\$ 4,079		\$ -	\$ -	\$ -	\$ 332	\$ 4,411
Task 800 - Wastewater Treatment Facility	0	8	16	12	50	0	0	8	0	94	\$ 20,014	\$ 6,800	\$ 6,800	\$ 680	\$ 7,480	\$ 1,485	\$ 28,979
804 WWTP Capacity Analysis (includes site visit)		2	4	4	16					26	\$ 5,578	\$ 1,800	\$ 1,800	\$ 180	\$ 1,980	\$ 411	\$ 7,969
808 Alternative Analysis		6	12	8	34			8		68	\$ 14,436	\$ 5,000	\$ 5,000	\$ 500	\$ 5,500	\$ 1,074	\$ 21,010
Total	4	66	47	37	50	66	161	43	16	490	\$ 101,287	\$ 8,000	\$ 8,000	\$ 800	\$ 8,800	\$ 7,742	\$ 117,829



## **EXHIBIT A**

### **CITY OF CAMAS**

### **SCOPE OF SERVICES**

#### **GENERAL SEWER PLAN UPDATE**

The following Scope of Services has been developed to assist the City of Camas (City) with the update of its General Sewer Plan (GSP). The following tasks under this Scope of Services have been prepared based on Carollo Engineers, Inc.'s (Consultant) and its subconsultant's current understanding of the proposed project, and through discussions with City staff.

#### **PROJECT BACKGROUND**

The City initiated this GSP to coincide with the update of the City's Our Camas 2045 Comprehensive Plan. The City recognizes the importance of planning, developing, and maintaining wastewater system facilities that provide reliable and efficient service for existing customers and to serve anticipated growth defined by the Comprehensive Plan. The GSP is designed to meet state, county, and local requirements. The project represents an update of the City's existing GSP (Carollo, 2024) to align with recent Comprehensive Plan updates, which extend the land use planning period through 2045. This project will consider system needs in the context of providing sewer service to meet updated population and economic development projections presented in the updated Comprehensive Plan.

Effort will involve evaluating sewer collection system needs in portions of the City's service area not considered in the existing GSP. Updated flow and load projections will be developed based on new information presented in the Comprehensive Plan update. An updated evaluation of the capacity of wastewater treatment plant (WWTP) capacity utilizing those updated flows and loads, as well as an update/confirmation of condition driven needs to those facilities are included.

#### **PROJECT ASSUMPTIONS**

- Carollo Engineers, Inc. will be referred to as "Consultant" in this document.
- City of Camas and its staff will be referred to as "City" in this document.
- State of Washington Department of Ecology and its staff will be referred to as "Ecology" in this document.
- All meetings will be held on Microsoft Teams, unless otherwise specified.
- All deliverables will be provided in electronic copy (PDF and/or Microsoft Word) transmitted via email or secure file transfer. The City will print and produce all documents as necessary for its use. Consultant will not provide any deliverables in a paper format.
- City comments on draft chapters will be documented in the Project Comment Response Log by the Consultant. The Consultant will prepare responses to address the comments in the Comment Response Log for the City's review and acceptance. Resulting changes will be incorporated in the Draft Agency Review Plan, rather than reissuing a draft chapter at the time. However, revised draft chapters can be produced upon City request.
- Electronic Flow Projection Tool will be provided in .xlsx format.

- The Consultant will prepare an agenda, presentation materials, and document discussions, including action items and decisions, and meeting minutes for Consultant-led meetings. Meeting notes and related materials will be transmitted electronically in MS Word and/or PDF formats via email.
- In providing opinions of cost, financial analyses, economic feasibility projections, schedules, and quantity and/or quality estimates for potential projects, the Consultant has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel. Therefore, the Consultant makes no warranty that the City's actual project costs, financial aspects, economic feasibility, schedules, and/or quantities or quality realized will not vary from the Consultant's opinions, analyses, projections, or estimates.
- The Consultant shall not be responsible for acts and decisions of third parties, including governmental agencies, other than the Consultant's subconsultants, that impact project completion and/or success other than noted elsewhere in this scope of work.
- The City will furnish the Consultant with available studies, reports, and other data pertinent to the Consultant's services; obtain or authorize the Consultant to obtain or provide additional reports and data as required; furnish to the Consultant services of others required for the performance of the Consultant's services hereunder; and the Consultant shall be entitled to use and reasonably rely upon all such information and services provided by the City or others in performing the Consultant's services hereunder.
- The GSP update will follow this organization of chapters and meetings as listed in Table 1.

Table 1      [Summary of Chapters and Appendices](#)

Chapter/Appendix		Lead
Executive Summary		Consultant
Chapter 1	Introduction	Consultant
Chapter 2	Regulations, Policies, and Criteria	Consultant
Chapter 3	Basis of Planning	Consultant
Chapter 4	Existing System	Consultant
Chapter 5	I/I Program	Consultant
Chapter 6	Collection System	Consultant
Chapter 7	Wastewater Treatment Facility	Consultant
Chapter 8	Operations and Maintenance	Consultant
Chapter 9	Capital Improvement Plan	Consultant
Chapter 10	Financial Plan	Consultant with FCS
Appendix A	Approvals	
Appendix B	Agency Comment Letters and Responses	
Appendix C	Demographic Projections	
Appendix D	Flow Monitoring Report	
Appendix E	Hydraulic Model Update and Calibration TM	
Appendix F	I/I Program Reports	

Chapter/Appendix		Lead
Appendix G	Local Limits Program Reports	
Appendix H	Wastewater Treatment Plant Permits	
Appendix I	Wastewater Treatment Engineering Report	
Appendix J	Spill Response Plan	
Appendix K	CIP Project Sheet	
Appendix L	Financial Backup	
Appendix M	O&M APE Examples	

Notes:

CIP - capital improvement program; I/I - infiltration and inflow; O&M - operations and maintenance; TM - technical memorandum

Table 2 Summary of Meetings

Meetings	Title	Type
Meeting No. 1	Kickoff Meeting	Virtual
Meeting No. 2	Policies and Criteria, and Regulatory Considerations and Strategy	Virtual
Meeting No. 3	Flow Monitoring Results & Flow Projections	Virtual
Meeting No. 4	WWTP Flows and Loadings	Virtual
Meeting No. 5	Hydraulic Model Development & Capacity Evaluation	Virtual
Meeting No. 6	Capacity Improvements	Hybrid
Meeting No. 7	Influent and select process characterization sampling and analysis effort	Virtual
Meeting No. 8	Review and confirm capacity analysis findings	Virtual
Meeting No. 9	Alternative development workshop with City and plant operations staff to develop and select liquids and solids process area improvements for evaluation	Hybrid
Meeting No. 10	Alternative evaluation workshop to review technical performance, costs, and non-cost considerations associated for each alternative	Hybrid
Meeting No. 11	CIP Review	Hybrid
Meeting No. 12a, 12b, 12c, 12d	Financial Review	Virtual
Meeting No. 13	City Review Draft	Virtual
Meeting No. 14	Agency Review Meeting	Virtual
	Up to 2 council meetings	Virtual
Project Management	36 Coordination Calls	Virtual

## TASKS

To meet the objectives of this Scope of Services, the Consultant shall complete the tasks as summarized in Table 3 and discussed in detail in the text that follows.

Table 3      **Task Summary**

Task Number	Task Name
Task 100	Project Management
Task 200	Introduction
Task 300	Regulations, Policies, and Criteria
Task 400	Basis of Planning
Task 500	Existing System
Task 600	I/I Program
Task 700	Collection System
Task 800	Wastewater Treatment Facility
Task 900	Operation and Maintenance
Task 1000	Capital Improvement Plan
Task 1100	Financial Plan
Task 1200	Plan Development

### TASK 100 - PROJECT MANAGEMENT

The purpose of this task is to direct activities within the GSP as assigned by the City and maintain the project within the contracted scope, schedule, and budget. This consists of project administration, monthly invoicing, client and team coordination and quality assurance/quality control review necessary to successfully complete the GSP to the City's expectations. Additionally, the Consultant will develop a Project Management Plan (PMP) and lead the initial team kickoff meeting. This task consists of the following activities:

#### **TASK 100 ACTIVITIES**

##### **Subtask 101 - Monthly Progress Reports and Invoices**

This subtask consists of production and implementation of the project plan, schedule, and budget. Assist the project team members in the implementation of the task items, reviewing the work-in-progress reports. Prepare and submit monthly activity reports showing current project status and identifying key issues or elements of the project that will need to be addressed in the proceeding weeks. An electronic version of the monthly progress reports will be sent to the City for review and approval. This task assumes that no hard copy of the monthly progress reports will be distributed.

##### **Subtask 102 - Project Management Plan**

Prepare a Project Management Plan (PMP) that describes deliverables, plan outline, anticipated meetings, project roles and responsibilities, lists contact information for the project team, describes communications

protocols, quality management, and includes the scope of services, schedule, and budget. Quality Management includes, but is not limited to, the following elements:

- Project Manager overview of all primary documents to verify technical consistency and compliance with contract requirements.
- Organization of the work into logical deliverables with qualified staff for each task assigned to the work.
- Resolution of all review comments summarizing key comments and the manner in which each was addressed in the work.

#### **Subtask 103 - Meeting No. 1- Kickoff Meeting**

- Facilitate a meeting to kick off the GSP update, review project management plan and initial data requests.

#### **Subtask 104 - Project Management & Client Coordination**

- Manage the consultant project team to track time and budget, work elements accomplished, work items planned for the next period, manpower, scope changes, time and budget needed to complete the project.
- Create and maintain a working project schedule based on the schedule in the PMP.
- Review project status, including scope, budget, and schedule.
- Bi-Monthly Virtual Status Meeting. Facilitate virtual PM meetings two times per month to review status of project.

#### Task 100 Assumptions

1. The PMP will be updated with full incorporation of review comments after the City review of the draft PMP.
2. The total length of the project is 18 months.
3. City provides required documents for appendices.
4. Thirty-six bi-monthly status meetings will be held over Microsoft Teams. Meetings to be held in conjunction with the Water System Plan Update.

#### Task 100 City Input

1. Team member contact information.
2. Receive, review, and process Consultant invoices in a timely manner.

#### Task 100 Consultant Deliverables

1. Draft GSP outline.
2. Eighteen monthly progress reports and invoices.

#### Task 100 Meetings

1. Meeting No. 1 - Kickoff Meeting.
2. PM Virtual Meetings.

## TASK 200 - INTRODUCTION

The purpose of this task is to provide an introduction to the GSP documenting the purpose, review and approvals, and direction to pertinent information. The task effort will be documented in Chapter 1 - Introduction.

### **TASK 200 ACTIVITIES**

#### **Subtask 201 - Regulatory Information Reference**

Prepare a table that provides reference in the GSP to each regulatory required information in the GSP. The intent of this reference is to aid the agency reviewers in conducting an efficient and thorough review of the GSP.

#### **Subtask 202 - Draft and Final Chapter 1 - Introduction**

Prepare draft Chapter 1 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final plan.

#### Task 200 Assumptions

1. None.

#### Task 200 City Input

1. Comments on draft Chapter 1 - Introduction.

#### Task 200 Consultant Deliverables

1. Draft Chapter 1 - Introduction.
2. Record of Comment (ROC) for Chapter 1 - Introduction.

#### Task 200 Meetings

1. None.

## TASK 300 - REGULATIONS, POLICIES, AND CRITERIA

The purpose of this task is to update the applicable regulations, policies impacting long-term sewer planning, and define planning criteria from the 2024 GSP. The task effort will be documented in Chapter 2 - Regulations, Policies and Criteria.

### **TASK 300 ACTIVITIES**

#### **Subtask 301 - Applicable Regulations, Considerations and Strategy.**

Review and update regulatory requirements presented in Chapter 2 of the 2024 GSP. Include a summary of requirements from the City's Wastewater Treatment Plant National Pollutant Discharge Elimination System (NPDES) Permit WA002049. This will include summarizing requirements of the City's updated NPDES Permit (under development for renewal by Ecology at time of drafting this scope of work) if renewed prior to GSP Update commencing.

In the course of Ecology review and approval of the existing GSP, the need for a Tier II evaluation in accordance with Washington Administrative Code (WAC) 173-201A-320 and Publication No. 11-10-073 was identified. It is expected this Tier II evaluation will be submitted by the City during the next cycle of NPDES permit renewal or at the point in time the City determines additional discharge capacity must be permitted.

Prepare an effluent and receiving water desktop analysis to assess the potential for exceedances of water quality objectives under projected future conditions. This analysis will rely on influent, effluent, and receiving water data requested in Task 400 and be conducted in conjunction with WWTP process evaluations described in Task 800. The results/findings of the desktop analysis will be summarized in Chapter 2. A summary addressing the implications of these findings in the context of potential future implications on WWTP unit processes and facilities will be included in Chapter 7.

### **Subtask 302 - Policies and Criteria**

Obtain existing level of service policies, financial policies, planning criteria, and design standards from the City. Review policies and criteria and make recommendations for additional or revised criteria and service area goals that best fit the needs of the City. Confirm the design storm used for the capacity evaluation. Review current and potential future design standards for the sewer system, including design depth to pipe diameter (d/D) standards. Criteria will include allowable pipeline d/D values during peak flows, minimum velocities, minimum/maximum slope, and pumping requirements.

### **Subtask 303 - Meeting No.2 - Policies and Criteria & Regulatory Considerations and Strategy**

Facilitate a meeting to review City policies and criteria. This will include discussion of possible future implications for WWTP processes and facilities and outline alternatives which will be considered in Task 800

### **Subtask 304 - Draft and Final Chapter 2 - Policies and Criteria**

Prepare draft Chapter 2 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

#### Task 300 Assumptions

1. City will provide pertinent information for missing or updated facility data.
2. Desktop analysis of reasonable potential will be conducted utilizing publicly available (Ecology) tools.

#### Task 300 City Input

1. Comments on draft Chapter 2 - Policies and Criteria.

#### Task 300 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 2 - Policies and Criteria.
3. ROC for Chapter 2 - Policies and Criteria.

#### Task 300 Meetings

1. Meeting No. 2 - Policies and Criteria and Regulatory Considerations and Strategy.

## TASK 400 - BASIS OF PLANNING

The purpose of this task is to update the planning criteria and all planning assumptions for use in evaluation of the wastewater collection system, from the 2024 GSP. The planning area assumed for this GSP includes the current utility services boundary and the North Shore expansion area. The task efforts will be documented in Chapter 3 - Basis of Planning.

### **TASK 400 ACTIVITIES**

#### **Subtask 401 - Data Request**

Prepare a data request for the required information. The request is expected to consist of the following:

- ADS flow monitoring data and historical pump run time data at Pump Stations.
- Updates to population and employment projections since the last GSP.
- Lift station flow data (if available).
- Major industrial discharges.
- WWTP influent and effluent flow monitoring data for the preceding 5 years. (See also Task 800, which includes an influent wastewater characterization sampling effort and focused process sampling internal to the plant to provide additional data).
- Most recent WWTP receiving water data (assumed to be data used to inform the required reasonable potential analysis for the City's recent NPDES permit renewal application).
- Results and report summarizing the findings of the City's most recent WWTP outfall evaluation as required by the existing NPDES permit.
- Available data characterizing industrial wastewater discharged to the WWTP (see also Subtask 404).
- Pertinent WWTP record drawings and basis of design reports.
- Spreadsheets utilized for the most recent NPDES permit renewal to assess reasonable potential.
- Additional information includes level of service policies, planning criteria, design standards, and financial data from the City.

A summary will be prepared identifying any informational gaps. Consultant will coordinate with City's project manager to resolve.

#### **Subtask 402 - Service Area Boundaries**

Update the City's service area boundaries to be considered in the GSP for the existing system service area ("Existing"), the 20-year timeframe ("20-Year"), and the ultimate ("Build-out") planning periods. City to review and confirm the service area boundaries.

#### **Subtask 403 - Demographic Analysis**

Update the service area and land use maps from the 2024 GSP, using geographic information system (GIS) data. Review current population, land use, and zoning to establish the historical demographics and to develop future demographics for the service area. Establish land use data per basin for the existing system service area ("Existing"), the 20-year timeframe ("20-Year"), and the ultimate ("Build-out") planning periods. Demographics within the 20-Year timeframe will be based on the Water System Plan Update.



#### **Subtask 404 - Industrial Flows and Loads**

The City's largest connections, potential large scale industrial flows and loads and future wholesale water customers will be evaluated and projected separately and added to other projected system flows and loads. The industrial flow and load projections will be updated from the 2024 GSP and be consistent with the WSP industrial demand projections.

#### **Subtask 405 - Review Flow Monitoring Report**

The City will contract directly with ADS to conduct flow monitoring for the STEP system and the North Shore of the gravity collection system. Flow monitoring basins and statistics will be provided in an email to ADS. ADS will provide raw data and a full report on flow and I/I analysis for each metered basin. This data will be verified by the Consultant and used for flow development and model calibration. The flow monitoring program will take place in the winter of 2024/2025 and is anticipated to capture dry and wet weather flows, including storm events required to meet calibration standards. Four or fewer flow meters will be used. Flow monitoring will be performed at one location on the STEP system, one location in the North Shore, and the two gravity pipes upstream of the treatment plant.

#### **Subtask 406 - Flow Projections**

Flow projections are based on demographic assumptions and the data obtained from flow monitoring. The flow projections from the 2024 GSP will be updated as a part of this subtask, as follows:

- **Flow Data Review.** Compare base sanitary flows estimated from existing land use to dry weather flow calculated through the flow monitoring for each basin. Existing land use and currently served areas will be used to estimate flow factors in gallons per acre per land use category. The flow factors will be customized to match the observed existing average dry weather flow (ADWF) and will be used to develop flow projections. Pump Station runtime data and City pump-down curves will be used to proportion ADWF throughout basins, where available.
- **Base Flow Projections.** Develop base sanitary flows for three planning periods: existing conditions, 20-year, and build-out scenarios.
- **Infiltration and Inflow Projections.** Estimate I/I flow rates for each sewer basin based on current and future land use and area specific I/I factors. Developed I/I flow rates will be compared to I/I flow rate estimates per monitored basin. Develop I/I flow rates for new areas to be added to the system.
- **Flow Projections.** Future flows, including base flows, I/I, and industrial point flows, will be projected based on service area growth. Future flows will be assessed for each sewer and pump station basin for the selected planning periods.

#### **Subtask 407 - WWTP Wastewater Flows and Loadings**

Consultant shall review historic ammonia, pH, fecal coliform, biochemical oxygen demand (BOD) and total suspended solids (TSS) wastewater load contributing to the wastewater treatment plant. Unit loading factors will be developed using existing flow and population data provided by the City to provide a basis for projected future loading within the service area. The unit loading factors will be established on an equivalent residential units (ERU) basis for both residential and employment units. It is anticipated different loading factors will be developed for STEP and gravity customers. Based on population projections provided by the City, project flows and loads for the planning period that will require treatment at the facility. Load projections will be summarized by basin and at the facility. Resulting flow and load projections will be used in Task 800 to evaluate WWTP capacity implications.

### **Subtask 408 - Meeting No. 3 - Flow Monitoring Results and Flow Projections**

Facilitate a meeting to review the flow monitoring results and flow projections with the City. Confirm flow projections are consistent with City understanding of the current and future system. Flows will be summarized by basin and at the facility.

### **Subtask 409 - Meeting No. 4 - WWTP Flows and Loadings**

Facilitate a meeting to review the WWTP flow and loading analysis findings with the City. Confirm flows and loadings are consistent with City understanding for the current facility and discuss implications of projections for future conditions.

### **Subtask 410 - Draft and Final Chapter 3 - Basis of Planning**

Prepare draft Chapter 3 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

#### Task 400 Assumptions

1. Flow monitoring will be performed at two locations on STEP system, one location in the North Shore, and the two gravity pipes upstream of the treatment plant.
2. Previously identified loading factors previously identified for large industries will be used and not reexamined.

#### Task 400 City Input

1. Requested Data from Task 401.
2. Comments on draft Chapter 3 - Basis of Planning.

#### Task 400 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 3 - Basis of Planning.
3. ROC for Chapter 3 - Basis of Planning.

#### Task 400 Meetings

1. Meeting No. 3 - Flow Monitoring Results and Flow Projections.
2. Meeting No. 4 - WWTP Flows and Loadings.

## **TASK 500 - EXISTING SYSTEM**

The purpose of this task is to update the Existing System Chapter from the 2024 GSP.

### **TASK 500 ACTIVITIES**

#### **Subtask 501 - Data Request**

Prepare a data request for the required information. The request is expected to consist of the following if updated since last GSP:

- As-builts of STEP system.
- As-builts of North Shore Area.

### **Subtask 502 - Study Area**

Update and incorporate study area information in Chapter 4 - Existing System.

### **Subtask 503 - Existing System**

Review the components of major sewer collectors and pump stations using data from the City's GIS, available pipe database, discussions with staff, and previous studies. Incorporate information from the City's 2024 GSP. Subtasks include the following:

- Update chapter text, tables, and figures summarizing the City's collection and conveyance system. Summarize the boundaries of sewer service basins and pump station basins (if different). Provide descriptions for each of the City's sewage pump stations, and force mains. Provide total length of pipe based on diameter and material, if available.
- Summarize improvements to the City's wastewater collection system that have been completed since the 2024 GSP, based on discussions with City Staff.
- Develop figures for the GSP of the existing system infrastructure using the City's GIS data.

### **Subtask 504 - Draft and Final Chapter 4 - Existing System**

Prepare draft Chapter 4 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

#### Task 500 Assumptions

1. None.

#### Task 500 City Input

1. Requested Data from Task 501.
2. Comments on draft Chapter 4 - Existing System.

#### Task 500 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 4 - Existing System.
3. ROC for Chapter 4 - Existing System.

#### Task 500 Meetings

1. None.

## **TASK 600 - I/I PROGRAM**

The purpose of this task is to update the City's I/I Program. Future I/I rates with and without the I/I Program will be estimated for use in the Collection System evaluation.

### **Subtask 601 - Summarize Existing I/I Program**

Summarize the existing I/I Program from City provided annual reports. Tabulate City I/I projects by year and I/I reduction. Create a map of historical I/I projects, if data is available. Identify future activities to be conducted by the I/I Program. Draft Chapter 5 - I/I Program.

### **Subtask 602 - Draft and Final Chapter 5 - I/I Program**

Prepare draft Chapter 5 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

#### Task 600 Assumptions

1. None.

#### Task 600 City Input

1. Requested Data from Task 601.
2. Comments on draft Chapter 5 - I/I Program.

#### Task 600 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 5 - I/I Program.
3. ROC for Chapter 5 - I/I Program.

#### Task 600 Meetings

1. None.

## **TASK 700 - COLLECTION SYSTEM**

The purpose of this task is to update the existing and future capacity evaluation, update system deficiencies, and revise recommendations to resolve deficiencies. Recommended projects will be included in the CIP.

### **Subtask 701 - Hydraulic Model Update and Calibration**

The City's gravity collection system model will be combined with the STEP system model and converted from DHI's Mike Urban to DHI's 2024 MIKE+. Piping and pumping will be reviewed and updated on the model with a focus on expanding the extents to the North Shore and the STEP system. Model extents will include:

- STEP System: Major STEP force mains and pump stations. The flows will be added to the model geographically by mini-basin for the existing, projected 20-year and build-out conditions.
- Gravity System: The model will include all pipes greater than 6 inches. The flows will be added to the model geographically by mini-basin for the existing projected 20-year and build-out conditions.
- North Shore: Constructed and planned North Shore Sewer infrastructure based on prior City effort.
- The flows will be added to the model geographically by mini-basin for the existing, projected 20-year and build-out conditions.

Model calibration will entail the following:

- Calibration will focus on a quantitative approach based on the recommendations for hydraulic model verification contained in the "Code of Practice for the Hydraulic Modeling of Sewer Systems," version 3.001, published by the Wastewater Planning Group, a section of the Chartered Institution of

Water and Environmental Management and the Consultant's expertise. These recommended calibration criteria include, but are not limited to, the following:

- » The comparison period between observed and modeled events should last until flow has substantially returned to winter dry weather flow.
- » Observed and modeled hydrographs should meet the criteria for at least two out of three events.
- » The peak flow should be in the range +25 percent to -10 percent.
- » The volume of flow should be in the range of +20 percent to -10 percent.
- The existing dry and wet weather flows as described in a previous task will be calibrated based upon the flow monitoring data, and rainfall data provided by the flow monitoring program as well as additional data available from the City's supervisory control and data acquisition (SCADA) system for up to 3 meter locations in the collection system. Existing flow depths and velocities will also be checked and calibrated.
- Calibrate the model to dry weather flow conditions. Flow monitoring data will provide custom hourly diurnal curves that establish the daily flow patterns for each metering basin. Model parameters will be adjusted, as needed, to best match the flow monitoring and SCADA data. It is assumed that the City will provide SCADA data in electronic format.
- Calibrate the model for wet weather conditions. Rainfall information will aid in developing the required rainfall-derived infiltration/inflow (RDI/I) estimations that enter the collection system during a storm event. It is recommended that the use of a single calibration period incorporating a number of independent rainfall events should be considered whenever possible. Model results will be reviewed and adjusted, as needed, to best match the flow monitoring, rainfall, and SCADA data.
- The flows from any unmetered basins will be assumed to be unchanged since the previous model calibration.

### **Subtask 702 - Capacity Evaluation**

Perform a hydraulic capacity analysis under the design storm for each basin using the calibrated model, and projected peak flow rates and system expansion developed in Task 200. The analysis will be performed for existing, 20 year, and build-out scenarios only, and will assist in identifying any system deficiencies and improvements required to resolve deficiencies. Subtasks include the following:

- Review related reports and studies for related capacity analyses and recommendations.
- Estimate the available capacity of each basin given existing infrastructure while meeting all performance criteria.
- Develop a future hydraulic modeling scenario that evaluates the impact of wastewater flows associated with future growth, as well as redevelopment projects on the collection system. Maps will be developed showing current and future deficiencies.
- Review and document resulting capacity deficiencies for 20-year and build-out conditions. Use the hydraulic model to confirm the sizing of the backbone facilities to serve the North Shore.
- Evaluate the capacities of the pump stations in the hydraulic model for their ability to convey peak flows under firm capacity for existing and 20-year and build-out conditions. Pump stations not in the hydraulic model are assumed to have sufficient capacity.
- Update capacity deficiencies based on City field investigations or additional information, as needed.

### **Subtask 703 - Meeting No. 5 - Hydraulic Model Development & Capacity Evaluation**

Facilitate a meeting to review the hydraulic model development and resolve outstanding questions. City staff will confirm known deficiencies and identify any areas for additional City lead investigation (field visit, reference as-builts, etc.).

### **Subtask 704 - Draft and Final TM 1 - Hydraulic Model Update and Calibration**

Prepare draft TM 1 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

### **Subtask 705 - Capacity Improvements**

Develop infrastructure recommendations to resolve deficiencies. Improvements will be sized for meeting build-out conditions and City criteria.

### **Subtask 706 - Meeting No. 6 - Capacity Improvements**

Facilitate a workshop to review capacity related collection system improvements. Highlight recommended improvements on system maps for discussion with City staff.

### **Subtask 707 - Draft and Final Chapter 6 - Collection System**

Prepare draft Chapter 5 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

#### Task 700 Assumptions

1. No remaining useful life (RUL) analysis will be performed.
2. Model calibration will focus on the STEP system and North Shore. The remainder of the system is considered calibrated from the 2024 GSP.
3. All portions of the collection system: gravity, STEP, and North Shore will be included in the hydraulic model.

#### Task 700 City Input

1. Requested Data from Task 701.
2. Comments on draft TM 1 - Hydraulic Model Update and Calibration.
3. Comments on draft Chapter 6 - Collection System.

#### Task 700 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft TM 1 - Hydraulic Model Update and Calibration.
3. ROC for TM 1 - Hydraulic Model Update and Calibration.
4. Draft Chapter 6 - Collection System.
5. ROC for Chapter 6 - Collection System.

#### Task 700 Meetings

1. Meeting No. 5 - Hydraulic Model Development & Capacity Evaluation.
2. Meeting No. 6 - Capacity Improvements.

## **TASK 800 - WASTEWATER TREATMENT FACILITY**

The purpose of this task is to define the condition and capacities of the WWTP's unit processes and facilities which directly impact the ability of the City to treat wastewater generated within their existing and expected future service area boundaries thereby managing the quality of effluent discharged to the Columbia River.

To inform the unit process analysis, additional information is required regarding the characteristics of existing wastewater influent received at the WWTP. This will be addressed through development and execution of a sampling and analysis plan in collaboration with City staff. This plan is also expected to include sampling at critical locations within the facility to provide additional detail regarding specific unit process performance. City staff will execute the plan with guidance from the Consultant. In addition, the Consultant will conduct a desktop reasonable potential analysis using the most recent effluent and receiving water information available (assumed to be data supporting the recent NPDES permit renewal application submitted to Ecology). The desktop reasonable potential analysis (RPA) will suggest potential limitations on future discharges from the WWTP that could impact plant capacity and composition of unit processes. A summary addressing the implications of these findings in the context of potential future implications on WWTP unit processes and facilities will be included in Chapter 7.

To address identified capacity and condition deficiencies, an alternatives analysis of the most viable improvement options will be conducted. Recommended projects and/or studies will be included in the CIP.

### **Subtask 801 - WWTP Historical Operations**

Summarize WWTP historical operations based on a review of data provided by the City in Task 400, input provided to the Consultant by City staff and information contained in the 2024 GSP.

### **Subtask 802 - Influent and Select Process Characterization Testing Plan**

Consultant will develop a wastewater characterization test plan to facilitate characterization of plant influent. This plan will incorporate limited sampling and analysis of selection locations within the liquid process as determined in collaboration with City staff. The City will execute this plan and provide data to the Consultant. Data will be used to calibrate the model developed in Subtask 804.

### **Subtask 803 - Meeting No. 7**

Facilitate a workshop to review influent and selection process characterization sampling and analysis efforts.

### **Subtask 804 - WWTP Capacity Analysis**

The objective of this Subtask is to determine the capacity of the existing treatment plant assuming: 1) current NPDES permit requirements, 2) current flow and loading conditions, and 3) projected future flow and loading conditions. A unit process analysis will be completed to identify shortfalls in plant capacity that will prevent the City from reliably treating and disposing of projected flow and loads at the end of the planning period (2045). A hydraulic analysis of the plant and river outfall utilizing Hydraulix® software will also be conducted. Activities associated with this task include:

- Evaluate process, design, and operational data for the facility liquids and solids treatment trains.

- Plan for and conduct tours of the facility to discuss operational protocols and data with City and operations staff. While on site, interview operations staff to identify operational issues and document any additional condition or capacity concerns not documented in the recent GSP (2024).
- Develop a calibrated a steady state biological wastewater treatment process model (e.g., Biowin) and use it to characterize the current performance of the City's WWTP during dry and wet weather seasons.
- Utilizing record documentation (drawings and basis of design reports, to the extent available) and data provided by the City, characterize performance of solids handling and treatment processes and equipment, as well as other mechanical elements of the WWTP liquid stream not included in Biowin model.
- Develop solids mass balance for facility.
- Evaluate hydraulic capacity of treatment plant elements and effluent outfall utilizing Hydraulix®.
- Develop one-page schematic of each process area that illustrates key equipment and overall unit process capacity.

#### **Subtask 805 - Meeting No. 8**

Facilitate a workshop to review and confirm capacity analysis findings.

#### **Subtask 806 - WWTP Condition**

Consultant will rely on information contained in the 2024 GSP summarizing the condition assessment completed as part of that effort and any additional information provided by City staff to identify WWTP condition related deficiencies. This information will be updated and used to inform the alternatives analysis to be conducted in Subtask 808.

#### **Subtask 807 - Desktop Reasonable Potential Analysis**

Utilizing data on effluent receiving water provided by the City in Task 401, the Consultant will perform a desktop analysis of reasonable potential for the future condition defined as 2045 (or the year identified as the endpoint for the planning period of this GSP study). Desktop analysis will be completed consistent with requirements for Tier II evaluation in accordance with WAC 173-201A-320 and Publication No. 11-10-073. This scope assumes the analysis will be limited to identification of potential capacity or process implications of reasonable potential suggested in results of the analysis. Analysis will be completed using Ecology tools that agency makes publicly available.

#### **Subtask 808 - Alternative Analysis**

The objective of this task is to identify, develop, and evaluate alternatives by process area that will maximize the use of existing assets at the WWTP and provide flexibility to meet potential future regulatory requirements. Activities associated with this task include:

- Based on basis of planning information developed in previous chapters, identify at conceptual level potential liquid and solids treatment process area alternative options for further evaluation. These will be organized and presented by process area based on deficiencies identified in Subtask 804.
- Document workshop results, decisions, and action items in meeting minutes.
- For up to two alternatives for each process area, perform the following activities:
  - » Consider process area layout requirements.



- » Compare hydraulic requirements to existing hydraulic profile and where necessary, perform hydraulic modeling between process units to identify required hydraulic improvements.
- » Define resulting dry and wet weather flow and loading capacities.
- » Review anticipated performance of the improvements.
- » Develop planning-level capital and life cycle costs.
- » Develop preliminary review of non-cost factors. (e.g., process reliability, permitting, flexibility and water quality considerations).

### **Subtask 809 – Meeting No. 9**

Alternative development workshop with City and plant operations staff to develop and select liquids and solids process area improvements for evaluation.

### **Subtask 810 – Meeting No. 10**

Alternative evaluation workshop to review technical performance, costs, and non-cost considerations associated for each alternative.

### **Subtask 811 - Draft and Final Chapter 7 - Wastewater Treatment Facility**

Prepare draft Chapter 7 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

#### Task 800 Assumptions

1. City provides bid costs of recent projects, if available, as one source for development of planning level costs for use in alternatives analysis.
2. City conducts influent characterization and select process sampling and analysis.
3. The City's most recent GSP (2024, Carollo) includes a summary of an assessment of unit process and facility condition conducted in 2019. That summary identifies certain condition related deficiencies for significant unit process/operation facilities. This GSP update will rely on the findings of that condition assessment.
4. Capacity evaluation will be based on criteria contained in the 2023 version of the Orange Book (Ecology).
5. For desktop analysis described in Subtask 807, future effluent concentrations for constituents not currently regulated in the City's NPDES permit (no existing effluent limitations or prohibitions) will be assumed to increase proportional to flow based on projections thereof developed in Task 400.
6. Approaches to process improvements to address findings of the desktop analysis (Task 805) involving constituents currently without limits or prohibitions in the City's NPDES permit.

#### Task 800 City Input

1. Requested Data from Task 401.
2. Comments on draft Chapter 7 - Wastewater Treatment Facility.

#### Task 800 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 7 - Wastewater Treatment Facility.
3. Final Chapter 7 - Wastewater Treatment Facility.

### Task 800 Meetings

4. Meeting No. 7 - Facilitate a meeting to discuss scope of and responsibilities for an influent wastewater and select process characterization sampling and analysis effort.
5. Meeting No. 8 - Facilitate a meeting to review and confirm capacity analysis findings.
6. Meeting No. 9 - Prepare for and conduct an alternative development workshop with City and plant operations staff to develop and select liquids and solids process area improvements for evaluation. These could include:
  - a. Operational and/or process modifications to maximize existing secondary capacity.
  - b. Process improvements/additions to meet projected flow and load conditions.
  - c. Process improvements/additions to meet potential future regulatory requirements.
7. Meeting No. 10 - Prepare for and conduct alternative evaluation workshop to review technical performance, costs, and non-cost considerations associated for each alternative. As part of the meeting, select preferred improvement alternatives and discuss spreadsheet tool to be developed in Task 1000.

## **TASK 900 - OPERATIONS AND MAINTENANCE**

The purpose of this task is to document the City's I/I Program. Future I/I rates with and without the I/I Program will be estimated for use in the Collection System evaluation.

### **Subtask 901 - Data Request**

Data required to summarize and evaluate the City's current O&M program will be requested. Data may include:

- Organization structure.
- Staffing levels and positions.
- Summary of ongoing maintenance activities and operational tasks.
- Current O&M funding.
- Planned or future O&M programs.
- Record keeping procedures.
- Sewer main age and material.

### **Subtask 902 - Summarize and Evaluate O&M Programs and Problem Areas**

Update the City's O&M program, including both preventative and corrective maintenance. This includes the planned and scheduled activities, such as treatment plant preventative maintenance, biosolids management, lift station inspection and maintenance, manhole inspection and maintenance, video inspection, root cutting, grease removal, and hydraulic line cleaning. Summarize O&M problem areas based on City provided data, such accumulation of solids or access issues. Maps will be prepared to aid in the review of O&M problem areas. Summarize customer-oriented programs, such as fats, oils, and grease (FOG), and the City's procedure to address suggestions/complaints. This task assumes the City will provide written materials for use in summarizing the existing O&M Program. The task assumes the Consultant will not prepare new summaries or documentation.

Conceptually evaluate the ability of existing O&M programs to address problem areas within the short-term and long-term planning horizons with City staff in a workshop. Propose updated or new programs, if necessary, to address problem areas within the planning period. The purpose of this task is to aid the City in establishing the quantity of work needed and subsequent cost of the ongoing O&M programs. A detailed evaluation of individual programs is not envisioned in this task.

### **Subtask 903 - Draft and Final Chapter 8 - Operations and Maintenance**

Prepare draft Chapter 8 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

#### Task 900 Assumptions

1. None.

#### Task 900 City Input

1. Requested Data from Task 901.
2. Comments on draft Chapter 8 - Operations and Maintenance.

#### Task 900 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 8 - Operations and Maintenance.
3. Final Chapter 8 - Operations and Maintenance.

#### Task 900 Meetings

1. None.

## **TASK 1000 - CAPITAL IMPROVEMENTS**

This Task will summarize the recommended improvements for the collection system, outlined in the previous tasks. Total project costs will be developed for each recommended improvement and ranked by priority. This task will develop Chapter 9 - Capital Improvement for the GSP.

### **TASK 1000 ACTIVITIES**

#### **Subtask 1001 - Cost Estimates**

Prepare a data request for the required information. The request is expected to consist of the following:

#### **Subtask 1002 - Project Prioritization**

Schedule identified projects for the three planning periods: existing, 20-year, and Build-out conditions. A summary table will present all CIP projects, year for construction, and estimated costs, and will be organized according to a recommended phasing plan. Maps will also be developed showing recommended future system pipes and facilities. Maps will include recommended projects color-coded by CIP phase and annotated with project identification numbers.

#### **Subtask 1003 - Meeting No. 11 - Capital Improvements**

Facilitate a meeting to review the CIP.

#### **Subtask 1004 - Electronic CIP**

Develop an electronic CIP spreadsheet tool to include a full sheet on each project and a summary CIP for all projects. Project costs and timing will be linked such that City staff may revise costs and timing and the CIP will automatically be updated.

#### **Subtask 1005 - Draft and Final Chapter 9 - Capital Improvement Plan**

Prepare draft Chapter 9 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

##### Task 1000 Assumptions

1. City provides bid costs of recent projects, if available.

##### Task 1000 City Input

1. Requested Data from Task 1001.
2. Comments on draft Chapter 9 - Capital Improvement Plan.

##### Task 1000 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 9 - Capital Improvement Plan.
3. Final Chapter 9 - Capital Improvement Plan.
4. Electronic CIP.

##### Task 1000 Meetings

1. Meeting No.11 - Capital Improvements.

### **TASK 1100 - FINANCIAL**

The purpose of this task is to review and update Chapter 11 - Financial Plan, which will be conducted by FCS. Chapter 11 will identify the total cost of providing sewer service, assure that the utility improvement schedule will be implemented, and assist in establishing adequate fees for service. The financial program will be coordinated with the CIP.

#### **TASK 1100 ACTIVITIES**

##### **Subtask 1101 - Data Collection and Validation**

Prepare an initial data request identifying financial and operational documents pertinent to the performance of the study. The Consultant will provide the CIP and relevant draft GSP chapters. Review, analyze, and validate data as necessary for use in formulating the technical analysis. Follow up with requests for any additional items or explanations as necessary.

##### **Subtask 1102 - Historical Financial Performance Review**

Review and document the financial operations (revenue and expenses) and financial condition (assets and liabilities) of the sewer utility for the previous 6-year period. Summarize noteworthy financial trends.

### **Subtask 1103 - Fiscal Policy Review**

Review the City's current fiscal policies for operating and capital reserves, system reinvestment funding, debt management, and debt service coverage.

### **Subtask 1104 - Capital Financing Plan**

Evaluate capital funding options and develop a capital financing plan for the 6-, 10-, and 20-year CIPs. The analysis will include a forecast of capital funding needs, borrowing requirements, and associated cash flows and cash balances over the study period. Evaluate and recommend an appropriate balance of funding from cash, system development charges (SDC), bonds, low interest loans and/or other available funding sources. Depending upon preliminary results, FCS will work closely with the Consultant and the City to perform sensitivity analyses for alternative scheduling of capital projects in order to smooth customer rate impacts. The budget provides for up to three scenarios.

### **Subtask 1105 - Operating Forecast**

The City's current sewer operating budgets will be used as the baseline for forecasting ongoing O&M costs, debt service, and other financial obligations of the sewer utility over the 6-year and 20-year study periods. Incorporate engineering planning growth forecasts and establish economic factors for cost escalation. Integrate additional O&M expenses, if any, resulting from the CIP and any other known changes in operational requirements.

### **Subtask 1106 - Revenue Needs Assessment**

Integrate fiscal policies, capital financing impacts and the operating forecast, and develop an operating cash flow projection for the 6-year and 20-year study periods. Compare forecasted financial requirements against forecasted revenue under existing rates to determine annual and cumulative revenue adjustments needed to ensure financial sustainability over time.

### **Subtask 1107 - Rate Forecast and Affordability Test**

Develop a rate forecast for the 6-year period. Apply annual rate adjustments to the City's existing sewer rate structures "across-the-board" to each rate class and rate charge (fixed and variable). Note: this scope does not include changes to the City's existing sewer rate structure. The Financial Chapter will include a narrative discussion of potential rate structure enhancements, if necessary. Perform an affordability test as an indication of a residential customer's ability to pay the existing and forecasted rates. This includes an analysis and comparison of the sewer system's existing and forecasted average residential bills to 2.5 percent of the median household income. This test will be conducted for the 6-year and 20-year study periods.

### **Subtask 1108 - Meeting No. 12 - Financial Review**

Review results over four remote meetings before finalizing the Financial Chapter. Meeting will be attended by FCS and Carollo.

### **Subtask 1109 - Draft and Final Chapter 10 - Financial Plan**

Prepare draft Chapter 11 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final GSP.

Task 1100 Assumptions

1. City can provide elements listed under Task 1101.
2. This scope does not include changes to the City's existing sewer rate structure or SDC.

Task 1100 City Input

1. Requested Data from Task 1101.
2. Comments on draft Chapter 11 - Financial Plan.

Task 1100 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 11 - Financial Plan.
3. Final Chapter 11 - Financial Plan.

Task 1100 Meetings

1. Meeting No.12a, 12b, 12c, 12d - Financial Review.

**TASK 1200 - GSP DEVELOPMENT**

The purpose of this task is to integrate comments on the GSP into a clear and comprehensive General Sewer Plan document. The City Draft Plan will be prepared, including an Executive Summary. This task includes assisting the City to coordinate plan review from Ecology. Under this task, the Consultant will assist the City with a public commenting period. Comments received from the public review meetings, adjacent sewer providers, Clark County, and Ecology will be incorporated into the updated plan for City Council's approval and adoption.

**TASK 1200 ACTIVITIES****Subtask 1201 - Executive Summary**

Prepare an executive summary, summarizing each element of the General Sewer Plan.

**Subtask 1202 - City Draft Plan**

The plan will be developed as a City review draft and reviewed by City staff. Under this task, the plan will be prepared incorporating the previous chapters according to the summary table above.

**Subtask 1203 - Meeting No. 13 - City Review Comments**

Meet with City to discuss comments of draft document. Incorporate comments to be included into Agency Draft Plan.

**Subtask 1204 - Agency Draft Plan**

Incorporate City comments into an Agency Draft plan to be submitted for agency review. The City will submit Agency Review Draft to adjacent sewer providers, Clark County, and Ecology. Eight notebook binders, one camera-ready set, and one PDF will be developed for City reproduction and distribution of plan to agencies and adjacent purveyors.

### **Subtask 1205 - Meeting No. 14 - Agency Review Comments**

Meet with Agency to discuss comments on draft document. Incorporate comments to be included into Final Plan.

### **Subtask 1206 - Final Plan**

Consultant will review agency review letters for incorporation into the Final Plan. Delivery of the Final Plan will include one professional engineer (PE)-stamped original notebook binder, one PE-stamped original camera-ready set, seven PE-stamped reproduction notebook binders, one PDF, and all electronic files.

#### Task 1200 Assumptions

1. The City provides required documents for appendices, including acceptance ordinances.
2. City will collect public and agency review comments and deliver to Consultant. City will develop written responses received during Agency Review process.

#### Task 1200 City Input

1. City comments.
2. Public and Agency review comments.

#### Task 1200 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Executive Summary.
3. City Draft Plan - One PDF.
4. Agency Draft Plan - Eight notebook binder, one camera-ready, and one PDF.
5. Final Plan - Eight notebook binder, one camera-ready, and one PDF

#### Task 1200 Meetings

1. Meeting No. 13 - City Review Comments.
2. Meeting No. 14 - Agency Review Comments.

CITY OF Camas General Sewer Plan LEVEL OF EFFORT  2-Aug-24																										
TASK / DESCRIPTION	Jude Grounds	Jili Kjellson	Sudhan Paranjape	Rod Reardon	Matt Huang	Cameron Clark	Matt Sokokowski	Jason Rozgony	James Doering	Tyler Troup	Victoria Boschmans	Max Mozer	Theresa Passe	Kevin Christensen / Maggie Flynn	Varies	Total Hours	Carollo Labor Cost	SUBCONSULTANTS					Total Direct Charges	PECE	TOTAL COST	
	PIC	PM / Collections Lead	DPM / Treatment Lead	Process/ Operations Specialist	QA/QC	Solids	Hydraulics	Cost Estimating	Structural Engineer	Electrical Engineer	Project Professional	Professional	Staff Professional	GIS / Graphics	DP	ADS		FCS	Total Subconsultant Cost	Total Subconsultant Markup 5%	Total Subconsultant Cost with Markup					
	\$ 310	\$ 237	\$ 275	\$ 310	\$ 275	\$ 275	\$ 237	\$ 275	\$ 310	\$ 237	\$ 237	\$ 201	\$ 165	\$ 162	\$ 117											
Task 100 – Project Management	11	35	29	0	9	1	0	0	0	0	11	38	1	2	19	156	\$ 35,367	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16	\$ 2,485	\$ 37,832
101 Monthly Progress Reports and Invoices		36	9												18	27	\$ 4,581			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 427	\$ 5,008
102 Project Management Plan	1	2										4				7	\$ 1,588			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 289	\$ 1,877
103 Meeting No.1 - Kick-off Meeting	1	3	2		1	1					1	4	1	2	1	17	\$ 3,748			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 269	\$ 4,017
104 Project Management & Client Coordination	9	30	18		8						10	30				105	\$ 25,450			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,659	\$ 27,109
Task 200 – Introduction	0	3	1	0	2	0	0	0	0	0	2	6	6	2	2	24	\$ 4,744	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 379	\$ 5,123
201 Regulatory Information Reference		1	1		1						2	2	2			9	\$ 1,993			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 142	\$ 2,135
202 Draft and Final Chapter 1 - Introduction		2			1							4	4	2	2	15	\$ 2,751			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 237	\$ 2,988
Task 300 - Regulations, Policies, and Criteria	1	14	7	1	1	2	0	0	0	0	14	20	16	4	6	86	\$ 17,976	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,359	\$ 19,335
301 Applicable Regulations, Considerations and Strategy		4	2								4	6	6			22	\$ 4,642			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 348	\$ 4,990
302 Policies and Criteria		2	1									6	4			13	\$ 2,615			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 205	\$ 2,820
303 Meeting No. 2 - Policies and Criteria & Regulatory Considerations and Strategy	1	4	2			2					4	4		2	2	21	\$ 4,648			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 332	\$ 4,980
304 Draft and Final Chapter 2 - Policies and Criteria		4	2	1	1						6	4	6	2	4	30	\$ 6,071			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 474	\$ 6,545
Task 400 - Basis of Planning	2	23	40	4	2	2	0	0	0	0	46	34	126	18	6	303	\$ 61,375	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,787	\$ 66,162
401 Data Request		2	2								4	2	4			14	\$ 3,034	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 221	\$ 3,255
402 Service Area Boundaries		1	1									1	4	4		11	\$ 1,981			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 174	\$ 2,155
403 Demographic Analysis		2										2	18	2		24	\$ 4,150			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 379	\$ 4,529
404 Industrial Flows and Loads			1								4	1	10			17	\$ 3,311			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 269	\$ 3,580
405 Review Flow Monitoring Report		1									2	4	2			9	\$ 1,845			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 142	\$ 1,987
406 Flow Projections		2										8	24	2		38	\$ 6,896			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 600	\$ 7,496
407 WWTP Wastewater Flows and Loadings		4	24	2		2					24		40	2		98	\$ 21,310			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,548	\$ 22,858
408 Meeting No. 3 - Flow Monitoring and Flow Projections	1	2	2									8	4	2	1	20	\$ 4,023			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 316	\$ 4,339
409 Meeting No. 4 - WWTP Flows and Loadings	1	2	2								4		6	2	1	18	\$ 3,693			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 284	\$ 3,977
410 Draft and Final Chapter 3 - Basis of Planning		6	6	2	2						8	8	14	4	4	54	\$ 11,132			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 853	\$ 11,985
Task 500 - Existing System	0	12	0	0	3	0	0	0	0	0	0	7	16	12	4	54	\$ 10,088	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 853	\$ 10,861
501 Data Request		2										1	2			5	\$ 1,005			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 79	\$ 1,084
502 Study Area		4										1	2	4		11	\$ 2,087			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 174	\$ 2,261
503 Existing System	0	2			1							1	6	4		14	\$ 2,548			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 221	\$ 2,769
504 Draft and Final Chapter 4 - Existing System		4			2							4	6	4	4	24	\$ 4,368			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 379	\$ 4,747
Task 600 - Infiltration and Inflow Program	0	8	0	0	2	0	0	0	0	0	0	22	10	4	4	50	\$ 9,594	\$ 64,437	\$ -	\$ 64,437	\$ 3,222	\$ 67,659	\$ -	\$ 790	\$ 78,043	
601 Summarize Existing I/I Program		4										16	8			28	\$ 5,484	\$ 64,437		\$ 64,437	\$ 3,222	\$ 67,659	\$ 442	\$ 73,585		
602 Draft and Final Chapter 5 - I/I Program		4			2							6	2	4	4	22	\$ 4,110			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 348	\$ 4,458
Task 700 - Collection System	1	32	0	0	4	0	0	0	0	0	0	172	0	22	10	241	\$ 48,080	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,200	\$ 3,808	\$ 53,088
701 Hydraulic Model Update and Calibration		4										72		8		84	\$ 16,636	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,327	\$ 17,963
702 Capacity Evaluation		6										32		4		42	\$ 8,462	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 664	\$ 9,126
703 Meeting No. 5 - Hydraulic Model Development & Capacity Evaluation		4										12		2	1	19	\$ 3,781	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 300	\$ 4,081
704 Draft and Final TM 1 - Hydraulic Model Update and Calibration		4			2							12		2	4	24	\$ 4,682	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 379	\$ 5,061
705 Capacity Improvements		6										24				30	\$ 6,246	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 474	\$ 6,720
706 Meeting No. 6 - Capacity Improvements	1	4										8		2	1	16	\$ 3,287	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 253	\$ 4,740
707 Draft and Final Chapter 6 - Collection System		4			2							12		4	4	26	\$ 4,986	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 411	\$ 5,397
Task 800 - Wastewater Treatment Facility	0	10	114	37	0	72	54	0	14	16	140	0	166	18	11	652	\$ 150,513	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,000	\$ 10,302	\$ 162,815
801 WWTP Historical Operations			2									6		8		16	\$ 3,292			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 253	\$ 3,545
802 Influent and Select Process Characterization Testing Plan			6	1								6		8		21	\$ 4,702			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 332	\$ 5,034
803 Meeting No. 7- Influent and Select Process Testing Plan			2									4		2		8	\$ 1,828			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 126	\$ 1,954
804 WWTP Capacity Analysis (includes site visit)		2	32	4		28	24				40		40	4		174	\$ 40,590			\$ -	\$ -	\$ -	\$ -	\$ 1,200	\$ 2,749	\$ 44,539
805 Meeting No. 8 - Capacity Analysis Findings		2	4	2							4		6	2	1	21	\$ 4,553			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 332	\$ 4,885
806 WWTP Condition		1	2	2		4			6	6	4		8			32	\$ 7,820			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 506	\$ 8,326
807 Desktop Reasonable Potential Analysis			6	6							12		12			36	\$ 8,334									



## CONSULTANT BILLING RATES

### CITY OF CAMAS

#### 2025 WATER SYSTEM PLAN AND GENERAL SEWER PLAN

Carollo Engineers, Inc. billing rates and other direct expenses are defined in the tables below. These rates are for calendar years 2024 and projected through 2026. If the contract is extended beyond December 31, 2026, Carollo Engineers, Inc., reserves the right to modify the rates on an annual basis.

Project Role	Hourly Rate		
	2024	2025	2026
Senior Advisor/SME	\$295.00	\$310.00	\$325.00
Project Manager	\$262.00	\$275.00	\$289.00
Principal Professional	\$262.00	\$275.00	\$289.00
Senior Professional	\$226.00	\$237.00	\$249.00
Project Professional	\$204.00	\$214.00	\$225.00
Professional	\$191.00	\$201.00	\$211.00
Staff Professional	\$157.00	\$165.00	\$173.00
Senior Technician	\$159.00	\$167.00	\$175.00
Assistant Professional	\$149.00	\$156.00	\$164.00
Technician	\$145.00	\$152.00	\$160.00
Document Processing	\$111.00	\$117.00	\$123.00

Expense			
Project Equipment Computer Expense (PECE)	\$15.00/hr	\$15.80/hr	\$16.60/hr
Travel and Subsistence	At cost		
Mileage at IRS Reimbursement Rate	\$0.67 per mile effective January 1, 2024		
Subconsultant	Cost + 10%		
Other Direct Cost	Cost + 10%		

## CITY OF CAMAS

### WATER SYSTEM PLAN UPDATE

### AMENDMENT 1 - SCOPE OF WORK

Preliminary efforts on this project identified the need to incorporate the following services in this existing Contract. This Amendment shall become part of the Contract and provisions of the Contract apply.

The following sections are modified as indicated below.

#### **SCOPE OF SERVICES**

##### **ADD to Task 100: Project Management**

This amendment includes additional effort for project management and coordination with subconsultant associated with additional tasks presented herein. Project completion is being extended from March 31<sup>st</sup> to July 2026.

##### **ADD to Task 200: Planning Considerations**

This amendment includes additional effort to review financial and environmental policies that were not included in the 2024 GSP and document in draft Chapter 2 Planning Considerations.

##### **ADD Subtasks 404-407 – Operations and Maintenance**

The purpose of the additional subtasks to Task 400 Operations and Maintenance is to update the City's existing O&M Manual to comply with the requirements outlined in the Washington DOH Planning Guidebook and WAC 246-290.

##### Task 400 Activities

404. *Meeting No. 11 – Operations & Maintenance.* Facilitate a virtual workshop to discuss and document existing system operations with City Staff. Prepare exhibits to aid in the workshop. Workshop discussions will serve as the basis for updating the draft O&M Manual.
405. *Update Existing Information.* Update Chapters 1 through 5 and Appendixes A through J of the 2017 Draft O&M Manual for operational changes since 2017. Update photographs and figures used in the document where there have been operational changes or new water system components.
406. *Add New Water System Components.* Add new water system components to the Draft O&M Manual.
407. *Draft and Final O&M Manual.* Produce electronic PDF copies of the Draft O&M Manual for City review and comment. Address City comments in a Final O&M Manual. Electronic PDF copies of the Final O&M Manual will be developed for City reproduction and distribution.

##### Assumptions

- City will provide needed manufacturer information, maintenance schedules, screen shots, and other information needed to update Draft O&M Manual.

##### City Input

- Review of Draft O&M Manual.

### Consultant Deliverables

- Meeting No. 11 Agenda, Materials, and Minutes.
- Draft O&M Manual – Electronic PDF copies.
- Final O&M Manual – Electronic PDF copies.

### Meetings

- *Meeting No. 11 - O&M Workshop.*

### **ADD to Task 500 – Water Requirements**

Additional effort for this task includes converting monthly PDF billing data from 2024 to excel, removing duplicate entries, and general data cleanup. Identifying parcels connected to the water system via aerial imagery to identify developed parcels in proximity to water system pipelines. Use of laterals to identify connected parcels. Additional effort includes updating and rerunning projections when 2017 to 2024 excel-based water billing data was provided on July 10<sup>th</sup> and conducting a second virtual meeting to review the updated future water projections.

### Consultant Deliverables

- Meeting No. 3b Agenda, Materials, and Minutes.

### Meetings:

- *Meeting No. 3b – Revised Water Demand Projections*

### **ADD Subtasks 603-605 – Water Use Efficiency**

A Water Use Efficiency Program describes decisions and actions taken by a water system to use its drinking water supply as efficiently as economically feasible to satisfy requirements outlined in WAC 246-290. The purpose of these additional subtasks is to assist the City with developing/updating and implementing its Water Use Efficiency Program to be compliant with the WAC and Washington DOH requirements.

### Task 600 Activities

603. *Source and Service Metering.* Describe the City's tools/methods used to monitor and report water production and consumptions. Provide a description of all source meters and the City's adopted standards for service meters as required in the DOH planning guidebook.
604. *Develop and Update Water Use Efficiency Program.* Develop and update the City's Water Use Efficiency Program using the requirements outlined in the DOH planning guidebook and pre-plan checklist. The water use efficiency program will capture the following items:
- 1) Description of the current WUE program.
  - 2) Updated WUE goals and measures.
  - 3) Description of the nine (9) additional measures that will be implemented to achieve goals, including schedules and costs.
  - 4) Description or example documenting yearly consumer communication and education.
  - 5) Estimate of projected water saving from selected WUE measures.

- 6) Description of processes that will be used to determine effectiveness of the WUE program.
- 7) Demand forecasts with estimated savings from WUE program implementation.
- 8) Demand forecasts for cost-effective measures not implemented in the WUE program.
- 9) For WUE measures not implemented, conduct quantitative and qualitative evaluation for cost effectiveness
- 10) Considerations for future reclaimed water opportunities.

605. *Meeting No 12 – Water Use Efficiency Program.* Facilitate a virtual workshop to discuss and document Water Use Efficiency goals and measures and projected water savings with City Staff. Prepare exhibits to aid in the workshop. Workshop discussions will serve as the basis for updating the draft Water Use Efficiency Program.
606. *Draft and Final Water Use Efficiency Program.* Produce electronic PDF copies of the Draft WUE for City review and comment. Address City comments in a Final WUE. Electronic PDF copies of the Final WUE will be developed for City reproduction and distribution.
607. *Draft Chapter 6 Water Use Efficiency.* Prepare draft Chapter 6 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final plan.

#### Assumptions

- City will provide comprehensive data to support program development.
- City will select WUE efficiency measures to be adopted and included in the Program.
- City will facilitate required public meetings and provide notifications.

#### City Input

- Review of Water Use Efficiency Program.
- Documentation of public meetings and adoption of WUE Program.

#### Consultant Deliverables

- Meeting No. 12 Agenda, Materials, and Minutes.
- Draft Water Use Efficiency Program – Electronic PDF copies.
- Final Water Use Efficiency Program – Electronic PDF copies.

#### Meetings

- *Meeting No. 12 - Water Use Efficiency Program.*

#### **ADD Subtasks 607 to 609 – Water Loss Control Action Plan Development**

Water systems must adopt a water loss control action plan (WLCAP) when distribution system leakage (DSL) exceeds 10 percent, on average, over the most recent three-year period. The purpose of this task is to assist the City in the development of this plan and incorporation into the City's Water Use Efficiency Program.

### Task 600 Activities

607. *Meeting No. 13 – Water Loss Control Action Plan Workshop.* Facilitate a workshop to discuss and document the required components of a water loss control action plan with City Staff. Prepare exhibits/alternatives addressing and documenting outlined requirements to support decision making efforts. Workshop discussions will serve as the basis for developing the WLCAP.

608. *Develop Water Loss Control Action Plan.* Develop the WLCAP using direction provided by City during the initial workshop. The development of this plan will capture the following items:

- 1) Control methods necessary to achieve no more than 10 percent DSL.
- 2) Implementation schedule that will be included in the City's CIP.
- 3) Budget defining how proposed control methods will be funded.
- 4) Technical or economic concerns that will affect the City's ability to achieve DSL standards, including past efforts.
- 5) Assessment of data accuracy and data collection.

609. *Draft and Final Water Loss Control Action Plan.* Produce electronic PDF copies of the Draft WLCAP for City review and comment. Address City comments in a Final WLCAP. Electronic PDF copies of the Final WLCAP will be developed for City reproduction and distribution.

### Assumptions

- City will select the measures and strategies for addressing water loss.
- City will provide needed manufacturer information, maintenance schedules, screen shots, and other information needed to prepare the WLCAP.

### City Input

- Review of Water Loss Control Action Plan.

### Consultant Deliverables

- Meeting No. 13 Agenda, Materials, and Minutes.
- Draft Water Loss Control Action Plan – Electronic PDF copies.
- Final Water Loss Control Action Plan – Electronic PDF copies.

### Meetings

- *Meeting No. 12 - Water Loss Control Action Plan Workshop.*

### **ADD to Subtask 805 – Wellhead Protection Program**

- Wellhead Contingency Planning: Strata staff will support Carollo in reviewing City options to address loss of supply. The review will focus on short-term plans such as well upgrades or changes in operations and longer-term options such as well replacement or new well construction at recommended sites. Additional options that will be reviewed include potential exchange or

purchase of sources from Georgia Pacific and the City of Washougal. Water right requirements for the various options will be discussed.

- Management Strategies and Implementation Tasks: A standard inclusion in a full WHP plan includes outlining the City's policies for implementing the plan. This is often provided as a list of preferred strategies the city will adopt, and a second list of the tasks needed for implementation. As each WHP plan is unique to the water system, the strategies and tasks will need to be tailored to the City's setting/logistical constraints, level of available management & staff, and funding limits. This will be a cooperative effort between the team and the City. To complete these lists, Strata will provide example ideas and tasks used by other similar sized water systems for review by the City and Carollo and then participate in up to three team meetings to discuss and select a final set of strategies and tasks.
- Spill Response Plan: Prepare draft language for use as a formal spill response plan for the City in case of a contamination event that affects or could impact one or more City water sources. The purpose of the plan is to outline City staff responses in relation to local and state emergency response activities regarding hazardous spills. The draft text will be provided along with pertinent contact information for local, state and federal emergency response agencies for review by the City and Carollo. Additional outreach and coordination with City, County and State level first responders and emergency management agencies may be recommended, but this could be completed by the City at a later stage.

#### **ADD Subtask 807 – Prepare Wellhead Protection Plan Report**

Prepare draft and final standalone Wellhead Protection Plan report to be included as an appendix of the WSP Update.

#### **ADD to Task 1200: Plan Development**

This amendment includes additional effort for incorporating the additional tasks into the City Draft, Agency Draft and Final WSP Update document.

### **SCHEDULE**

- **ADD** the following:

<b>Task</b>	<b>Name</b>	<b>Duration</b>	<b>Estimated Completion</b>
100	Project Management	9 months (4 additional months)	July 2026
400	Operations and Maintenance	2 months	January 2026
600	Water Use Efficiency	1 month	December 2025
800	Wellhead Protection Program	2 months	January 2026
1200	Plan Development	5 months	July 2026

### **BUDGET**

- **SUPPLEMENT** with the attached.

CITY OF Camas  
Water System Plan - Amendment 1  
LEVEL OF EFFORT  
21-Oct-25

TASK / DESCRIPTION	Jude Grounds	Matt Huang	Jill Kjellsson	Ali Leeds	Aurelie Nabonnand	Max Mozer	Connor Mancosky	Brandon Nakamura	Kevin Christensen/ Varies	Varies	Total Hours	Carollo Labor Cost					Total Direct Charges	PECE	TOTAL COST
	PIC	PM	APM	Principal Professional - Water Quality	QA/QC	Professional - Modeler	Project Professional - Water Quality	Staff Engineer	GIS/Graphics	DP			Strata Geosciences	Total Subconsultant Cost	Total Subconsultant Markup	Total Subconsultant Cost with Markup			
	\$ 325	\$ 289	\$ 249	\$ 289	\$ 249	\$ 211	\$ 225	\$ 173	\$ 160	\$ 123					10%				
Task 100 – Project Management	2	6	16	0	2	8	0	0	0	4	38	\$ 9,046	\$ 1,540	\$ 1,540	\$ 154	\$ 1,694	\$ -	\$ 16.60	\$ 11,371
101 Monthly Progress Report and Invoice		2	4							4	10	\$ 2,066	\$ 1,540	\$ 1,540	\$ 154	\$ 1,694	\$ -	\$ 166	\$ 3,926
102 Project Management Plan											0	\$ -				\$ -	\$ -	\$ -	\$ -
103 Pre-Plan DOH Meeting											0	\$ -				\$ -	\$ -	\$ -	\$ -
104 Meeting No.1 - Kick-off Meeting											0	\$ -				\$ -	\$ -	\$ -	\$ -
105 Client and Team Coordination	2	4	12		2	8					28	\$ 6,980		\$ -	\$ -	\$ -	\$ -	\$ 465	\$ 7,445
Task 200 – Planning Considerations	0	2	4	0	4	0	0	16	0	0	26	\$ 5,338		\$ -	\$ -	\$ -	\$ -	\$ 432	\$ 5,770
201 Data Request											0	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
202 Summarize Related Documents											0	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
203 Draft and Final Chapter 1 - Introduction											0	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
204 Draft and Final Chapter 2 - Planning Considerations		2	4		4			16			26	\$ 5,338		\$ -	\$ -	\$ -	\$ -	\$ 432	\$ 5,770
Task 400 - Operations and Maintenance	1	16	12	0	4	24	0	64	6	14	141	\$ 27,751		\$ -	\$ -	\$ -	\$ -	\$ 2,341	\$ 30,092
404 Meeting No. 11 - Operations and Maintenance		4	6		2	4		12	2	2	32	\$ 6,634		\$ -	\$ -	\$ -	\$ -	\$ 531	\$ 7,165
405 Update Existing Information		4	2			6		16			28	\$ 5,688		\$ -	\$ -	\$ -	\$ -	\$ 465	\$ 6,153
406 Add New Water System Components		4	2			6		12			24	\$ 4,996		\$ -	\$ -	\$ -	\$ -	\$ 398	\$ 5,394
407 Draft and Final O&M Manual	1	4	2		2	8		24	4	12	57	\$ 10,433		\$ -	\$ -	\$ -	\$ -	\$ 946	\$ 11,379
Task 500 - Water Requirements	0	7	13	0	7	24	0	82	24	0	157	\$ 30,093		\$ -	\$ -	\$ -	\$ -	\$ 2,606	\$ 32,699
501 Data Request			3								3	\$ 747		\$ -	\$ -	\$ -	\$ -	\$ 50	\$ 797
502 Demographic Projections Review and Update		1	2		2	6		20	8		39	\$ 7,291		\$ -	\$ -	\$ -	\$ -	\$ 647	\$ 7,938
503 Demand Projections Review and Update		4	6		4	14		50	16		94	\$ 17,810		\$ -	\$ -	\$ -	\$ -	\$ 1,560	\$ 19,370
504 Meeting No. 3 - Water Demand Forecast, Water Use Efficiency, and Conservation.		2	2		1	4		12			21	\$ 4,245					\$ -	\$ 349	\$ 4,594
505 Draft and Final Chapter 5 - Water Requirements											0	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Task 600 - Water Use Efficiency	0	28	36	0	10	30	0	144	6	16	270	\$ 53,716		\$ -	\$ -	\$ -	\$ -	\$ 4,482	\$ 58,198
603 Source and Service Metering		2	2			2		8			14	\$ 2,882		\$ -	\$ -	\$ -	\$ -	\$ 232	\$ 3,114
604 Develop and Update Water Use Efficiency Program		4	4			6		24			38	\$ 7,570		\$ -	\$ -	\$ -	\$ -	\$ 631	\$ 8,201
605 Meeting No. 12: Water Use Efficiency Program		4	4		1			12			21	\$ 4,477		\$ -	\$ -	\$ -	\$ -	\$ 349	\$ 4,826
606 Draft and Final Water Use Efficiency Program		4	6		2	6		20	2	6	46	\$ 8,932		\$ -	\$ -	\$ -	\$ -	\$ 764	\$ 9,696
607 Draft Chapter 6 Water Use Efficiency Program		2	4		2	2		16	2	4	32	\$ 6,074		\$ -	\$ -	\$ -	\$ -	\$ 531	\$ 6,605
608 Meeting No. 13: Water Loss Control Action Plan		4	4		1			24			33	\$ 6,553		\$ -	\$ -	\$ -	\$ -	\$ 548	\$ 7,101
609 Develop Water Loss Control Action Plan		4	6		2	8		20			40	\$ 8,296		\$ -	\$ -	\$ -	\$ -	\$ 664	\$ 8,960
610 Draft and Final Water Loss Control Action Plan		4	6		2	6		20	2	6	46	\$ 8,932		\$ -	\$ -	\$ -	\$ -	\$ 764	\$ 9,696
Task 800 - Water Resources	0	4	4	0	0	0	0	4	0	0	12	\$ 2,844	\$ 12,900	\$ 12,900	\$ 1,290	\$ 14,190	\$ -	\$ 199	\$ 17,233
805 Wellhead Protection Program Update		2	2					2			6	\$ 1,422	\$ 9,560	\$ 9,560	\$ 956	\$ 10,516	\$ -	\$ 100	\$ 12,038
807 Draft and Final WHP Plan Report		2	2					2			6	\$ 1,422	\$ 3,340	\$ 3,340	\$ 334	\$ 3,674	\$ -	\$ 100	\$ 5,196
Task 1200 - Plan Development	1	3	6	0	2	0	0	12	3	8	35	\$ 6,724	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 581	\$ 7,305
1202 City Draft Plan		1	2					4	1	2	10	\$ 1,885		\$ -	\$ -	\$ -	\$ -	\$ 166	\$ 2,051
1204 Agency Draft Plan		1	2		1			4	1	2	11	\$ 2,134		\$ -	\$ -	\$ -	\$ -	\$ 183	\$ 2,317
1206 Final Plan	1	1	2		1			4	1	4	14	\$ 2,705		\$ -	\$ -	\$ -	\$ -	\$ 232	\$ 2,937
																	\$ -		
Total	4	66	91	0	29	86	0	322	39	42	679	\$ 135,512	\$ 14,440	\$ 14,440	\$ 1,444	\$ 15,884	\$ -	\$ 11,271	\$ 162,667

## **EXHIBIT A**

### **CITY OF CAMAS**

### **SCOPE OF SERVICES**

### **WATER SYSTEM PLAN UPDATE**

The following Scope of Services has been developed to assist the City of Camas (City) with the update of its Water System Plan (WSP). The objective of this project is to update and review the elements of the WSP documents, in accordance with Washington Administrative Code (WAC) 246-290-100 and State of Washington Department of Health (DOH) regulations. The following tasks under this Scope of Services have been prepared based on Carollo Engineers, Inc.'s (Consultant) and its subconsultant's current understanding of the proposed project, and through discussions with City staff.

#### **PROJECT BACKGROUND**

The City initiated this WSP update recognizing the importance of planning, developing, and maintaining water system facilities that provide reliable and efficient service for existing customers and to serve anticipated growth. The WSP is designed to meet state, county, and local requirements. The project represents a limited update of the City's existing WSP (Carollo, 2019) to align with recent Comprehensive Plan updates, which extend the land use planning period through 2045. This project will consider system needs in the context of providing water service to meet updated population and economic development projections presented in the updated Comprehensive Plan. Limited additional effort will involve evaluating water system needs in portions of the City's service area not considered in the existing WSP.

#### **PROJECT ASSUMPTIONS**

- Carollo Engineers, Inc. will be referred to as "Consultant" in this document.
- City of Camas and its staff will be referred to as "City" in this document.
- All meetings will be held on Microsoft Teams, unless otherwise specified.
- Draft chapters will be provided in electronic copy (PDF and/or Microsoft Word) transmitted via email or secure file transfer.
- City comments on draft chapters will be documented in the Project Comment Response Log by the Consultant. The Consultant will prepare responses to address the comments in the Comment Response Log for the City's review and acceptance. Resulting changes will be incorporated in the Draft Agency Review Plan, rather than reissuing a draft chapter at the time. However, revised draft chapters can be produced upon City request.
- Electronic Demand Tool will be provided in .xlsx format.
- The Consultant will prepare an agenda, presentation materials, and document discussions, including action items and decisions, in meeting minutes for Consultant-led meetings.
- Meeting notes and related materials will be transmitted electronically in MS Word and/or PDF formats via email.
- The City will print and produce all documents as necessary for its use. Consultant will not provide any deliverables in a paper format.



- In providing opinions of cost, financial analyses, economic feasibility projections, schedules, and quantity and/or quality estimates for potential projects, the Consultant has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; the incoming water quality and/or quantity; the way the City's plant(s) and/or associated processes are operated and/or maintained; and other economic and operational factors that may materially affect the ultimate project elements, including, but not limited to, cost or schedule. Therefore, the Consultant makes no warranty that the City's actual project costs, financial aspects, economic feasibility, schedules, and/or quantities or quality realized will not vary from the Consultant's opinions, analyses, projections, or estimates.
- The Consultant shall not be responsible for acts and decisions of third parties, including governmental agencies, other than the Consultant's subconsultants, that impact project completion and/or success other than noted elsewhere in this scope of work.
- The City will furnish the Consultant with available studies, reports and other data pertinent to the Consultant's services; obtain or authorize the Consultant to obtain or provide additional reports and data as required; furnish to the Consultant services of others required for the performance of the Consultant's services hereunder, and the Consultant shall be entitled to use and reasonably rely upon all such information and services provided by the City or others in performing the Consultant's services hereunder.
- The WSP update will follow this organization of chapters and meetings as listed in Table 1.

Table 1      **Summary of Chapters and Appendices**

Chapter/Appendix		Lead
Executive Summary		Consultant
Chapter 1	Introduction	Consultant
Chapter 2	Planning Considerations	Consultant
Chapter 3	Existing System	Consultant
Chapter 4	Operations and Maintenance	Consultant
Chapter 5	Water Requirements	Consultant
Chapter 6	Water Use Efficiency	City
Chapter 7	Water Quality	Consultant
Chapter 8	Water Resources	Consultant with Mott MacDonald
Chapter 9	Water System Analysis	Consultant
Chapter 10	Capital Improvement Plan	Consultant
Chapter 11	Financial Plan	Consultant with FCS
Appendix A	Notice of DNS	City
Appendix B	SEPA Checklist	City
Appendix C	Local Government Consistency Determination Form	City
Appendix D	Agency Comment Letters and Responses	City
Appendix E	Ordinances and Approvals	City

Chapter/Appendix		Lead
Appendix F	Water System Plan Submittal Form	Consultant
Appendix G	DOH Water System Plan Checklist	Consultant
Appendix H	Service Area and Interlocal Agreements	City
Appendix I	Water Facilities Inventory Form	City
Appendix J	Water Rights Self-Assessment Forms	Consultant
Appendix K	Demographic and Demand Forecast	Consultant
Appendix L	Wellhead Protection Plan	City
Appendix M	Water Quality Sampling Procedures and Program	City
Appendix N	Coliform Monitoring Plan	City
Appendix O	Emergency Response Plan	City
Appendix P	Water Shortage Response Plan and Service Reliability	City
Appendix Q	Cross-Connection Control Program	City
Appendix R	Hydraulic Model Development and Calibration TM	Consultant
Appendix S	Standard Construction Specifications for Distribution Mains	City
Appendix T	CIP Cost Estimates	Consultant

Notes:

CIP - capital improvement program; DNS - determination of non-significance; SEPA - State Environmental Policy Act;  
TM - technical memorandum

Table 2 Summary of Meetings

Meetings	Title	Type
Pre-Plan DOH Meeting	DOH Pre-Meeting	Virtual
Meeting No. 1	Kickoff Meeting	Virtual
Meeting No. 2	Policies and Criteria, Existing System, and Service Area	Virtual
Meeting No. 3	Water Demand Forecasts, Water Use Efficiency, and Conservation	Virtual
Meeting No. 4	Water Management Plan and Hydraulic Model Development	Virtual
Meeting No. 5	Preliminary System Deficiencies	Hybrid
Meeting No. 6	Recommendations Workshop	Virtual
Meeting No. 7	Capital Improvement Plan	Hybrid
Meeting No. 8a, 8b, 8c, and 8d	Financial Review	Virtual
Meeting No. 9	City Review comments	Virtual
Meeting No.10	Agency Review comments	Virtual
	Up to 2 council meetings	In Person
Project Management	36 Coordination Calls (joint with GSP)	Virtual

## TASKS

To meet the objectives of this Scope of Services, the Consultant shall complete the tasks as summarized in Table 3 and discussed in detail in the text that follows.

Table 3      **Task Summary**

Task Number	Task Name
Task 100	Project Management
Task 200	Planning Considerations
Task 300	Existing System
Task 400	Operations and Maintenance
Task 500	Water Requirements
Task 600	Water Use Efficiency
Task 700	Water Quality
Task 800	Water Resources
Task 900	Water System Analysis
Task 1000	Capital Improvement Plan
Task 1100	Financial Plan
Task 1200	Plan Development

### TASK 100 - PROJECT MANAGEMENT

The purpose of this task is to direct activities within the WSP as assigned by the City and maintain the project within the contracted scope, schedule, and budget. This consists of project administration, monthly invoicing, client and team coordination and quality assurance/quality control review necessary to successfully complete the WSP to the City's expectations. Additionally, the Consultant will develop a Project Management Plan (PMP) and lead the initial team kickoff meeting. This task consists of the following activities:

#### **TASK 100 ACTIVITIES**

##### **Subtask 101 - Monthly Progress Reports and Invoices**

This subtask consists of production and implementation of the project plan, schedule, and budget. Assist the project team members in the implementation of the task items, reviewing the work-in-progress reports. Prepare and submit monthly activity reports showing current project status and identifying key issues or elements of the project that will need to be addressed in the proceeding weeks. An electronic version of the monthly progress reports will be sent to the City for review and approval. This task assumes that no hard copy of the monthly progress reports will be distributed.

##### **Subtask 102 - Project Management Plan**

Prepare a Project Management Plan (PMP) that describes deliverables, plan outline, anticipated meetings, project roles and responsibilities, lists contact information for the project team, describes communications

protocols, quality management, and includes the scope of services, schedule, and budget. Quality Management includes, but is not limited to, the following elements:

- Project Manager overview of all primary documents to verify technical consistency and compliance with contract requirements.
- Organization of the work into logical deliverables with qualified staff for each task assigned to the work.
- Resolution of all review comments summarizing key comments and the manner in which each was addressed in the work.

#### **Subtask 103 - Pre-Plan DOH Meeting**

- Attend DOH Pre-Planning meeting with City staff.

#### **Subtask 104 - Meeting No. 1- Kickoff Meeting**

- Facilitate a kickoff meeting to review project management and initial data requests.

#### **Subtask 105 - Client Coordination**

- Manage the consultant project team to track time and budget, work elements accomplished, work items planned for the next period, manpower, scope changes, time and budget needed to complete the project.
- Create and maintain a working project schedule based on the schedule in the PMP.
- Review project status, including scope, budget, and schedule.
- Bi-Monthly Virtual Status Meeting. Facilitate virtual PM meetings two times per month to review status of project.

#### Task 100 Assumptions

1. The PMP will be updated with full incorporation of review comments after the City review of the draft PMP.
2. The total length of the project is 18 months.
3. City provides required documents for appendices.
4. Thirty-six bi-monthly status meetings will be held over Microsoft Teams.
5. Bi-monthly Status Meetings will be jointly held on the WSP and GSP.

#### Task 100 City Input

1. Team member contact information.
2. Receive, review, and process Consultant invoices in a timely manner.

#### Task 100 Consultant Deliverables

1. Draft WSP outline.
2. Eighteen monthly progress reports and invoices.

#### Task 100 Meetings

1. Pre-Plan DOH Meeting.
2. Meeting No. 1 - Kickoff Meeting.
3. PM Virtual Meetings.

## TASK 200 - PLANNING CONSIDERATIONS

The objective of this task is to document the planning considerations that influence the WSP. These include the study area, policies, criteria, and related documents.

### TASK 200 ACTIVITIES

#### **Subtask 201 - Data Request**

Prepare a data request for the required information. The request is expected to consist of updates in the following categories provided by the City since the 2019 WSP:

- Agreements with neighboring jurisdictions.
- Interlocal agreements.
- Review of updated Comprehensive Plan.
- Study area.
- Legislation, regulations, and permits.
- Policies and criteria.

#### **Subtask 202 - Summarize Related Documents**

Review list of City, County, and Regional Planning documents related to the 2019 WSP. Summarize information that is important to the operation of the City's water system. It is expected that this will include the updated Comprehensive Plan.

#### **Subtask 203 - Draft and Final Chapter 1 - Introduction**

Prepare draft Chapter 1 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final plan.

#### **Subtask 204 - Draft and Final Chapter 2 - Planning Considerations**

Prepare draft Chapter 2 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final plan.

#### Task 200 Assumptions

1. No site visit will be performed.
2. City can provide elements listed under Task 201.
3. No hard copy of the chapters will be distributed.

#### Task 200 City Input

1. Requested Data from Task 201.
2. Comments on draft Chapter 1 - Introduction.
3. Comments on draft Chapter 2 - Planning Considerations.

#### Task 200 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 1 - Introduction.
3. Return on cost (ROC) for Chapter 1 - Introduction.

4. Draft Chapter 2 - Planning Considerations.
5. ROC for Chapter 2 - Planning Considerations.

#### Task 200 Meetings

1. None.

### **TASK 300 - EXISTING SYSTEM**

The purpose of this task is to document the City's existing water system, including supply, storage, booster pump stations, interties, treatment, and distribution. This task will develop Chapter 3 - Existing System.

#### **TASK 300 ACTIVITIES**

##### **Subtask 301 - Data Request**

Prepare a data request for the required information. The request is expected to consist of updates to the following since the 2019 WSP:

- Geographic information system (GIS) data for existing facilities, service areas, and inventory.
- Data on pipeline materials and age by linear foot, as available.
- Existing renew and replacement program.
- Summary of improvements completed since the last WSP.
- Data on existing infrastructure (e.g., supply, storage, booster pump stations, interties, and distribution).
- Water Facilities Inventory Form.

##### **Subtask 302 - Review and Update of Existing System**

Review and update Chapter 3 of the 2019 WSP to reflect the latest information and maintain consistency throughout the WSP, including storage, booster pump stations, and treatment. Facilities will be updated, as required, based on information provided by the City.

##### **Subtask 303 - Meeting No. 2 - Policies and Criteria, Existing System and Service Area**

Review and discuss existing policies and criteria, as well as recommendations. Review and update the existing system and service area. Discuss current operations and City concerns during the meeting.

##### **Subtask 304 - Draft and Final Chapter 3 - Existing System**

Prepare draft Chapter 3 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

#### Task 300 Assumptions

1. City will provide pertinent information for missing or updated facility data.

#### Task 300 City Input

1. Requested Data from Task 301.
2. Comments on draft Chapter 3 - Existing System.



### Task 300 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 3 - Existing System.
3. ROC for Chapter 3 - Existing System.

### Task 300 Meetings

1. Meeting No. 2 - Policies and Criteria, Existing System and Service Area.

## **TASK 400 - OPERATIONS AND MAINTENANCE**

The purpose of this task is to review, update, and evaluate the City's Operations and Maintenance (O&M) Program and document in Chapter 4 - Operations and Maintenance of the WSP.

### **TASK 400 ACTIVITIES**

#### **Subtask 401 - Data Request**

Prepare a data request for the required information. The request is expected to consist of the following updates since the 2019 WSP:

- Any updates to the City's standard plans, in PDF format; and specifications, in MS Word. It is assumed the City will provide its standard plans and specifications for inclusion in the WSP.
- Any updates to the City's Cross-Connection Control Program.
- Any updates to the City's Water Shortage Response Plan and Service Reliability, if available.

#### **Subtask 402 - Review O&M Analysis**

Review O&M analysis to identify deficiencies and recommendations from the 2019 WSP. Summarize and update as necessary the current operations and maintenance programs. Programs may include Operator certificates and training, lead free, routine, and preventive maintenance, Cross Connection Control Program, and Public Notification Plan/Procedures. O&M analysis will include a description of how O&M will be impacted by per- and polyfluoroalkyl substances (PFAS) removal facilities. Review current operation and maintenance program in relation to state and national water operation standards, including American Water Works Association (AWWA) G200-09 Standards. Propose recommendations and develop CIPs, if needed, based on the review.

#### **Subtask 403 - Draft and Final Chapter 4 - Operations and Maintenance**

Prepare draft Chapter 4 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

### Task 400 Assumptions

1. City can provide elements listed under Task 401.
2. A detailed evaluation of City O&M programs will not be conducted.
3. City will provide existing design and construction standards as needed to be included in an Appendix.

### Task 400 City Input

1. Requested Data from Task 401.
2. Comments on draft Chapter 4 - Operations and Maintenance.

### Task 400 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 4 - Operations and Maintenance.
3. ROC for Chapter 4 - Operations and Maintenance.

### Task 400 Meetings

1. None.

## **TASK 500 - WATER REQUIREMENTS**

The purpose of this task is to perform a demographic and demand analysis to predict current and future demands within the City's retail water service area (RWSA). Five-year, 10-year, 20-year, and build-out planning horizons will be evaluated using the best available information. This task will develop Chapter 5 - Water Requirements of the WSP.

### **TASK 500 ACTIVITIES**

#### **Subtask 501 - Data Request**

Prepare a data request for the required information. The request is expected to consist of the following updates since the 2019 WSP:

- Growth rates by customer class through the end of the water supply planning horizon. The rates should be consistent with regional planning and population and employment projections on a transportation analysis zones (TAZ) basis.
- Historical connection and water use information by customer class for the past 5 years, since the 2019 WSP.
- Historical Production from each source for the past 5 years, since the 2019 WSP, including annual volume and maximum day production.
- Updates to largest customer locations on a map and annual consumption by customer class.
- Accounted-for Non-Revenue Water for the past 5 years, since the 2019 WSP.
- Identify infill capacity and areas of redevelopment. Specific emphasis will be placed on those areas with a high potential for large scale residential or commercial development, as well as new industrial customers.
- GIS Data: Updates to land use and zoning data, vacant and re-developable land, TAZ boundaries.

#### **Subtask 502 - Demographic Projections Review and Update**

Demographic projections will be reviewed and updated to project the future growth in customers. Projections will use data from Clark County and the City to calculate rates of growth for each TAZ and each pressure zone. High, low, and average number of accounts will be prepared for the 5-year, 10-year, and 20-year, and build-out by pressure zone, if sufficient data is available. Accounts per acre will be developed based on existing densities.

#### **Subtask 503 - Demand Projections Review and Update**

Demand projections will be for the 5-year, 10-year, 20-year, and build-out planning horizons. Demand projections will include the following:

- Evaluate impact of climate change on demand trends based on results of local climate models.

- Develop the historical average day demands (ADD) and maximum day demands (MDD), the accounted-for-revenue water uses, estimated water loss and leakage planning values, and establish equivalent residential unit (ERU) values for the different customer classes.
- Estimate the future ADD and MDD water demand for each pressure zone based on the demographic projections and historical ERU demand. Estimates of the future water demand will be determined. The range will be based on the statistical variation in the historical ERU demand, leakage values, conservation goals, and the high and low ranges of the demographic projection and the effects of climate change. The City's largest connections, potential large scale industrial demands and future wholesale water customers will be evaluated and projected separately and added to other projected system demands. Peak hour demand (PHD) will be calculated using City specific peaking factors.

Demand projections will be provided to the City in an excel database demand projecting and loading tool.

#### **Subtask 504 - Meeting No. 3 - Water Demand Forecast, Water Use Efficiency, and Conservation**

Review demographic analysis and demand projection results. Confirm allocation of demand across customer classes and pressure zones. Review Water Use Efficiency (WUE) program and conservation volumes.

#### **Subtask 505 - Draft and Final Chapter 5 - Water Requirements**

Prepare draft Chapter 5 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

##### Task 500 Assumptions

1. The City will provide most current information from ongoing Comprehensive Plan update.
2. The City will provide data request for data available from 2019 WSP to present.
3. Demographic projections will update projections from 2019 WSP.

##### Task 500 City Input

1. Requested Data from Task 501.
2. Comments on draft Chapter 5 - Water Requirements.

##### Task 500 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 5 - Water Requirements.
3. ROC for Chapter 5 - Water Requirements.
4. Electronic demand tool.

##### Task 500 Meetings

1. Meeting No. 3 - Water Demand Forecast, Water Use Efficiency, and Conservation.

### **TASK 600 - WATER USE EFFICIENCY**

The City will lead the Water Use Efficiency Chapter, which summarizes the WUE program, estimate the water savings from measures in the past 6 years, and project future conservation water demand. The City will author Chapter 6 - Water Use Efficiency of the. The City will summarize the existing and future WUE

program, including program measures, effectiveness, costs, and benefits. The Consultant will develop future demand projections with the WUE program and review and format Chapter 6. The WUE work efforts will be presented as part of Meeting No. 4 - Water Demand Forecast, Water Use Efficiency, and Conservation.

## **TASK 600 ACTIVITIES**

### **Subtask 601 - Data Request**

Prepare a data request for the required information. The request is expected to consist of the following items if they have been updated since the 2019 WSP:

- Historical Word Document of Chapter 6 - Water Use Efficiency.
- Electronic version of figures and large tables.
- Conservation goals.
- Water Use Efficiency Public Meeting Minutes.

### **Subtask 602 - Review Future Conservation Water Demand**

Review conservation demands (both MDD and ADD) based on the established conservation goals provided by the City from the 2019 WSP. MDD and ADD conservation demands will be developed in the same demand years used in demand projections. Demands will be transmitted electronically to the City.

### **Subtask 603 - Final Chapter 6 - Water Use Efficiency**

Review draft Chapter 6 and provide comments. Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

#### **Task 600 Assumptions**

1. City can provide elements listed under Task 601.

#### **Task 600 City Input**

1. Requested Data from Task 601.
2. Draft Chapter 6 - Water Use Efficiency.

#### **Task 600 Consultant Deliverables**

1. Meeting Agendas, Materials, and Minutes.
2. Comments on Draft Chapter 6 - Water Use Efficiency.
3. Final Chapter 6 - Water Use Efficiency.

#### **Task 600 Meetings**

1. None.

## **TASK 700 - WATER QUALITY**

The purpose of this task is to summarize the water quality regulations and reporting requirements, evaluate water quality against the regulations, summarize any water quality violations, and recommend improvements if necessary to meet anticipated or future water quality regulations. This task will develop Chapter 7 - Water Quality of the Plan. The water quality work efforts will be presented as part of Meeting No. 4 - Water Demand Forecast, Water Use Efficiency, and Conservation.

## **TASK 700 ACTIVITIES**

### **Subtask 701 - Data Request**

Prepare a data request for the required information. The request is expected to consist of updates since the 2019 WSP for the following:

- Water Quality Monitoring Plan.
- Summary of water quality test results, including data from well water, treated water, and the distribution system.
- Testing Waivers.

### **Subtask 702 - Water Quality Summary**

Summarize the City's water quality programs and activities. Identify key requirements of applicable water quality regulations.

### **Subtask 703 - Water Quality Analysis**

Review draft Chapter 6 and provide comments. Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

### **Subtask 704 - Draft and Final Chapter 7 - Water Quality**

Prepare draft Chapter 7 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

#### Task 700 Assumptions

1. This task does not include review or update of the City's Water Quality Monitoring Plan and other water quality programs and plans.
2. This task does not include a blending study between surface water and groundwater.

#### Task 700 City Input

1. Requested Data from Task 701.
2. Comments on draft Chapter 7 - Water Quality.

#### Task 700 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 7 - Water Quality.
3. Final Chapter 7 - Water Quality.

#### Task 700 Meetings

1. None.

## **TASK 800 - WATER RESOURCES**

The purpose of this task is to review and update the current and future water resources to identify potential deficiencies and proposed improvements. Evaluations will consider current water rights, Water Resources Inventory Areas (WRIA), and coordinated regional water system plans. This task will develop Chapter 8 - Water Resources of the Plan.

## **TASK 800 ACTIVITIES**

### **Subtask 801 - Data Request**

Prepare a data request for the required information. The request is expected to consist of the following if updated since the 2019 WSP:

- Existing water rights certificates/permits and pending water rights applications.
- Existing well pump tests, surface water diversion capacity, and other evaluations and/or characterizations of supply capacity.
- Known limitations in supply transmission or treatment capacity.
- Electronic information for the City's existing monitoring wells and sampling protocol.
- Information required by Mott MacDonald for updating the Wellhead Protection Report.
- Source Water Protection Plan.

### **Subtask 802 - Water Supply Summary**

Review and summarize the existing sources of supply for the City's RWSA, including all surface water, groundwater, and interties. The "ability to pump" of each source will include an evaluation of capacity, water rights, treatment capacity, auxiliary power, and other limitations. Identify the criticality of each source.

### **Subtask 803 - Water Rights Assessment**

Review and summarize water right permits, claims, certificates, and pending water right applications and change applications from 2019 WSP. Update DOH Water Rights Self-Assessment Tables 1, 2, and 3 for the existing, 5-year, 10-year, and 20-year planning years, respectively.

### **Subtask 804 - Water Supply Analysis**

Review and summarize the City's ability to provide water supply in accordance with the City's confirmed reliability and supply criteria for the 10-, 20-year, and build-out projected demands within the whole system. Additional supplies or improvements will be identified and summarized, as needed. Summarize the City's water supply strategy plan and recommend program modifications, if needed, to meet all system demands for the planning period.

### **Subtask 805 - Wellhead Protection Program Update**

Review and update City's Wellhead Protection Plan from 2019 WSP to maintain compliance with all requirements of the State of Washington's wellhead protection rules. Work will be performed by Mott MacDonald and will include the following:

- Wellhead Protection Capture Zone Delineations. Mott MacDonald previously modeled the City's wellhead capture zones at full build-out conditions (i.e., total water rights) for the lower Washougal well field area and do not anticipate the need for any updates to the delineations in the 2015 WSP, and therefore were not included in the budget.
- Assess Environmental Threats and Risk Reduction Strategies. Inventory and map potential and confirmed contaminant sources within the delineated capture zone areas using current data contained within Ecology Environmental Information Management (EIM) database system. Evaluate and rank potential risks to the City's supply sources and assess management strategies that can be employed to minimize risk.

- Prepare Contingency Supply Plans. Prepare a contingency supply plan that considers the potential loss of the City's largest supply source due to groundwater contamination including options to use interties from the Cities of Vancouver and Washougal and use of the Camas surface water diversions on Boulder and Jones creeks.
- Prepare Notification Letters. Prepare notification letters that will need to be sent to hazardous waste handlers, first responders, and regulatory agencies as required by WAC 246-290-135. The letters will include maps showing the locations of the wellhead protection capture zones, transportation corridors where spills might be of concern, and waste storage and handling sites. It is assumed that the City will transmit the letters using their letterhead. Electronic versions of the documents and mailing lists will be provided to the City for their transmittal. Copies of the letters will be provided for inclusion in the WSP.
- Provide Assistance with Steigerwald Wellfield Supply Options and Analysis. Mott MacDonald will assist with integrating information from the Steigerwald water supply work that we have completed to date as needed for the 2015 WSP. Up to 2 days of staff time have been included in the budget.
- Prepare Wellhead Protection Plan Summary Report. Prepare a letter report which summarizes the findings of Subtasks 1 through 5. The document will serve as an appendix to the City's WSP document which will be submitted to DOH.
- Mott MacDonald Project Management. Conduct internal communication and management of personnel in accomplishing the project tasks. Mott MacDonald will communicate regularly with City staff and other project team members to keep them informed on project status and will solicit input, as needed. Mott MacDonald will prepare and submit invoices on a monthly basis.

#### **Subtask 806 - Draft and Final Chapter 8 - Water Resources**

Prepare draft Chapter 8 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

##### Task 800 Assumptions

1. The City will provide assumptions on future sources and quantities of supply.
2. City staff will field-verify hazard sites.
3. No sensitivity analyses have been budgeted.

##### Task 800 City Input

1. Requested Data from Task 801.
2. Comments on draft Chapter 8 - Water Resources.

##### Task 800 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Wellhead Protection Plan Report Update.
3. Draft Chapter 8 - Water Resources.
4. Final Chapter 8 - Water Resources.

##### Task 800 Meetings

1. None.

## **TASK 900 - WATER SYSTEM ANALYSIS**

The purpose of this task is to convert the City's model to InfoWater Pro and recalibrate it to current conditions. The model will then be used to evaluate the distribution system. Improvements will be developed for identified deficiencies. Improvements identified in other tasks will be incorporated into the model, as appropriate, to determine the effect of comprehensive improvements. Identified improvements will be reviewed as part of Meeting No. 9 - Capital Improvements.

### **TASK 900 ACTIVITIES**

#### **Subtask 901 - Data Request**

- Prepare a data request for the required information. The request is expected to consist of the following:
  - » Potential future supplies or interties, including locations.
  - » Potential location for future storage facilities.
  - » Supervisory control and data acquisition (SCADA) data for diurnal curve development and calibration.
  - » As-builts or list of new projects to be added to the hydraulic model.

#### **Subtask 902 - Updated Hydraulic Profile**

Update the previous hydraulic profile according to data provided in the hydraulic model. Prepare a hydraulic profile figure for review by City.

#### **Subtask 903 - Storage Analysis**

Identify the storage volume required for each pressure zone based on the established storage criteria for equalizing, fire flow, operational and standby volumes. The storage analysis will be performed for the 6-, 10-, and 20-year projected demands. If storage deficiencies are identified, additional storage volume requirements will be identified by pressure zone and capacity. Potential storage size and location specifically identified by the City will be utilized if future storage needs are identified.

#### **Subtask 904 - Pump Station Analysis**

Identify the pumping capacity requirements per City specified criteria. Compare requirements to current pump station capacity to identify any deficiencies for the 10- and 20-year projected demand scenarios. Required upgrades, modifications, or operational changes will be recommended, as necessary.

#### **Subtask 905 - Perform Hydrant Flow Tests**

Consultant will provide up to 10 pressure loggers to be used for hydrant flow testing at up to 10 locations. Consultant will identify hydrants to be tested and develop a calibration plan to summarize activities. City staff will install pressure loggers at predetermined locations. Consultant will accompany City staff during flow testing and will read and record flow hydrant flows and pressures. All residual hydrant pressure results will be measured by pressure loggers in addition to manual pressure readings by City staff and recorded by Consultant staff. City will provide hydrant pitot tubes and diffusers. Flow testing will be documented in a Hydrant Flow Testing TM.

#### **Subtask 906 - Update Hydraulic Model**

Convert the City's Hydraulic model from InfoWater to InfoWater Pro. Apply demand distribution to the model based on meter locations and demand factors for each customer class. Projected demands for the



largest customers will be applied directly to each customer location. The demands will include the current year for model calibration, as well as the 5-year, 10-year, and 20-year ADD and MDD for planning. Custom diurnal patterns will be developed by service area utilizing historical representative SCADA data.

#### **Subtask 907 - Calibrate Hydraulic Model**

Calibrate the model using hydrant flow test data provided by Consultant. Up to 10 hydrant tests will be used for calibration. Consultant will work with the City to determine the appropriate hydrant sites; it is assumed no more than 10 sites will be considered. Verify appropriate model settings and parameters (such as tank levels, pump curves, etc.) using data provided by City, including SCADA information. Calibrate the hydraulic model according to M32 guidelines. Calibrate the model for a 24-hour extended period simulation scenario and 10 steady state conditions. SCADA data will be provided by the City and will be used for calibration.

#### **Subtask 908 - Meeting No.4 - Water Management Plan and Hydraulic Model Development**

Review and summarize the existing sources of supply for the City's RWSA, including all surface water, groundwater, and interties. The "ability to pump" of each source will include an evaluation of capacity, water rights, treatment capacity, auxiliary power, and other limitations. Identify the criticality of each source. This meeting will also present the results of the model development and calibration efforts.

#### **Subtask 909 - Draft and Final TM 1 - Hydraulic Model Development and Calibration TM**

Prepare draft TM 1 - Hydraulic Model Development and Calibration for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

#### **Subtask 910 - Fire and System Pressure Analysis**

Using the hydraulic model, perform steady state analysis of the system evaluating fire flow and system pressures per DOH regulations and guidelines based on the City's water system criteria. Identify improvements to address deficiencies under the MDD plus fire flow simulations and the peak hour simulations for the 5-year, 10-year, and 20-year scenarios. The model will also be used to identify minimum system pressures and velocities during peak hour demands. Operational changes will be recommended in addition to physical improvements. The system analysis will focus on distribution capacity deficiencies for pressure, velocity, and flow. The analysis will be conducted for both supply scenarios.

#### **Subtask 911 - Meeting No. 5 - Preliminary System Deficiencies**

Facilitate a meeting to review the results from the pumping, storage, and fire and pressure analyses. Discuss potential improvement projects.

#### **Subtask 912 - Meeting No. 6 - Recommendations Workshop**

Facilitate a meeting to review the recommendations for inclusion in the City's CIP.

#### **Subtask 913 - Draft and Final Chapter 9 - System Analysis**

Prepare draft Chapter 9 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

### Task 900 Assumptions

1. The City and Consultant will conduct hydrant flow testing to support model calibrations. Field testing is anticipated to last up to 6 days (an average of five hydrant tests per day).
2. Consultant will provide up to 10 pressure loggers. City will provide the rest of the equipment, including pitot tubes, diffusers for hydrants and any needed equipment to operate hydrants.
3. Hydrant flow testing will be performed in the summer of 2024.
4. The City will provide SCADA data for extended period simulations (EPS) calibration.

### Task 900 City Input

1. Requested Data from Task 901.
2. Comments on draft TM 1 - Hydraulic Model Development and Calibration.
3. Comments on draft Chapter 9 - System Analysis.

### Task 900 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft TM 1 - Hydraulic Model Development and Calibration.
3. Final TM 1 - Hydraulic Model Development and Calibration.
4. Draft Chapter 9 - System Analysis.
5. Final Chapter 9 - System Analysis.
6. Hydrant Flow Testing TM.

### Task 900 Meetings

1. Meeting No.4 - Water Management Plan and Hydraulic Model Development.
2. Meeting No.5 - Preliminary System Deficiencies.
3. Meeting No.6 - Recommendations Workshop.

## **TASK 1000 - CAPITAL IMPROVEMENTS**

This Task will review and update the recommended improvements for the sources of supply, storage, distribution and transmission, and pressure zones outlined in the 2019 WSP. Total project costs will be developed for each recommended improvement and ranked by priority. This task will develop Chapter 10 - Capital Improvement for the Plan.

### **TASK 1000 ACTIVITIES**

#### **Subtask 1001 - Cost Estimates**

Update project cost for pipe replacement, pump station, reservoir, treatment, and other improvement projects from 2019 WSP. Summarize the recommended system improvements for the 5-year, 10-year, and 20-year terms. Costs will be presented in current dollars and represents an American Association of Cost Engineering (AACE) Class V estimate.

### **Subtask 1002 - Project Prioritization**

Review project prioritization criteria from 2019 WSP. Prioritize all projects into 5-year, 10-year, and 20-year schedules based on evaluation during the WSP. Projects not identified in the WSP will be identified by the City and included for prioritization during this task.

### **Subtask 1003 - Meeting No. 7 - Capital Improvements**

Prepare a data request for the required information. The request is expected to consist of the following.

### **Subtask 1004 - Electronic CIP**

Review CIP projects and develop project prioritization. Review and confirm all CIP project costs.

### **Subtask 1005 - Draft and Final Chapter 10 - Capital Improvement Plan**

Prepare draft Chapter 10 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

#### Task 1000 Assumptions

1. City provides bid costs of recent projects, if available.

#### Task 1000 City Input

1. Requested Data from Task 1001.
2. Comments on draft Chapter 10 - Capital Improvement Plan.

#### Task 1000 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 10 - Capital Improvement Plan.
3. Final Chapter 10 - Capital Improvement Plan.
4. Electronic CIP.

#### Task 1000 Meetings

1. Meeting No.7 - Capital Improvements

## **TASK 1100 - FINANCIAL**

The purpose of this task is to review and update Chapter 11 - Financial Plan, which will be conducted by FCS. Chapter 11 will identify the total cost of providing water service, assure that the utility improvement schedule will be implemented, and assist in establishing adequate fees for service. The financial program will be coordinated with the CIP.

### **TASK 1100 ACTIVITIES**

#### **Subtask 1101 - Data Collection and Validation**

Prepare an initial data request identifying financial and operational documents pertinent to the performance of the study. The Consultant will provide the CIP and relevant draft WSP chapters. Review, analyze, and validate data as necessary for use in formulating the technical analysis. Follow up with requests for any additional items or explanations, as necessary.

### **Subtask 1102 - Historical Financial Performance Review**

Review and document the financial operations (revenue and expenses) and financial condition (assets and liabilities) of the water utility for the previous 6-year period. Summarize noteworthy financial trends.

### **Subtask 1103 - Fiscal Policy Review**

Review the City's current fiscal policies for operating and capital reserves, system reinvestment funding, debt management, and debt service coverage.

### **Subtask 1104 - Capital Financing Plan**

Evaluate capital funding options and develop a capital financing plan for the 6-, 10-, and 20-year CIPs. The analysis will include a forecast of capital funding needs, borrowing requirements, and associated cash flows and cash balances over the study period. Evaluate and recommend an appropriate balance of funding from cash, system development charges (SDC), bonds, low interest loans and/or other available funding sources. Depending upon preliminary results, FCS will work closely with the Consultant and the City to perform sensitivity analyses for alternative scheduling of capital projects in order to smooth customer rate impacts. The budget provides for up to three scenarios.

### **Subtask 1105 - Operating Forecast**

The City's current water operating budgets will be used as the baseline for forecasting ongoing O&M costs, debt service, and other financial obligations of the water utility over the 6-year and 20-year study periods. Incorporate engineering planning growth forecasts and establish economic factors for cost escalation. Integrate additional O&M expenses, if any, resulting from the CIP and any other known changes in operational requirements.

### **Subtask 1106 - Revenue Needs Assessment**

Integrate fiscal policies, capital financing impacts and the operating forecast, and develop an operating cash flow projection for the 6-year and 20-year study periods. Compare forecasted financial requirements against forecasted revenue under existing rates to determine annual and cumulative revenue adjustments needed to ensure financial sustainability over time.

### **Subtask 1107 - Rate Forecast and Affordability Test**

Develop a rate forecast for the 6-year period. Apply annual rate adjustments to the City's existing water rate structures "across-the-board" to each rate class and rate charge (fixed and variable). Note: this scope does not include changes to the City's existing water rate structure. The Financial Chapter will include a narrative discussion of potential rate structure enhancements, if necessary. Perform an affordability test as an indication of a residential customer's ability to pay the existing and forecasted rates. This includes an analysis and comparison of the water system's existing and forecasted average residential bills to 2.5 percent of the median household income. This test will be conducted for the 6-year and 20-year study periods.

### **Subtask 1108 - Meeting No. 8 - Financial Review**

Review results over four remote meetings before finalizing the Financial Chapter. Meeting will be attended by FCS and Carollo.

### **Subtask 1109 - Draft and Final Chapter 11 - Financial Plan**

Prepare draft Chapter 11 for City's review and approval. City comments and Consultant responses will be tracked in the Comment Response Log. Comments on this chapter will be incorporated into the final WSP.

#### Task 1100 Assumptions

1. City can provide elements listed under Task 1101.
2. This scope does not include changes to the City's existing water rate structure.

#### Task 1100 City Input

1. Requested Data from Task 1101.
2. Comments on draft Chapter 11 - Financial Plan.

#### Task 1100 Consultant Deliverables

1. Meeting Agendas, Materials, and Minutes.
2. Draft Chapter 11 - Financial Plan.
3. Final Chapter 11 - Financial Plan.

#### Task 1100 Meetings

1. Meeting No. 8a, 8b, 8c, 8d - Financial Review.

## **TASK 1200 - PLAN DEVELOPMENT**

The purpose of this task is to integrate comments on the WSP into a clear and comprehensive Water System Plan document. The City Draft Plan will be prepared, including an Executive Summary. This task also includes incorporating comments and developing the Agency Review Draft Plan and Final Plan.

### **TASK 1200 ACTIVITIES**

#### **Subtask 1201 - Executive Summary**

Prepare an executive summary, summarizing each element of the Water System Plan.

#### **Subtask 1202 - City Draft Plan**

Prepare Cover Sheet, Table of Contents, and Executive Summary. Compile Chapters and develop Appendices. Prepare one PDF of City draft document for City staff review the City's water quality programs and activities. Identify key requirements of applicable water quality regulations.

#### **Subtask 1203 - Meeting No. 9 - City Review Comments**

Meet with City to discuss comments on draft document. Incorporate comments to be included into Agency Draft Plan.

#### **Subtask 1204 - Agency Draft Plan**

Incorporate City comments into an Agency Draft plan to be submitted for agency review. An electronic PDF will be developed for City reproduction and distribution of plan to agencies and adjacent purveyors.

**Subtask 1205 - Meeting No. 10 - Agency Review Comments**

Meet with Agency to discuss comments on draft document. Incorporate comments to be included into Final Plan.

**Subtask 1206 - Final Plan**

Consultant will review agency review letters for incorporation into the Final Plan. Delivery of the Final Plan will include one electronic PDF.

*Task 1200 Assumptions*

1. The City provides required documents for appendices, including acceptance ordinances.
2. It is anticipated that City will distribute the WSP to DOH, county agencies, and adjacent purveyors review for approval. The City will collect public and agency review comments and deliver to Consultant. City will develop written responses received during agency review process.
3. Plans will be delivered via electronic PDF.

*Task 1200 City Input*

1. City comments.
2. Public and Agency review comments.

*Task 1200 Consultant Deliverables*

1. Meeting Agendas, Materials, and Minutes.
2. Executive Summary.
3. City Draft Plan - PDF.
4. Agency Draft Plan - PDF.
5. Final Plan - PDF

*Task 1200 Meetings*

1. Meeting No. 9 - City Review Comments.
2. Meeting No. 10 - Agency Review Comments.

CITY OF Camas Water System Plan LEVEL OF EFFORT 1-Aug-24																					
TASK / DESCRIPTION	Jude Grounds	Matt Huang	Jill Kjellson	Ali Leeds	Aurelie Nabonnand	Max Mozer	Connor Mancosky	Madeleine LaPorte	Kevin Christensen/ Varies	Varies	Total Hours	Carollo Labor Cost	FCS	Mott McDonald	Total Subconsultant Cost	Total Subconsultant Markup 5%	Total Subconsultant Cost with Markup	Total Direct Charges	PECE	TOTAL COST	
	PIC	PM	APM	Principal Professional - Water Quality	QA/QC	Professional - Modeler	Project Professional - Water Quality	Staff Engineer	GIS/Graphics	DP											
	\$ 310	\$ 275	\$ 237	\$ 275	\$ 237	\$ 201	\$ 214	\$ 165	\$ 152	\$ 117											
Task 100 – Project Management	9	29	45	0	4	27	0	0	0	22	136	\$ 30,379	\$ -	\$ 15,628	\$ 15,628	\$ 782	\$ 16,410	\$ -	\$ 15,80	\$ 2,149	\$ 48,938
101 Monthly Progress Report and Invoice		3	18							18	39	\$ 7,197		\$ 5,255	\$ 5,255	\$ 263	\$ 5,518	\$ -	\$ 616	\$ 13,331	
102 Project Management Plan			1							4	5	\$ 705		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 79	\$ 784	
103 Pre-Plan DOH Meeting		4	4			1					9	\$ 2,249		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 142	\$ 2,391	
104 Meeting No.1 - Kick-off Meeting		4	4			8					16	\$ 3,656	\$ 3,533	\$ 3,533	\$ 177	\$ 3,710	\$ -	\$ 253	\$ 7,619		
105 Client and Team Coordination	9	18	18		4	18					67	\$ 16,572	\$ 6,840	\$ 6,840	\$ 342	\$ 7,182	\$ -	\$ 1,059	\$ 24,813		
Task 200 – Planning Considerations	0	2	4	0	3	13	0	14	5	12	53	\$ 9,296			\$ -	\$ -	\$ -	\$ -	\$ 837	\$ 10,133	
201 Data Request			1			1		2			4	\$ 768			\$ -	\$ -	\$ -	\$ -	\$ 63	\$ 831	
202 Summarize Related Documents			1			2		4			7	\$ 1,299			\$ -	\$ -	\$ -	\$ -	\$ 111	\$ 1,410	
203 Draft and Final Chapter 1 - Introduction		1	1		1	4		4	1	4	16	\$ 2,833			\$ -	\$ -	\$ -	\$ -	\$ 253	\$ 3,086	
204 Draft and Final Chapter 2 - Planning Considerations		1	1		2	6		4	4	8	26	\$ 4,396			\$ -	\$ -	\$ -	\$ -	\$ 411	\$ 4,807	
Task 300 – Existing System	0	2	4	0	3	15	0	12	6	8	50	\$ 9,052		\$ 4,925	\$ 4,925	\$ 247	\$ 5,172	\$ -	\$ 790	\$ 15,014	
301 Data Request						1		2			3	\$ 531			\$ -	\$ -	\$ -	\$ -	\$ 47	\$ 578	
302 Review and Update Existing System						4		2	4		10	\$ 1,742	\$ 1,930	\$ 1,930	\$ 97	\$ 2,027	\$ -	\$ 158	\$ 3,927		
303 Meeting No.2 - Policies and Criteria, Existing System, and Service Area		1	2		1	8					12	\$ 2,594	\$ 780	\$ 780	\$ 39	\$ 819	\$ -	\$ 190	\$ 3,603		
304 Draft and Final Chapter 3 - Existing System		1	2		2	2		8	2	8	25	\$ 4,185	\$ 2,215	\$ 2,215	\$ 111	\$ 2,326	\$ -	\$ 395	\$ 6,906		
Task 400 – Operations and Maintenance	0	1	3	0	2	13	0	14	0	8	41	\$ 7,319			\$ -	\$ -	\$ -	\$ -	\$ 648	\$ 7,967	
401 Data Request						1		2			3	\$ 531			\$ -	\$ -	\$ -	\$ -	\$ 47	\$ 578	
402 Review O&M Analysis			1			6		6			13	\$ 2,433			\$ -	\$ -	\$ -	\$ -	\$ 205	\$ 2,638	
403 Draft and Final Chapter 4 - Operations and Maintenance		1	2		2	6		6		8	25	\$ 4,355			\$ -	\$ -	\$ -	\$ -	\$ 395	\$ 4,750	
Task 500 - Water Requirements	0	7	6	0	5	29	0	54	12	9	122	\$ 22,148			\$ -	\$ -	\$ -	\$ -	\$ 1,928	\$ 24,076	
501 Data Request						1		2			3	\$ 531			\$ -	\$ -	\$ -	\$ -	\$ 47	\$ 578	
502 Demographic Projections Review and Update		1				4		12	4		21	\$ 3,667			\$ -	\$ -	\$ -	\$ -	\$ 332	\$ 3,999	
503 Demand Projections Review and Update					2	8		24	4		39	\$ 6,925			\$ -	\$ -	\$ -	\$ -	\$ 616	\$ 7,541	
504 Meeting No. 3 - Water Demand Forecast, Water Use Efficiency, and Conservation		4	4		1	8		8		1	26	\$ 5,330			\$ -	\$ -	\$ -	\$ -	\$ 411	\$ 5,741	
505 Draft and Final Chapter 5 - Water Requirements		1	2		2	8		8	4	8	33	\$ 5,695			\$ -	\$ -	\$ -	\$ -	\$ 521	\$ 6,216	
Task 600 - Water Use Efficiency	0	3	8	0	2	3	0	18	0	6	40	\$ 7,470			\$ -	\$ -	\$ -	\$ -	\$ 632	\$ 8,102	
601 Data Request						1		2			3	\$ 531			\$ -	\$ -	\$ -	\$ -	\$ 47	\$ 578	
602 Review Future Conservation Water Demand		2	4			2		8			16	\$ 3,220			\$ -	\$ -	\$ -	\$ -	\$ 253	\$ 3,473	
602 Final Chapter 6 - Water Use Efficiency		1	4		2			8		6	21	\$ 3,719			\$ -	\$ -	\$ -	\$ -	\$ 332	\$ 4,051	
Task 700 - Water Quality	0	1	1	9	2	0	64	0	0	8	85	\$ 18,093			\$ -	\$ -	\$ -	\$ -	\$ 1,343	\$ 19,436	
701 Data Request				1			4				5	\$ 1,131			\$ -	\$ -	\$ -	\$ -	\$ 79	\$ 1,210	
702 Water Quality Summary				2			24				26	\$ 5,686			\$ -	\$ -	\$ -	\$ -	\$ 411	\$ 6,097	
703 Water Quality Analysis				2			24				26	\$ 5,686			\$ -	\$ -	\$ -	\$ -	\$ 411	\$ 6,097	
704 Draft and Final Chapter 7 - Water Quality		1	1	4	2		12			8	28	\$ 5,590			\$ -	\$ -	\$ -	\$ -	\$ 442	\$ 6,032	
Task 800 - Water Resources	0	7	7	4	2	13	0	22	2	8	65	\$ 12,641	\$ 26,160	\$ 26,160	\$ 1,308	\$ 27,468	\$ -	\$ 1,027	\$ 41,136		
801 Data Request						1		2			3	\$ 531	\$ 2,260	\$ 2,260	\$ 113	\$ 2,373	\$ -	\$ 47	\$ 2,951		
802 Water Supply Summary			2					4			6	\$ 1,134	\$ 1,705	\$ 1,705	\$ 85	\$ 1,790	\$ -	\$ 95	\$ 3,019		
803 Water Rights Assessment			2			2					4	\$ 876	\$ 2,515	\$ 2,515	\$ 126	\$ 2,641	\$ -	\$ 63	\$ 3,580		
804 Water Supply Analysis		2	2			4		8			16	\$ 3,148	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 253	\$ 3,401		
805 Wellhead Protection Program Update		1	1			2					4	\$ 914	\$ 12,920	\$ 12,920	\$ 646	\$ 13,566	\$ -	\$ 63	\$ 14,543		
806 Draft and Final Chapter 8 - Water Resources		4		4	2	4		8	2	8	32	\$ 6,038	\$ 6,760	\$ 6,760	\$ 338	\$ 7,098	\$ -	\$ 506	\$ 13,642		
Task 900 - Water System Analysis	1	31	35	0	13	143	0	164	48	29	464	\$ 86,703			\$ -	\$ -	\$ -	\$ 3,200	\$ 7,331	\$ 97,234	
901 Data Request						1		2			3	\$ 531			\$ -	\$ -	\$ -	\$ -	\$ 47	\$ 578	
902 Updated Hydraulic Profile			1			4		4		8	17	\$ 2,637			\$ -	\$ -	\$ -	\$ -	\$ 269	\$ 2,906	
903 Storage Analysis		2	1			6		4	2		15	\$ 2,957			\$ -	\$ -	\$ -	\$ -	\$ 237	\$ 3,194	
904 Pump Station Analysis		2	1			6		4	2		15	\$ 2,957			\$ -	\$ -	\$ -	\$ -	\$ 237	\$ 3,194	
905 Perform Hydrant Flow Tests		1	4			36		60	12		113	\$ 20,183			\$ -	\$ -	\$ -	\$ 2,000	\$ 1,785	\$ 23,968	
906 Update Hydraulic Model		4	2		2	12		16	8		44	\$ 8,316			\$ -	\$ -	\$ -	\$ -	\$ 695	\$ 9,011	
907 Calibrate Hydraulic Model		6	2		1	24		36	2		71	\$ 13,429			\$ -	\$ -	\$ -	\$ -	\$ 1,122	\$ 14,551	
908 Meeting No.4 - Water Management Plan & Hydraulic Model Development	1	2	6		2	8			2	1	22	\$ 4,785			\$ -	\$ -	\$ -	\$ -	\$ 348	\$ 5,133	
909 Draft and Final TM 1 - Hydraulic Model Development and Calibration TM		2	4		2	6		6	4	8	32	\$ 5,712			\$ -	\$ -	\$ -	\$ -	\$ 506	\$ 6,218	
910 Fire and System Pressure Analysis		2	2			12		16	8		40	\$ 7,292			\$ -	\$ -	\$ -	\$ -	\$ 632	\$ 7,924	
911 Meeting No.5 - Preliminary System Deficiencies		4	6		2	12			2	2	28	\$ 5,946			\$ -	\$ -	\$ -	\$ 1,200	\$ 442	\$ 7,588	
912 Meeting No.6 - Recommendations Workshop		2	4		2	8		8	2	2	28	\$ 5,438			\$ -	\$ -	\$ -	\$ -	\$ 442	\$ 5,880	
913 Draft and Final Chapter 9 - System Analysis		4	2		2	8		8	4	8	36	\$ 6,520			\$ -	\$ -	\$ -	\$ -	\$ 569	\$ 7,089	
Task 1000 - Capital Improvements	0	13	12	0	5	28	0	50	20	9	137	\$ 25,575			\$ -	\$ -	\$ -	\$ 1,200	\$ 2,165	\$ 28,940	
1001 Cost Estimates		1	1			2		8			12	\$ 2,234			\$ -	\$ -	\$ -	\$ -	\$ 190	\$ 2,424	
1002 Project Prioritization		2	1			4		8			15	\$ 2,911			\$ -	\$ -	\$ -	\$ -	\$ 237	\$ 3,148	
1003 Meeting No.7 - Capital Improvements		6	6		1	8		8	2	1	32	\$ 6,658			\$ -	\$ -	\$ -	\$ 1,200	\$ 506	\$ 8,364	
1004 Electronic CIP		2	2			8		24	16		54	\$ 9,498			\$ -	\$ -	\$ -	\$ -	\$ 853	\$ 10,351	
1005 Draft and Final Chapter 10 - Capital Improvement Plan		2	2		2	6		2	2	8	24	\$ 4,274			\$ -	\$ -	\$ -	\$ -	\$ 379	\$ 4,653	
Task 1100 - Financial	0	6	12	0	2	18	0	12	4	8	62	\$ 12,110	\$ 23,535		\$ 23,535	\$ 1,633	\$ 25,168				

## CONSULTANT BILLING RATES

### CITY OF CAMAS

#### 2025 WATER SYSTEM PLAN AND GENERAL SEWER PLAN

Carollo Engineers, Inc. billing rates and other direct expenses are defined in the tables below. These rates are for calendar years 2024 and projected through 2026. If the contract is extended beyond December 31, 2026, Carollo Engineers, Inc., reserves the right to modify the rates on an annual basis.

Project Role	Hourly Rate		
	2024	2025	2026
Senior Advisor/SME	\$295.00	\$310.00	\$325.00
Project Manager	\$262.00	\$275.00	\$289.00
Principal Professional	\$262.00	\$275.00	\$289.00
Senior Professional	\$226.00	\$237.00	\$249.00
Project Professional	\$204.00	\$214.00	\$225.00
Professional	\$191.00	\$201.00	\$211.00
Staff Professional	\$157.00	\$165.00	\$173.00
Senior Technician	\$159.00	\$167.00	\$175.00
Assistant Professional	\$149.00	\$156.00	\$164.00
Technician	\$145.00	\$152.00	\$160.00
Document Processing	\$111.00	\$117.00	\$123.00

Expense			
Project Equipment Computer Expense (PECE)	\$15.00/hr	\$15.80/hr	\$16.60/hr
Travel and Subsistence	At cost		
Mileage at IRS Reimbursement Rate	\$0.67 per mile effective January 1, 2024		
Subconsultant	Cost + 10%		
Other Direct Cost	Cost + 10%		





## Staff Report

December 15, 2025 Council Workshop Meeting

Professional Services Agreement Amendment Water System Plan Update

Presenter: Rob Charles, Utilities Manager

Time Estimate: 10 minutes

Phone	Email
360.817.7003	rcharles@cityofcamas.us

**BACKGROUND:** The Water System Plan Update (WSPU) is a required chapter of the Comprehensive Plan Update showing that there is sufficient water capacity for growth demands in the City's 20 year planning period from 2026-2046. The plan looks at supply capacity, the distribution system for supplying water, storage capacity, and deficiencies in supply and fire flow in the system. Recommendations for Capital Improvements are created for the WSPU within the planning period. A contract with Carollo was approved in November of 2024 to complete the WSPU in the amount of \$382,888.

**SUMMARY:** As Carollo has advanced the Water System Plan Update, additional scope has become necessary because the Comprehensive Plan update experienced delays and required additional time to finalize growth percentages, land-use designations, and densities that directly influence the City's water demand projections, hydraulic modeling, and system deficiency analysis. Because the WSPU must reflect where and how growth will occur, certain tasks could not be finalized until this information was available. This has required additional consultant time to refine demand forecasts, adjust modeling inputs, and coordinate assumptions with the Comprehensive Plan team. In addition to the major technical components outlined below, the amendment also includes supporting project management, planning considerations, and plan development tasks necessary to integrate these updated growth assumptions and ensure the WSPU remains accurate, compliant, and complete.

- Operations and Maintenance Manual - The existing O&M Manual is in draft form, but new water system components have been added since the draft was completed and need to be incorporated into the final manual.
- Water Use Efficiency and Water Loss Control Action Plan – A Water Loss Control Action Plan is required as part of the WSPU if the most recent 3 years of water loss average is greater than 10% per Department of Health (DOH) requirements. The amendment adds in the chapter needed to address the Water Loss Action Control Plan and updating the Water Use Efficiency chapter in the WSPU.
- Wellhead Protection Program (WHPP) - Initial findings of the WSPU indicate a loss of water supply capacity. The amendment will include development of short and long term options for the City to address loss of supply. Components of the WHPP

have been developed, however a completed Wellhead Protection Plan has never been developed by the City. Included with the work will be the development of Spill Response Plan and combining this all into one chapter within the WSPU.

- There are also additional efforts by the consultant to develop water demand projections based on the available data and coordination with the Comprehensive Plan Update.

**BENEFITS TO THE COMMUNITY:** The plan provides a roadmap for the City to build infrastructure necessary to meet growth demands over the next 20 years as well as address system deficiencies.

**STRATEGIC PLAN:** This project aligns with the Stewardship of City Assets from the City's Strategic Plan.

**POTENTIAL CHALLENGES:** None known.

**BUDGET IMPACT:** The cost of the amendment will be \$162,667 and will be covered out of the revenue from the water fund. There is sufficient revenue to cover this expense. The amendment will bring the total cost of the project to \$544,955.

**RECOMMENDATION:** Staff would recommend this item be placed on the January 4<sup>th</sup> Regular Meeting Consent Agenda for Council's consideration.

# *our* Downtown Camas 2045

August 2025 - DRAFT



# Acknowledgments

Item 4.

## City Staff

**Doug Quinn**  
City Administrator

**Alan Peters**  
Community Development  
Director

**Robert Maul**  
Planning Manager

**Lauren Hollenbeck**  
Senior Planner

**Yvette Sennewald**  
Senior Planner

**Madeline Coulter**  
Planner

**Kim Sogge**  
Community Member

**Marlo Maroon**  
Community Member/Planning  
Commission

**Carey Certo**  
Administrative Support  
Assistant

**Rob Charles**  
Interim Public Works Director

**Curleigh Carothers**  
Engineering Manager

## City Council

**Mayor Steve Hogan**

**John Nohr**  
Ward 1

**Leslie Lewallen**  
Ward 3

**Marilyn Boerke**  
Ward 1

**John Svilarich**  
At Large (All Wards)

**Martin Elzingre**  
Ward 2

**Tim Hein**  
Ward 2

**Jennifer Senescu**  
Ward 3

## Planning Commision

**Troy Hull**  
Chair

**Geoerl Niles**  
Vice Chair

**Marlo Maroon**

**Joe Walsh**

**Shawn High**

**Masha Eshghi**

**Paul Anderson**

## Downtown Advisory Committee (DAC)

**Alicia Brazington**  
Community Member/Parks and  
Recreation Commission

**Samantha Horner**  
Community Member / Library  
Board of Trustees

**Jason Irving**  
Community Member/Parks and  
Recreation Commission

**Brian Kuhta**  
Community Member

**Rick Melching**  
Community Member

**Kim Sogge**  
Community Member

**Marlo Maroon**  
Community Member/Planning  
Commission

**Carrie Schulstad**  
DCA Executive Director

**Caroline Mercury**  
DCA Founding and Current  
Board Member

**Marilyn Boerke**  
DCA Board President/ Camas  
City Council

**Randy Curtis**  
DCA Board Vice  
President

**Sarah Laughlin**  
DCA Board Secretary

**Shawn Parker**  
DCA Board Member



SERA



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# 01

## Introduction

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## Purpose

Over the last decade, the City of Camas has grown substantially. Access to outdoor recreation, schools, and a strong community-feel are frequently cited as the City's strengths, and Downtown Camas has played a crucial role as the heart of the City, defining its unique identity in the region. Since initiating the modern economic and industrial history of Camas, Downtown has continued to transform into a core commercial district that attracts residents and visitors alike to its authentic Main Street experience along NE 4th Avenue.

Whether for daily shopping trips or a monthly themed event, Downtown Camas continues to be a local retail hub and a regional destination. To date, downtown has kept pace with the demands of overall growth in Camas, but recent market demands and fluctuations led the City and downtown to address future transformations over the next 20 years.

To address future growth, the City of Camas prepared to update its citywide Comprehensive Plan ("Our Camas 2045"). City leaders and local stakeholders recognized a need to place a special focus on Downtown Camas through a Subarea Plan ("Our Downtown Camas 2045"). Completing these plans with a synchronous planning process offered a chance to consider unique needs at both

the city-scale and downtown-scale, while understanding the vision and goals for each plan are intertwined. The plans were developed through an iterative community engagement process, input from local stakeholders at key project milestones, and ongoing guidance and input from City staff.



Bike Parked on Curb in Downtown Camas

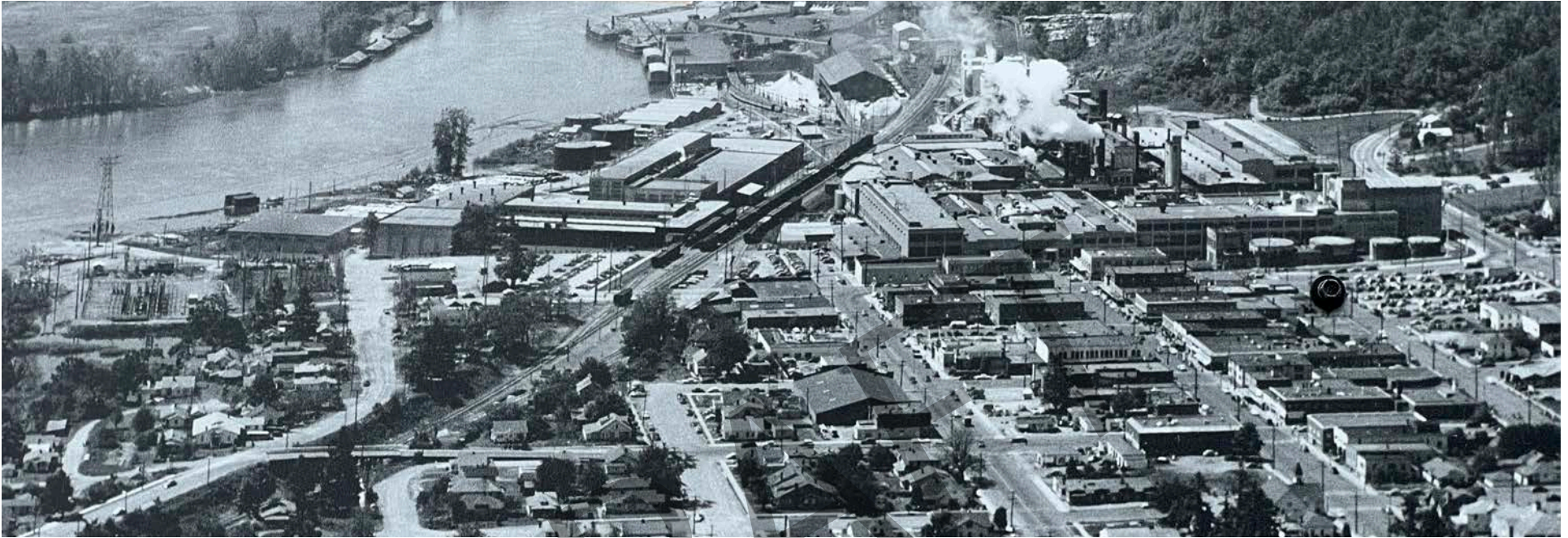
The Downtown Subarea Plan considers the historic character of Downtown Camas and offers a strategy for balancing history with future transformations to make downtown a place that will continue to attract residents and visitors alike. The Subarea Plan is intended to serve as a

shared commitment between city and downtown stakeholders, welcoming the development and business communities to help implement the vision. It also provides discussion about future expansion to the Camas Mill Property, when timing aligns with property owners' planning processes. The vision and goals set forth in this Plan intend to achieve the following outcomes:

1. Set the **policy direction** for future implementation in Downtown.
2. Guide development in a way that **reflects the community's vision** for the area through a set of clear and objective design guidelines.
3. Establish a framework for **connecting public and private spaces and transportation networks**.
4. Lay the groundwork for the future of the Camas Mill Property by **supporting an unrestricted environmental cleanup level**.

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**Downtown Camas has been a vital part of the city's history since its founding as the Town of Camas in 1883.** At that time, construction of the Camas Paper Mill began, which provided opportunities for the first businesses to open in downtown. These businesses served the people working at the mill and living in the town. The mill's involvement in and support of the community, as well as the standard for excellence, brought many years of civic prosperity and quality entrepreneurship to Downtown Camas.

With **increased suburban growth in the early 1960's**, anchor businesses in historic downtowns across the country

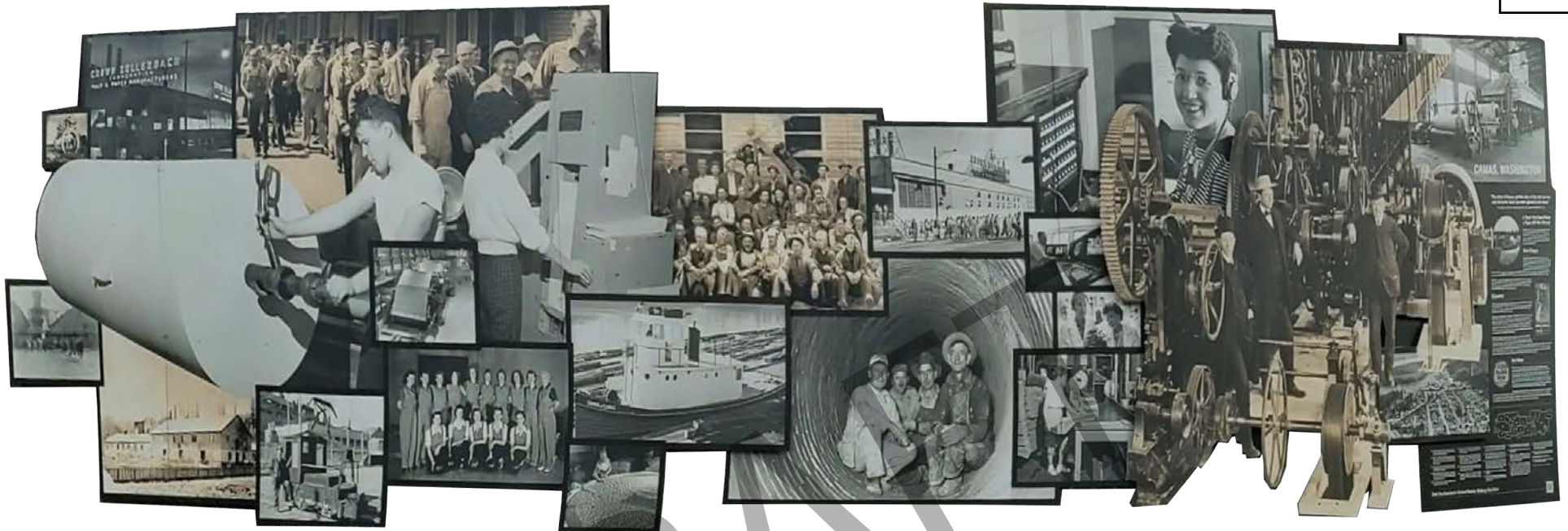
were moving to shopping malls and the civic leaders of Camas grew concerned. Downtown business leaders were inspired by a transformative pedestrian shopping mall in Grand Junction, Colorado and proposed to do something similar in Downtown Camas. The effort was called "Operation 4Sight" and improvements included widened sidewalks, trees, flowers, benches, store awnings, gazebos, buried electrical and phone wires, better layout of parking spaces, outdoor telephones, and an outdoor sound system.

To communicate the potential changes to the community, civic leaders and downtown advocates temporarily redesigned NE

4th Ave with a mockup of the suggested improvements. These improvements were left in place for two months so residents could offer suggestions and get used to the changes. The community saw the benefit and the project moved forward.

**Work began on the downtown mall in 1966 and was completed in 1967.** Funding came from the building owners of the downtown area, city revenues, and some federal aid. The vision of forward-thinking stakeholders at the time has created a unique experience in Camas today, including the wider pedestrian friendly sidewalks and iconic tree canopy. These efforts have helped the downtown business





Camas Historic Mill Photo Collage at the Universal Martial Arts Building at the Corner of 4th Avenue and Adams.

district to continue to thrive.

**By the 1980's and 90's, a steady decline was occurring** in downtown as mill employment was decreasing and many anchor businesses such as JC Penney, Sears, and Sprouse Reitz were closing or relocating to the Vancouver Mall. Farrell & Eddy, an anchor retailer for 53 years in downtown, closed in 1998, along with other retailers who depended on the bigger stores to help bring people to downtown.

**In the early 2000's, the City of Camas started working with business leaders and community members in a city-funded committee called the Downtown Vision Coalition (DVC)** to create a new

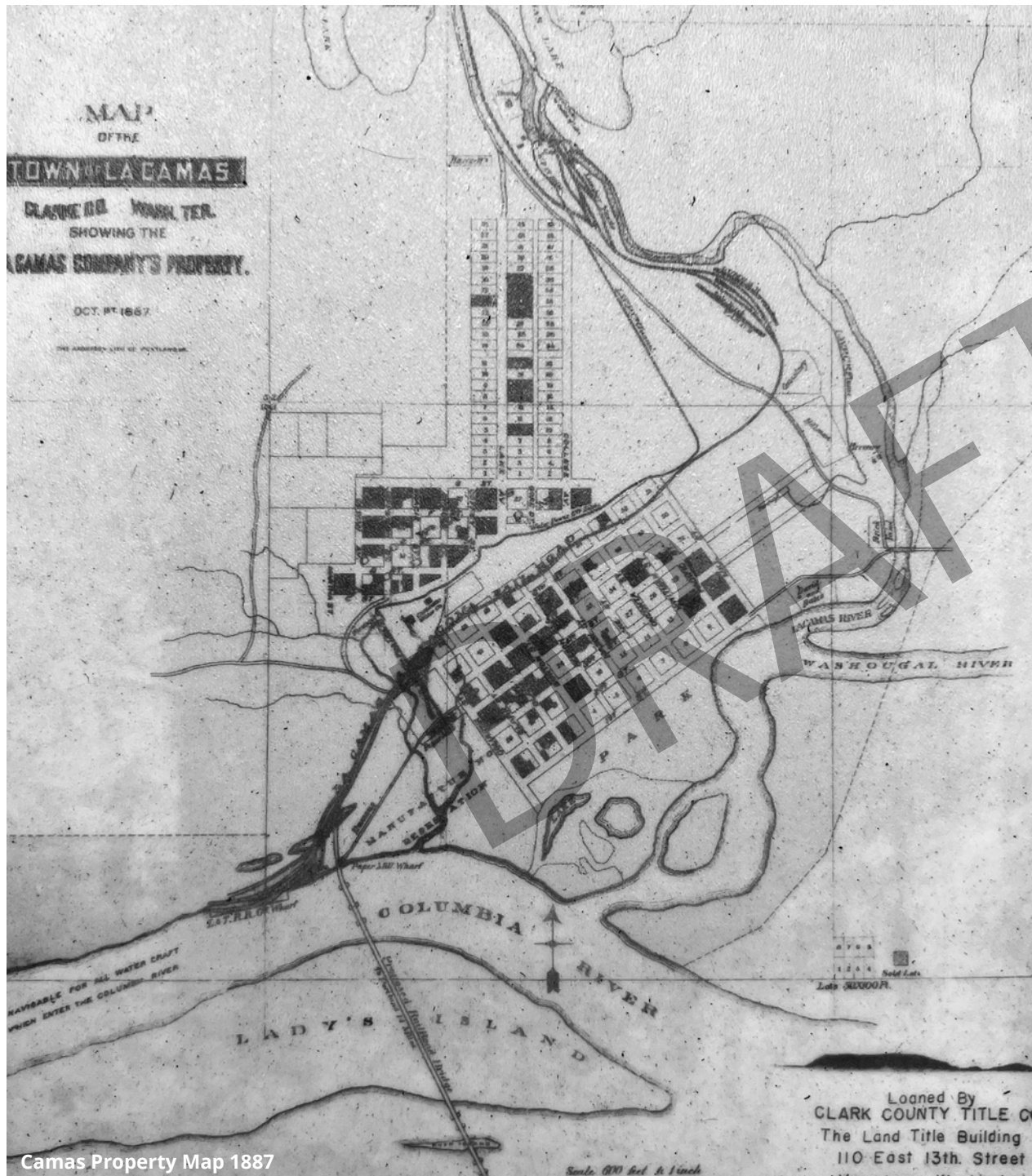
vision for downtown and address building vacancies and necessary improvements. Progress was slow but by 2005, new small businesses had opened in downtown, and they worked to together on events, marketing, advertising, active referrals, and camaraderie to create collective success.

**The Great Recession hit in 2008 and by 2009, downtown fell to a 60% vacancy rate.** The City suspended funding, but the members of the DVC looked for opportunities for continued growth. The DVC joined the Washington State Main Street Program, seeking increased expert guidance in downtown revitalization and in 2009, incorporated into the 501c3 non-

profit Downtown Camas Association (DCA). The mission of the DCA, which continues today, is to create a vibrant social, cultural and economic center of the community, emphasizing preservation and a vision for the future. The DCA promotes, represents and advocates for our town locally, regionally, and nationally.

Over the years, the DCA, City, businesses, and community have all strategically worked together to bring vitality, prosperity, and quality of life to Downtown Camas. **Today, downtown has a vacancy rate of less than 2%,** and a variety of high-quality shops, restaurants, a preserved historic theatre, a remodeled boutique





hotel, and wellness services. Businesses work together and have strong community support. The DCA and the City have put considerable effort into beautifying downtown with tree and ridgeline lighting, engaging public art, benches and seating areas, flower baskets, landscaping, bike racks, signage, and lamp posts that match the authentic downtown aesthetic.

**Over 25 consistent and long-term community events are held each year in downtown** to stimulate economic vibrancy, grow awareness of Camas, and to bring the community together. Thousands of volunteer hours have been contributed. Private investment continues to increase and new housing has begun developing. Collectively, these efforts have worked to strengthen and preserve our downtown, but increased planning efforts and improved infrastructure are required to continue to increase downtown vitality, livability, and sustainability.

The Downtown Subarea Plan presents this opportunity as another key milestone in the history of downtown through updated visioning, planning, and implementation over the next 20 years.

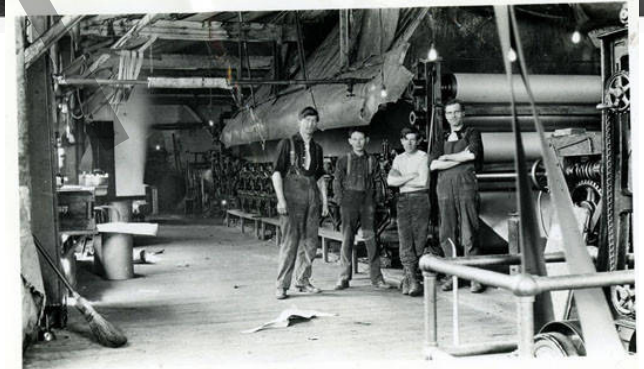
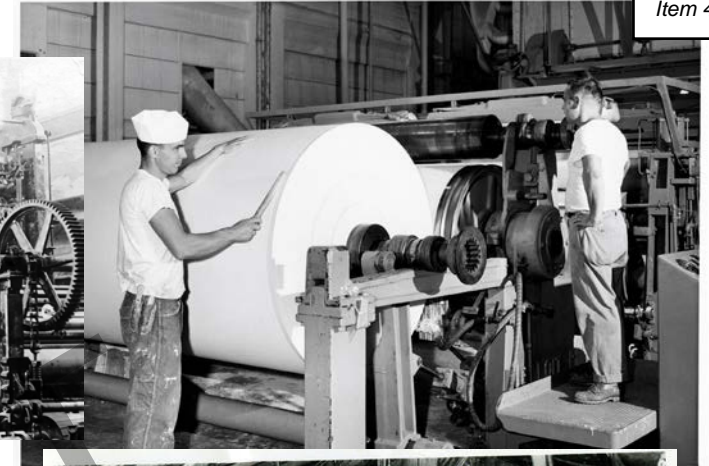
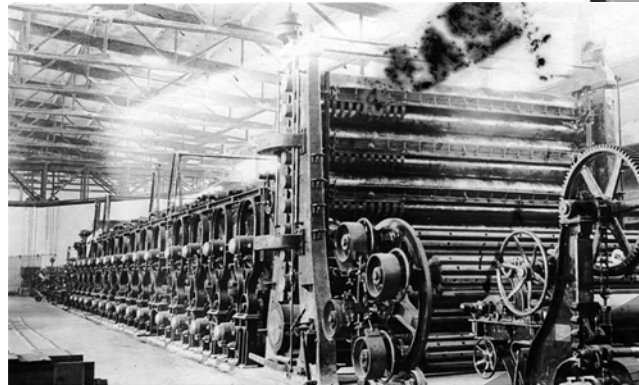


# Camas Paper Mill



**Founded in 1883** as the LaCamas Colony Mill and later operated by Crown Zellerbach and eventually Georgia-Pacific, the Camas Paper Mill was **once one of the largest employers in the region**, shaping the economic, physical, and cultural landscape of Camas. With its iconic smokestacks and waterfront facilities, the mill not shaped Camas' identity as a mill town but also supported generations of workers and families. The mill's proximity to the Columbia River and nearby forests made Camas an ideal site for pulp and paper production, and **the downtown core emerged in tandem, serving the needs of mill workers and their families.**

In recent decades, **the role of the mill has evolved.** Significant portions of the mill's operations were shut down in 2018 and the workforce has been reduced to about 150 employees. The mill's operations



Camas Paper Mill Photo Collage Circa 1920 - 1950

and footprint have contracted in recent years and **Georgia-Pacific is currently demolishing several unused buildings**, but there is no announced plan to shut down entirely.

While **recognizing the role that the mill has played in Camas's history** and its significance as an economic driver, the City of Camas is working closely with the Washington Department of Ecology and Georgia-Pacific to ensure that the site is cleaned up to a high environmental standard, opening the door for potential

long-term reuse. In February 2025, the City Council adopted Resolution 25-002, in support of an **unrestricted environmental cleanup level.** "Given the site's legacy and its importance to our community," the resolution states, "it is imperative to ensure the cleanup efforts are fully protective of human health and the environment and preserve future private and public redevelopment options, including the flexibility to support a broad range of **future uses from residential and commercial development to natural and recreational spaces.**"

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## Organization of the Plan

The Downtown Subarea Plan is intended for use by a range of stakeholders in Downtown Camas: from City decision makers setting priorities for City staff to implement, to Downtown Camas Association staff and members who continue to be champions for Downtown, to property and business owners who would like to contribute to and participate in continued growth, to community members wanting safer access to and through Downtown. This Plan reinforces the city's commitment to making downtown a safe and thriving place to live, work, and play, serving as the city's "living room" for years to come. The City welcomes the development and business community to work together to honor the foundation that the historic Downtown has set, and look for ways to transform beyond the core to create space for more opportunities.

The Plan is organized in the following sections:

**01 Introduction.** An explanation of the purpose, context, and history.  
*Why plan for Downtown now? How did we get here?*

**02 Existing Conditions Summary.** A review of the existing physical, regulatory, and market conditions that exist in Downtown Camas today.  
*Where are we now?*

**03 Framework.** A summary of the engagement process that set the priorities for the Downtown Subarea Plan; a vision statement and set of goals for Downtown Camas; and an urban design framework that illustrates the opportunities and constraints.  
*How did the community inform the plan?  
What is the vision for Downtown Camas?  
What are the opportunities and constraints for the future of Downtown Camas?*

**04 Land Use Concept.** Presents how the vision and goals can be achieved through new development and redevelopment, including residential, commercial, and mixed-use development types.  
*What could Downtown transformation look like?*

**05 Open Space Network.** Designs for improved and new open spaces that provide more gathering space and connected recreation opportunities Downtown.  
*What does this mean for park and open space?*

**06 Transportation Concepts.** Analysis of potential effects on traffic and transportation networks Downtown, as development changes occur. *How will changes to Downtown affect traffic and transportation networks?*

**07 Infrastructure Improvements.** Analysis of potential effects on utilities and infrastructure.  
*What changes to infrastructure will need to occur over the next 20 years?*

**08 Implementation.** A strategy that reflects the policy direction and intention for the next 20 years of Downtown set by the vision and goals in the Subarea Plan.  
*How will we get there?*

**09 Appendices.** Supplemental information relevant to the Subarea Plan.







# 02

## Existing Conditions

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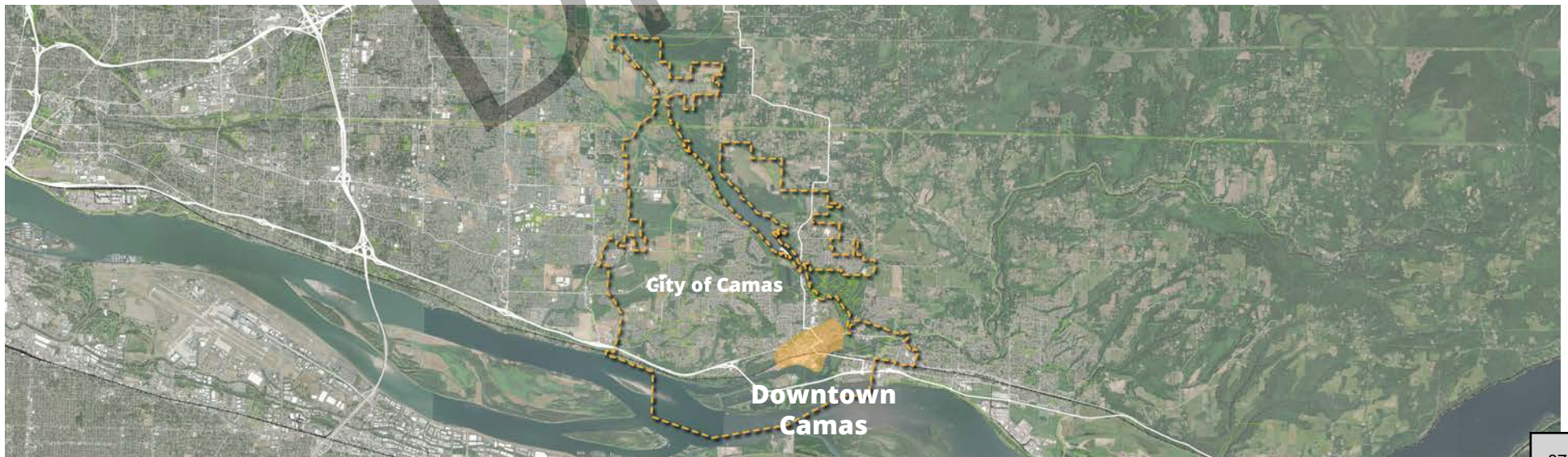
## Context

The City of Camas is well-connected to the Portland-Vancouver Metro region, located off of Washington State Route 14. Downtown Camas, the well-established, recognized core of the city, is easily accessible with a gridded street network. Its historic main street on NE 4th Avenue, with buildings fronting the sidewalk, serves as an attraction for a range of activities including retail businesses, community events, and City services. The adjacent Camas Paper Mill property helped to establish this historic character, but downtown has evolved over the years to continue to be a destination for residents and visitors, serving today's needs and offering unique community events rooted in the city's history.

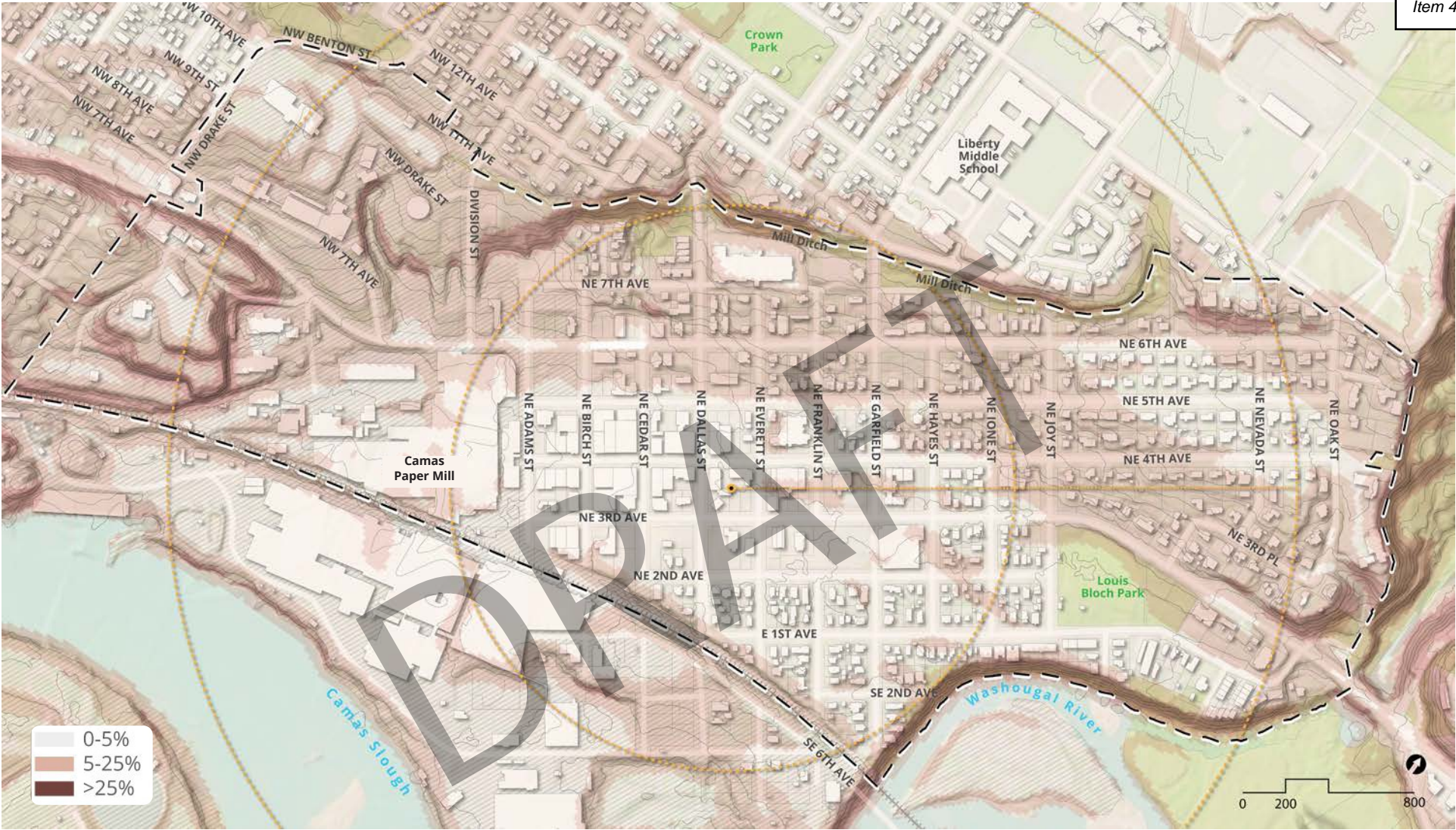
The Downtown Subarea Plan considered relevant context from previous City-adopted planning efforts that encompass the downtown area including the current Comprehensive Plan "Camas 2035," the Downtown Design Manual, and the Street Tree Succession Plan. Additionally, concurrent efforts that

influenced the planning process included the Our Camas 2045 Comprehensive Plan, the Parks and Open Space Management Plan, the Station 41 Replacement Project, and the Department of Ecology environmental remediation process. These projects, along with community-led efforts in Downtown, provided insight into understanding common goals and desired outcomes that affect Downtown Camas.

An early phase of planning for the future of Downtown Camas included a site assessment of existing conditions. This assessment, summarized in this section, includes findings from available data, discussions with City staff with institutional knowledge, visual assessments from site visits, and conversations with key stakeholders with lived experience in Downtown Camas.



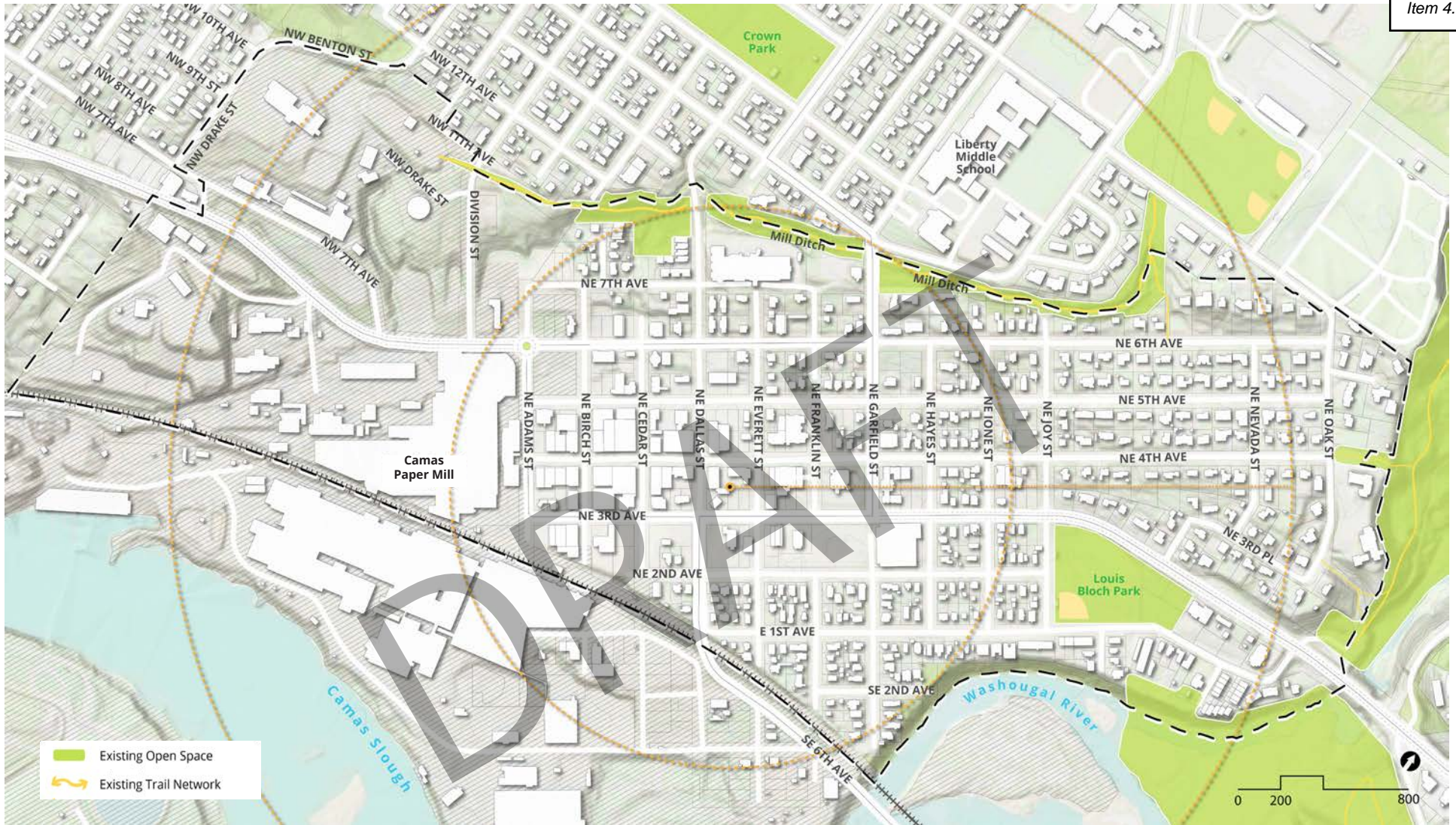




## Physical Constraints

The boundary of Downtown Camas, as defined by its physical constraints, includes the Camas Paper Mill property to the west, steep slopes to the north, and the railroad tracks, Camas Slough, and Washougal River to the south and east. The downtown core is located on mostly flat land, but topography quickly changes to the north of NE 4th Ave, creating a separation of the commercial core and adjacent residential neighborhoods.

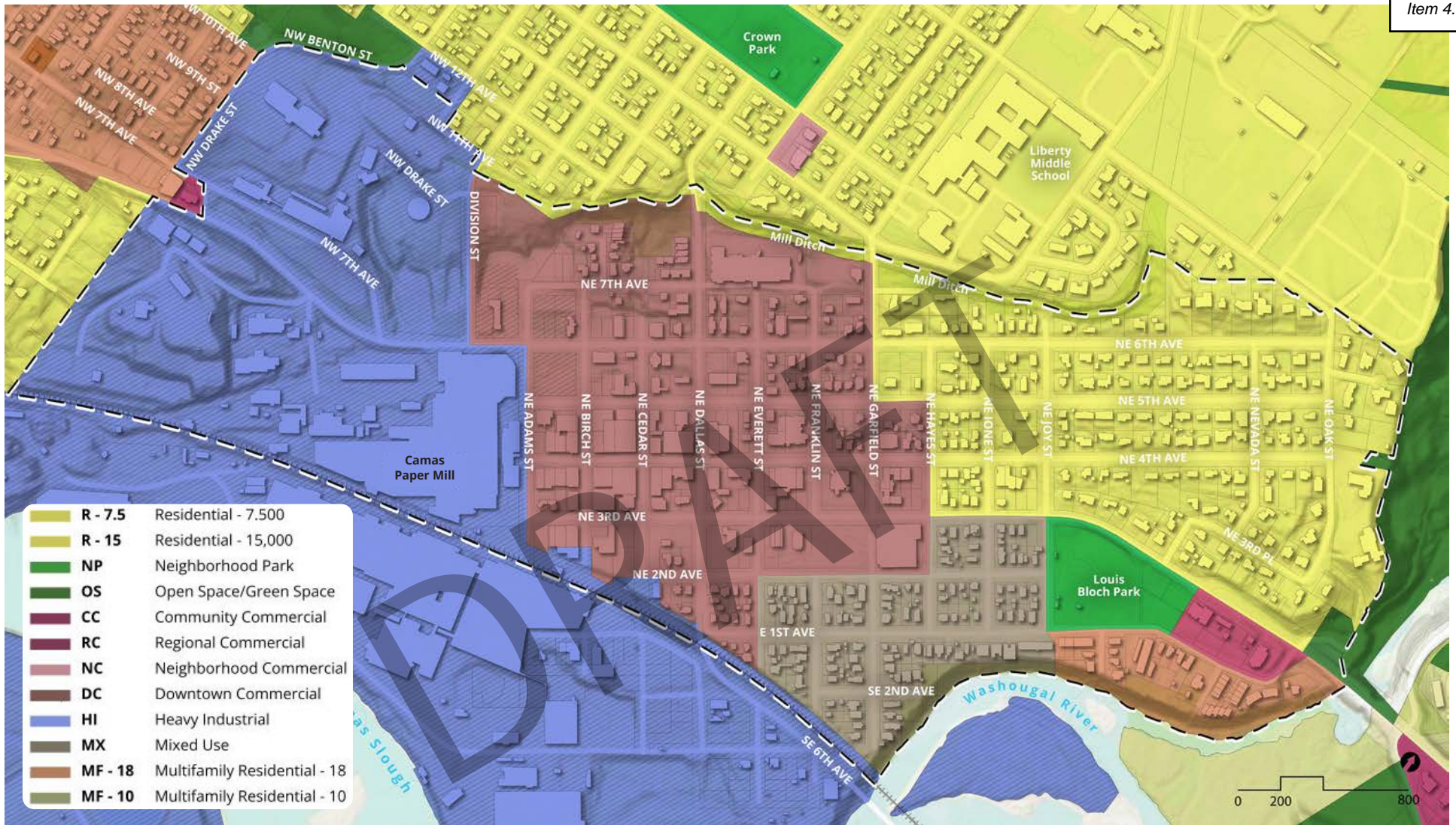




## Open Space

Downtown has access to parks within a half mile including Louis Bloch Park, Crown Park, and the Mill Ditch Trail. Lacamas Creek Trail is accessible within walking distance of the eastern edge of Downtown Camas. Community stakeholders communicated a need for more recreation and gathering spaces Downtown.





## Zoning

The downtown core is zoned Downtown Commercial (DC) and Mixed Use (MX). The MX zoning district “provides for a wide range of commercial and residential uses. Compact development is encouraged that is supportive of transit and pedestrian travel.” The adjacent zones are primarily residential neighborhoods served by downtown amenities, with the exception of the Camas Paper Mill property to the west of the Downtown Core, which is zoned Heavy Industrial.

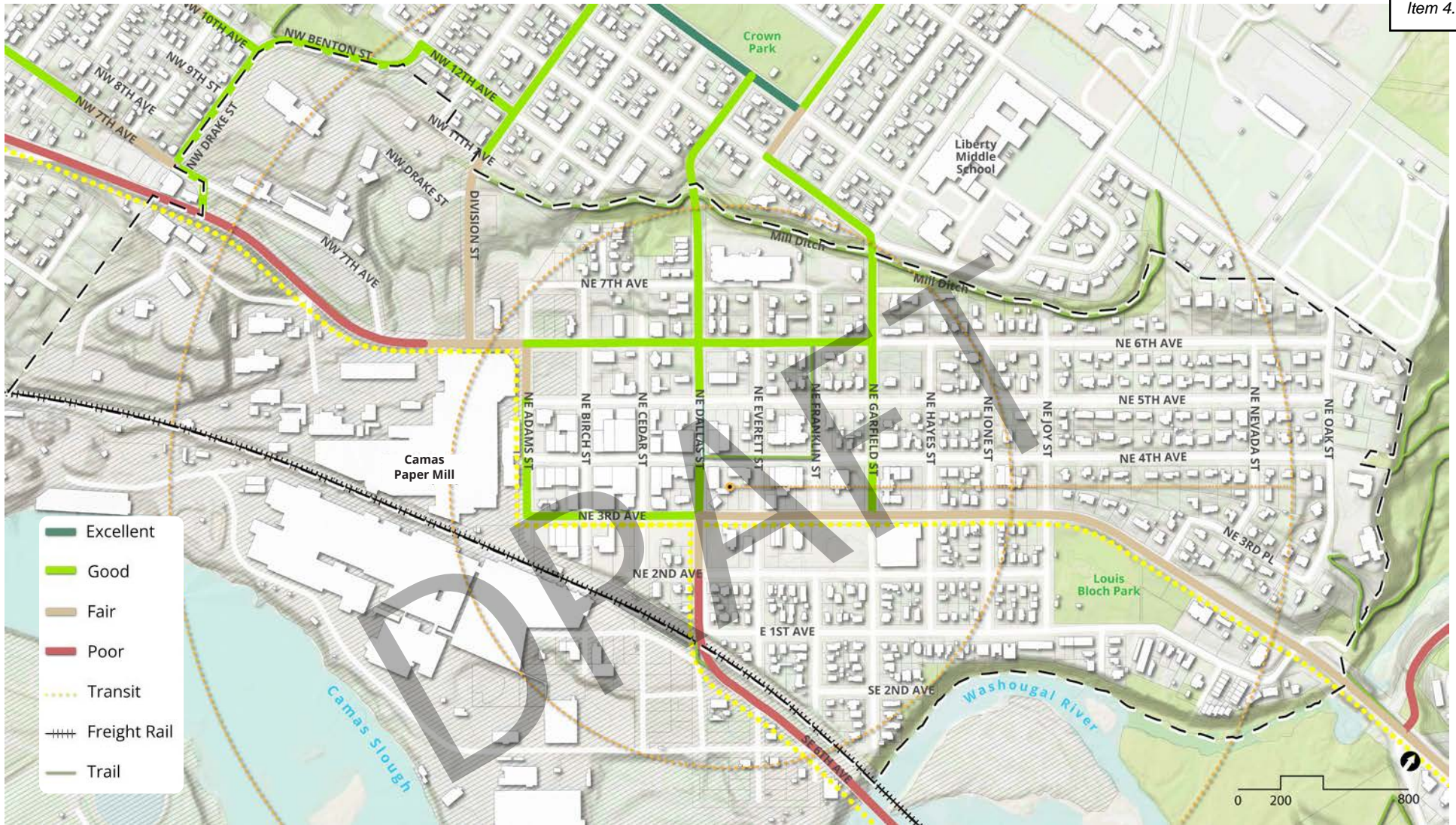




## Historic Sites

Downtown includes historic sites on the National Register of Historic Places and Clark County Heritage Register, as well as those identified in the Clark County Historic Resource Inventory. Historic structures in Downtown Camas are concentrated along NE 4th Avenue, which help to define the character of 4th Avenue as Downtown's Main Street. Community members expressed a desire to preserve historic structures Downtown, seeking a balance between preservation and new transformation in the future.

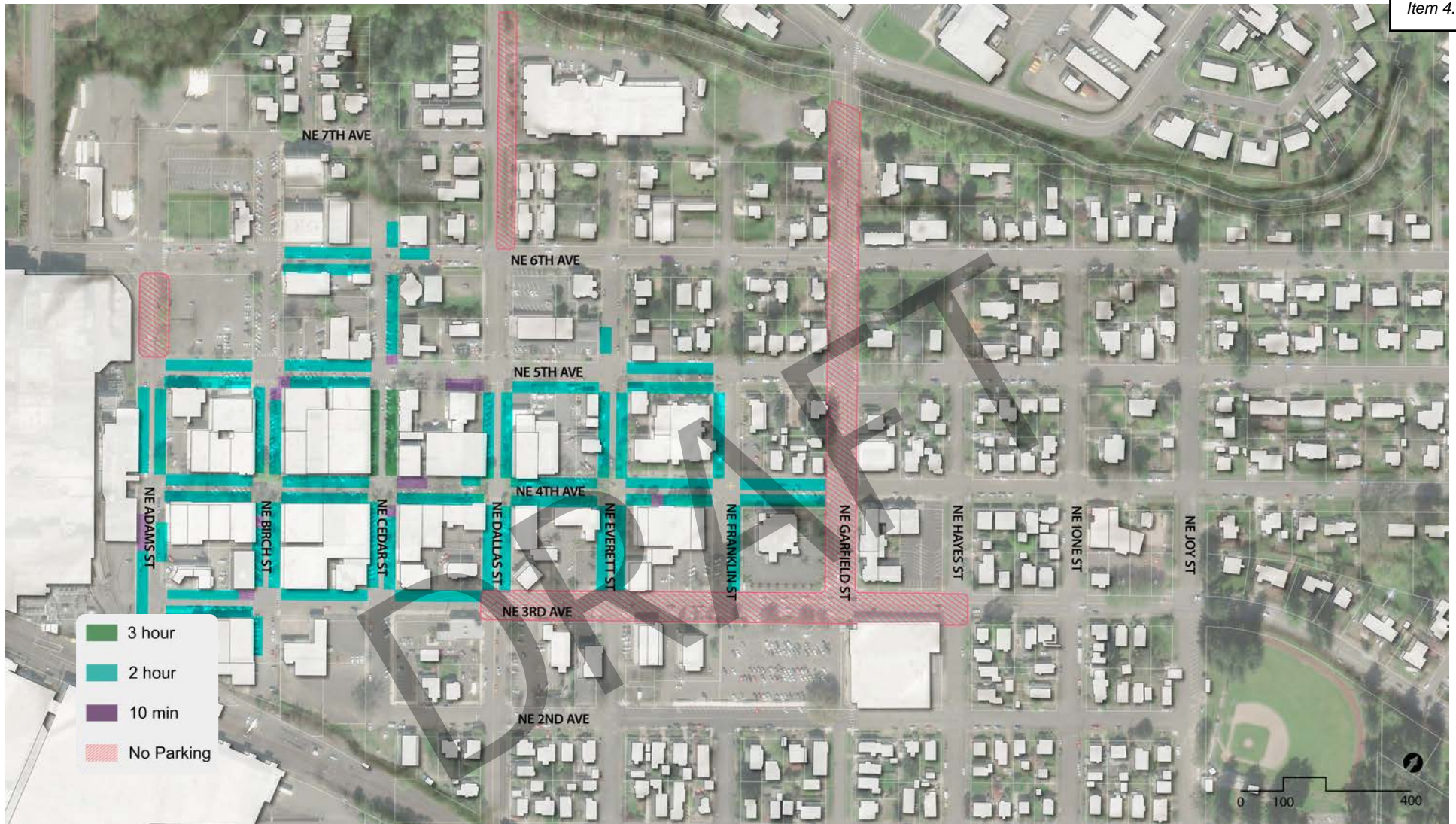




## Connectivity

Downtown Camas is well-connected to City services and amenities. The small block size in downtown (about 250 square feet) creates a walkable grid, and a qualitative assessment showed that the pedestrian network Downtown ranked higher than other areas of Camas. Areas along NE 3rd Avenue to NE 7th Avenue and NE Adams Street to NE Garfield Street were identified as needing sidewalk improvements. The bicycle network could also be improved, especially to the bike network along NE 6th Avenue and 3rd Avenue. These assessments were reinforced in conversations with community members who would like to see safer crossings and a better pedestrian and bicycling experience in the areas Downtown surrounding NE 4th Avenue.



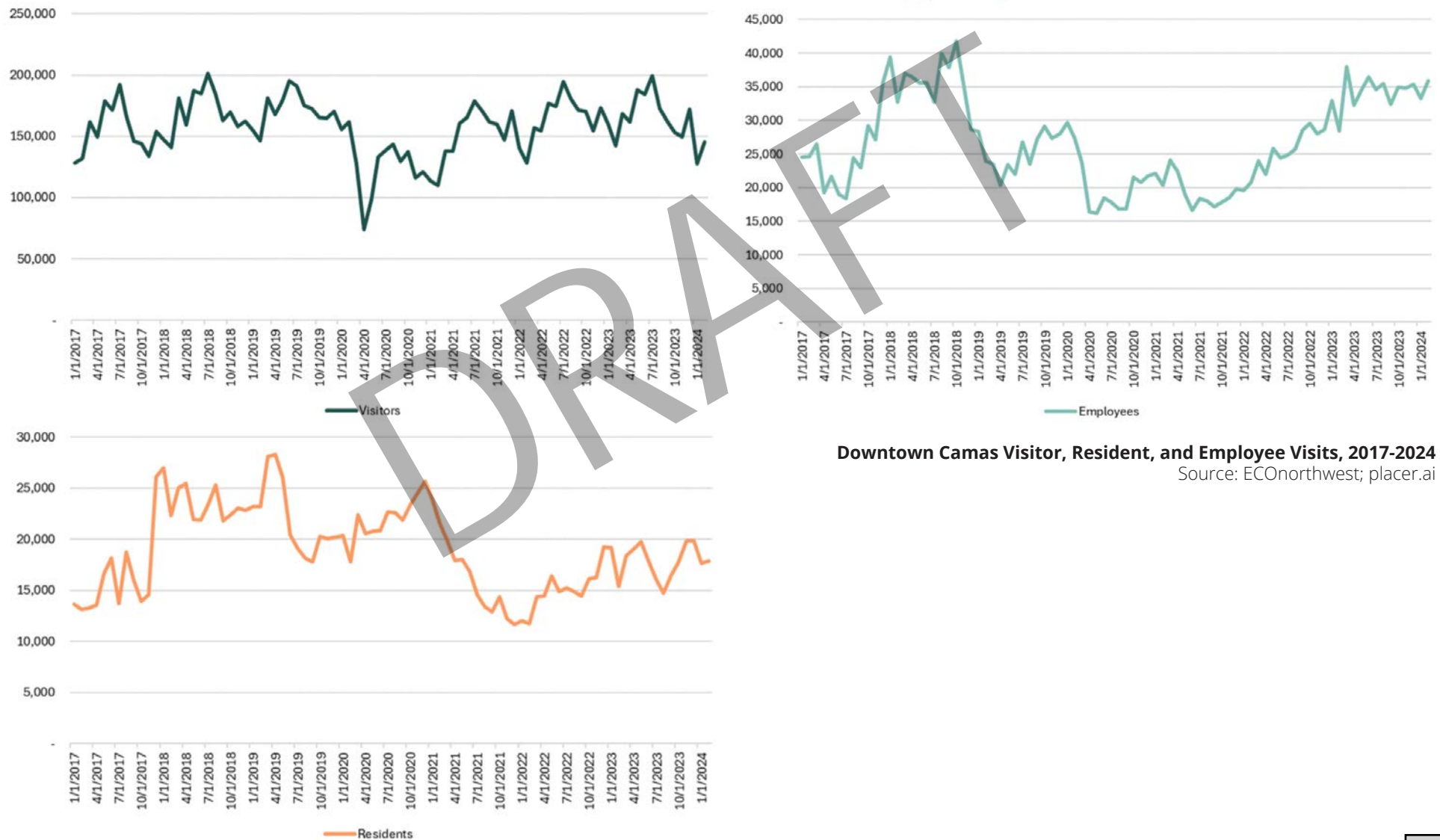


## Parking

Most of the downtown core is regulated by 2-hour, non-metered parking. A few key blocks have 30-minute or 10-minute parking zones. Community members and downtown stakeholders reported a mixture of frustration and optimism related to parking downtown. Some expressed a need to reevaluate the time limits, as parking for workers at downtown businesses is difficult, given the concerns with unsafe crossings for pedestrians in areas without parking restrictions. Others offered insight that the lack of parking is a perception due to surges in demand for parking during large events. Designated off-street parking (e.g., lot or structure) was cited as a potential solution to the current parking perceptions.

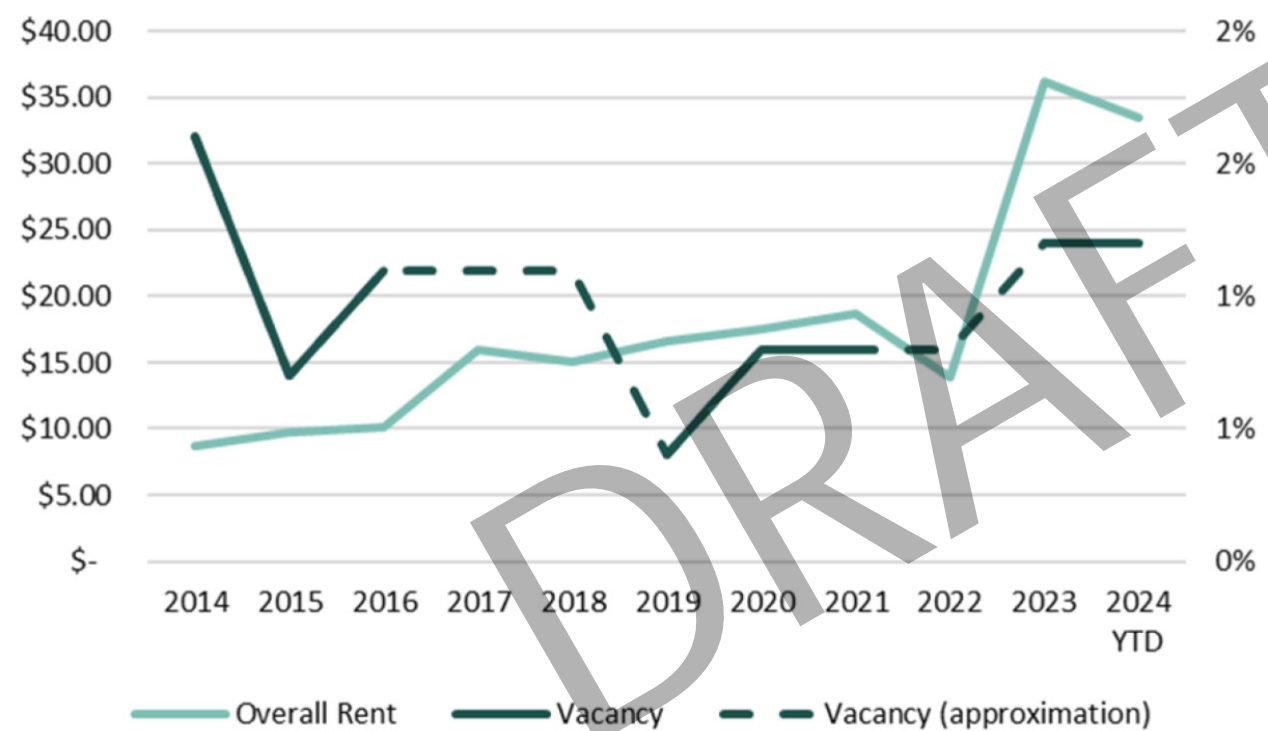
## Market Conditions

Visitor and employee visits to Downtown Camas increased to pre-pandemic levels and visitation by residents has been trending upward in recent years, including a healthy level of foot traffic in the downtown area. The market in Camas is on an upwards trajectory with visitors, employees, and residents coming to the downtown area for shopping, work, or other purposes.





A market analysis of retail activity in Downtown Camas showed retail rents increasing rapidly from approximately \$15 per square foot in 2022 to almost \$35 per square foot in 2024. Vacancy rates for retail have remained very low below 1.5 percent since 2014; lower than the retail vacancy rates in both the City of Vancouver (3.7 percent) and Clark County (3.7 percent) in 2023, which indicates increased demand for retail space above the available supply.



**Average Retail Rent per Square Foot and Average Retail Vacancy Rate (Percent) in Downtown Camas, 2014-2024 Year to Date**  
Source: ECONorthwest; CoStar



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# 03

## Framework

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our 2045  
Downtown  
Camas



## Overview



Hand-drawn diagrams from opportunities and constraints exercise completed with DAC.

Through dedicated community efforts and intentional planning, Downtown Camas has remained the authentic and functional core of the City of Camas. Careful consideration of these long-term community efforts helped to craft a future vision that builds on this strong foundation. The Downtown Subarea Plan process also welcomed new ideas to create a vision and set of goals that represent the future evolution of Downtown Camas while maintaining its historic character and charm.

This section outlines the planning process of developing the Downtown Subarea Plan, including various engagement efforts. Early engagement led to a vision, set of goals, and an urban design framework that set the foundation for the Subarea Plan.

## Process

Prior to beginning the Downtown Subarea Plan, City staff met with members of the Downtown Camas Association (DCA) board, City Council members, and City staff to gain a baseline understanding of the issues and priorities to address in the plan. Shortly after the official kickoff for the work, the planning team met with key stakeholders (downtown business owners, property owners, etc.) through one-on-one interviews.

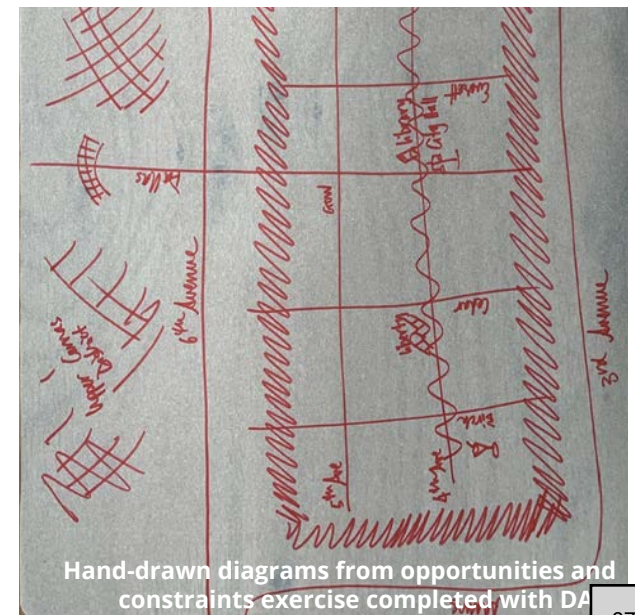
These interviews focused on opportunities and constraints in Downtown Camas, from the interviewees' perspectives. These interviews helped to both reinforce findings in the existing conditions and provide new insights to issues or opportunities in the downtown area.

Additionally, the City convened a Downtown Advisory Committee (DAC) to provide feedback and discuss issues related to the Downtown Subarea Plan throughout the planning process. The DAC included members of the DCA as well as select members of the Community Advisory Committee (CAC) from the Our Camas 2045 Comprehensive Plan process. This helped to create a holistic perspective of community input on the future of Downtown Camas and bridged the efforts of the two concurrent projects. The DAC met 8 times throughout the planning process, providing feedback on draft deliverables at key milestones.

Broader community engagement was completed as part of the Our Camas 2045 Comprehensive Plan process. The significant milestones of community engagement that provided insight for the Downtown Plan were:

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- **Community conversations.** Discussions with a range of community groups and Downtown stakeholders early in the project to gain an understanding of existing conditions and desired outcomes.
- **Community summits.** Held in an open-house style, the community summits provided an opportunity for members of the Camas community to provide feedback at key moments in the development of the Subarea Plan.
- **Surveys.** Online surveys included information that was available at the Community Summit, allowing community members an alternative way to provide feedback at their convenience.



Hand-drawn diagrams from opportunities and constraints exercise completed with DAC.



# Goals

Item 4.

The Downtown Subarea Plan goals provide a set of themes that support the vision for Downtown Camas over the next 20 years. These themes guide the urban design framework and concepts presented in the Downtown Subarea Plan and also help set the key priorities for the implementation strategy.



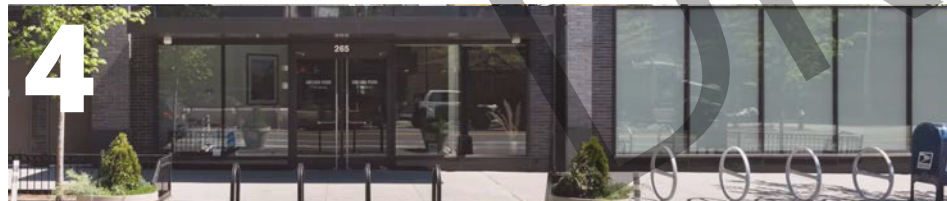
Retain Downtown's **historic character** and expand its **charm**



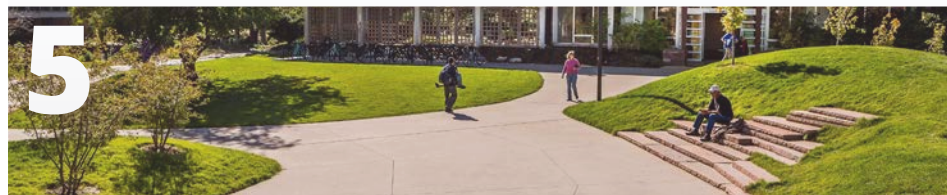
Incentivize a range of **housing** options that welcome more people to live Downtown



Provide the right mix of **development, services, and open spaces** that support ways for people to live, work, and play Downtown



Encourage **(re)development** to expand opportunities Downtown for retail, office, and residential



Expand on **civic life** and services Downtown through strategic use of City-owned property and vibrant community events



Create a **safe and connected** transportation network that makes Downtown walkable and bikeable



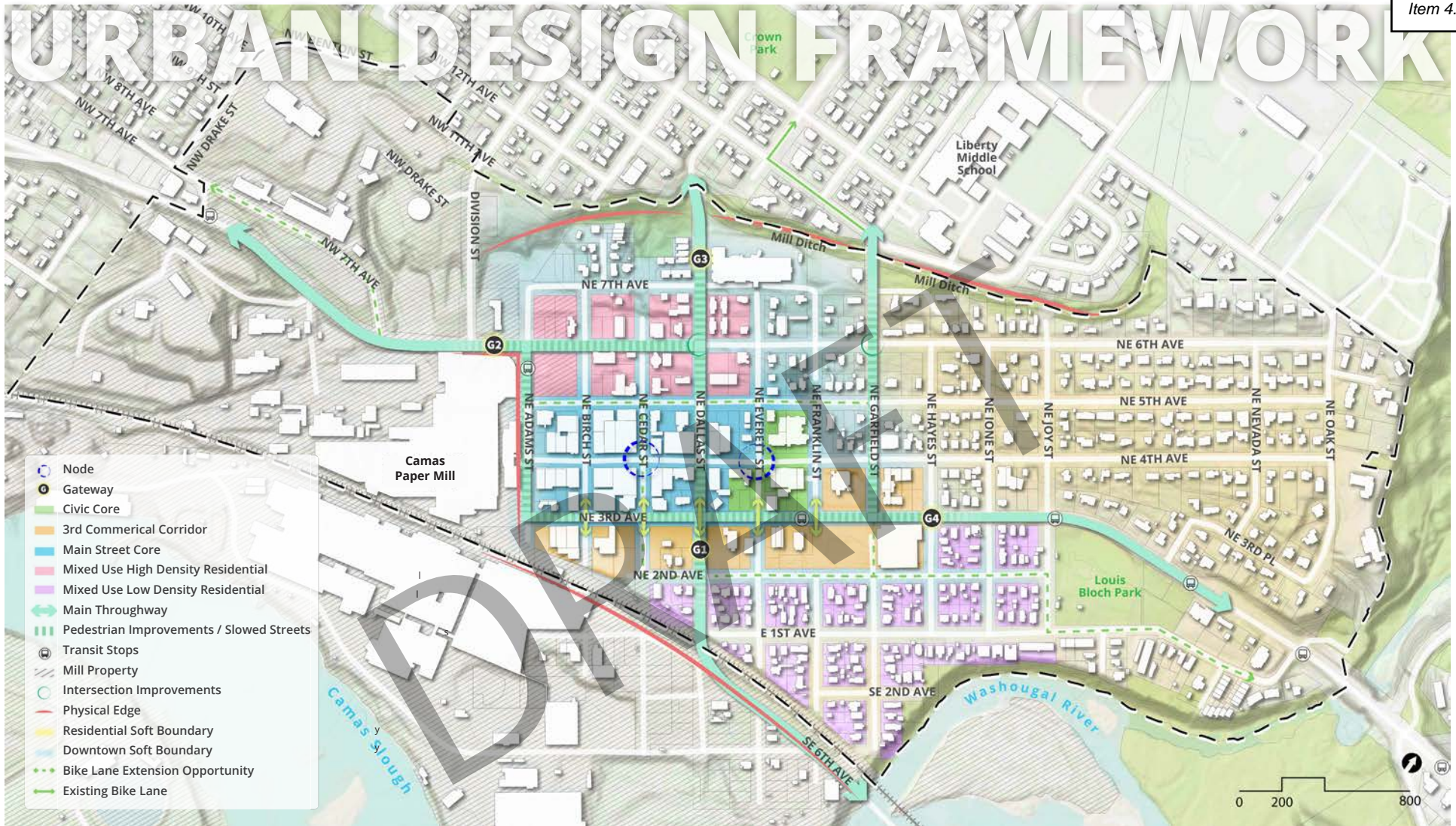
# Vision Statement:

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**Charming, vibrant, and walkable, Downtown Camas is the city's living room.** Downtown's history is complemented by new businesses and inclusive housing options. Expansion, resiliency, and a dynamic economic landscape are critical to its success. Downtown Camas **anchors the community while fostering a culture of pride, support, and connection.**



# URBAN DESIGN FRAMEWORK



The urban design framework visualizes the opportunities and constraints shaping Downtown Camas' future. It highlights existing character areas that reinforce downtown's identity and potential areas for growth. The framework also highlights locations for connectivity improvements and sites for open space enhancements. As a whole, the diagram presents opportunities for expanding civic spaces, improving transportation networks, and enhancing pedestrian and bike accessibility, while also outlining existing traffic challenges and infrastructure limitations. By illustrating these elements, the framework serves as a strategic tool to guide the concepts presented in subsequent sections, ensuring downtown evolves into a more connected, vibrant, and accessible district that supports a mix of uses and community needs.





Home Converted to Business - Camas, WA



Local Non Profit in Downtown Camas - Camas, WA



Residential to Commercial Transition - Camas, WA



NE 4th Ave Historic Shopping District - Camas, WA



Office Building Adjacent to Single Family Housing - Camas, WA



Louis Bloch Park - Camas,



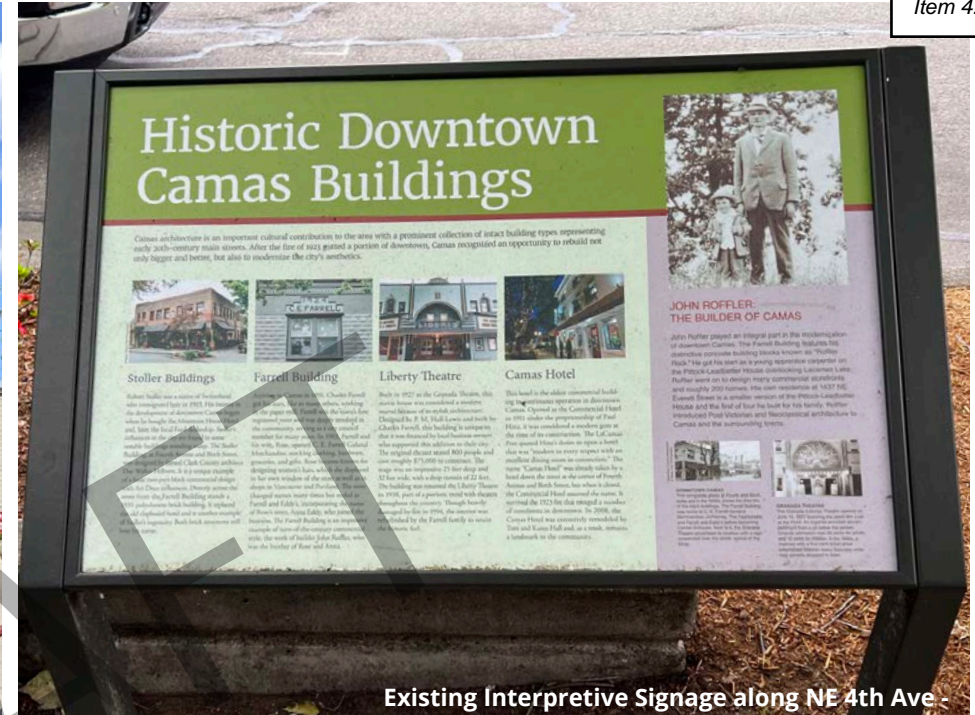


The vision and goals for the Downtown Subarea Plan are focused on intentional growth, while preserving the unique identity that defines Downtown Camas. This begins with identifying the character areas that shape the district. The Main Street Core includes the blocks on either side of historic NE 4th Avenue, bookended by the Camas Paper Mill property to the west and the Civic Core to the east. Areas for potential growth include the Mixed-Use High Density Residential area, north of the Main Street Core, where newer apartment buildings have been constructed in recent years. South of the Main Street Core is the NE 3rd Avenue Commercial Corridor and the Mixed Use Low Density Residential, areas with existing lower density and redevelopment potential. The Land Use Concept section further defines the potential transformations of these character areas, ensuring that as downtown grows, it remains a vibrant, welcoming place that reflects the uniqueness of Camas.





Existing Mixed-Use Building - Camas, WA



Existing Interpretive Signage along NE 4th Ave -



Public Library - Camas, WA



NE 4th Ave Crossing - Camas,





Future growth in Downtown Camas relies on a safe transportation network that balances mobility for pedestrians, bicyclists, and cars. Key nodes in the existing street network, along NE 4th Ave offer starting points for transportation network improvements. The introduction of additional gateways into each access point of the downtown area can serve as wayfinding solutions and enhance its unique character. By exploring innovative design solutions, such as slowed streets, this framework also identifies corridors that create a more secure and welcoming downtown environment that encourages walking and cycling. The main throughways in Downtown Camas that primarily serve vehicle circulation will continue to ensure that cars can continue to serve the needs of residents and visitors effectively, while providing safer crossings across these corridors.





Integrated Bus Stop and Bike Lane - Nashville, TN



Camas Paper Mill Property - Camas, WA



NE 3rd Ave crossing at NE Dallas St - Camas, WA



Inman Square Bike Lane - Cambridge,





Community members and local stakeholders expressed a need for expanded and enhanced recreational opportunities in Downtown Camas. The framework illustrates potential for these improvements by building upon existing open spaces like Louis Bloch Park and the Mill Ditch Trail as open space anchors on opposite ends of the Downtown boundary. Additionally, a central civic plaza or park would serve as a community gathering space. Ideally, these spaces will be connected through an improved transportation network of pedestrian and bicycle infrastructure, creating a system of accessible, active, and inviting outdoor areas for residents and visitors throughout downtown.





Wooden Parklet Structure - London, UK



Mill Ditch Trail - Camas, WA



Louis Bloch Park - Camas, WA



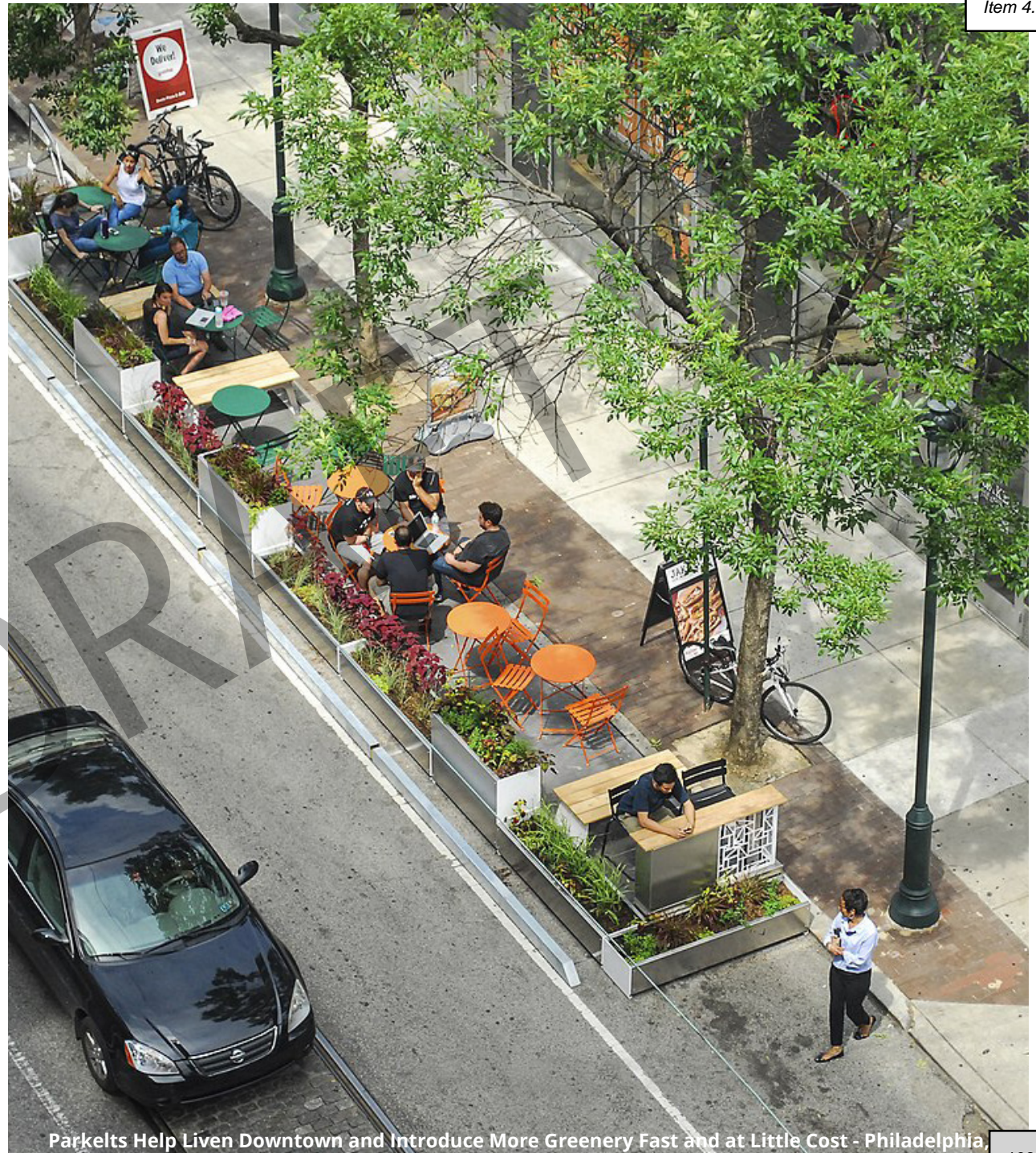
Terraced Park example to Connect the Mill Ditch Trail to Greater Downtown - Hudson, NY



## Our Downtown Camas: 2045

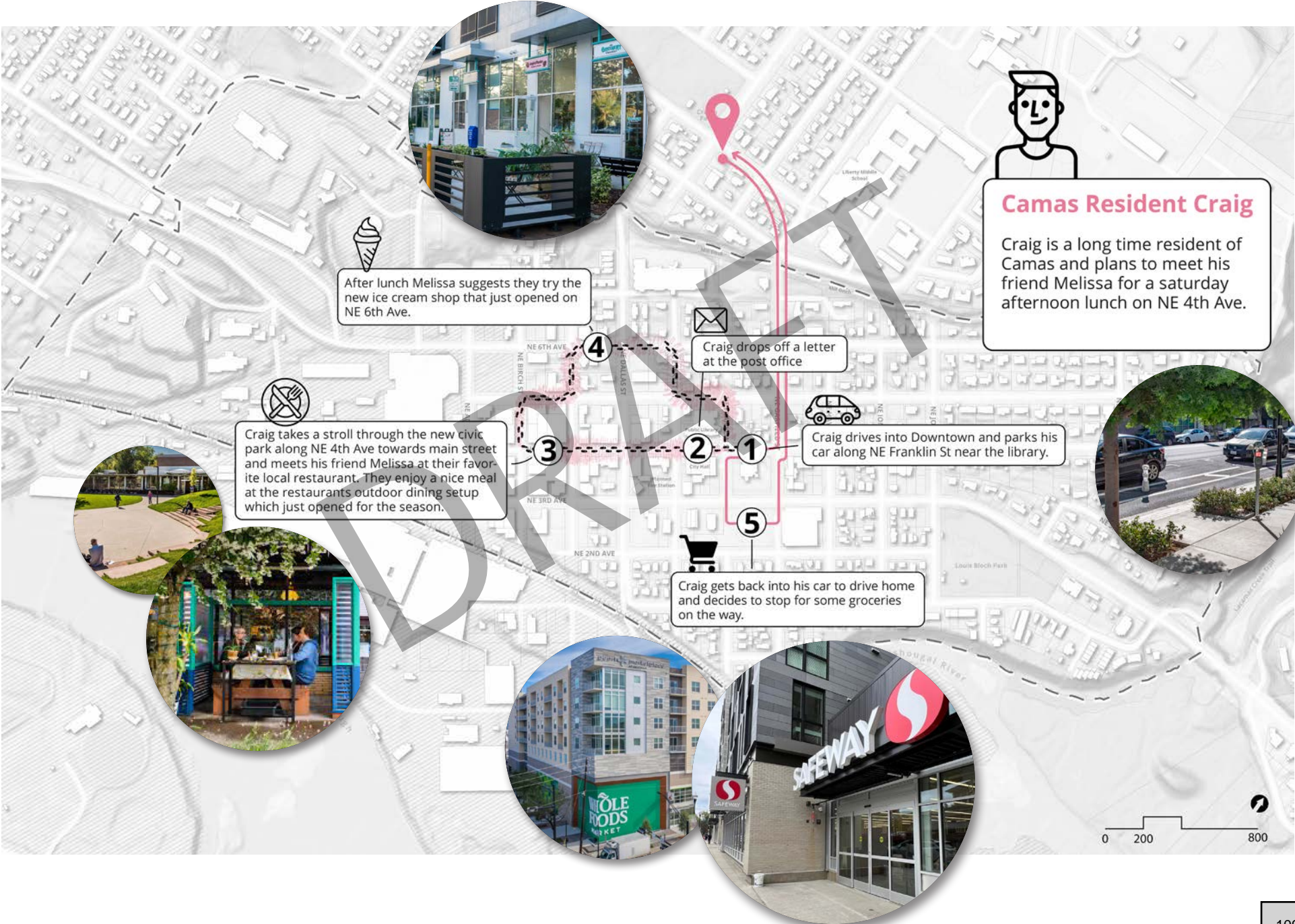
The Downtown Subarea Plan envisions a vibrant, well-connected downtown that strengthens its identity among residents and visitors alike. Expanded beyond NE 4th Ave, downtown will feature a mix of housing, retail, and office spaces, fostering a dynamic, walkable environment.

The urban design framework illustrates potential enhancements that would help achieve this improved experience of navigating Downtown Camas, but it does not highlight how different visitors may interact with these enhancements. The following pages explore a few example journeys for a future “day in the life” in Downtown Camas in 2045.



Parkelts Help Liven Downtown and Introduce More Greenery Fast and at Little Cost - Philadelphia







A Day in the Life: Local Employee









# 04

## Land Use Concept

DRAFT





## Overview

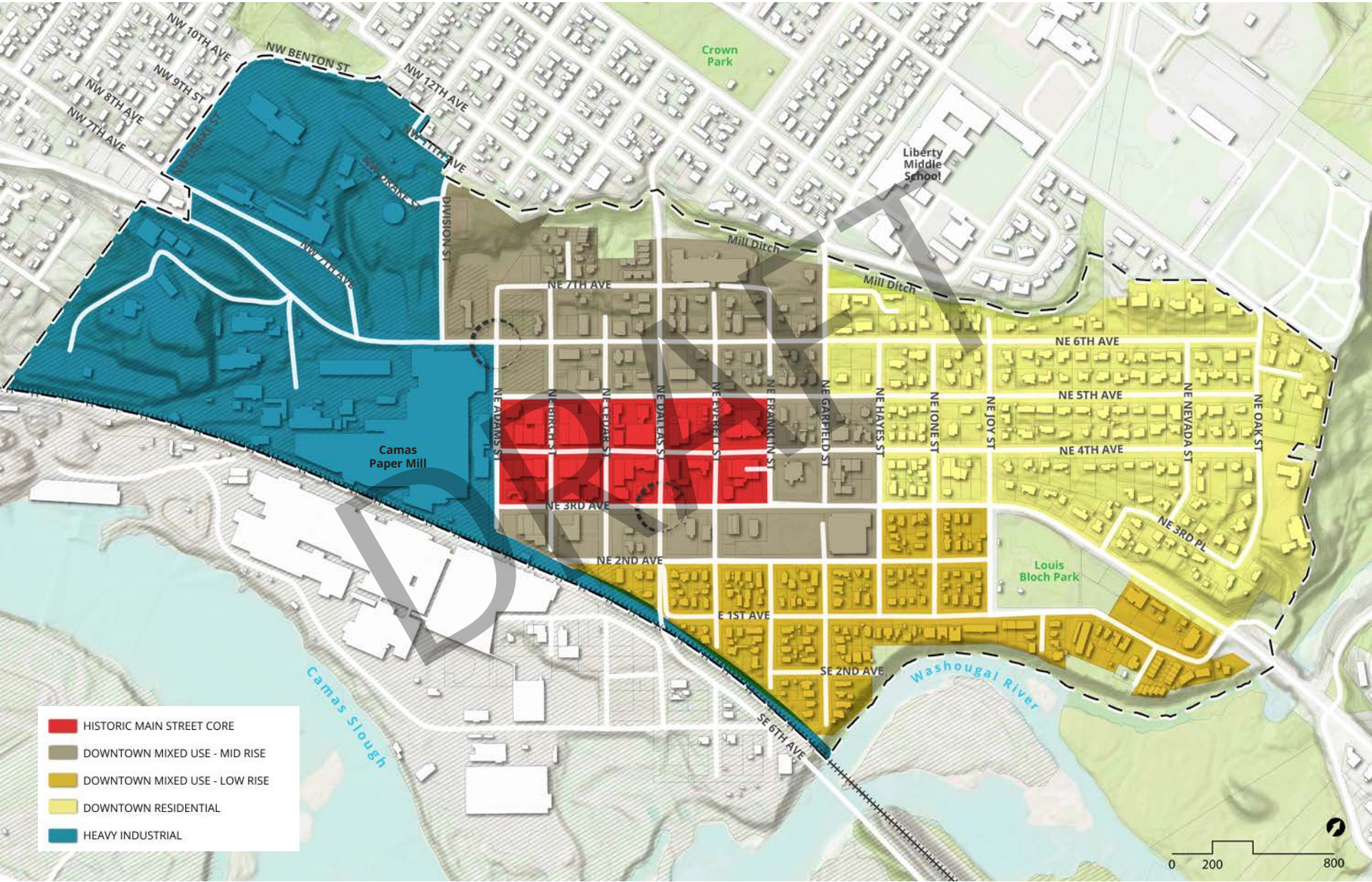
The land use concept is the result of iterative work with the Downtown Advisory Committee (DAC), City staff, and the broader community to illustrate the types of development that are appropriate for Downtown over the next 20 years. The planning team considered early feedback from stakeholders and worked with the DAC and City staff to identify potential opportunity areas.

Through evaluation of potential land use types, supplemented by market feasibility analysis, the planning team drafted three land use concepts that aligned with these potential areas of growth.

Community members had an opportunity to review and provide comments on these concepts via both in-person and virtual engagement methods. Feedback on these initial concepts led to a refined land use concept that aligns with the overall Downtown Subarea Plan vision.

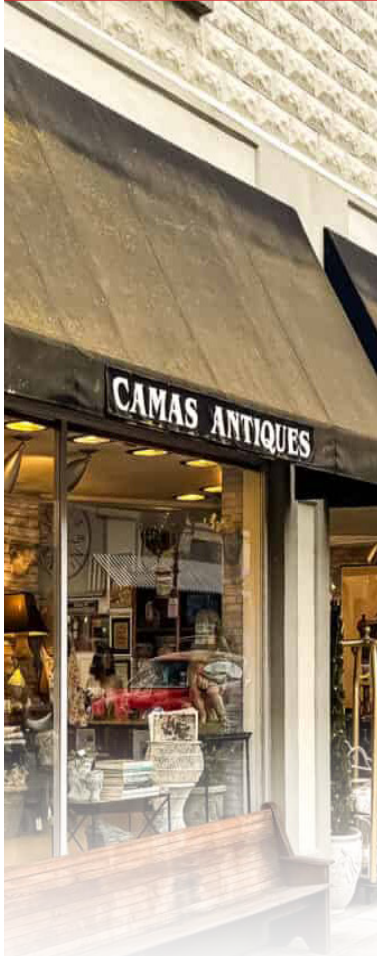
This section discusses each land use type included in the concept, supplemented with images that illustrate what these areas could look like within the context of Downtown Camas.







## Historic Main Street Core



### Key Features:

- Active retail storefronts
- Maintains historic character

## Downtown Mixed-Use Mid-Rise



### Key Features:

- Mid-rise apartments with active ground floor
- Live/work units
- Higher density middle housing allowed

## Downtown Mixed-Use Low-Rise



### Key Features:

- Mix of low-rise apartments with active ground floor
- Live/work units
- Duplexes
- Townhomes
- Triplexes

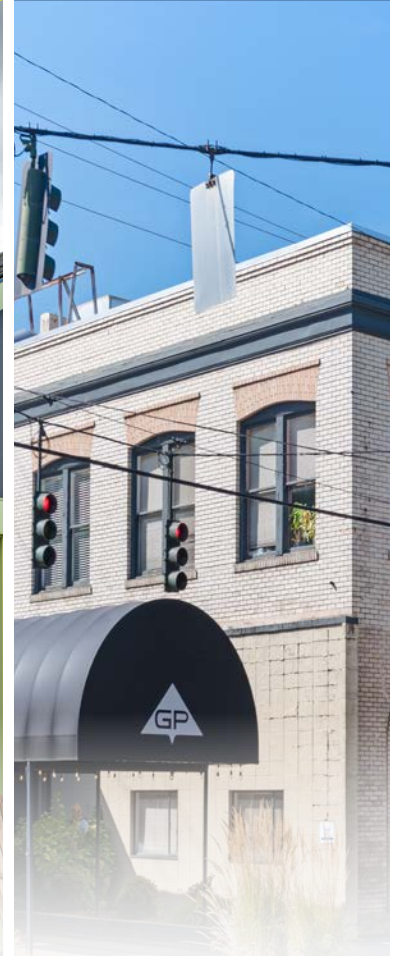
## Downtown Residential



### Key Features:

- Single-family homes
- Duplexes
- ADUs

## Heavy Industrial



### Key Features:

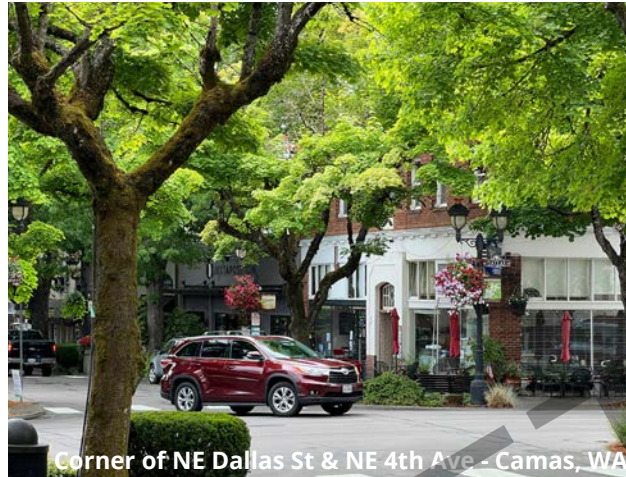
- Camas Paper Mill
- Industrial and Commercial uses
- Recreational and Educational uses
- Residential development



# Historic Main Street Core

The Downtown Subarea Plan identifies the Historic Main Street Core as the blocks along NE 4th Avenue, between NE 5th and 6th Avenues and between NE Adams and NE Garfield Streets. The NE 4th Avenue corridor has been the heart of Downtown Camas with its historic Main Street character. Its active retail frontages in historic buildings house a thriving business community, where storefronts are in short supply as coveted locations for Camas business owners. The NE 4th Avenue corridor hosts several events throughout the year, bringing residents and visitors of Camas to this central gathering space.

As with any unique, beloved place, there is a community desire to preserve the character of NE 4th Avenue while recognizing some potential areas for change. The streetscape defines this area as much as the buildings and uses do, with wide sidewalks, bulbouts, midblock crossings, and a mature tree canopy enhancing the pedestrian experience. Priorities in this area will include preserving existing buildings that contribute to the desired look and feel of Downtown Camas, supporting active street frontages for retail businesses, and enhancing the area's status as a central gathering space, as shown in the expansion of the Civic Hub.



Corner of NE Dallas St & NE 4th Ave - Camas, WA



Liberty Theater - Camas, WA



Downtown Camas Gateway Signage



NE 4th Ave Street Conditions - Camas, WA



Corner Conditions Along NE 4th Ave - Camas, WA



Street Crossing Along NE 4th Ave - Camas, WA

Item 4.





**NE Dallas St & NE 4th Ave**

Slowing traffic by adding wider sidewalks and curb extensions on Dallas can create a clear north-south bike / pedestrian connection through Downtown and connect outlying parklands and greenspace



# Civic Hub

With the Camas Paper Mill property as the southwest bookend to historic NE 4th Avenue, the Civic Hub will serve as the vibrant northeast gateway to downtown. This reimagined civic center will unite existing city services—the Library, City Hall, and the new Fire Station 41—into a cohesive and welcoming district. A new City Hall, strategically positioned near NE 3rd Avenue, will create opportunities for a dynamic public plaza and a flexible festival street that can host community events, farmers markets, and public gatherings

The planned Fire Station 41 includes a small civic space, which could seamlessly connect to a larger, multi-functional plaza between City Hall and the Library. This central gathering space will strengthen the identity of downtown Camas, offering an inviting destination where civic life, cultural activities, and daily social interactions thrive. By integrating walkable connections, green spaces, and public art, the Civic Hub will become a true anchor for the community, fostering engagement and reinforcing the historic charm and future growth of downtown.



Conceptual Rendering of the New Camas Fire Station 41



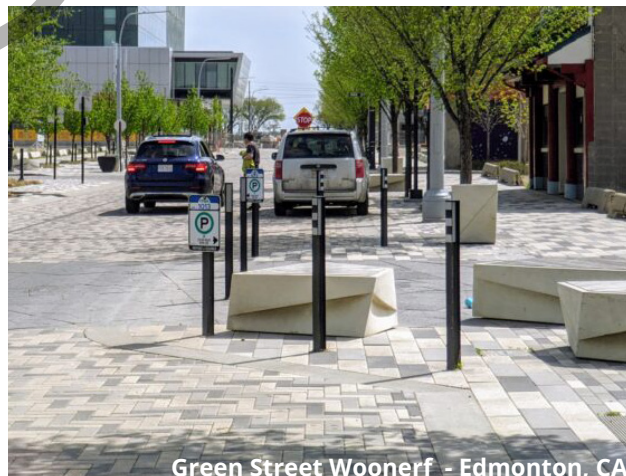
Public Art Street Corner Activation - Cedar Park, TX



12th Ave Square Park - Seattle, WA



Civic Park - Boulder, CO



Green Street Woonerf - Edmonton, CA



Belle Street Park - Seattle





## NE Everett St & NE 4th Ave

Moving City Hall south toward NE 3rd Avenue creates a civic campus with the library and opens up a great opportunity for a public plaza on NE 4th Avenue.



## Downtown Mixed-Use Mid-Rise

Surrounding the Historic Main Street Core, the Mixed-Use Mid-Rise area would allow for expanded development in the blocks beyond NE 4th Avenue. Mixed-Use Mid-Rise development, typically ranging between three and five stories, would complement the retail and commercial uses along the Historic Main Street Core, while providing more opportunities for commercial space in mixed-use buildings. Frontages along NE 3rd and 5th Avenues will include a larger concentration of commercial space and active street frontages, and new development in this area could also include residential property types, such as townhomes or apartment buildings with a mix of rental and ownership options.

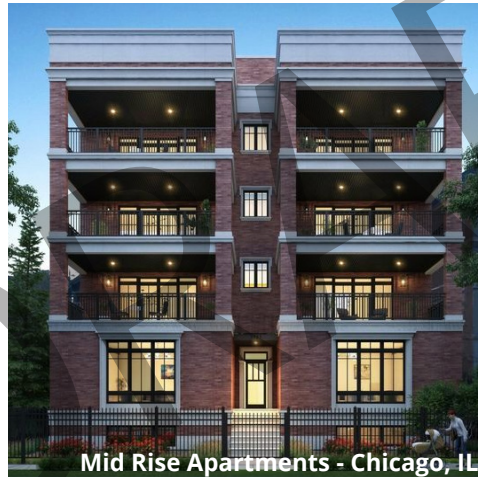
The priority for this area is to extend the experience of Downtown Camas as a walkable, livable area that provides a range of housing and commercial opportunities as the City grows.



Mixed Use Development - Boulder, CO



Ground Floor Grocery Store - Seattle, WA



Mid Rise Apartments - Chicago, IL



Clara Apartments - Camas, WA



Fire Clay Lofts - Denver, CO



Mixed Use Apartments - Portland, OR



## Streetscape

Item 4.



### NE 5th Ave & NE Birch St

Widening sidewalks and adding bike lanes and curb extensions introduces a safer and more pedestrian-focused edge to the historic commercial district, which will see enhanced business from new medium-density mixed-use apartment buildings.



## Downtown Mixed-Use Low-Rise

With higher-density development in the Mixed-Use Mid-Rise area, there is potential for existing underutilized areas south of NE 3rd Avenue to redevelop as Mixed-Use Low-Rise. This area would remain predominantly residential, with redevelopment focusing on middle housing types such as townhomes, duplexes, triplexes, and quadplexes, while commercial development would occur in mixed-use buildings along key corridors or corner lots. As this area was previously zoned Mixed Use with several in-home businesses, the City will continue to encourage live-work land uses and development.

Streetscape improvements and enhanced crossings along NE 3rd Avenue will strengthen connections between this district and the downtown core, making it easier for residents and visitors to engage with downtown businesses, services, and public spaces.



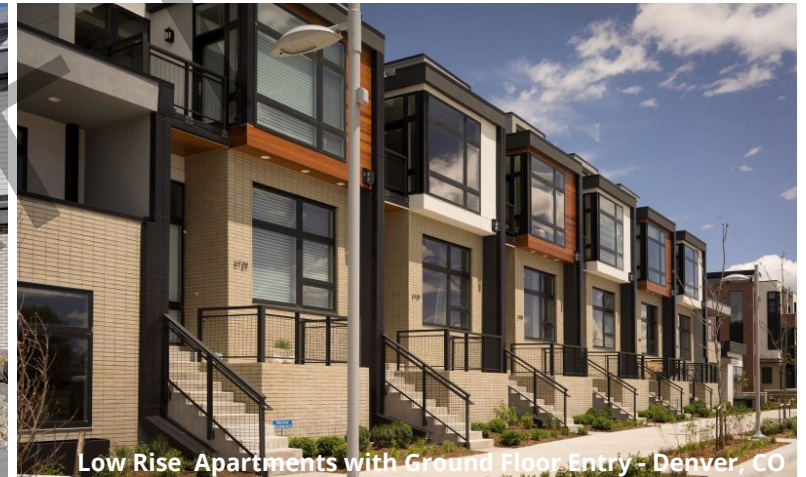
Low Rise Apartments with Garage Space - Reno, NV



Low Rise Ground Floor Corner Market - Seattle, WA



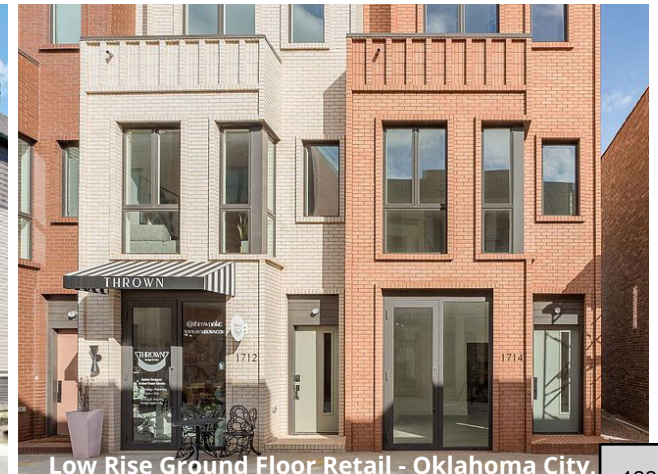
Modern Duplex - Denver, CO



Low Rise Apartments with Ground Floor Entry - Denver, CO



3 Story Townhomes - Ottawa, ON



Low Rise Ground Floor Retail - Oklahoma City, OK





## NE 2nd Ave & NE Everett St

As an important multimodal connector between the downtown historic district and Louis Bloch park, NE 2nd Ave provides pedestrians and cyclists an active but quieter thoroughfare away from the traffic of NE 3rd Ave.



## Downtown Residential

The transition out of the commercial core of Downtown to the northeast leads to a lower-density existing residential area, Evergreen Terrace. Updated requirements to residential zoning codes citywide will apply to this zone. The area will remain residential, with potential for infill development as ADUs or middle housing in specific areas.

Streetscape improvements and an expanded tree canopy will enhance the neighborhood's character and walkability, while improved pedestrian crossings across Garfield Street will strengthen connections to the downtown core, making it safer and more accessible for residents.



Cottage Cluster Housing - Portland, OR



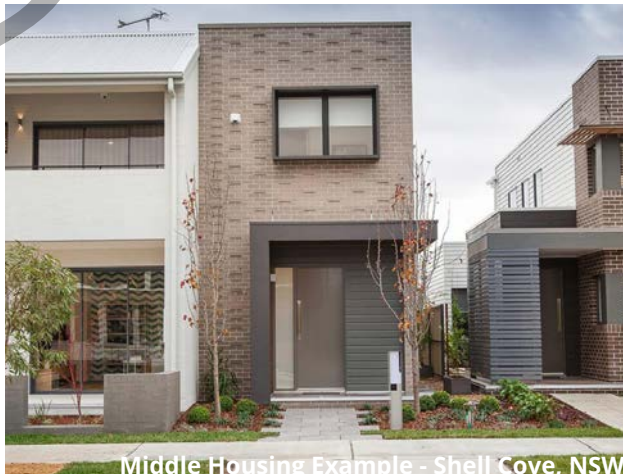
Accessory Dwelling Unit (ADU)  
Garage Conversion - Portland, OR



Accessory Dwelling Unit (ADU)  
- Portland, OR



Cottage Cluster Housing - Auburn, CA



Middle Housing Example - Shell Cove, NSW



Single Family Lots - Portland,





## NE 6th Ave & NE Joy St

Our example residential street, NE 6th at NE Joy St, is currently 50-ft wide with curb-tight sidewalks. This street can be enhanced with curb extensions to slow traffic, improve safety and walkability, and provide planting areas for many new street trees.



# 05

## Open Space

DRAFT

## Open Space Improvements

The City of Camas provides access to a range of high-quality recreation areas and open spaces, which are a major draw for residents. Many choose to live in Camas because of these exceptional parks and recreation opportunities. However, while NE 4th Avenue features wide sidewalks and a few seating areas, there is no dedicated city park or open space in the downtown core. During engagement for the Downtown Subarea Plan, community members and stakeholders expressed interest in more public spaces, community gathering areas, and stronger open space connections downtown.

This section outlines potential enhancements to existing open spaces as well as new opportunities to introduce open space into the heart of Downtown.



Item 4.

Local Community Garden - Vancouver





## Connected Network of Open Space

The urban design framework envisions a connected network of trails, parks, plazas, and parklets to enhance outdoor recreation and green space throughout Downtown Camas. By linking existing and new open spaces, this network will provide accessible, inviting areas for relaxation, social gatherings, and community events. Strategically placed plazas and parklets will complement larger parks and trails, creating a seamless flow of outdoor spaces that encourage walking, biking, and recreation. This approach aims to integrate more greenery into downtown while fostering a vibrant, active, and connected community environment.





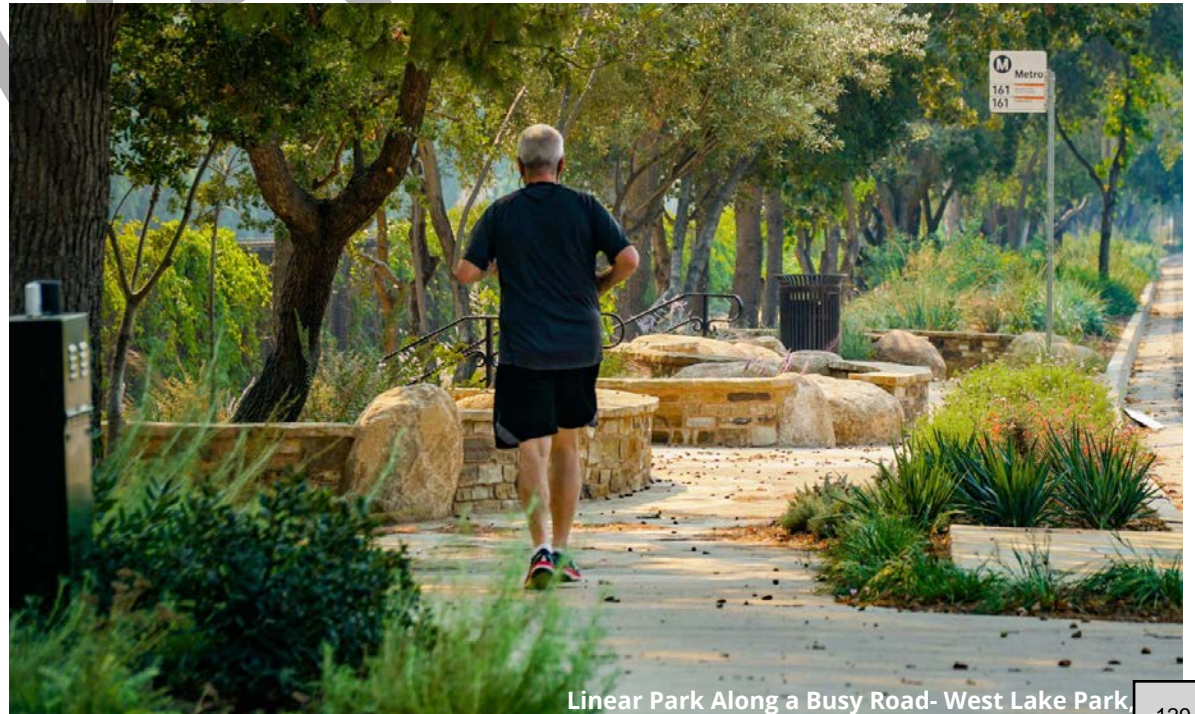
Gravel Trail Through the Woods - DuPage County, IL



Wooden Parklet Structure - London, UK



Sidewalk Landscaping Upgrades - Seattle, WA



Linear Park Along a Busy Road- West Lake Park,

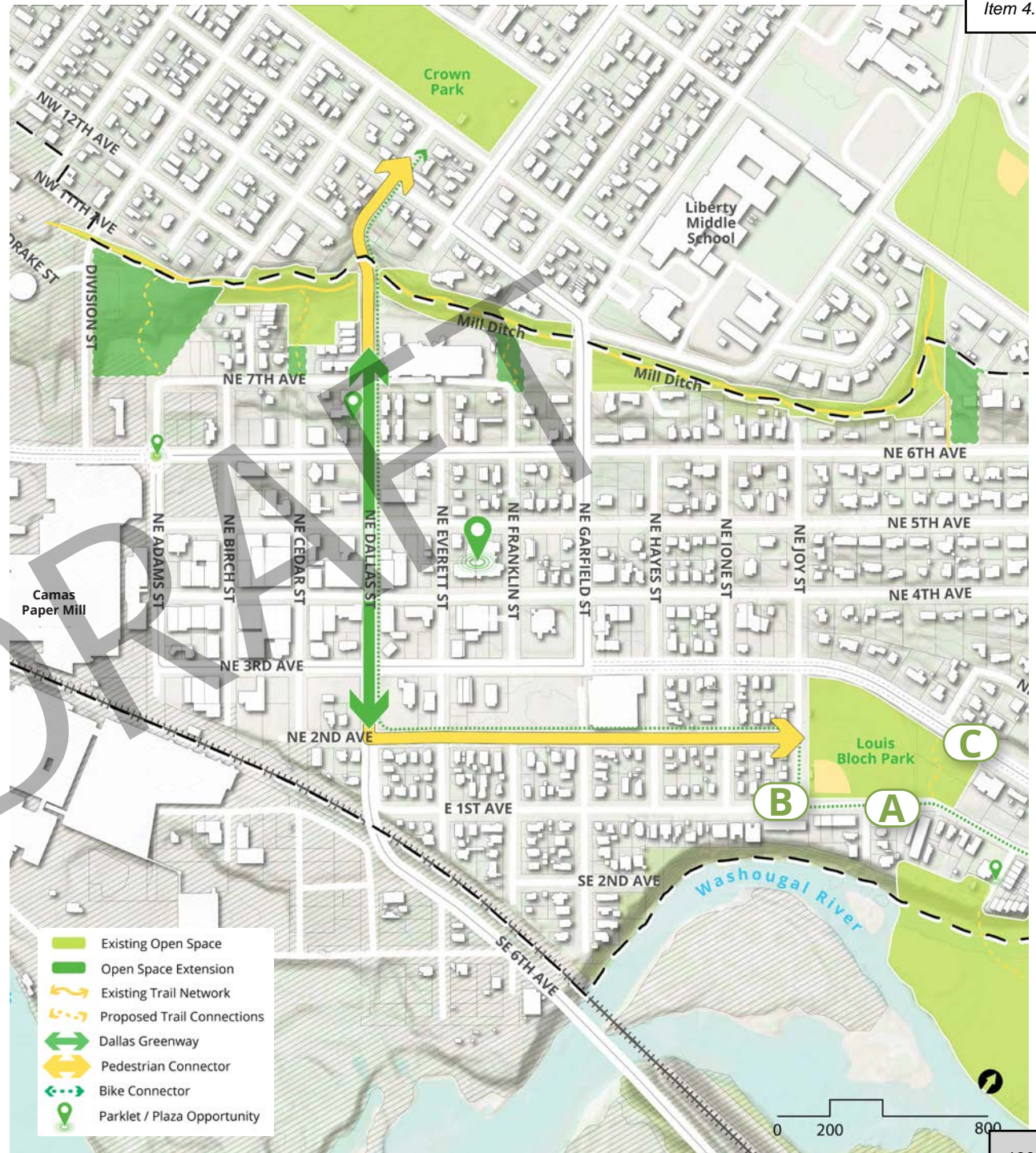


# Louis Bloch Park Enhancements

Planned enhancements for Louis Bloch Park aim to create a more dynamic and community-focused space. Proposed improvements include developing a designated area for programmed events and providing a flexible venue for gatherings, performances, and activities.

Upgrades to the sports facilities will enhance recreational opportunities, ensuring the park remains a hub for local athletics. Additionally, the addition of a play park for children will create a welcoming, family-friendly environment.

To support these improvements, the plan also emphasizes better connectivity between the park and the downtown core, encouraging more seamless access for pedestrians and cyclists. These enhancements will transform Louis Bloch Park into a more versatile and engaging space for residents and visitors.





## A Community Event Space

The programmed event space at Louis Bloch Park will provide a dedicated area for community gatherings, performances, and seasonal events. Designed for flexibility, it will accommodate a variety of activities, from concerts to markets, fostering a lively, engaging environment that strengthens community connections and enhances downtown's cultural and social offerings.

## B Sports Fields Improvements

Sports field improvements at Louis Bloch Park will enhance playability and accessibility for local athletes and recreational users. Upgrades may include improved turf, lighting, and seating, ensuring a better experience for players and spectators. These enhancements will support year-round use and strengthen the park's role as a key community sports hub.

## C Play Park

The children's play park at Louis Bloch Park will provide a safe, engaging space for families. Featuring modern play structures, seating areas, and shaded spots, it will offer opportunities for active play and social interaction. This addition will make the park more family-friendly, enhancing its role as a community gathering space.



Covered Picnic Pavilion - Hillsborough NC



Outdoor Ampitheater for Public Events - Seattle



Sand Volleyball Court  
- Central Park, NYC



Baseball Field Dugout Improvements - Ames, IA



Immersive Childrens Playscape - San Francisco, CA



Playground in Local Park - Carmel

Item 4.



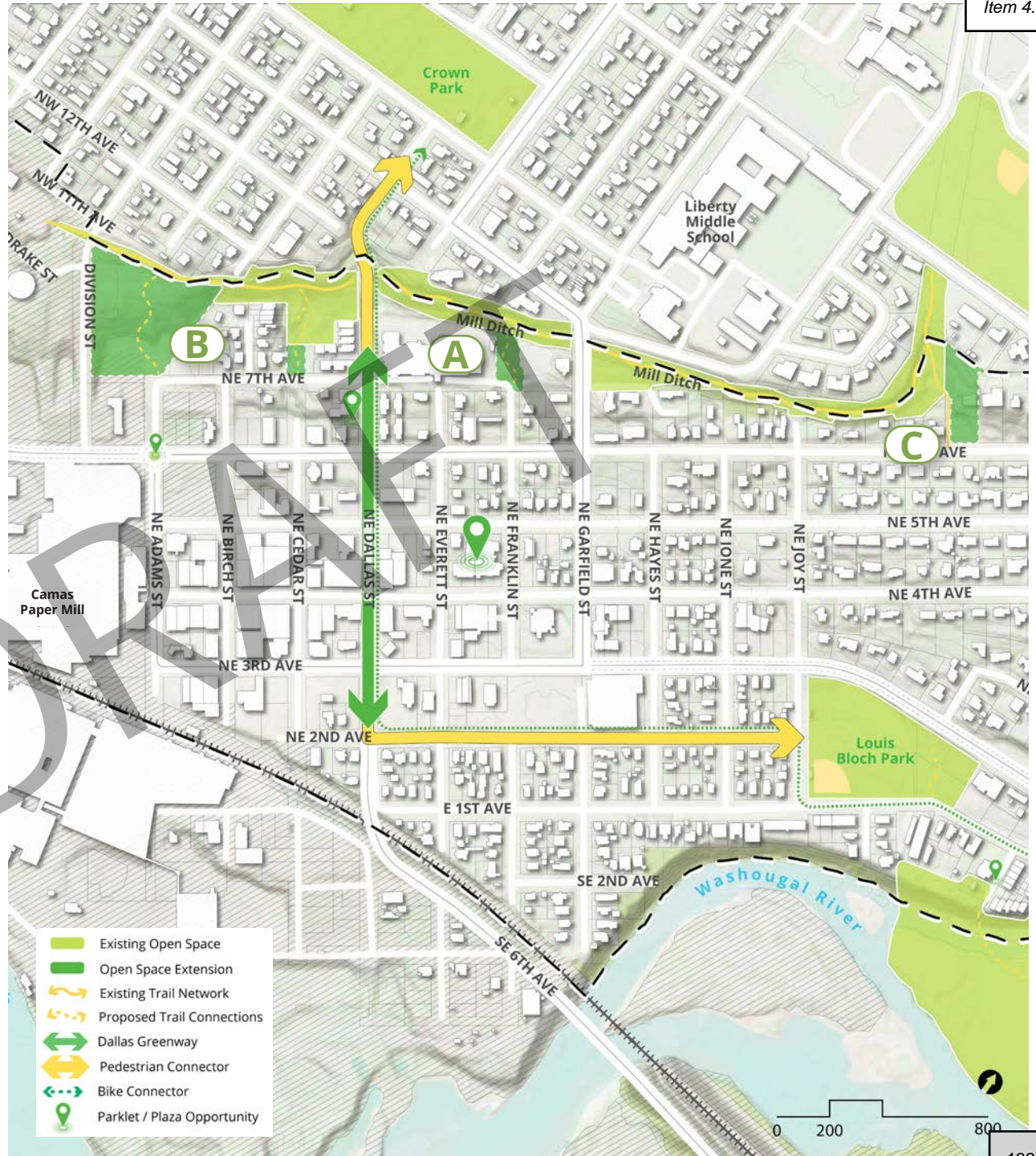
# Mill Ditch Trail Improvements



Example Sketch of a Multi-Use Trail Through the Woods

The urban design framework identifies potential improvements to the Mill Ditch Trail that would enhance its accessibility and connection to Downtown Camas. Key improvements include adding wayfinding signage to better guide users to and from the trail, as well as establishing a trailhead to create a welcoming entry point.

As a historic, mostly flat, unpaved route following the former Camas Paper Mill water ditch, the 2.6-mile trail offers a unique recreational experience. Enhancing its visibility and access will encourage more use, strengthening its role as a key outdoor asset for the community.





## A Trail Connections to Downtown Camas

Improvements to the Mill Ditch Trail will enhance connections to Downtown Camas through wayfinding signage and strategic access points. Strengthening links at key streets like NE Dallas and NE Garfield will make the trail more accessible, encouraging walking and biking between downtown, surrounding neighborhoods, and recreational areas.



Trailhead Signage - Boulder, CO

## B Neighborhood Park Opportunities

Neighborhood park opportunities along the Mill Ditch Trail focus on transforming adjacent lots into accessible green spaces. These parks would provide seating, play areas, and natural landscaping, creating inviting community gathering spots. Strategically placed along the trail, they would enhance recreation, strengthen neighborhood connections, and improve access to Downtown Camas.



Small Park Along Trailhead  
- Cascade, MI



Example of a Hillside Park to Potentially Connect  
the Mill Ditch Trail to Greater Downtown Camas

## C Community Garden Sites

The plan explores opportunities for small community gardens along the Mill Ditch Trail to enhance its appeal and engage the community. These gardens would activate underutilized spaces, adding greenery and seasonal plantings while fostering community involvement. Strategically placed, they would create inviting, interactive spaces that complement the trail's natural character.



Low Impact Community Garden Site - Moraga, CA



Small Urban Farm Example - Seattle,



Large gateway element to signal your arrival to downtown



Wayfinding signage throughout the downtown core



Linear park opportunity as you enter downtown from the north



Item 4.



Improved pedestrian crossings along the high traffic volume NE 6th Ave

Improved pedestrian crossings along the high traffic volume NE 3rd Ave



Secondary gateway element as you enter Camas city limits



Secondary gateway element as you enter downtown Camas



## Dallas Linear Park

The Dallas Linear Greenway would transform NE Dallas Street into a safer, more inviting corridor for pedestrians and cyclists while maintaining vehicle access. Wider sidewalks, curb extensions, and mid-block crossings will enhance walkability and outdoor gathering spaces. The plan also introduces more on-street parking and increased street trees to improve both accessibility and aesthetics. A linear park between NE 6th and 7th Avenues will provide a welcoming green space for those arriving downtown from the north, strengthening connections to neighborhoods and surrounding parklands.



## Wayfinding Elements

The wayfinding elements along the Dallas Linear Greenway will include directional signage and maps to guide pedestrians and cyclists. These features will not only improve navigation between downtown and surrounding parks but also help establish a strong downtown identity, enhancing the area's sense of place and making it more welcoming.



Park Network Wayfinding Signage - Edmonton, CA



Historic Map - Washington



Urban Trail Network Map - Austin, TX

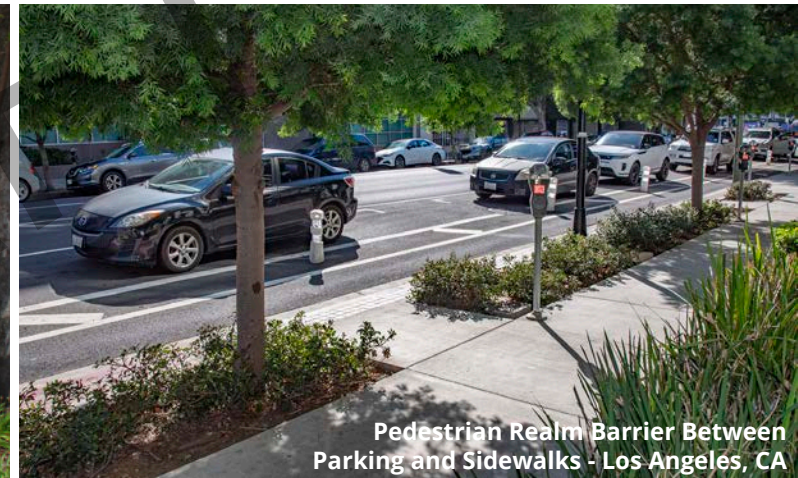
Item 4.

## On-Street Parking Improvements

The Dallas Linear Greenway will enhance on-street parking by making existing spaces more pronounced and identifying new areas for additional parking. These improvements will provide more convenient parking options for visitors, support local businesses, and improve the overall functionality and accessibility of Downtown Camas.



On Street Parking Nestled Amongst Landscaping - Nashville, TN



Pedestrian Realm Barrier Between Parking and Sidewalks - Los Angeles, CA

## Street Tree Enhancements

The Dallas Linear Greenway will incorporate additional street trees along NE Dallas Street to enhance the pedestrian experience and improve aesthetics. These tree plantings will provide shade, create a more inviting environment, and contribute to the overall greenery of the area, helping to beautify and soften the streetscape.



Green Infrastructure Streetscaping - Nashville, TN



Increased Planter Beds for Street Trees - Paramount, CA



## NE 4th Ave & NE Everett St

Moving City Hall south toward NE 3rd Avenue creates a civic campus with the library and opens up a great opportunity for a public plaza on 4th Street.



High Level Conceptual Rendering

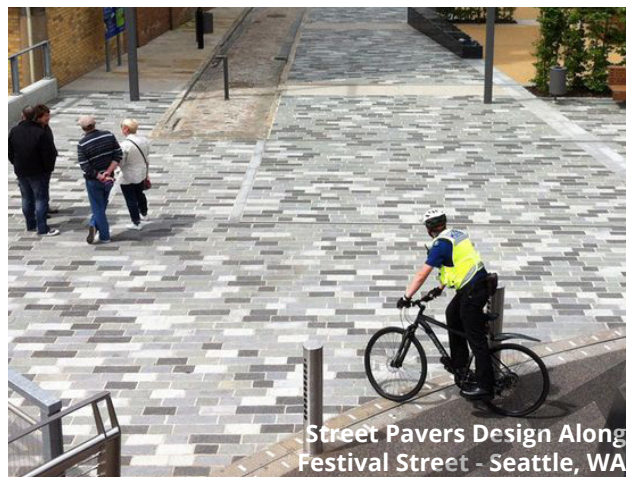
## Civic Plaza

The proposed civic plaza aims to create a vibrant public space as the heart of a potential civic campus encompassing a relocated City Hall, existing library, and new fire station. This allows for a flexible plaza on NE 4th Ave, accessible to cars but easily closed for events like the farmer's market. The plaza will anchor NE 4th Ave, strengthening connections to the downtown historic core while providing a much-needed space for community gatherings and activities.



## Festival Street

The new civic plaza will serve as a central gathering space for the community, hosting events like the farmer's market and other public activities. Its flexible design will enhance downtown's social life, providing a venue for cultural events and fostering a greater sense of community.



Street Pavers Design Along Festival Street - Seattle, WA



Shared Car and Pedestrian Street - Seattle, WA

## Downtown Anchor

The civic plaza will anchor downtown by providing a central, vibrant space for community events and gatherings. Its strategic location at the eastern end of the historic NE 4th Ave will draw activity, create a focal point for the area, and enhance downtown's sense of place, making it a key destination within the district.



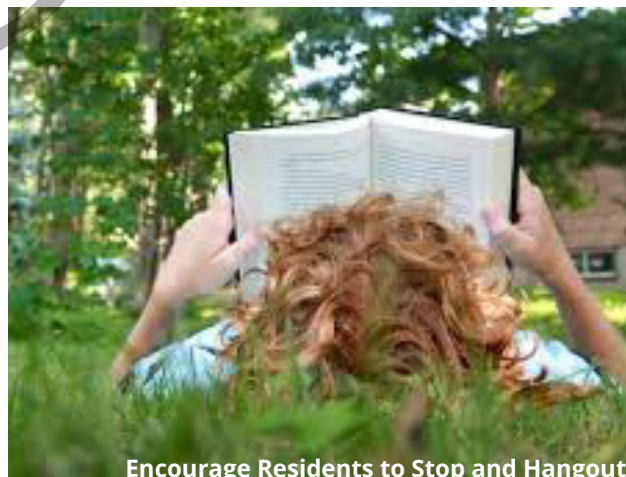
Farmers Market - Boulder, CO



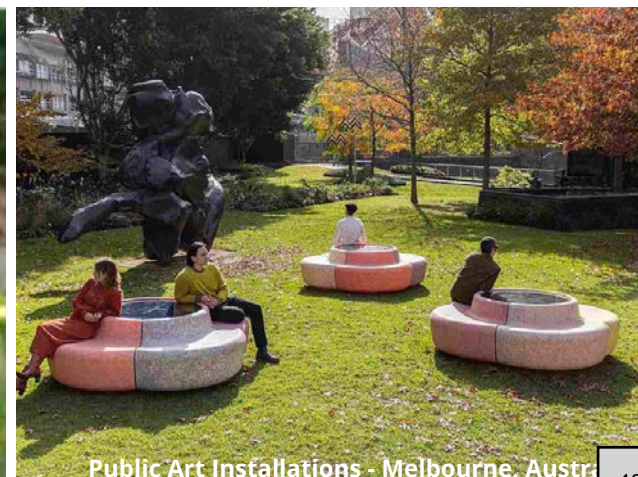
Community Event - Cleveland, OH

## Center for Civic Life

The new civic campus will bring essential community services together in one area, making it easier for residents to access services. The integrated plaza will provide space for both civic activities and recreational use, offering opportunities for public events, play, and social interaction, fostering a stronger sense of community.



Encourage Residents to Stop and Hangout



Public Art Installations - Melbourne, Australia

Item 4.



# Development Feasibility Study

Item 4.

A development feasibility study focused on two possible scenarios for the civic plaza, considering market trends and regulatory factors. The study assessed how rising development costs, including materials, labor, and parking requirements, affect the plaza's feasibility. The study aimed to balance the need for a vibrant public space with current economic conditions, ensuring the plaza remains a practical and valuable addition to Downtown Camas.

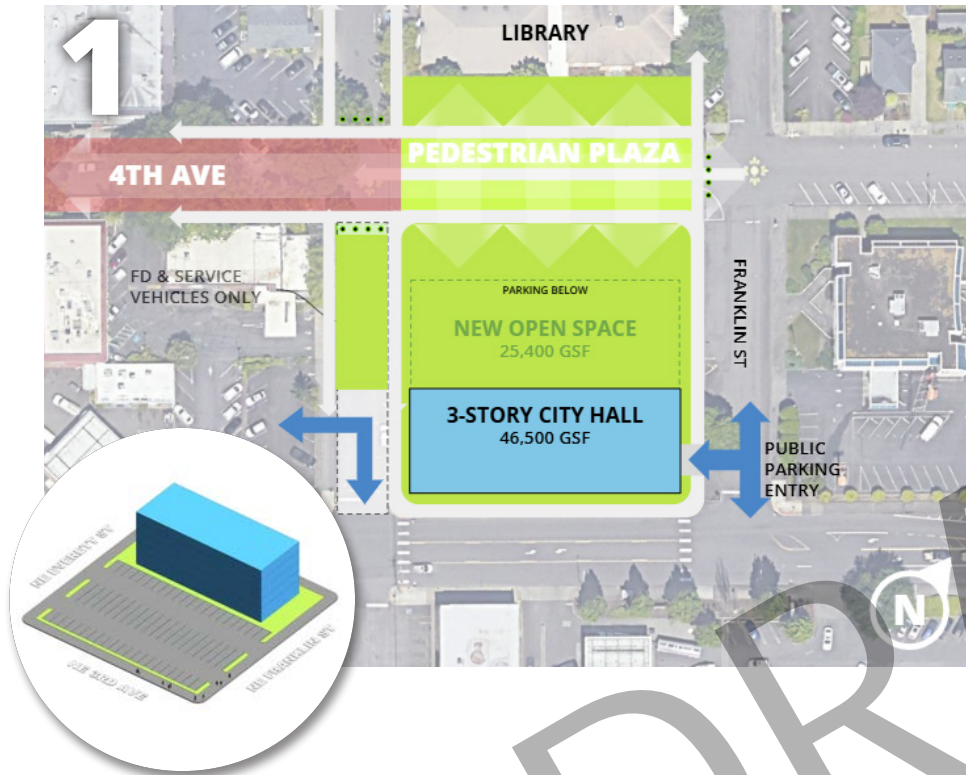


Civic Plaza Conceptual Site Plan - Camas



# Development Scenarios

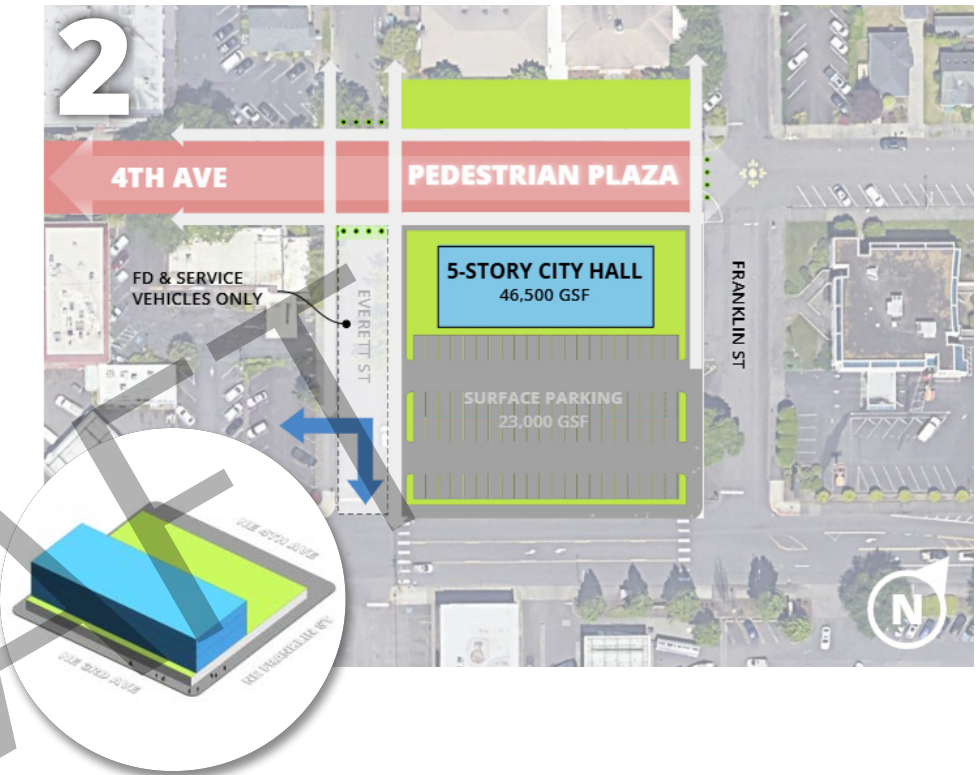
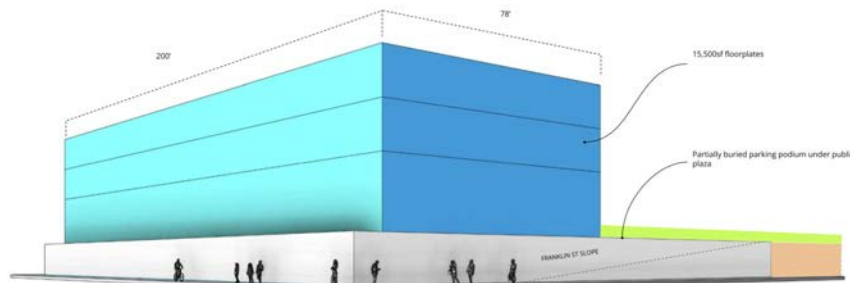
Item 4.



Move City Hall south to create a civic quad (public open space that stretches across 4th Ave to the Library) while simultaneously reinforcing taller construction and higher density on NE 3rd Avenue.

**3-story, 46,500 sf new building = ~150% of current gsf**

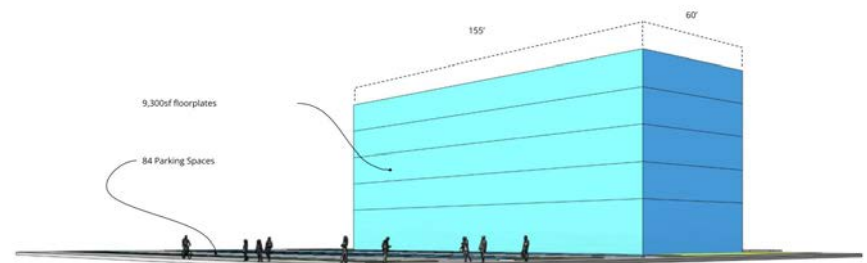
**36,000 SF parking podium = 116 of 117+ required off-street parking spaces**



Provide surface parking off the main auto thoroughfare of NE 3rd Avenue. Maintain City Hall's intimacy with NE 4th Ave while building up to increase density. No new open space.

**5-story, 46,500 sf new building = ~150% of current gsf**

**23,000 SF parking podium = 84 of 117+ required off-street parking spaces**





# 06

## Transportation

DRAFT

*our*  
**Downtown  
Camas**

Hometown.  
Downtown.  
Our Town. 2045

*This section is currently in progress and will be included in the final draft of the Downtown Subarea Plan.*



# 07

## Infrastructure

DRAFT

*our*  
**Downtown  
Camas**

Hometown.  
Downtown.  
Our Town. 2045

*This section is currently in progress and will be included in the final draft of the Downtown Subarea Plan.*



# 08

## Goals, Policies, & Implementation

*our*  
**Downtown**  
**Camas**

Hometown.  
Downtown.  
Our Town. 2045





Clara Apartments - Camas, WA

## Overview

Over the next 20 years, City staff and community partners will work to bring the Downtown Subarea Plan's concepts and recommendations to life. The goals and policies presented in this section align with the vision statement of the Subarea Plan and set the policy direction for decision makers when reviewing priorities for City-led actions.

The implementation plan further supports the goals and policies by outlining specific strategies and actions that will lead to the desired outcomes of the Subarea Plan. The implementation plan provides guidance on the estimated timing, leadership and

partnership roles, and level of priority for each implementation action. Many actions will be City-led through various City Departments, while others will require partnership with community groups or regional agencies. Over the planning period, City staff and decision makers, in coordination with key stakeholders, may reevaluate the goals, policies, and implementation actions to respond to changes in priorities or other City planning efforts that affect the Downtown area.



# Goal DT-1: Architecture and Design

Item 4.

Retain Downtown’s historic design and expand its charm.

<b>DT-1.1: Protect and enhance downtown’s design, including the integrity of the Historic Main Street Core, through clear and objective zoning standards and design guidelines.</b>
<b>DT-1.2: Explore improvements to public spaces that reinforce downtown’s character through a streetscape plan and investments in community amenities.</b>
<b>DT-1.3: Ensure downtown design standards are up-to-date and reflect the goals and policies of the Downtown Subarea Plan.</b>
<b>DT-1.4: Promote the addition of street trees, landscape planters, green walls, and other landscaping elements that improve aesthetics, provide shade, and enhance the pedestrian experience.</b>
<b>DT-1.5: Incorporate public art, murals, and interactive elements to create a unique sense of place.</b>
<b>DT-1.6: Require new buildings to complement the existing architectural character while allowing for contemporary design elements.</b>
<b>DT-1.7: Encourage pedestrian-scale building design and street lighting to highlight building facades and architectural features and enhance safety and visibility.</b>







Patrons Enjoy a Meal Outdoors at Natalia's Cafe in Downtown Camas



# Goal DT-2: Downtown Housing

Provide a range of housing options that welcome more people to live Downtown.

- DT-2.1: Allow development of a range of housing types, including both rental and ownership options, for a wide range of income levels within the zoning districts in the Downtown Subarea Plan boundary.**
- DT-2.2: Explore incentives to increase housing capacity and encourage the development of diverse housing types, ADUs, affordable housing, senior housing, and mixed-use or live/work units within Downtown.**
- DT-2.3: Develop design standards for new housing to complement the existing downtown development and ensure clear and objective regulations and permitting processes.**
- DT-2.4: Implement housing affordability strategies that meet the needs of downtown households and preserve existing affordable housing.**
- DT-2.5: Encourage housing downtown to provide features that foster healthy living such as community gardens, open spaces, and recreation areas.**

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## Goal DT-3: Urban Amenities

Item 4.

Provide the right mix of development, services, and public spaces that support ways for people to live, work, and play Downtown.

**DT-3.1: Require active ground floor uses and engaging street level design in the Historic Main Street Core zoning district.**

**DT-3.2: Support parks and open space improvements and connectivity to Mill Ditch Trail and Louis Bloch Park, as illustrated in the Downtown Subarea Plan.**

**DT-3.3: Evaluate regulations that support visitor lodging and tourism activities in downtown.**

**DT-3.4: Explore opportunities for additional public spaces, including public plazas, pocket parks, pedestrian-only streets, and community gardens.**

**DT-3.5: Create a parklet program that converts downtown curbside parking spaces into community seating spaces for businesses and residents**

**DT-3.6: Establish a policy to require new public and private projects to provide public art, including murals, sculptures, or interactive elements within public spaces**

**DT-3.7: Support and incentivize business and property owners to incorporate outdoor patios, seating areas, planters, and other landscape features that contribute to an inviting and dynamic streetscape.**









## Goal DT-4: Economic Development

Item 4.

Encourage (re)development to expand opportunities Downtown for retail, office, and residential.

- DT-4.1: Support partnerships with community groups focused on advocating for the future of Downtown Camas, such as the Downtown Camas Association.**
- DT-4.2: Evaluate the Camas Municipal Code and permitting procedures to identify ways to increase flexibility to allow businesses to expand, grow, or redevelop at existing locations.**
- DT-4.3: Collaborate with public agencies, private parties, and non-profits in marketing and outreach efforts that attract visitors, sustain existing local businesses, attract new development/redevelopment, and maintain the historic character of downtown.**
- DT-4.4: Partner with the Downtown Camas Association, Camas-Washougal Chamber of Commerce, and other similar organizations to expand incentives available to small local businesses such as credit improvement programs.**
- DT-4.5: Prioritize City investments that capitalize on nearby redevelopment efforts to reinforce economic and physical connections to downtown.**
- DT-4.6: Evaluate financing tools to help investments in community infrastructure and encourage redevelopment of key areas.**
- DT-4.7: Address infrastructure improvements necessary for redevelopment projects.**
- DT-4.8: Encourage development and redevelopment that reinforces the role of public spaces in Downtown Camas as a vibrant center of activity, particularly for vulnerable populations.**
- DT-4.9: Develop strategies to mitigate displacement of existing businesses downtown, particularly in areas of increased investment and redevelopment.**
- DT-4.10: Work to achieve a diverse set of local businesses downtown that are complementary and economically resilient, balancing needs of residents, workers, and visitors.**
- DT-4.11: Actively participate in the Washington Department of Ecology cleanup process for the Camas Mill and support an unrestricted cleanup level to provide for the greatest flexibility for future land use.**







# Goal DT-5: Civic Life

Expand on civic life and services Downtown through strategic use of City-owned property and vibrant community events.

<b>DT-5.1: Ensure that City Hall and primary services remain downtown.</b>
<b>DT-5.2: Develop a Civic Hub as a central gathering place and include a civic plaza to support existing and new community events.</b>
<b>DT-5.3: Support flexibility and provide infrastructure investments at the Civic Hub along NE 4th Ave to create shared spaces and accommodate pedestrian-friendly events.</b>
<b>DT-5.4: Develop guidelines and permitting procedures for seasonal or temporary use of public spaces for outdoor dining, retail displays, community events, and allow for pedestrian flow and safety.</b>

DRAFT









## Goal DT-6: Multimodal Connectivity

Item 4.

Create a safe and connected transportation network Downtown for pedestrians, bicyclists and vehicles.

**DT-6.1: Encourage placemaking and wayfinding efforts downtown to develop a distinct identity and attract visitors.**

**DT-6.2: Ensure downtown sidewalks are wide, unobstructed, and well-maintained to accommodate all users.**

**DT-6.3: Implement traffic-calming measures such as curb extensions, raised crosswalks and intersections, and unique pavement treatments that improve pedestrian safety and enhance downtown design.**

**DT-6.4: Improve bicycle infrastructure with new dedicated bike lanes, sharrows, intersection improvements, and bicycle parking. Encourage the use of priority bicycle parking for community events.**

**DT-6.5: Enhance connections between the historic Main Street core and downtown residential neighborhoods, including Evergreen Terrace and south of NE 3rd Ave.**

**DT-6.6: Install benches, shade structures, and public seating along pedestrian routes to create a more comfortable walking environment.**

**DT-6.7: Ensure adequate parking downtown for continued business growth and consider developing a parking management plan. Seek out opportunities for shared use parking and additional parking on the edges of the downtown district, which could also serve as a park and ride transit facility.**









*The implementation plan is currently in process and will be included in the final draft.*

*The implementation plan is currently in process and will be included in the final draft.*





## Staff Report

December 15, 2025, Council Workshop

Workshop – SunCal Development Agreement and Master Plan

Presenter: Robert Maul, Planning Manager

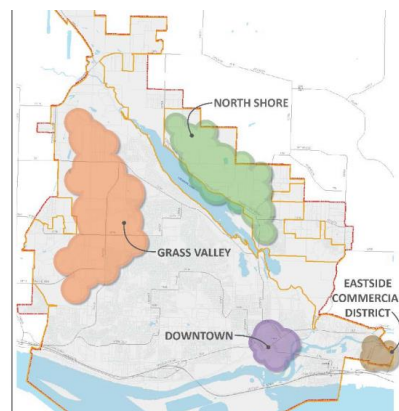
Time Estimate: 30 minutes

Phone	Email
360.817.7255	rmaul@cityofcamas.us

**BACKGROUND:** In 2019 the Camas City Council directed staff to engage in a subarea planning process for the North Shore area as allowed for in the adopted comprehensive plan, Camas 2035 (see fig1). Subarea planning is an optional element that cities can elect to include in their respective comprehensive plans with the goal of providing a more area-specific level of master planning to encourage more intense level of development, well served by transportation options, and includes facilities for pedestrian and bicycle travel, a range of housing choices and a mix of shops, services and public spaces.

The North Shore subarea planning process was a two-part public engagement focused effort that spanned from 2020-2022 with final adoption in November 2022. The first year was largely public engagement with a series of open houses, surveys, first Friday events, participation at farmer's markets, Camas Days, and listening sessions with Camas High School students which resulted in a vision statement. The second phase of the subarea plan was taking the vision statement and shaping it into the plan that is now adopted today. Phase 2 was not only well vetted with the community, it was also informed by stakeholder groups and citizen advisory committee work. The North Shore subarea plan is specific to the area north of Lacamas Lake and encompasses over 900 acres of land, including the city owned legacy lands for preservation and recreation. The adopted subarea plan provides flexibly zoning standards, a variety of density and housing types, jobs lands, commercial center and public trails and multi-model transportation elements throughout. There are also specific architectural design standards for residential and commercial developments.

**Fig 1**

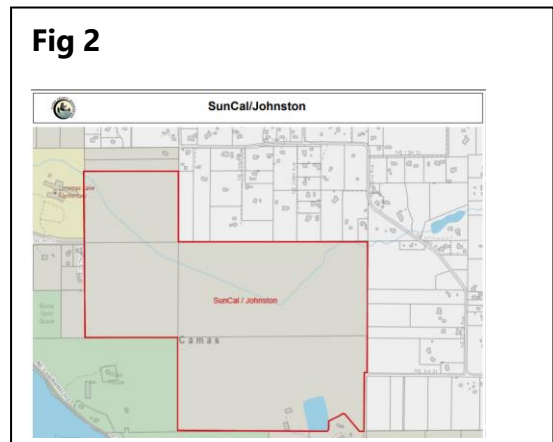


**SUMMARY:** Since its adoption in 2022, the subarea plan has incentivized several developments within the plan boundary, which includes two recently approved subdivisions north of Camas High School, three other subdivisions submitted for entitlements just north of Lacamas Lake, and staff's recent negotiations with SunCal

development for a master plan development agreement, which is before council for a workshop.

Development agreements (DA) are authorized by RCW36.70.B.170, and can be used as an effective tool with larger scale development as a voluntary agreement between the city and a developer/owner. Development agreements allow for flexibility in design, details and development standards beyond what is currently allowed for in adopted city code. It provides increased regulatory certainty, vesting standards, makes clear financial obligation, and can be more ideal for larger projects to create continuity and ensuring vision implementation. What is proposed is a master plan and development agreement similar to what was done for Green Mountain PRD and Hills at Round Lake PRD. Given the large scale of the development, it will take years to build out, which is where a DA can provide regulatory certainty for a longer period of time beyond normal vesting rights which currently range from 2 years to 7 under normal enlistment regulations. Typical timelines for DA's can range from 10-15 years, which is what is proposed for this project. The two documents of the DA and the master plan act as one adopted agreement.

SunCal has a development proposal for the approximate 300 acres of land currently owned by the Johnston family farm (see Fig 2). Within the proposed development area are several zoning designations as assigned by the adopted plan that do not follow property lines. As proposed, SunCal wants to shift the zoning around a bit to help create a neighborhood that designates several housing types for detached and attached single family residential, as well as higher density apartment units closer to the commercial village. The adopted commercial zoning in this section is 15 acres, and the applicant is proposing to maintain a minimum 15-acre commercial center, albeit shifted to the west a bit for design purposes. Included in the proposal is the construction of North Shore Boulevard from the existing terminus at the western boundary all the way through the site to connect to neighboring developments to the south (please refer to the master plan in the packet).



All major utilities will also be installed with this development and there is a proposed stormwater conveyance to the west at the Rose property where natural drainage has flowed historically. Additionally, SunCal has designed the required public plaza that will be adjacent to the Rose legacy lands nearby the storm conveyance. Other private open space, trails, and neighborhood pocket parks are proposed as well.

This process does require for a public hearing before adoption, so the goal for this second workshop is to allow for a deeper review of the proposal from council. Nothing is set in stone with this DA and master plan. The goal for staff and the applicant is to gain insight



and guidance from the City Council on the proposal so any changes can be made prior to a public hearing on the packet in early 2026.

Aside from the standard recitals and terms of a DA, the following are the project specific elements within the DA:

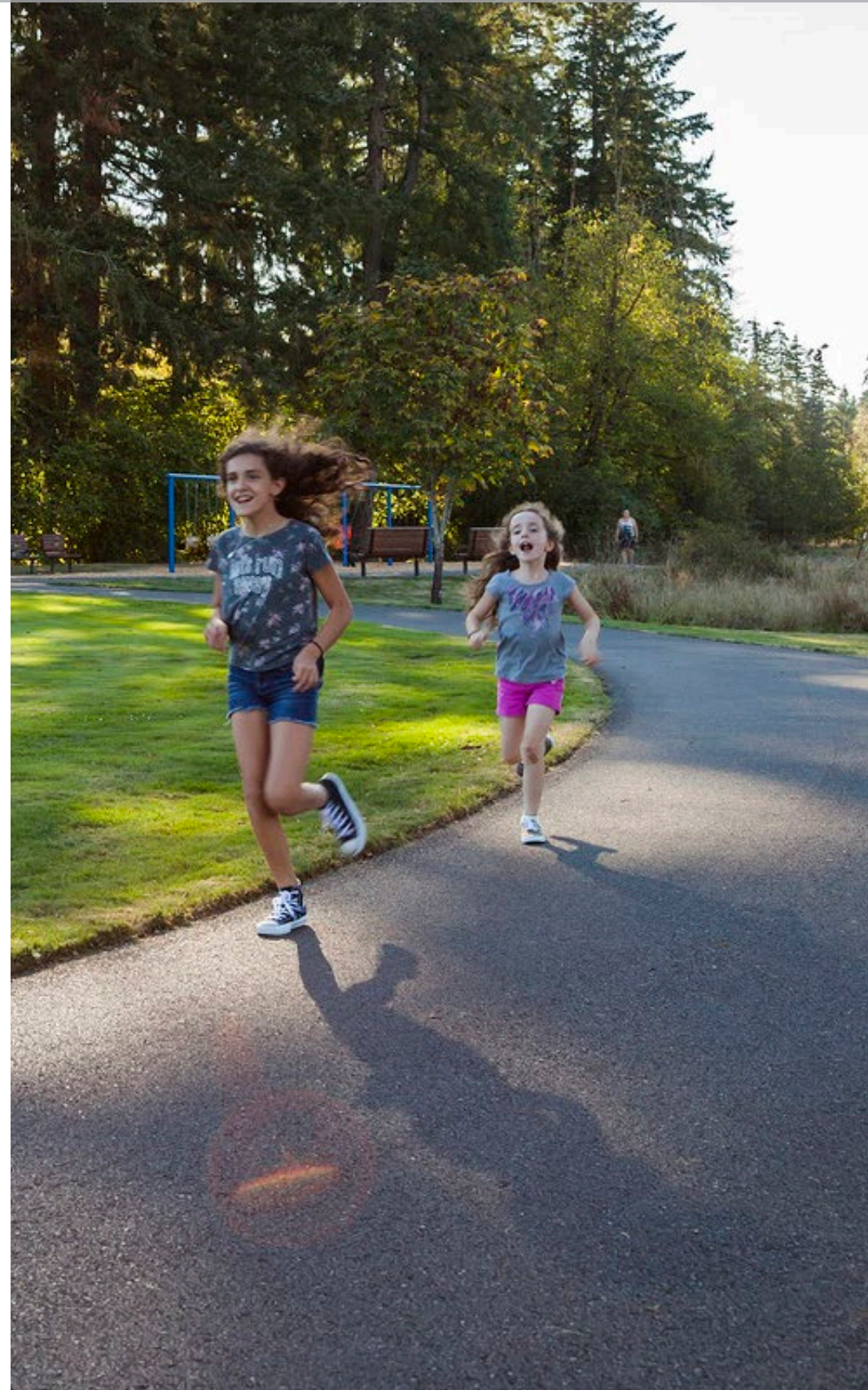
- Vesting
- Master Plan
- State Environmental Policy Act (SEPA) review and vesting
- Phasing
- Transportation
- Design Standards for public and private facilities
- Commitment to commercial development
- Maintenance responsibilities
- Stormwater conveyance
- Impact and SDC credits
- Process

**RECOMMENDATION:** This is for discussion purposed only. Staff is seeking input and direction from council prior to scheduling a public hearing.



# LACAMAS NORTH SHORE MASTER PLAN

Item 5.





# TEAM

**SUNCAL**  
DEVELOPER

Nick Pappas  
Matt Keenen  
Matthew Vissotzky



**GBD ARCHITECTS**  
ARCHITECT

Mark Raggett



**WALKER MACY**  
LANDSCAPE ARCHITECT

Mike Zilis  
Brian Bishop  
Cameron Blakely



**MACKAY SPOSITO**  
ENGINEER

Lindsey Perticone  
Peter Tuck



**CAMAS**  
CITY

James Carothers  
Rob Charles  
Robert Maul  
Alan Peters  
Chris Witkowski



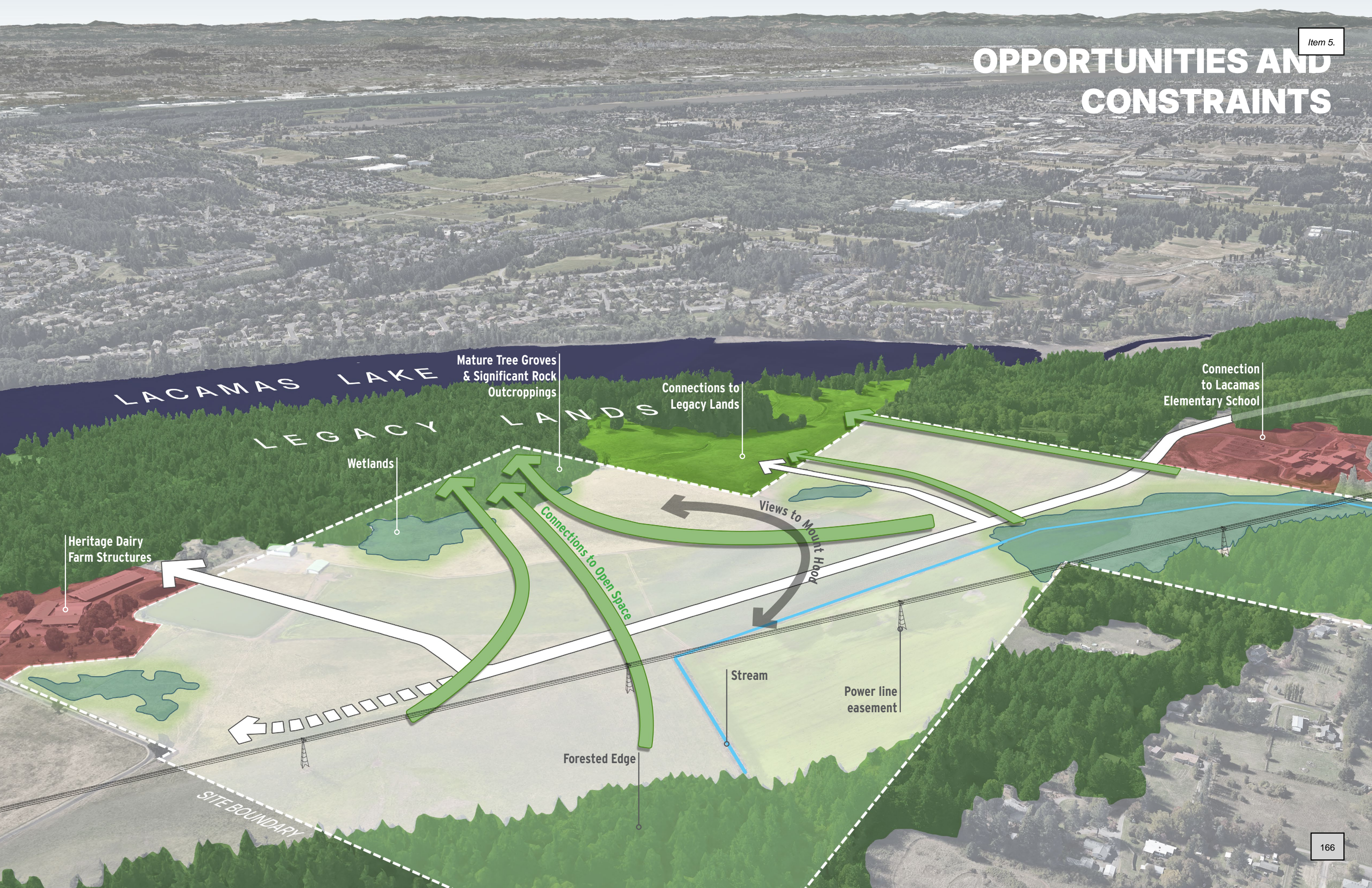


# SETTING

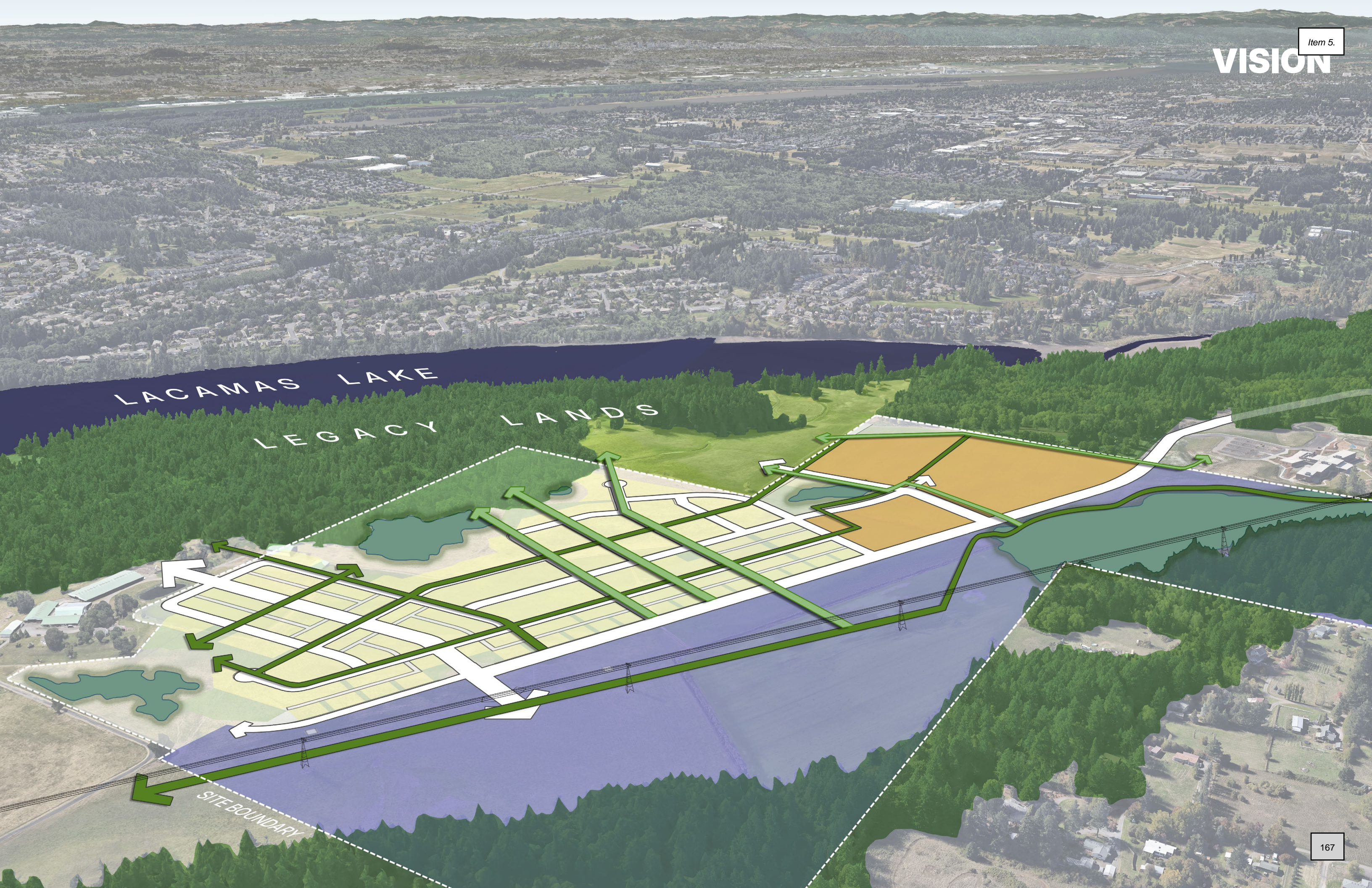




# OPPORTUNITIES AND CONSTRAINTS

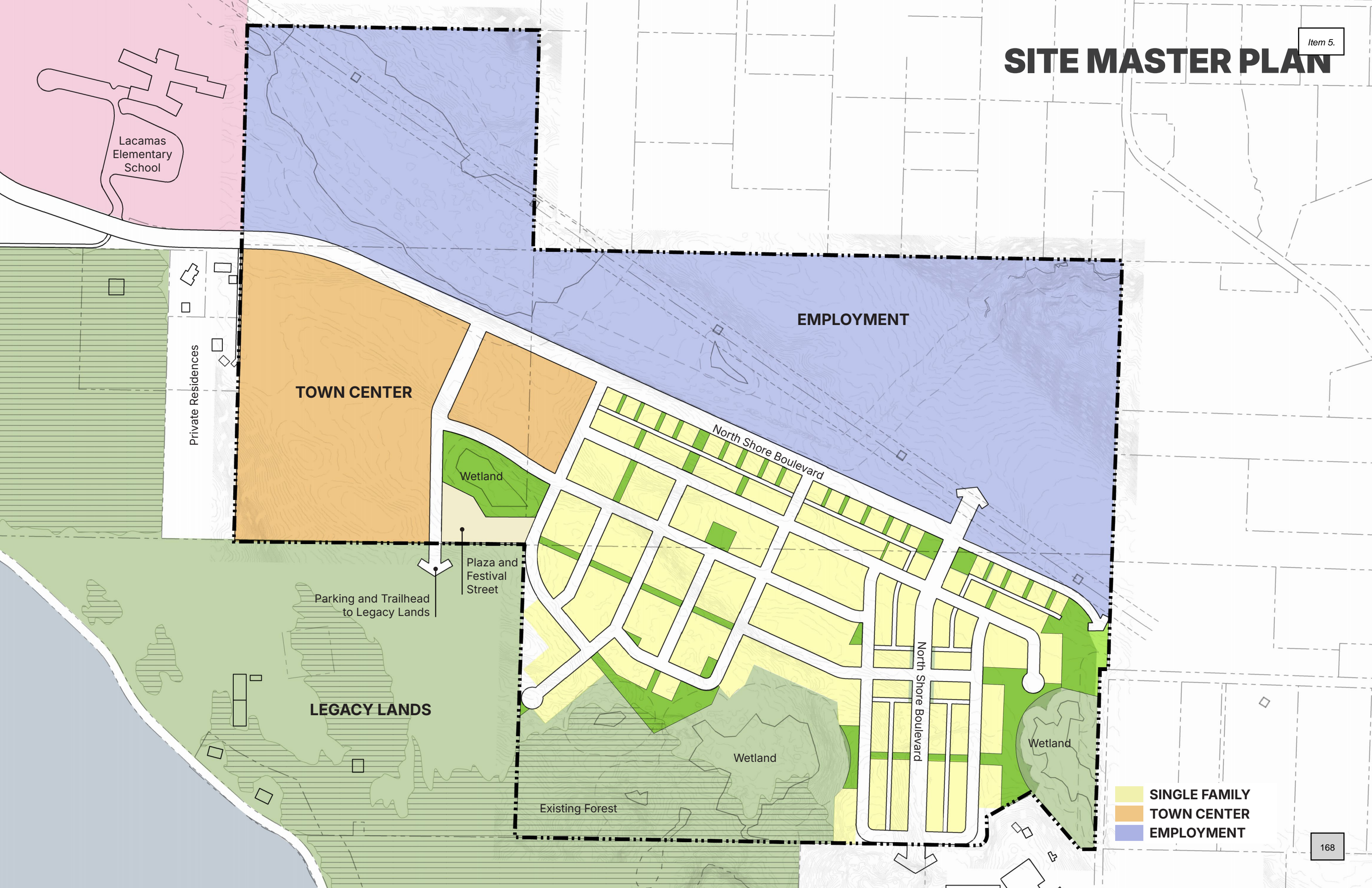








# SITE MASTER PLAN



- SINGLE FAMILY**
- TOWN CENTER**
- EMPLOYMENT**



# OPEN SPACE

The open space vision is anchored by the park spaces of Legacy Lands and extends green into the sitethrough features such as natural wooded areas, improved wetlands, pocket parks, mid-block greenways, special streets, and trails.

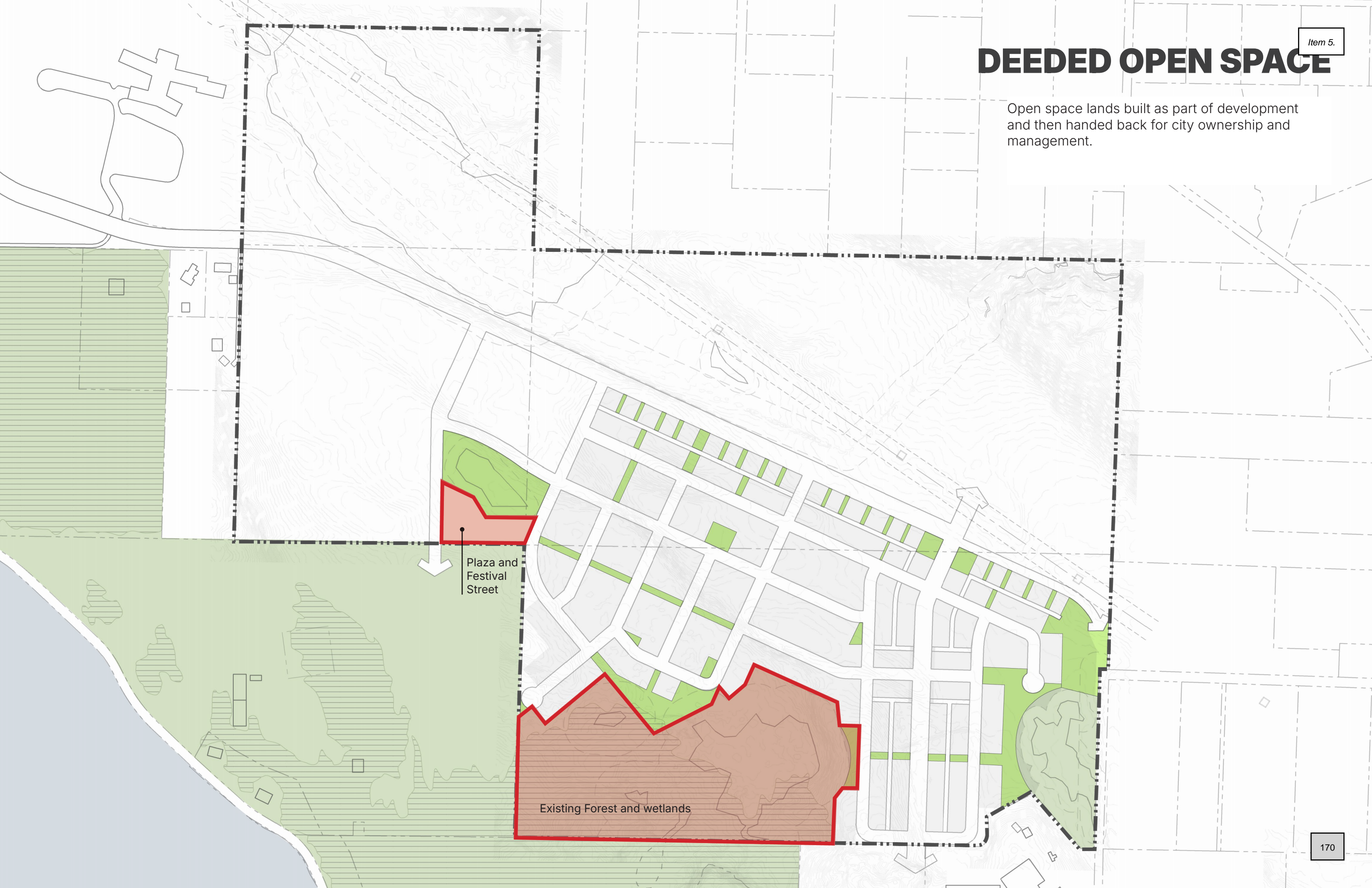


- NATURAL AREA**
- COMMUNITY OPEN SPACES**
- POCKET PARKS**
- PRIMARY PEDESTRIAN ROUTES**
  - Shared Use Paths
  - Mid-Block Connection
  - Soft surface trails
  - Sidewalk



# DEEDED OPEN SPACE

Open space lands built as part of development and then handed back for city ownership and management.

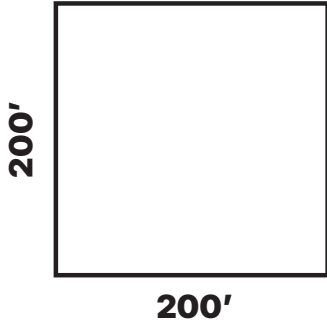




# PLAZA EXAMPLES

There are a wide variety of potential plazas that could be developed. Examples below show how other communities have addressed this need. Please see following page for our proposed approach.

**PIONEER SQUARE**  
PORTLAND, OR



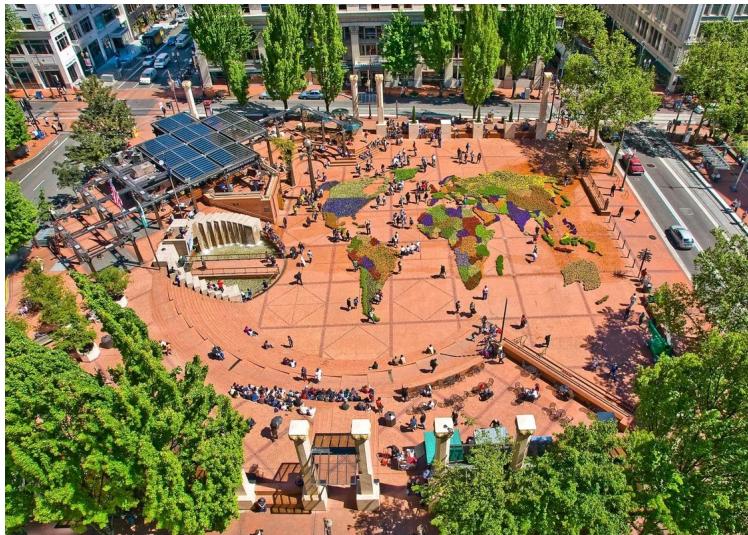
**CENTENNIAL PLAZA**  
REDMOND, OR



**FEDERAL STREET PLAZA**  
THE DALLES, OR



**JERRY WILEY PLAZA**  
HILLSBORO, OR



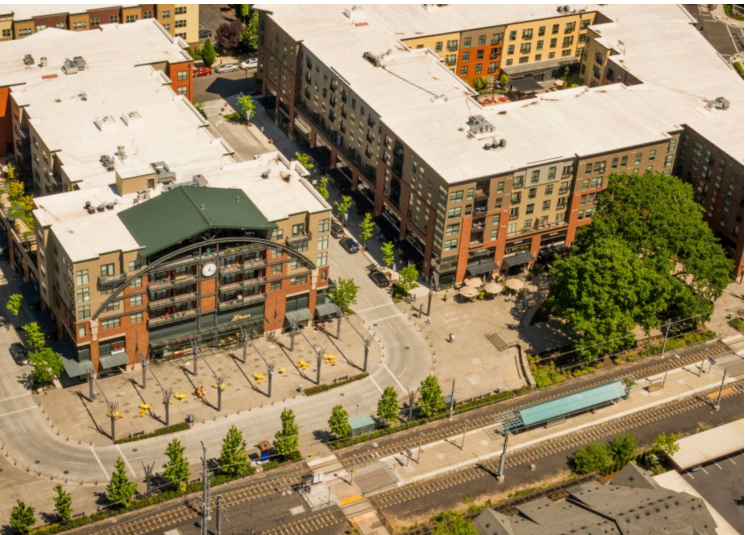
- **Concerts**
- **Festivals**
- **Temporary Markets**
- **Water feature**
- **Cafe**
- **Food Carts**



- **Splash Pad**
- **Shade Structure**
- **Restrooms**
- **Concession Stand**
- **Flexible Lawn**
- **Temporary Markets**



- **Splash Pad**
- **Shaded Seating**
- **Restrooms**
- **Temporary Markets**



- **Overhead structure**
- **Seating**
- **Temporary Markets**

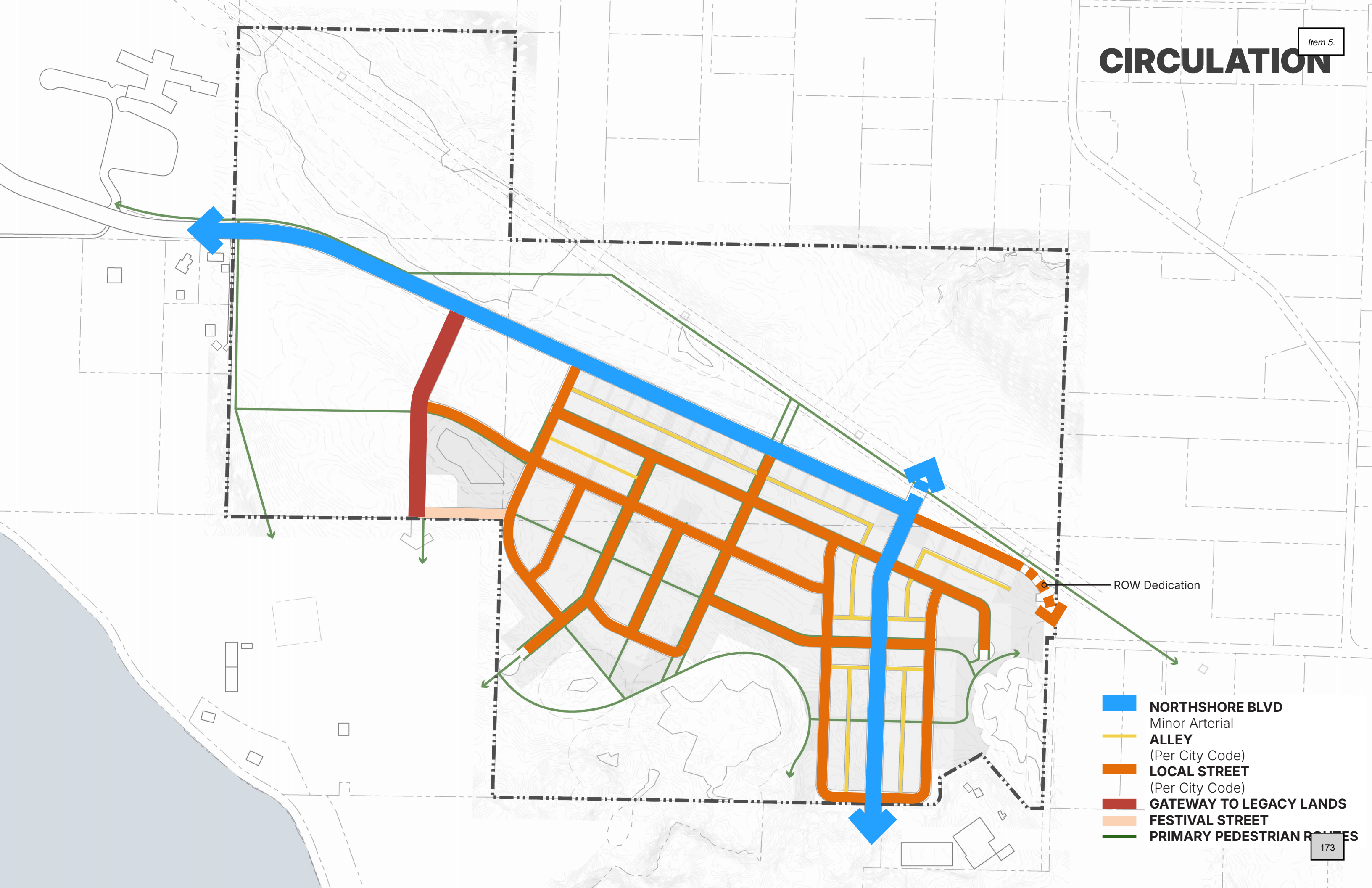


# PLAZA





# CIRCULATION

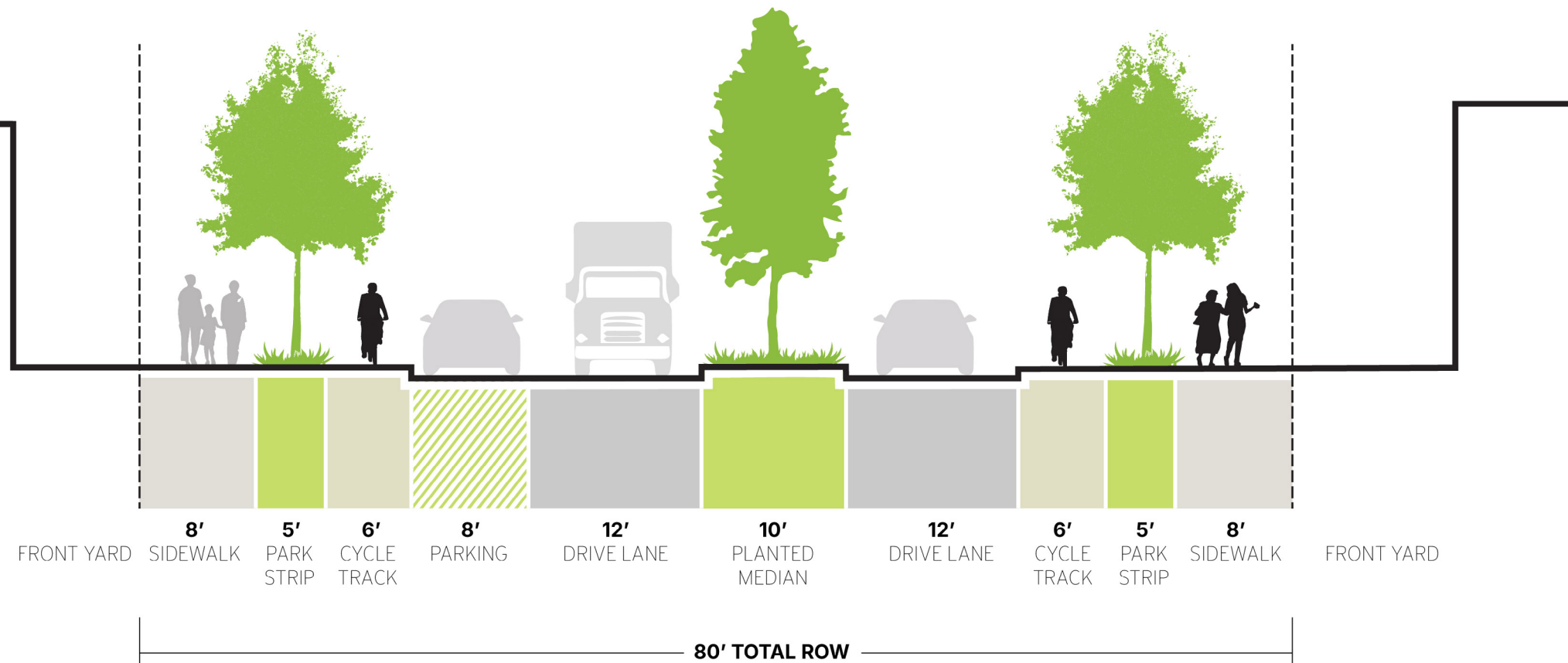


ROW Dedication

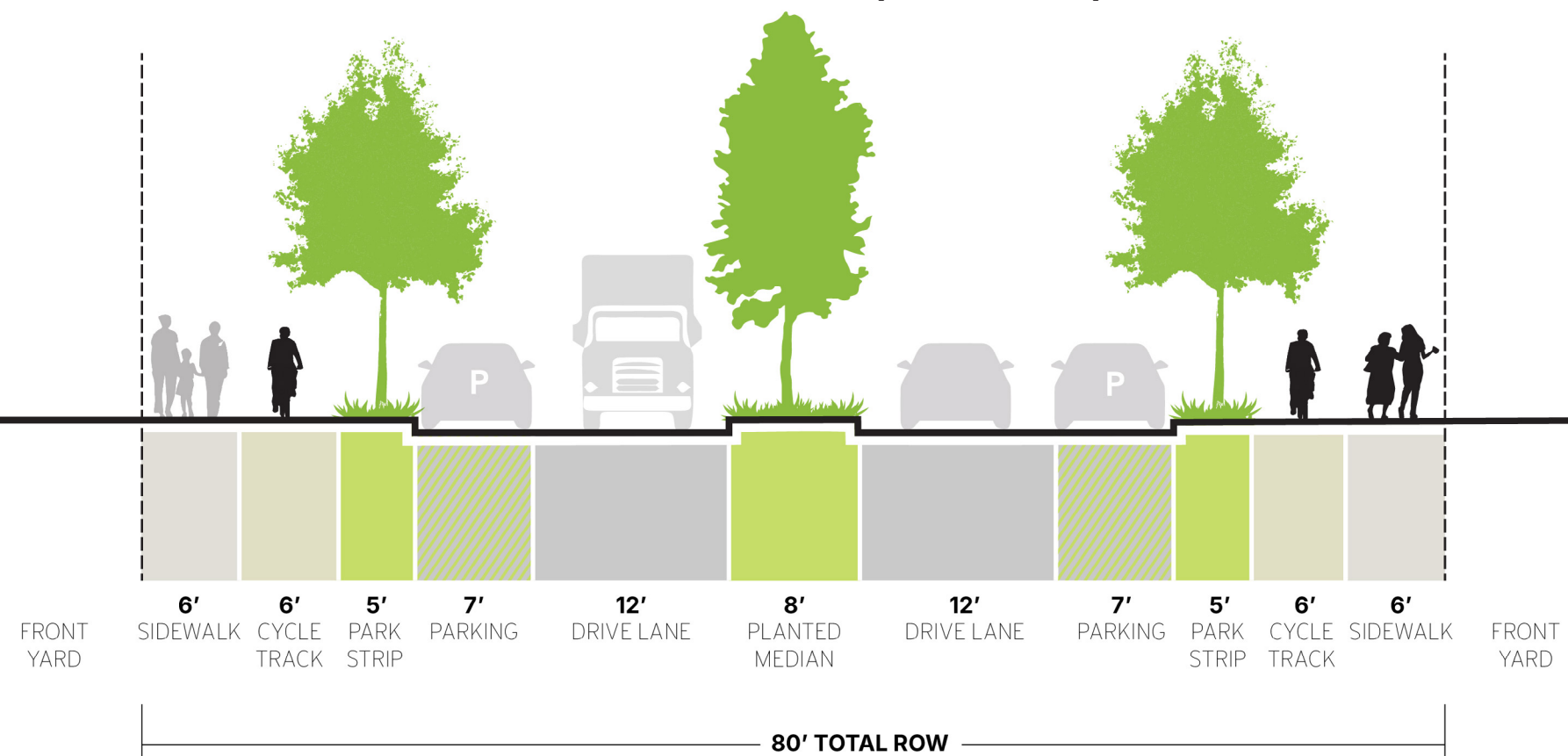


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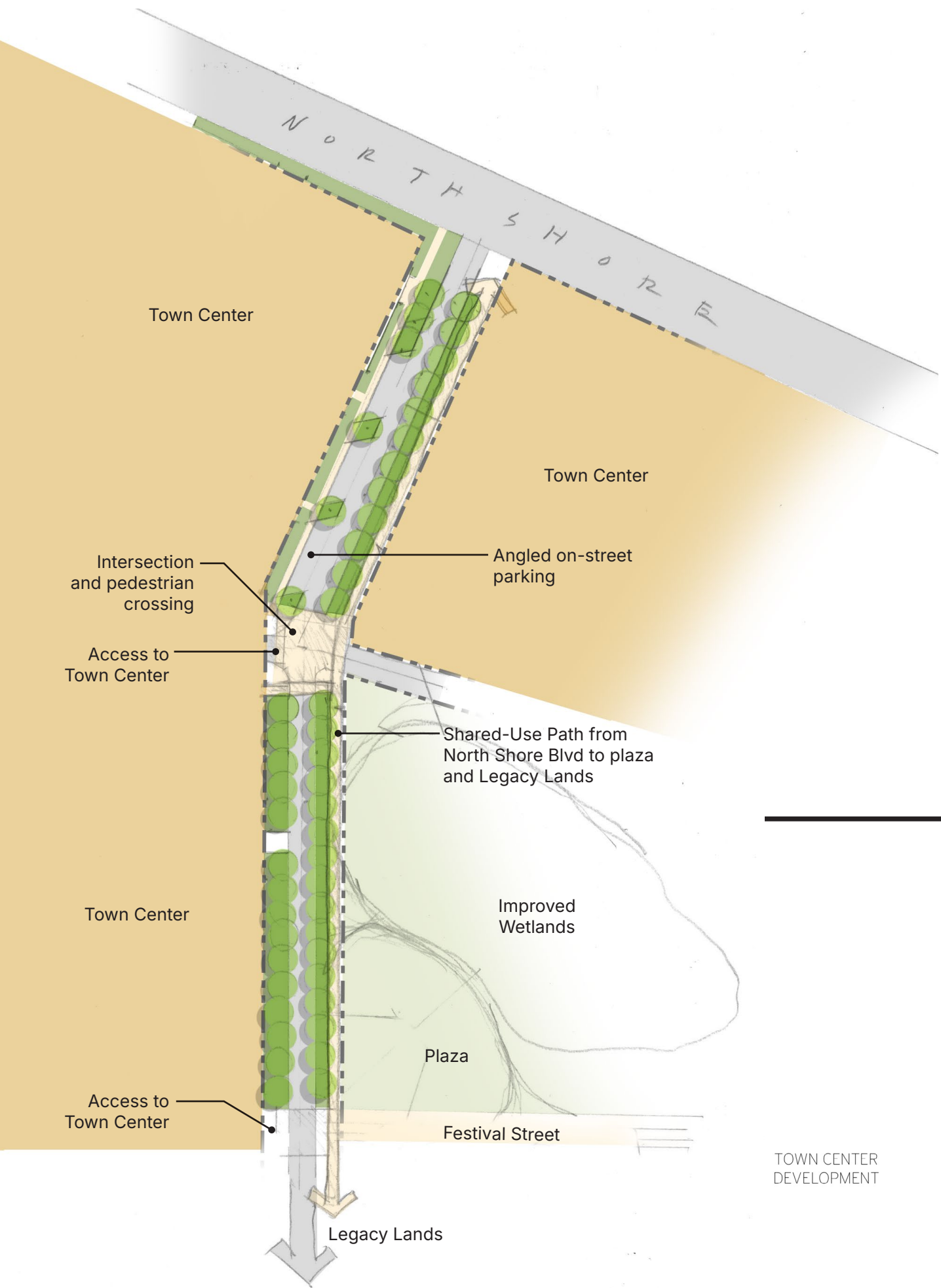
## NORTH SHORE BOULEVARD (EAST WEST)



## NORTH SHORE BOULEVARD (NORTH SOUTH)



# GATEWAY TO LEGACY LANDS

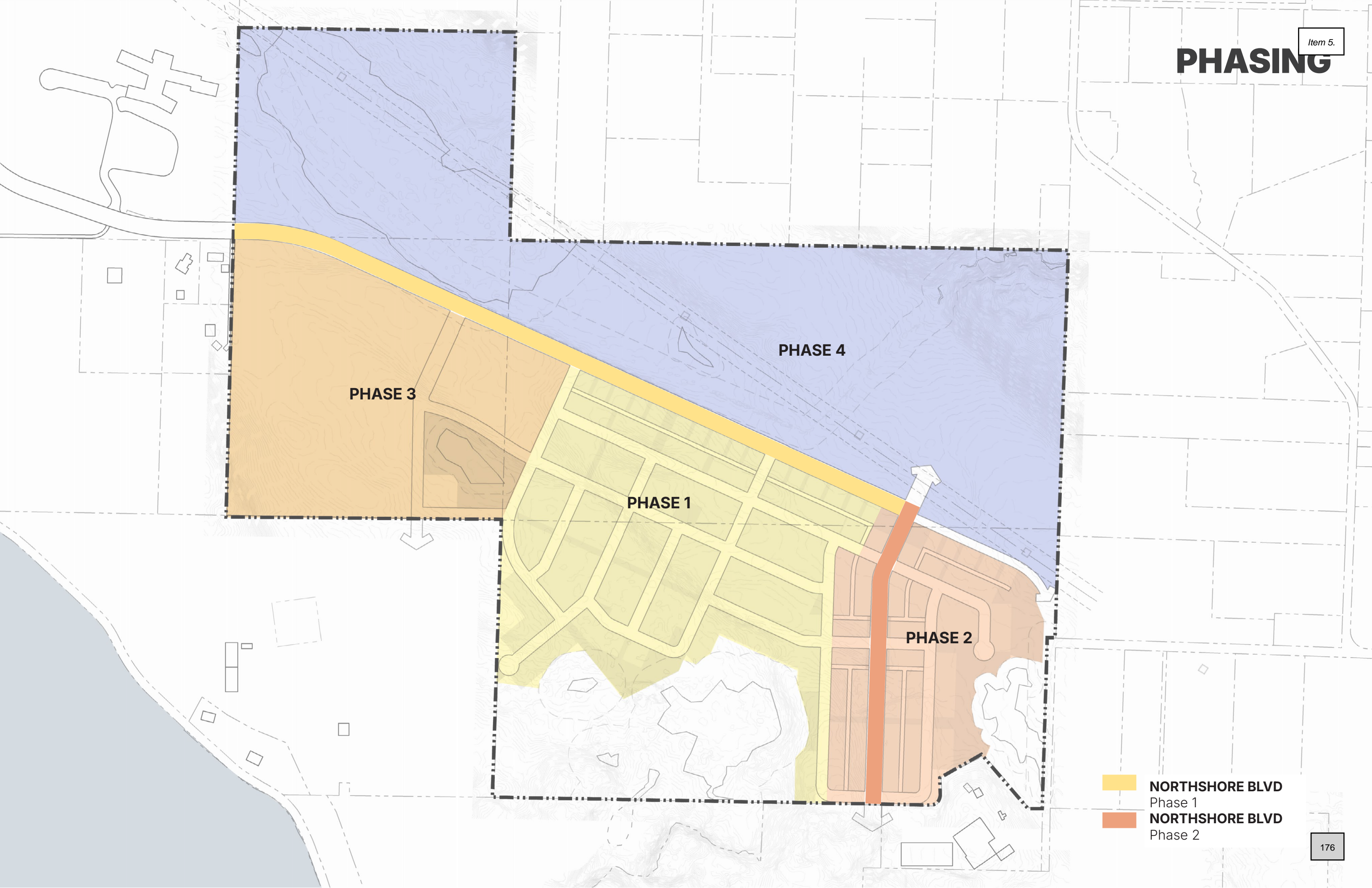


TOWN CENTER DEVELOPMENT





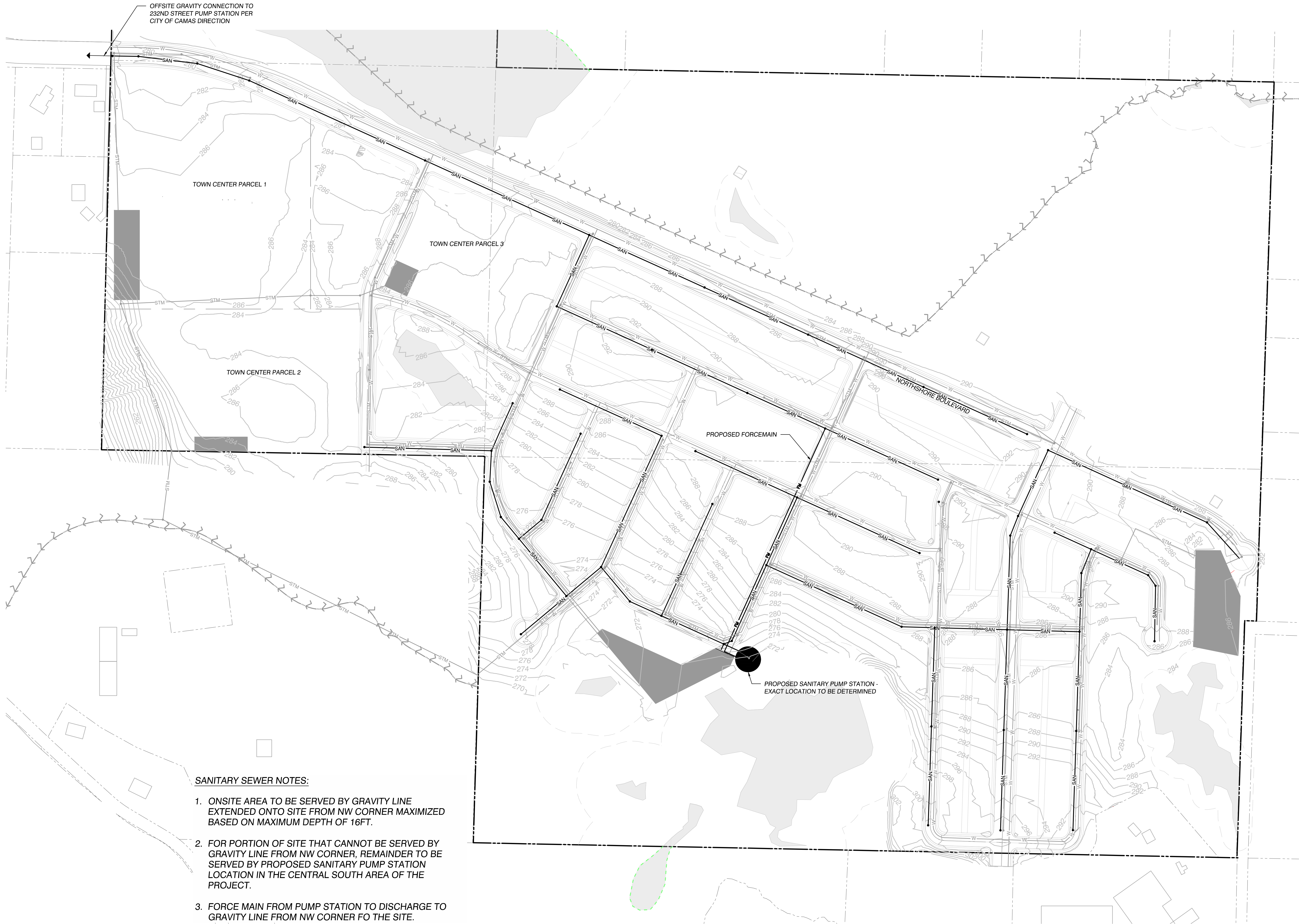
# PHASING



**NORTHSHORE BLVD**  
Phase 1  
**NORTHSHORE BLVD**  
Phase 2



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10/13/2025

LACAMAS NORTH SHORE MIXED-USE DEVELOPMENT  
CAMAS  
UTILITY PLAN - SANITARY

REVISIONS:

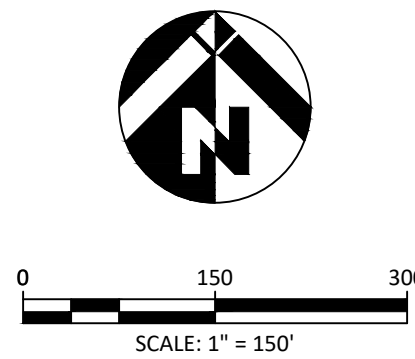
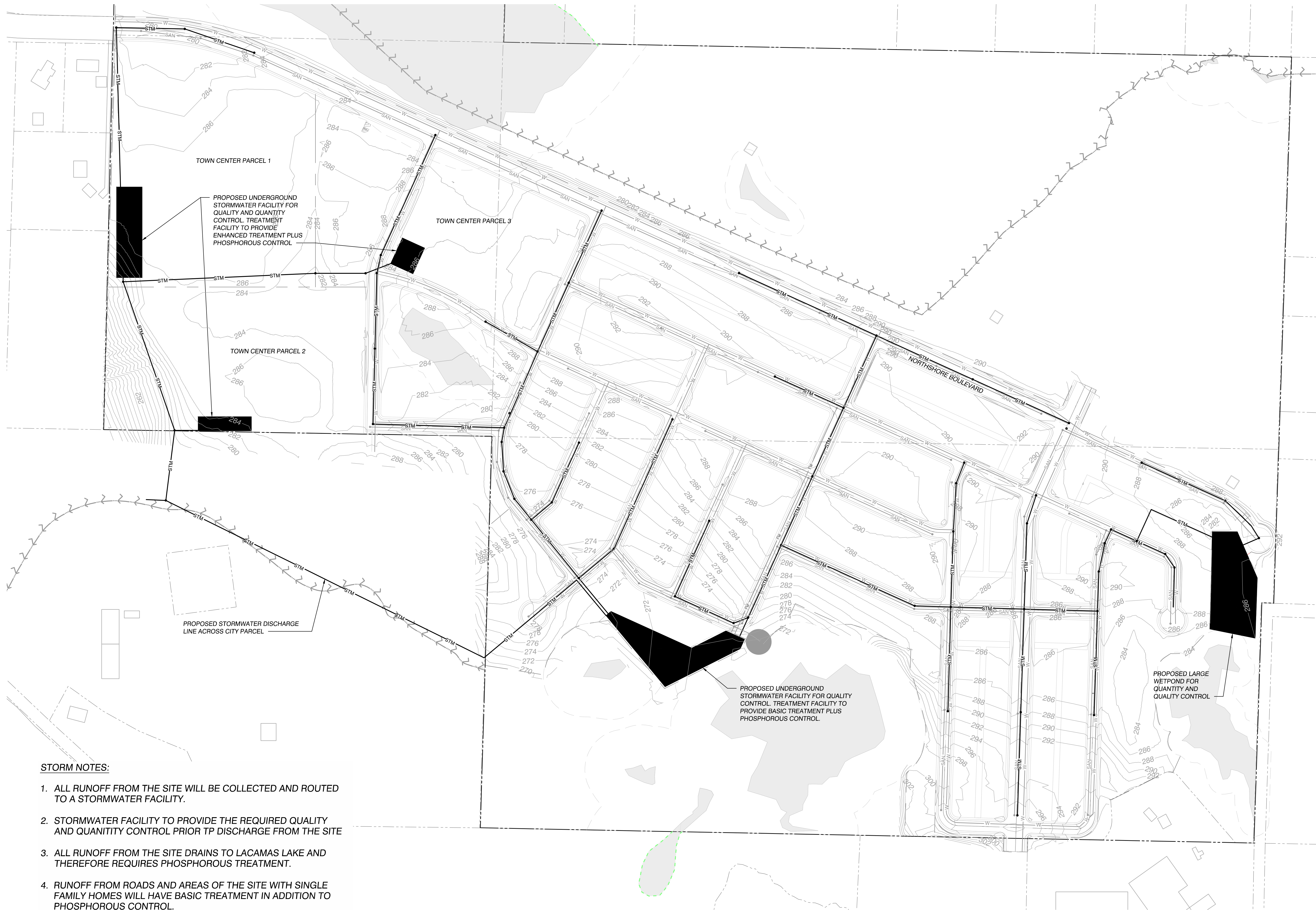
JOB NO.: 008973  
DATE: OCTOBER 2025  
DESIGNED BY: PT/GO  
DRAWN BY: GO/MD  
CHECKED BY: CONCEPTUAL

CONCEPTUAL

C1.0



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LACAMAS NORTH SHORE MIXED-USE DEVELOPMENT  
CAMAS

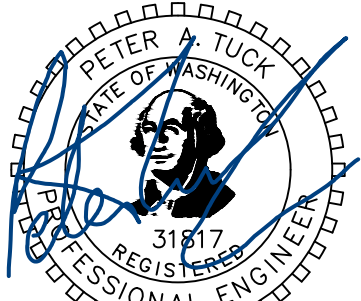
UTILITY PLAN - STORM

REVISIONS:

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DATE: OCTOBER 2025  
DESIGNED BY: PT/GO  
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CHECKED BY: PT

CONCEPTUAL

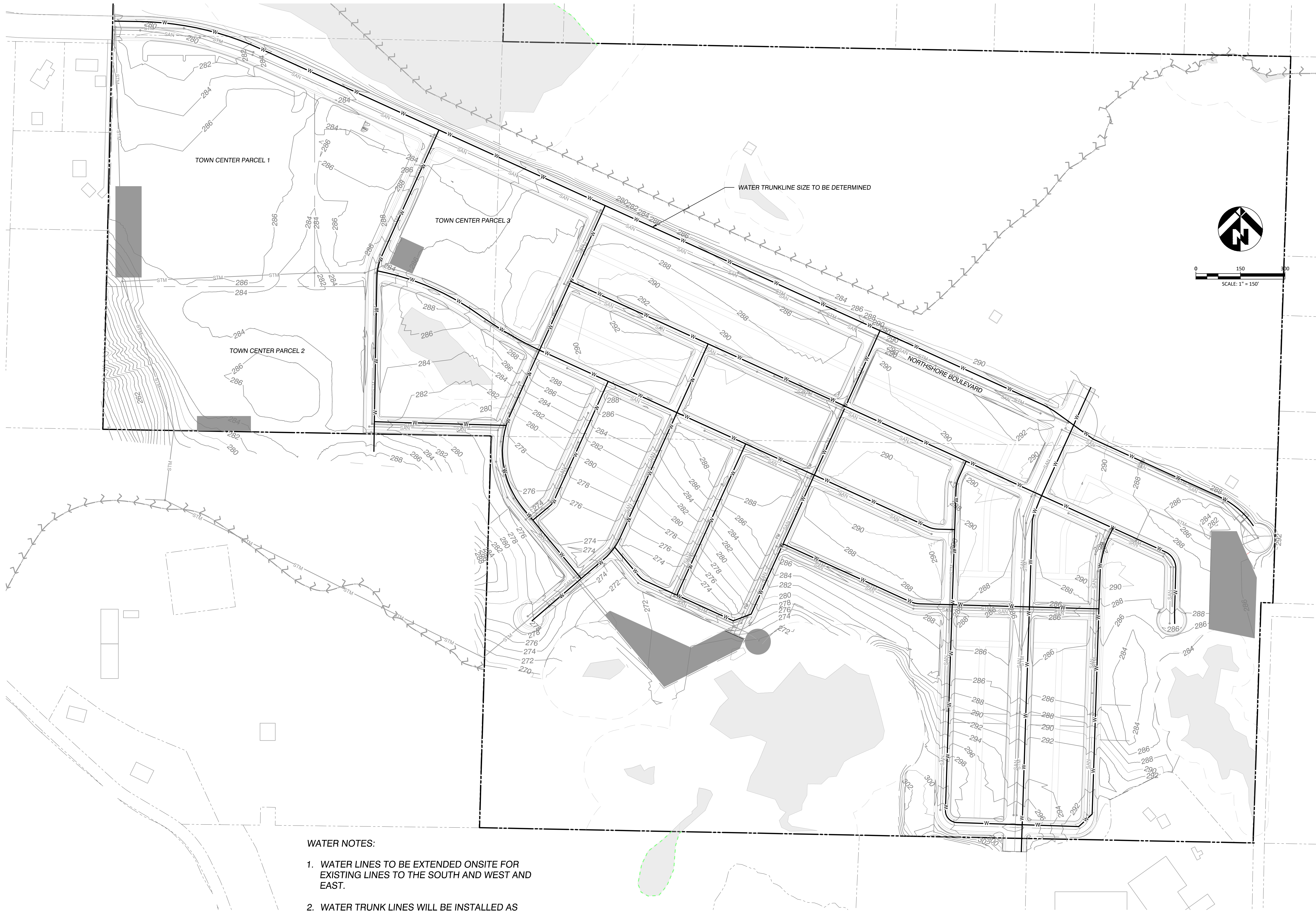
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10/13/2025



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LACAMAS NORTH SHORE MIXED-USE DEVELOPMENT  
CAMAS

UTILITY PLAN - WATER

REVISIONS:

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DATE: OCTOBER 2025  
DESIGNED BY: PT/GO  
DRAWN BY: GO/MD  
CHECKED BY: PT

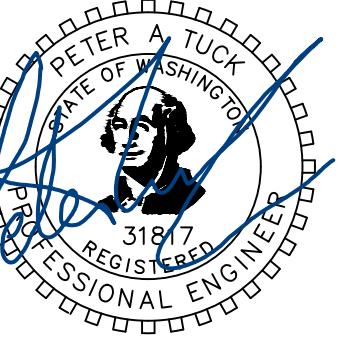
CONCEPTUAL

C1.2



10/13/2025





10/13/2025

# LACAMAS NORTH SHORE MIXED-USE DEVELOPMENT CAMAS

## GRADING CONTOUR PLAN

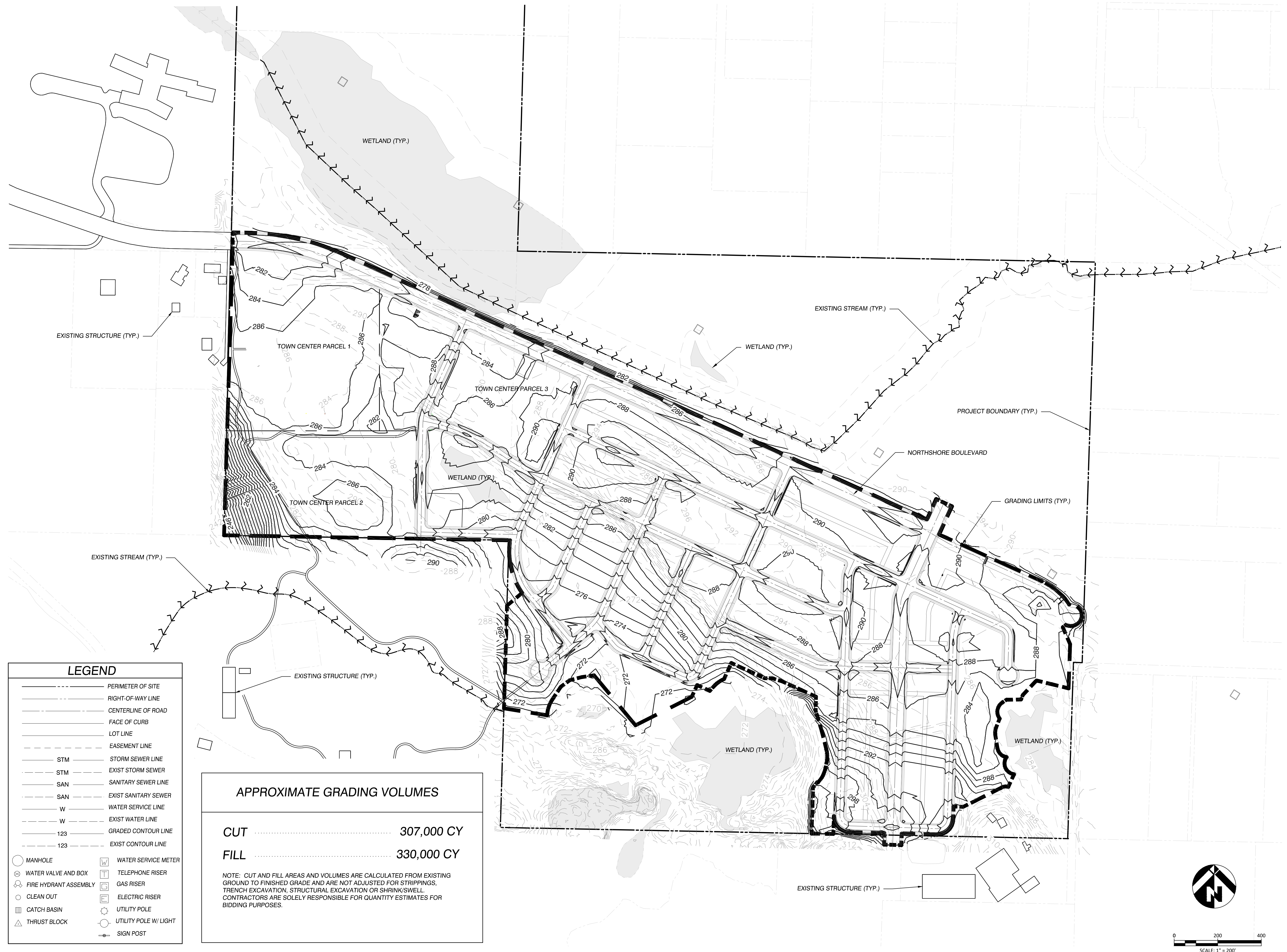
REVISIONS:

JOB NO.:	0089
DATE:	OCTOBER 20
DESIGNED BY:	PT/C
DRAWN BY:	GO/M
CHECKED BY:	

## CONCEPTUAL

# G1.0

180





Northshore will be a vibrant, walkable community rooted in its connection to Lacamas Lake, the Legacy Lands, and surrounding natural areas. Anchored by an active public plaza, the neighborhood will offer a mix of residential, commercial, and employment uses connected by multimodal streets, trails, and parks. Architecture will reflect Pacific Northwest character while encouraging variety, creativity, and a strong sense of place—building on Camas’ small-town feel.

General Development and Design Requirements for the North Shore Area

• Architectural Character

Developments must include a cohesive mix of high-quality architectural styles that promote variation, pedestrian orientation, and compatibility with the natural and enhanced setting throughout the North Shore Area.

• Pedestrian Safety, and Comfort

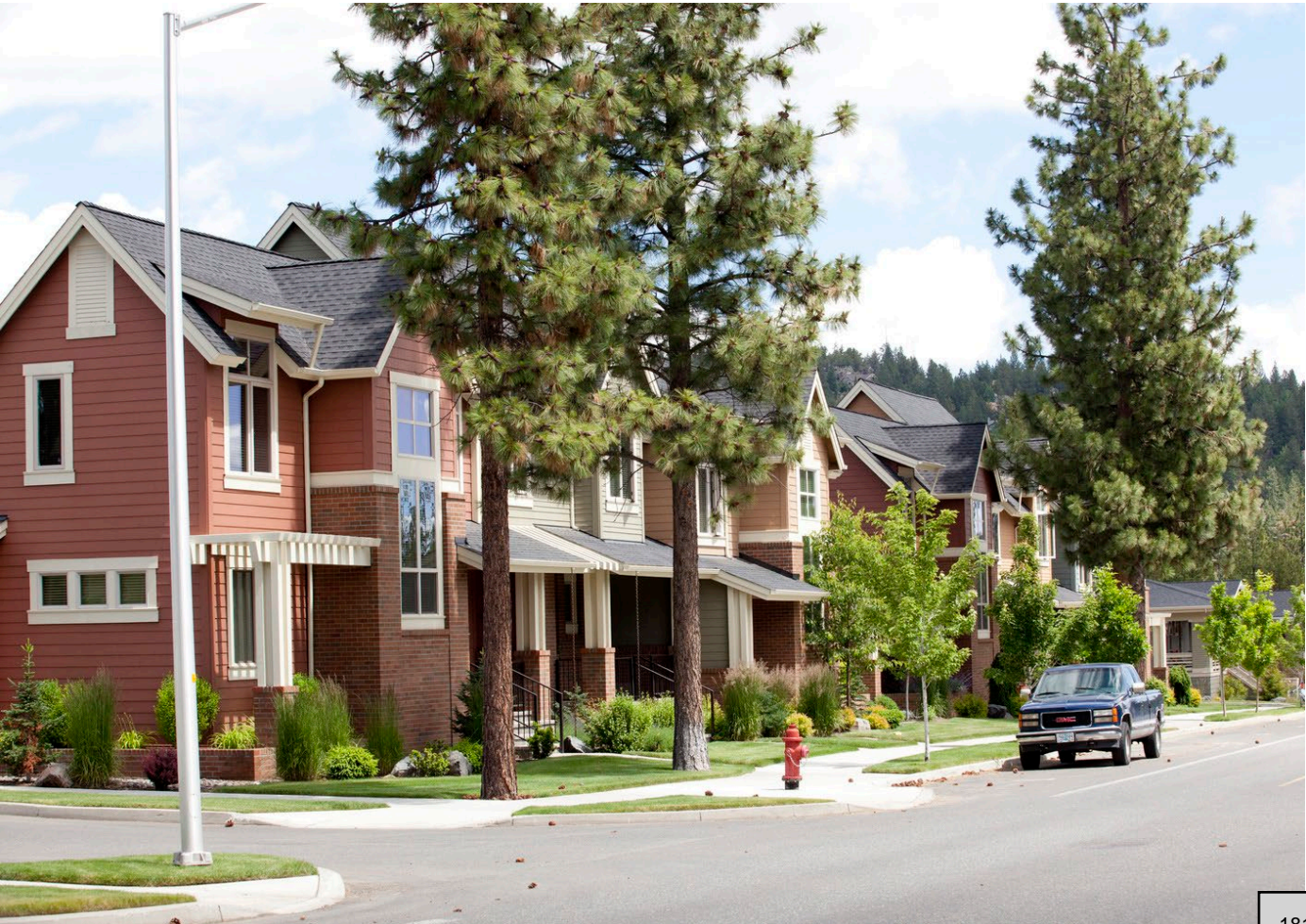
- Principal entries must face public streets or common open spaces
- Weather protection (awnings, overhangs, or canopies) shall be provided at entries
- A combination of sidewalks, trails, and multimodal paths are required throughout the North Shore Area
- Safe intersections, crossings, and traffic calming measures are required throughout the North Shore Area to promote a walkable environment

• Public Spaces, Parks, and Trails

- Wayfinding and Signage is required throughout the North Shore Area and to guide users to key areas, including the Legacy Lands, public plaza, and commercial areas
  - Signage shall be integrated into the streetscape (trails and links), pocket parks and overall open space design
- Landscaping/Plaza/Open Space (Plantings, native plantings, etc.)
- Local Streets and Alleys are required to be built to City standards North Shore Blvd will be designed in accordance with the cross sections in the Master Plan

• Environment

- All outdoor lighting must be dark-sky compliant and downward facing fixtures are required
- On-site stormwater management (retention and treatment) is required.
- Wetland and natural area enhancements are required
- Native species and plantings are required, and non-native species are not permitted





Intent:

To support a variety of housing types at a density of 6–24 units per acre, encouraging homeownership opportunities, family-style housing, and neighborhood diversity at a more compact density. Housing types include rowhouses, duplexes, and single-family detached.

The following Design Elements are required in North Shore Residential Area:

- **Façade and Materials**
  - Sloped roofs are required
  - Front façade must include windows
  - Durable building materials are required
  - Garage architecture must match the primary structure
  - Fencing in front yards must be visually permeable
  - In front-loaded homes, the front door of the house must be proud of the garage by a minimum of 2 feet
  - Porches are encouraged, but not required
- **Entry and Connections**
  - Main entrances must face the street (applicable to single-family detached only)
  - Main entrances must be covered
  - All homes must have direct pedestrian access from the main entrance to the sidewalk
  - Residential lots must be connected to common open spaces, natural areas and/or pocket parks, etc., via trails (this can include sidewalks)
- **Variety**
  - To ensure visual diversity and avoid monotony throughout the North Shore Residential Area rooflines, façades, and color schemes must vary:
    - A minimum of 3 different building elevations and a minimum of 3 different color schemes will meet this requirement
    - Identical roofline, façade, or color scheme may not be repeated on adjacent lots or directly across the street (only applicable to single-family detached)
    - Neighborhoods shall include a range of lot sizes and home types, as illustrated in the Potential Lot Mix diagrams (see following page), to promote visual diversity and avoid uniform streetscapes. Detached lots shall vary in width and depth, allowing for a variety of building forms and the accommodation of single-level homes. Attached housing shall incorporate architectural and material variation to reinforce neighborhood character and ensure a cohesive, high-quality appearance. The lot types shown are illustrative only and do not represent specific quantities or locations within the NS-Residential Area.

North Shore Residential Development Standards:

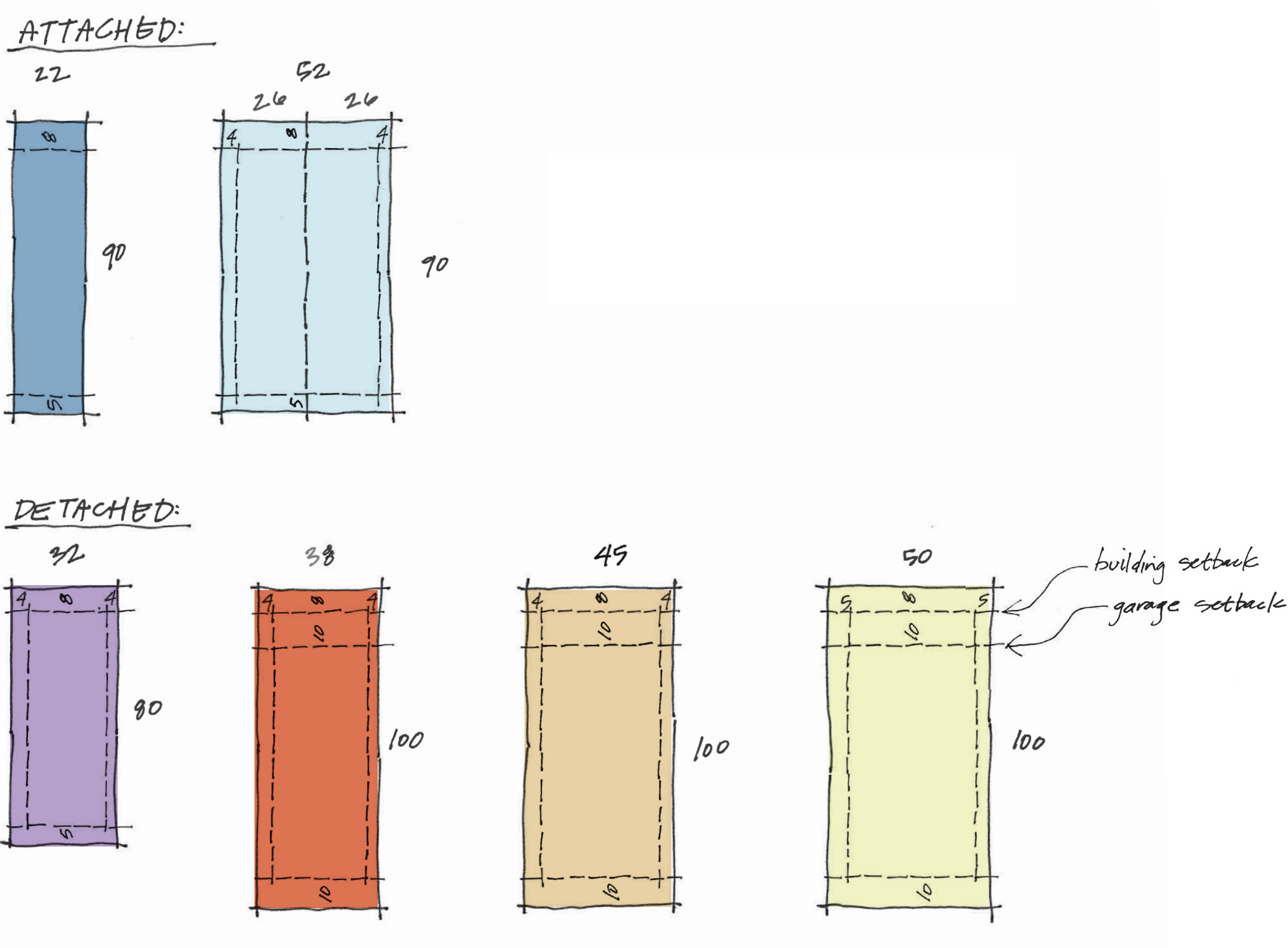
Item	Standard
Density Minimum/Maximum Dwelling Units/ Acre	6 / 24
Minimum Lot Size	1,800 SF
Minimum Lot Width	18'
Minimum Lot Depth	60'
Maximum Building Height	50'
Maximum Gross Floor Area	None
Front Setback / Garage Setback (Front Load)	8' / 18'
Front Setback (Alley Load)	8'
Side Setback / Zero Lot Line	3' / 0'
Street Side Setback	8'
Rear Setback (Front Load)	10'
Rear Setback (Alley Load)	5'

Setback Exceptions:

- Porches/Patios may extend up to 6’ into front or rear yards, as long as they are not in conflict with public utility easements
- Overhangs may extend up to 3’ into any setback



Potential Lot Mix Diagram





Architectural Styles and Elements Allowed in the North Shore Residential Area

To create an organic, visually interesting community that reflects the values and aesthetics of the Pacific Northwest, a range of permitted architectural styles are allowed within North Shore Residential Area:

1. Pacific Northwest Inspired

- Natural materials: wood, stone, concrete, mass timber
- Large windows and extended roof overhangs
- Low-slope or shed roofs
- Earth-tone or neutral color palettes

2. Craftsman / Northwest Craftsman

- Deep eaves with exposed rafters
- Covered porches with stone or tapered columns
- Horizontal lap or shingle siding
- Gabled or cross-gabled roofs
- Earth-tone color schemes
- Double-hung or multi-pane windows

3. Cottage / Storybook

- Steeply pitched roofs and asymmetrical massing
- Arched entries or windows
- Multi-pane windows, wood shutters
- Combination of wood, brick, or stucco siding
- Front stoops or porches
- Compact scale and playful detailing

4. Modern Farmhouse

- Gabled rooflines and simple massing
- Vertical board-and-batten or lap siding
- Black-framed windows and light-colored exteriors
- Wood or rustic metal accents
- Covered porches or stoops
- Minimalist detailing

6. Transitional

- Blends modern and traditional forms
- Simple hipped or gabled roofs
- Balanced façades and neutral color palettes
- Mix of traditional materials with modern detailing
- Trimmed or untrimmed windows depending on application
- Flexible use across housing types

DESIGN GUIDELINES

Item 5.





Intent:

To enable compact, walkable mixed-use development that integrates residential and non-residential uses, fostering connection and activation of a public plaza, the Legacy Lands, and Lacamas Lake through strategic placement of uses, trails, circulation, and enhancement of critical areas. Residential types may include multifamily apartments.

The following Design Elements are required in North Shore Town Center Area:

A Public Plaza

- Minimum Size: 1 acre
- A Woonerf or Festival Street is permitted to further activate the plaza for public market, festivals, and similar uses and count towards size requirements
  - Food Carts, Public Markets, and other seasonal events or festival uses are permitted on the plaza and woonerf or festival street
- Location: Nearby or adjacent to enhanced critical wetland area, Legacy Lands and connected to residential and non-residential uses via streets and trail systems
- Pedestrian Amenities: Must include bike racks, seating, signage, expanded streetscapes.
- Landscaping: native plantings, spacing, etc.
- Materials: Can include landscaped areas, paved areas, or other materials

Grocery Anchored Retail Center

- Parking shall be landscaped or screened to minimize view from North Shore Boulevard
- Main entrances must face a sidewalk or street
- Main entrances must be covered
- Architectural Elements
  - Large Blank walls facing streets are not permitted. Break up large blank walls through material changes, murals, landscaping, or modulation, or other architectural design elements
  - Natural and/or neutral color scheme is required
  - Natural materials (such as timber) as accents are encouraged, but not required

Retail / Commercial Area

- Fuel station is an allowed use as part of grocery-anchored retail center
- Parking shall be landscaped or screened to minimize view from North Shore Boulevard and other adjacent public streets
- Pedestrian entrances must be covered
- Outdoor lighting must be at pedestrian scales
- Outdoor areas that support uses are encouraged but not required (i.e., covered and outdoor seating for restaurants)
- Architectural Elements
  - Durable building materials are required
  - Natural and/or neutral color scheme is required
  - Natural materials (such as timber) as accents are encouraged, but not required

Minimum Retail Requirement

- Within the North Shore Town Center, a minimum of 15 acres of retail use shall be provided. The required retail acreage may be broken into multiple smaller sites and may be located in various places throughout the North Shore Town Center

Multifamily Areas

- Garden Style or Low-Rise are buildings permitted
- Multifamily can be located in one or more area within the North Shore Town Center
- Ground-Floor Privacy is required for residential units. The use of privacy screens, landscaping, or design features for window privacy meet this requirement
- Parking shall be landscaped and located internal to the multifamily site(s)
- Architectural Elements:
  - A sloped roof is required
  - Patios/balconies are required
  - All units must have a covered entrance
  - All units must have direct pedestrian access from the main entrance to the sidewalk
  - All buildings must be a neutral or natural color palette
  - Materials must be durable
  - Multifamily buildings must be connected to open spaces and pocket parks, etc., via trails, (this can include sidewalks)

North Shore Town Center Development Standards:

Item	Standard
Density Minimum/Maximum Dwelling Units/Acre	10 / 40
Minimum Lot Size	None
Average Lot Coverage	75%
Maximum Building Height	100’
Front Yard Setback	10’
Side Yard	10’
Street Side Yard	10’
Rear Yard	10’





North Shore Employment

Intent:

To accommodate a range of employment-generating uses, including office, retail, light manufacturing, and warehouse, providing opportunity for people to live near where they work, complimenting the amenities of the North Shore Town Center and supported by the North Shore Residential Area.

Permitted Uses:

- Grocery, retail, restaurants
- Offices and flex spaces
- Warehousing and light industrial
- Electrical substation for Clark PUD

North Shore Employment Development Standards:

Item	Standard
Minimum Lot Size, Width, Depth	None
Maximum Building Height	100’
Lot Coverage	None
Usable Open Space	5% of net acreage
Setbacks (Front, Side, Street)	None

Usable Open Space Definition:  
Areas planned for recreation, relaxation, or community use, accessible to residents, workers, or customers. May include plazas, sport courts, or viewpoints.

The following Design Elements are required in North Shore Employment Area:

- Primary entrances must face public streets
- Main entrances must be covered
- Rooftop equipment must be screened from view (from public right-of-way) through landscaping, or other screening/fencing, or architectural design features
- Parking areas must be behind or beside buildings and screened with landscaping
- Office elements of warehouses should front public streets
- A natural or neutral color palette is required





After recording, return to:

Keenan Ordon-Bakalian  
 Jamie Howsley  
 Jordan Ramis PC  
 1211 SW 5th Ave, Ste. 27  
 Portland, OR 97204

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Space Above for Recording Information Only

## DEVELOPMENT AGREEMENT

This Development Agreement (the “Agreement”) is made and entered into by and between the CITY OF CAMAS, a Washington Municipal Corporation (hereinafter referred to as the “City”) and \_\_\_\_\_ (hereinafter referred to as the “Developer”) (and collectively referred to as “Parties”).

### RECITALS

**WHEREAS**, Developer owns or controls certain real property that is located within the City’s municipal boundary and that is more fully described within the Master Plan and attached **Exhibit A**, (hereinafter referred to as the “Property”); and,

**WHEREAS**, the City and the Developer recognize this area will develop with multiple uses and wish to provide predictability about the development standards that will apply to the Property over the course of its full development in order to increase efficient use of urban services and land, and provide compatibility amongst the various phases of the Property as they develop, including planning for advance funding for transportation improvements, predictable infrastructure and regulations, and parks, trails and open spaces; and,

**WHEREAS**, the City is a Washington Municipal Corporation with land use planning and permitting authority over all land within its corporate limits; and,

**WHEREAS**, pursuant to RCW 36.70B.170, a Development Agreement may set forth the development standards and other provisions that shall apply to, govern and vest the development, use and mitigation of the development of real property for the duration specified in the agreement; which statute provides:

(1) A local government may enter into a Development Agreement with a person having Developershship or control of real property within its jurisdiction. A city may enter into a development agreement for real property outside its boundaries as part of a proposed



annexation or a service agreement. A development agreement must set forth the development standards and other provisions that shall apply to and govern and vest the development, use, and mitigation of the development of the real property for the duration specified in the agreement. A development agreement shall be consistent with applicable development regulations adopted by a local government planning under chapter 36.70A RCW; and

**WHEREAS**, the legislative findings supporting the enactment of this section provide: The legislature finds that the lack of certainty of the approval of development projects can result in a waste of public and private resources escalate housing costs for consumers and discourage the commitment to comprehensive planning that would make maximum efficient use of resources at the least economic cost to the public. Assurance to a development project applicant that upon government approval the project may proceed in accordance with existing policies and regulations, and subject to conditions of approval, all as set forth in a development agreement, will strengthen the public planning process, encourage private participation and comprehensive planning, and reduce the economic cost of development. Further, the lack of public facilities and services is a serious impediment to development of new housing and commercial uses. Project applicants and local governments may include provisions and agreements whereby applicants are reimbursed over time for financing public facilities. It is the intent of the legislature by RCW 36.70B.170 through 36.70B.210 to allow local governments and Developers and developers of real property to enter into development agreements; and,

**WHEREAS**, for the purposes of this Agreement, “Development Standards” includes, but is not limited to, all of the standards listed in the Master Plan attached hereto as **Exhibit D**, RCW 36.70B.170(3); and CMC 18.55.340; and,

**WHEREAS**, the City will be making necessary updates to its Capital Facilities Plan (CFP) and Transportation Improvement Project (TIP) list of which Northshore Boulevard is a transportation corridor of regional importance; and,

**WHEREAS**, Developer has agreed to place the road alignment for Developer’s responsible portion of Northshore Boulevard at the City’s preferred location as will be set forth in the CFP, City’s circulation plan documents, and TIP list; and,

**WHEREAS**, certain offsite transportation improvements are located in unincorporated Clark County and will require cooperation and agreement with that jurisdiction.

**NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:**

**Section 1. Development Agreement.** This Agreement is a Development Agreement to be implemented under the authority of and in accordance with RCW 36.70B.170 through RCW 36.70B.210. It shall become a contract between the Developer and the City upon its approval by ordinance or resolution following a public hearing as provided for in RCW 36.70B.170; and upon execution by all parties. The City is authorized to enter into this Agreement pursuant to CMC 18.55.340.

**Section 2. Term of Agreement.** This Agreement shall commence upon the Effective Date, and shall be valid for a period of Fifteen (15) years; unless extended or terminated by mutual consent of the Parties; provided however, if this Agreement or any initial land use applications related to the Property and filed within one year of the effective date of this Agreement, are appealed, the term of this Agreement shall be tolled for the time during which the appeal is pending or 18 months, whichever is less. The “Effective Date” shall be the date of recording, which shall occur within thirty days of the date of the adopting Resolution.

**Section 3. Vesting.** Any land use applications submitted with respect to the Property during the term of this Agreement, shall be vested to the following land use regulations and Development Standards in effect on the effective date of this Agreement CMC Title 16.01-16.19; CMC 16.31; CMC Title 17 and CMC Title 18 (through Ordinance 24-007), unless otherwise provided for within the Master Plan. Any land use approvals affecting the Property issued after the effective date of this Agreement shall remain in effect during the term of this Agreement; provided however, that preliminary plat approvals shall be valid for a period of ten years from the date of the approval, regardless of whether the end of such ten years occurs during or after the term of this Agreement and Developer shall have the right to seek extensions to such preliminary plat approvals pursuant to the relevant provisions of the CMC. The vesting provided for under this Agreement shall not apply to System Development Charges, Impact Fees or application or review fees, which shall be assessed at the then-current rates.

The City shall have no liability for any damages or losses suffered by the Developer or the Developer’s successors if a federal or state agency takes action that voids, nullifies or preempts the City’s agreement to permit vesting under this development agreement. Developer and Developer’s successors shall further indemnify and hold harmless the City from any and all liability, including third party liability, under any applicable state or federal regulations including, but not limited to, the Clean Water Act, for any actual or alleged violation of said regulations arising from the City’s agreement to allow the vesting described in this section, or in the event said third party or agency challenges the adoption of this Agreement within the applicable timeframes. In such event, the City, in its sole discretion, may require the Developer or the Developer successors to post a bond in an amount deemed reasonably sufficient to cover all costs and expenses associated with any claim or action for liability as described herein, including reasonable attorney’s fees to be incurred by the City in defending any third party claim. Upon notice of any claim or action for liability against City relating to this Section, the City shall timely notify Developer or Developer’s successors of their duties for indemnification of the City. Within ten (10) days of such notice, Developer may, at Developer’s sole discretion, revoke its vested rights to the City’s current storm water standards arising under this section by giving written notice of such revocation to the City. Upon such revocation, the Developer shall have no further liability to the City or obligation to indemnify the City, including any obligation to post the bond described in this Section. The Developer may choose to waive the vesting provided for in Section 6, if it notifies the City in writing. In that event, any fully complete development application submitted to the City and relating to the property, shall vest to the stormwater rules and regulations in effect at the time such application is submitted to the City. If the Developer chooses to waive the vesting provided for in Section 6.1, then all vested rights created in Section 6.1 shall become null and void.



**Section 4. Master Plan.** Parties agree to incorporate by reference **Exhibit D** dated \_\_\_\_\_ as the Master Plan for development of the Property. The Master Plan provides for a variety of housing types and lot sizes, as well as a unique and innovative plaza in the North Shore Town Center designation. The Master Plan provides the Parties with predictability regarding certain aspects of the future development of the Property, including access locations on to public streets and any associated offsite improvements related to transportation. The standards within the Master Plan, or those substantially similar to the standards in the Master Plan, shall be controlling on the future development of the Property.

**Section 4.1 Environmental Review.** Pursuant to the State Environmental Policy Act (SEPA), piecemeal environmental review is to be discouraged. As such, the Parties wish for SEPA review to be accomplished as part of the Agreement for as many of the Property's potential adverse environmental impacts as can be reasonably analyzed, based upon current information contained within the SEPA checklist submitted with this Agreement, including, but not limited to, a Traffic Impact Study, Critical Areas Report, and GIS data as to off site storm water impacts. This review is done under the Consolidated Review provisions of SEPA. The SEPA checklist attendant with this Agreement identifies various potential adverse impacts including transportation, wetlands, sewer, water, and storm water. The Checklist also identifies a variety of technical reports or information that provides a basis for the proposed mitigation or partial mitigation of these impacts. It is the intent of this Agreement and its attendant SEPA process, to have the City issue a Threshold Determination (as that term is utilized in RCW 43.21C) on the identified conceptually proposed impacts of the development of the Property. Uses and impacts that are identified at future stages of the development, including but not limited to, Site Plan approval, Preliminary Plat approval, Short Plat approval or building permit approvals that have been previously analyzed through this or other SEPA processes, shall not be re-analyzed on the condition that the future identified adverse impacts, in the sole discretion of the City, are substantially similar to and of the same or less intensity as those previously analyzed under this or other SEPA processes. Nothing in this Section shall preclude the City from requesting information, at the cost of the Developer, on the potential adverse environmental impacts associated with a specific land use application that have not been previously identified or analyzed as required under the State Environmental Policy Act.

**Section 4.2 Phasing.** Site development at buildout is expected to include a mix of residential, commercial retail and employment lands. The Parties agree that the initial phases of the Master Plan (Phases 1, and 2) will include townhouses, duplexes, and single family residences. The Parties further agree that Developer may complete the full buildout of the residential Phases 1 and 2 of the Master Plan prior to the completion of the connection of Northshore Boulevard with SR 500. Phase 1 shall include the completion of the East/West section of Northshore Boulevard as depicted in the Master Plan. Phase 2 will include the completion of the North/South section of Northshore Boulevard as depicted in the Master Plan, and Phase 2 can be phased according as required to deliver access to the residential lots. Phases 3 and 4 will occur subsequent to the residential phases as set forth in the phasing of the Master Plan. For the avoidance of doubt, the Public Plaza as depicted in the Master Plans and described in the Master Plan's Design Guidelines will be included in Phase 3.

**Section 4.3 Transportation.** Kittelson and Associates Transportation Engineers (“Kittelson”) and the City have analyzed the transportation impacts of the full development (based upon the Master Plan in Exhibit D) of the Property as identified in the traffic study attached hereto as Exhibit \_\_\_\_\_. Based upon the Master Plan, the Property at full development will increase the existing number of PM peak hour trips on the transportation system by \_\_\_\_\_ PM peak hour and \_\_\_\_\_ average daily trips. Based upon Kittelson’s and the City’s analysis, the future development of the Property will be conditioned upon the reasonable funding within six years of, the critical links and intersections provided for in the Comprehensive Plan and the other mitigation measures provided for in Exhibit \_\_\_\_\_, which is attached hereto and incorporated by reference herein. The City agrees to consider and use best efforts, as a part of the 2025 annual review process, to include the Northshore Boulevard onto the six (6) year transportation improvement project list as a reasonably funded project. The Parties agree that Developer’s obligation to construct critical links and intersections are depicted in Exhibit \_\_\_\_\_ and shall be limited to Developer’s construction of Developer’s proportional share of extending Northshore Boulevard and providing right of way dedication to 3rd Street and 252nd Avenue.

The Property shall be vested during the term of this Agreement with \_\_\_\_\_ PM peak hour, \_\_\_\_\_ AM peak hour and \_\_\_\_\_ average daily trips and no additional off site transportation mitigation or analysis will be required during the term of this Agreement; provided, however, that in the event Developer proposes uses or intensities of uses that would cause the total number of PM Peak or Average Daily trips to exceed the number of trips analyzed as part of this Agreement, then the City may require, and Developer shall provide, additional transportation analysis and lawful mitigation for those increased trips. The transportation vesting provided for in this Section shall be subject to the mitigation measures and the timing provided for in Exhibit \_\_\_\_\_. Some of the transportation improvements may be on the City’s Transportation Capital Facility Plan. Developer or successor in interest to the Property, upon construction of such qualifying transportation improvement, shall be eligible to apply for Transportation Impact Fee Credits pursuant to CMC Chapter 3.88, but only if such improvements are eligible for Credits under the City’s applicable Capital Facilities Plan and Transportation Impact Fee programs.

The City and Developer also acknowledge that the in accordance with the Kittelson Study there may be offsite intersection improvements needed at NE 28th Street and NW 232nd Avenue. The land surrounding this area lies within the jurisdiction of unincorporated Clark County. The City has an interest in ensuring that this development can be fully realized and will therefore use best efforts to enter into a interlocal agreement after the execution of this Agreement with Clark County to ensure that the completion of the intersection improvements will happen so that certificates of occupancies can be issued for each home, building, or improvement within the development on the Property.

#### **Section 4.4 Specific Design Standards.**

- 4.4.1 Streetscape.** Developer agrees to incorporate into its development application submittal package streetscape standards for primary streets within the Property addressing street specifications, tree spacing and species, sidewalk separation,



trash receptacles, benches and other street amenities that will create an inviting, safe passage for not only vehicular but pedestrian and bicycle traffic. Streetscape standards will be consistent with the streetscape standards identified in the Master Plan. During the land use application phase subsequent to the adoption of this Agreement, proposed streetscape standards that are not substantially similar to those standards within the Master Plan may be adopted upon mutual agreement of the Parties.

- 4.4.2 Master Plan Design Standards.** The Parties hereby agree that the design standards, guidelines, and processes set forth in the Master Plan shall apply to the development of the Property. Design standards that are inconsistent with the design standards set forth in the Master Plan shall only be incorporated into the project upon mutual agreement of the Parties, consistent with the terms of this Agreement. In the event the design standards within the Master Plan and North Shore Subarea Design Manual conflict, the design standards within the Master Plan shall control.
- 4.4.3 Lighting.** This project uses dark sky compatible street lights and LED lamps.
- 4.4.4 Development of Commercial Lands.** The development of the commercial lands within the Property shall be consistent with the standards and provisions identified in the Master Plan. During the land use application phase subsequent to the adoption of this Agreement, proposed development standards that are not substantially similar to those standards within the Master Plan may be adopted upon mutual agreement of the Parties.
- 4.4.5 Maintenance of Northshore Boulevard.** The City and Developer agree that the North-South section of Northshore Boulevard park strip and planted median as depicted in the Master Plan shall be maintained by the Home Owners Association that shall be established in conjunction with the development of the residential phases of the Master Plan. All other sections of Northshore Boulevard shall be maintained by the City pursuant to dedication by Developer or Developer's successors in interest.

**Section 4.5 Stormwater.** As depicted in the Master Plan, there are three primary stormwater discharge locations from the Property, including a depression in the southwest portion of the Property with an off-site discharge in a shallow and very flat drainage that crosses the City's Legacy Lands Park ("City Parcel") to the west of the Property before dropping steeply to Lacamas Lake. This shallow and flat drainage across the City Parcel poses an issue to both the Project and to the City. The lack of elevation change across the localized on-site depression and adjacent City Parcel prior to the drop off to Lacamas Lake create the following issues:

- Excess fill on the Property to enable collection, routing, treatment and detention of onsite runoff.

- Surface discharge of concentrated flow onto the adjacent City Parcel. Since the drainage route across the City Parcel is flat and shallow, managing the drainage in the existing condition and for any development is problematic.

The Parties acknowledge the foregoing and agree that further evaluation of existing drainage patterns and stormwater flow paths is necessary to confirm whether this area represents the appropriate discharge location. The final stormwater design and any proposed discharge method shall be based on the findings and recommendations of the Project's Technical Information Report (TIR), to be reviewed and approved by the City. If the TIR determines that a piped stormwater discharge across the City Parcel is the preferred and necessary option, the Parties agree to work cooperatively to evaluate, design, and construct such a system. The benefits of a piped discharge across the City Parcel include the following:

- A piped discharge across the City Parcel removes any surficial flow on the City Parcel and will provide a much more manageable subsurface system.
- The sizing of the piped discharge will include capacity for future development of the City Parcel.
- Managing stormwater through a piped discharge will result in reduced fill on the Property.

Along with a piped discharge, the parties also agree to work collaboratively to evaluate the use of the existing drainage channel across the Legacy Lands property for stormwater conveyance. This has the benefit of providing capacity for the required discharge, based off the TIR, and maintaining flows so the existing water course can be incorporated into future park design.

Therefore, the Parties shall collaborate to determine the most advantageous route for the stormwater line, discharge point, and sizing of the line, subject to City review and approval through the standard stormwater permitting process. Any such stormwater line constructed across the City Parcel shall be owned, operated, and maintained by the Developer (or successor in interest), unless otherwise agreed to in writing by the City.

**Section 4.6 Temporary Grading Easement on City Parcel.** The City Parcel southwest of the Property has a rolling and hummocky topography. Several of the hummocks are located on the property line between the City Parcel and Property. The varied topography along the property lines will result in cut and fill slopes to enable flatter areas to be graded onsite. When the City develops the City Parcel, it will be required to grade in similar cut and fill slopes resulting in peaks and valleys along the common property line between the City Parcel and the Property. Therefore, the Parties agree that it is mutually beneficial for the City to grant Developer a temporary grading easement ("TGE") to resolve the aforementioned topographical challenges that are present on the common property line between the City Parcel and the Property. The TGE will allow beneficial grading to occur on both parcels to maximize the Parties respective developable area, as well as allow a



road being developed with Lacamas Northshore to directly serve the City Parcel. The TGE will include appropriate erosion control methods to be implemented in conjunction with grading. The Parties shall work together to determine area of the TGE as depicted in the Master Plan.

**Section 4.7 City to Reimburse Developer for Upsizing Onsite Water Trunk Lines.** A water trunk line is identified within the City's Water System Plan ("WSP"), incorporated hereto by reference, as being located on the Property. The City is specifying that a 24-inch water trunk line is needed to be constructed with the Project. The Parties agree that Developer shall be reimbursed by the City through SDC credits, at the time improvements are accepted by City inspector, for the costs associated with upsizing any onsite water lines.

**Section 4.8 Impact Fee Credits and Reimbursement.** Developer or successor in interest to the Property, upon construction of such qualifying improvements, shall be eligible to apply for impact fee credits, including for schools, traffic, fire, parks, stormwater, sanitary and water. The Parties agree that the City shall include Developer's design of its proportional share of Northshore Boulevard (as depicted in the Master Plan) within the City's Transportation System Plan ("TSP") and that Developer will be eligible for all available impact fee credits upon completion of Developer's proportional share of Northshore Boulevard. Developer will dedicate and convey ownership of the parks identified in the Master Plan as shown on the Master Plan's open space sheet. Developer agrees to use best efforts to coordinate with Legacy Lands on its design of the entrance to legacy lands, parks, the plaza, trails, public and open space amenities for the deeded open space as depicted in the Master Plan so that the City will use best efforts and take substantial steps towards the inclusion of these regional public spaces on the next update to the City's six (6) year parks and open space plan ("PROS").

**Section 4.9 Land Use Designations.** The Parties agree that the Property shall develop consistent with the land use designations and density set forth in the Master Plan depicted in Exhibit D.

**Section 5. Process.** Subsequent to the approval of this Agreement, the Parties agree that subdivision and future development of the Property will be achieved through a subdivision application subject to the provisions in CMC Chapter 17.11. The subdivision application will be processed as a Type III decision subject to a hearing and city final decision by the hearings examiner pursuant to the provisions in CMC Chapter 18.55.030(C). The approval of any multi-family development will proceed forward through a Type II site plan review process under CMC Chapter 18.18 and Chapter 18.55. The entitlement of industrial and commercially zoned lands within the Property will be concurrently processed under the City's site plan review standards within CMC Chapter 18.18 and under Chapter 18.55. Design review for North Shore residential shall be processed as a Type I decision to be rendered by the City's Community Development Director or designee and be approved consistent with the design standards set forth in the Master Plan. The application shall be substantially similar to the Master Plan. Any aspects of a land use application relating to the Property that are not substantially similar to the Master Plan shall be reviewed under the applicable regulations as if no Master Plan had been approved.

**Section 6. Remedies.** Should a disagreement arise between the City and Developer regarding the interpretation and application of this Agreement, the parties agree to attempt to resolve the disagreement by first meeting and conferring. If such meeting proves unsuccessful to resolve the dispute, the disagreement may be resolved by judicial action filed in the Clark County Superior Court.

**Section 7. Performance.** Failure by either party at any time to require performance by the other party of any of the provisions hereof shall in no way affect the parties' rights hereunder to enforce the same, nor shall any waiver by a party of the breach hereof be held to be a waiver of any succeeding breach or a waiver of this non-waiver clause.

**Section 8. Venue.** This Agreement shall be construed in accordance with and, governed by, the laws of the State of Washington. The parties agree to venue in the Superior Court for Clark County, State of Washington, to resolve any disputes that may arise under this Agreement.

**Section 9. Severability.** If any portion of this Agreement shall be invalid or unenforceable to any extent, the validity of the remaining provisions shall not be affected thereby.

**Section 10. Inconsistencies.** If any provisions of the Camas Municipal Code or Master Plan are deemed inconsistent with the provisions of this Agreement, the provisions of this Agreement shall prevail.

**Section 11. Binding on Successors and Recording.** The rights and obligations created by this Agreement are assignable and shall be binding upon and inure to the benefit of Developer, the City, and their respective heirs, successors and assigns. Only Developer and the City or their assigns shall have the right to enforce the terms of this Amendment. This Agreement shall be recorded against the real property indicated in the Master Plan with the Clark County Auditor.

**Section 12. Recitals.** Each of the recitals contained herein are intended to be, and are incorporated as, covenants between the parties and shall be so construed.

**Section 13. Amendments.** This Agreement may only be amended by mutual agreement of the parties. While nothing contained herein shall be construed to obligate either party to amend the Master Plan, it is recognized that future evolution of the City may warrant consideration of such issues. The City reserves authority to impose new or different regulations to the extent required by a serious threat to public health and safety pursuant to RCW 36.70B.

IN WITNESS WHEREOF, the parties hereto have caused this to be executed as of the dates set forth below:

CITY OF CAMAS

By \_\_\_\_\_  
Title \_\_\_\_\_



By \_\_\_\_\_  
 Title \_\_\_\_\_

STATE OF WASHINGTON           )  
   ) ss.  
 County of Clark                           )

I certify that I know or have satisfactory evidence that \_\_\_\_\_ is the Person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument and acknowledged it as the \_\_\_\_\_ of \_\_\_\_\_ to be free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: \_\_\_\_\_

\_\_\_\_\_  
 NOTARY PUBLIC for the State of Washington,  
 Residing in the County of Clark  
 My Commission Expires:  
 \_\_\_\_\_

STATE OF WASHINGTON           )  
   ) ss.  
 County of Clark                           )

I certify that I know or have satisfactory evidence that \_\_\_\_\_ is the Person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument and acknowledged it as the \_\_\_\_\_ of the City of Camas, WA to be free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: \_\_\_\_\_

\_\_\_\_\_  
 NOTARY PUBLIC for the State of Washington,  
 Residing in the County of Clark

My Commission Expires: \_\_\_\_\_

## EXHIBIT A: PROPERTY DESCRIPTION

[Insert legals/description]

### Parcels

175733-000  
175726-000  
175727-000  
175747-000



