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November 2023 draft







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- A. Implementation Plan Project Costs, Oct 2023
- B. ODOT letter to Hood River Urban Renewal Agency, Sept 27, 2023
- C. Heights District Parking Studies. Nov 2021 and April 2023
- D. The Heights Streetscape Plan Phase 1 Summary Memo without appendices, Aug 31, 2021
- E. The Heights Streetscape Plan Phase 2 Summary Memo without appendices, June 17, 2022
- F. Open House Summary, without attachments, April 2023
- G. Online Survey Summary, without attachments, May 2023
- H. Traffic Studies, various











EXECUTIVE SUMMARY

TO BE DEVELOPED FOR FINAL REPORT







EXECUTIVE SUMMARY

TO BE DEVELOPED FOR FINAL REPORT





STUDY PROCESS, PUBLIC ENGAGEMENT, AND COMMUNITY GOALS







STUDY PROCESS

The Heights streetscape project was initiated to support the City of Hood River and Urban Renewal Agency (URA) in establishing a comprehensive plan for improving the OR 281 couplet through the Heights neighborhood. The project area includes 12th Street, 13th Street and the streets and intersections that tie them together at May Street to the north and Belmont Avenue to the south. The project addresses URA and community conversations related to traffic safety, community identity, and other City and stakeholder goals as well as proposed improvements documented in the Heights District Urban Renewal Plan. The study process for the project occurred in three distinct phases:

PHASE 1 – PROJECT VISION AND FOUNDATION:

This phase included reviewing existing planning studies completed in the project area, documenting the context of the study area including the regulatory context and applicable design standards, developing a survey basemap, documenting existing and future parking supply and demands, and conducting public engagement to identify community and stakeholder priorities. A key outcome from Phase 1 was the identification of project goals that were used to guide the development and evaluation of preliminary design concepts.

PHASE 2 - CONCEPT DEVELOPMENT:

In this phase the project team developed preliminary design concepts that aligned with

the project goals. Transportation, parking, and other analyses were completed to evaluate the preliminary design concepts against project goals. Public outreach was conducted to collect community feedback on the design concepts and technical analysis and identify preliminary recommendations for developing a preferred concept plan.

PHASE 3 – PREFERRED CONCEPT AND IMPLEMENTATION PLAN:

This phase developed the preferred concept plan and recommendations for future implementation that are documented in this report.

Public Engagement

The project included a comprehensive community engagement effort that was planned and executed to build on previous City, URA, and community conversations that had taken place in the years prior to the start of the project. This community engagement plan focused on collecting and incorporating ideas and input from stakeholders in the immediate vicinity of the project and broader engagement of City residents, businesses, and interest groups. Key goals of the community engagement were:

- Gathering community feedback to influence and shape the project design,
- Providing varied platforms for participation,
- Tracking input to maximize outreach,
- Generating excitement and community ownership

The community outreach that was conducted during this project included:

2 Online surveys published in English and Spanish.

Meetings with the URA (Advisory Committee and Board).

Focus group meetings.

Meetings conducted in Spanish.

Rounds of direct outreach to businesses along 12th and 13th Streets.

Two-day open house and community event

250+ Attendees

Community Goals

The Heights Business District Urban Renewal Plan (First Amendment March 2016) has seven goals that apply to the entire urban renewal area and are broad statements designed to guide future planning and urban renewal funded projects in the area. While each urban renewal goal applies in some form to the Heights Streetscape Plan, project specific goals were developed that focus on improving 12th and 13th Streets and the intersections and streets that tie the couplet together at the north and south ends of the Heights. Project specific goals were developed

incorporating input from the Urban Renewal Ag ency, community feedback from an online survey, and meetings with individuals and groups with a specific interest in the study area.

The project goals established a project vision that was used to guide the development and evaluation of preliminary design concepts. Evaluation criteria, which aligned with the project goals and desired project outcomes based on community feedback, were also identified and used for evaluating preliminary design concepts.



PROJECT TIMELINE

Heights District Urban Renewal Area Public Input Summary

January 2018

A Community preference was identified for "a multi-faceted project... focusing on public transportation safety."

Walkshop with Dan Burden

Community event identified existing

issues and ways to make the area

2018

Summer 2018

more walkable.



City Issues RFP for Developing a Streetscape Plan for the Heights

December 2018



Urban Renewal Agency approves comprehensive project for the Heights

September 2020

2020

Phase 2: Develop Concepts

September 2021 - October 2021

Develop preliminary concepts and an approach for evaluating designs based on project goals. The outcome of Phase 2 identified a recommended design that was developed during a third project phase.

2019

2019

Streets Alive Demonstration Project

September 28 – October 11, 2018

Tested options to make street crossing safer and adding bike lanes.



Phase 1: Develop Project Goals

February 2021 – August 2021

Community outreach identified community priorities and established project goals to guide street design alternatives.

2021



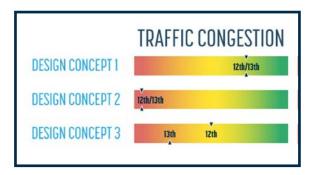
Phase 1: Urban Context
Designation and Parking Study

Summer 2021

ODOT concurrence on a Central Business
District urban context designation for OR
281 through the Heights aligns with project
goals.

The Heights' first parking study was conducted to evaluate parking space types and availability compared to existing and future demand.





Phase 2: Evaluate Concepts

January 2022 – February 2022

Technical evaluation to determine how design concepts align with project goals.

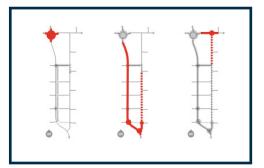
<u> 2022 </u>



Phase 3: Additional Design Studies

September 2022 – April 2023

Additional design studies requested by the Urban Renewal Agency (URA) on the design of key intersections and refinements to the streetscape design to inform the final streetscape plan.



Implementation Plan

August 2023 - September 2023 Recommendations for phasing future street improvements.

2024

TSP Update and Jurisdictional **Transfer Discussions**

To be determined

This Plan will be adopted as an amendment to the City Transportation System Plan (TSP). As part of this process and to support the implementation of this Plan the City and ODOT will discuss opportunities for a partial or full Jurisdictional Transfer of OR 281 through the Heights.

THE FUTURE

2023

Phase 2: Community Outreach and Feedback

April 2022 – May 2022

Community open house and online survey to review design concepts and provide feedback to frame the development of a preferred streetscape concept for the Heights.



Phase 3: Preferred Concept Plan

May 2023 – August 2023

Development of the final streetscape plan incorporating URA feedback.



Phased Engineering, Design and **Construction of Streetscape Plan Elements**

To be determined

Over time, as funding allows, the elements of the Heights Streetscape Plan will go through final design and engineering and then be built.



COMMUNITY PRIORITY GOALS



Calm **traffic** and improve intersections to improve safety for people driving, walking, biking, taking transit and supporting local businesses.



Preserve and promote a **livable community and economy** through streetscape improvements
that increase safety for people walking and
biking and addresses parking needs to support
local business access, and future mixed-use
development.



Create an **identity for the Heights** that reflects the diverse culture and history of the area and as destination for local residents for goods and services.



Create streets and gathering spaces that provide safe, comfortable places for people walking, accessing transit, and biking along and across the corridor and that connects area recreation and commercial destinations and neighborhoods.

Evaluation Criteria

- Provides traffic calming.
- Accomodates vehicular traffic.
- Improves intersection safety.

Evaluation Criteria

- Accommodates parking.
- Supports the local economy.
- Supports livability.
- Adapts seasonally.

Evaluation Criteria

- Opportunity for creating identity.
- Supports the Heights as a destination for locals.
- Creates opportunities for an enhanced landscape.

Evaluation Criteria

- Provides comfortable places for walking and biking.
- Aligns with Safe Routes to School goals.
- Improves connections.
- Connects to planned bike routes.







COMMUNITY SECONDARY GOALS



Support existing and future development by maintaining and improving **utility infrastructure** as part of the streetscape project.



Engage local residents and businesses, the school district, and those that use the corridor to provide ongoing input in the streetscape project.



Provide **locations for people** to gather, stop and rest.

Evaluation Criteria

• Impacts to utility infrastructure.

Evaluation Criteria

• Community feedback was part of the final evaluation and development of the preferred concept plan.

Evaluation Criteria

• Creates opportunities for placemaking.







PREFERRED CONCEPT PLAN







INTRODUCTION TO PREFERRED CONCEPT PLAN

Today's roads and intersections in the Heights were designed to move motorized vehicle traffic with limited consideration for the comfort of people walking and biking. As a result, the performance of the street for people driving (e.g., level of service) has remained relatively high while the comfort of people walking and biking is low.

Using the project goals and community feedback as a guide, the Project Team developed three preliminary design concepts, in addition to what was assumed in the City's adopted Transportation System Plan (TSP), to test various streetscape design elements. The concepts presented a spectrum of potential streetscape opportunities for improving the streets and intersections in the Heights. The concepts also sought to balance the streetscape performance for people driving, walking and biking while considering local business needs to better align the roadway design with project goals. The preliminary design concepts included:

- Baseline Alternative: Current Adopted Plan (City Transportation System Plan, October 2011, Amended April 2021)
- Design Concept 1: Two Lane, Two-Way Traffic on 12th and 13th Streets.
- Design Concept 2: One Lane, One-Way Traffic on 12th and 13th Streets.
- Design Concept 3: Hybrid One Lane, Oneway on 12th Street and Two-Way traffic on 13th Street.

Consistent with the project goals, each of the three concepts reprioritized how the limited public right-of-way is used to improve safety and achieve the desired balance of performance for all modes of travel. Each alternative also changed the flow of traffic through the Heights, which was a departure from the City's adopted plan (TSP) that had been approved by ODOT.

Based on the technical evaluation and community feedback the URA recommend a design that built on Design Concept 3 (Hybrid) as it offered a compromise that aligns well with the project goals and balances divided community feedback. The following pages present the preferred concept plan for the Heights, documenting how it aligns with project goals and identifying design features for each of the streets and key intersections in the project area. The plan includes plan view and perspective renderings, typical street cross sections, and introduces character-defining streetscape elements to create a streetscape environment that reflects the values of the local community.





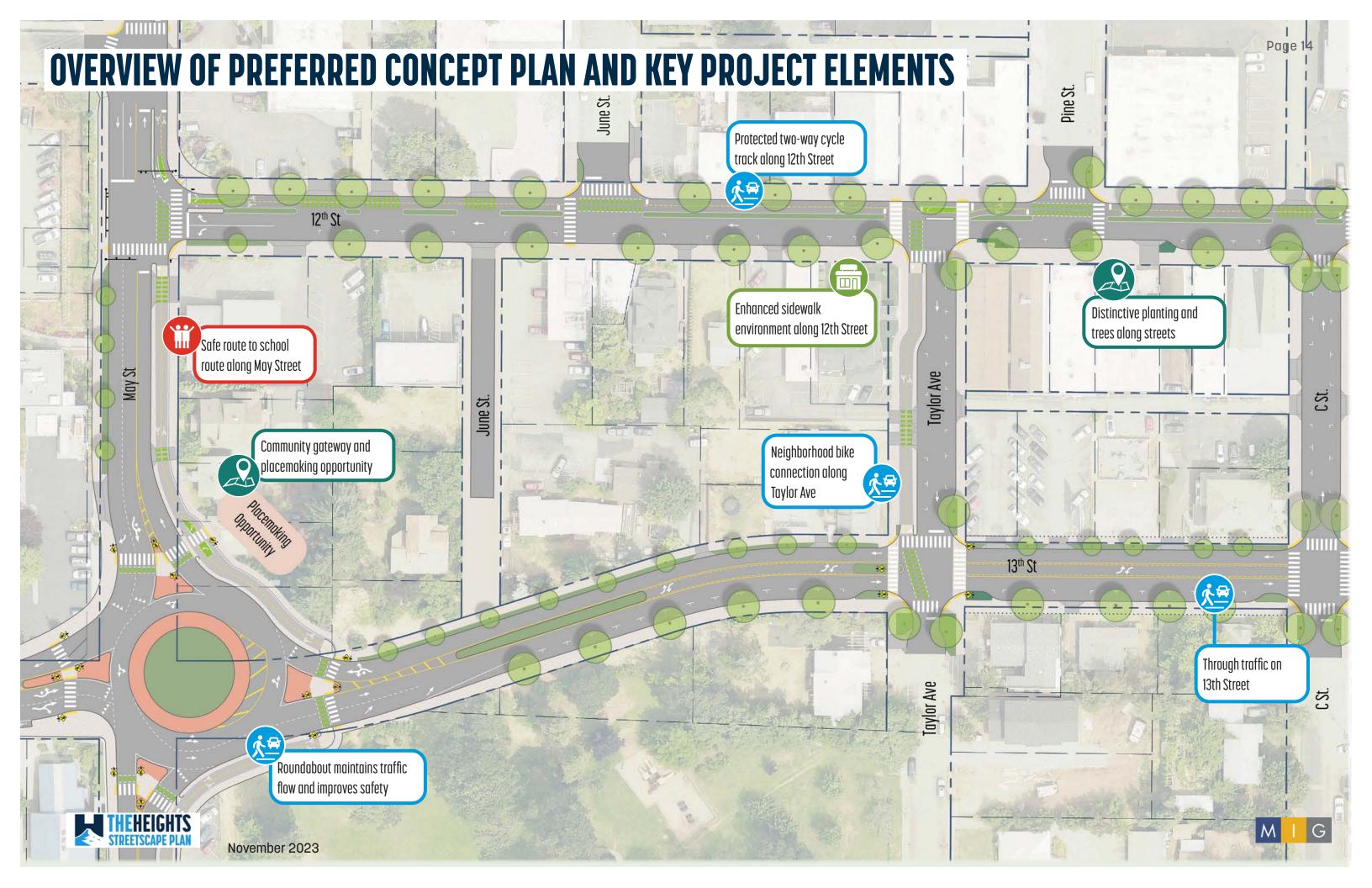


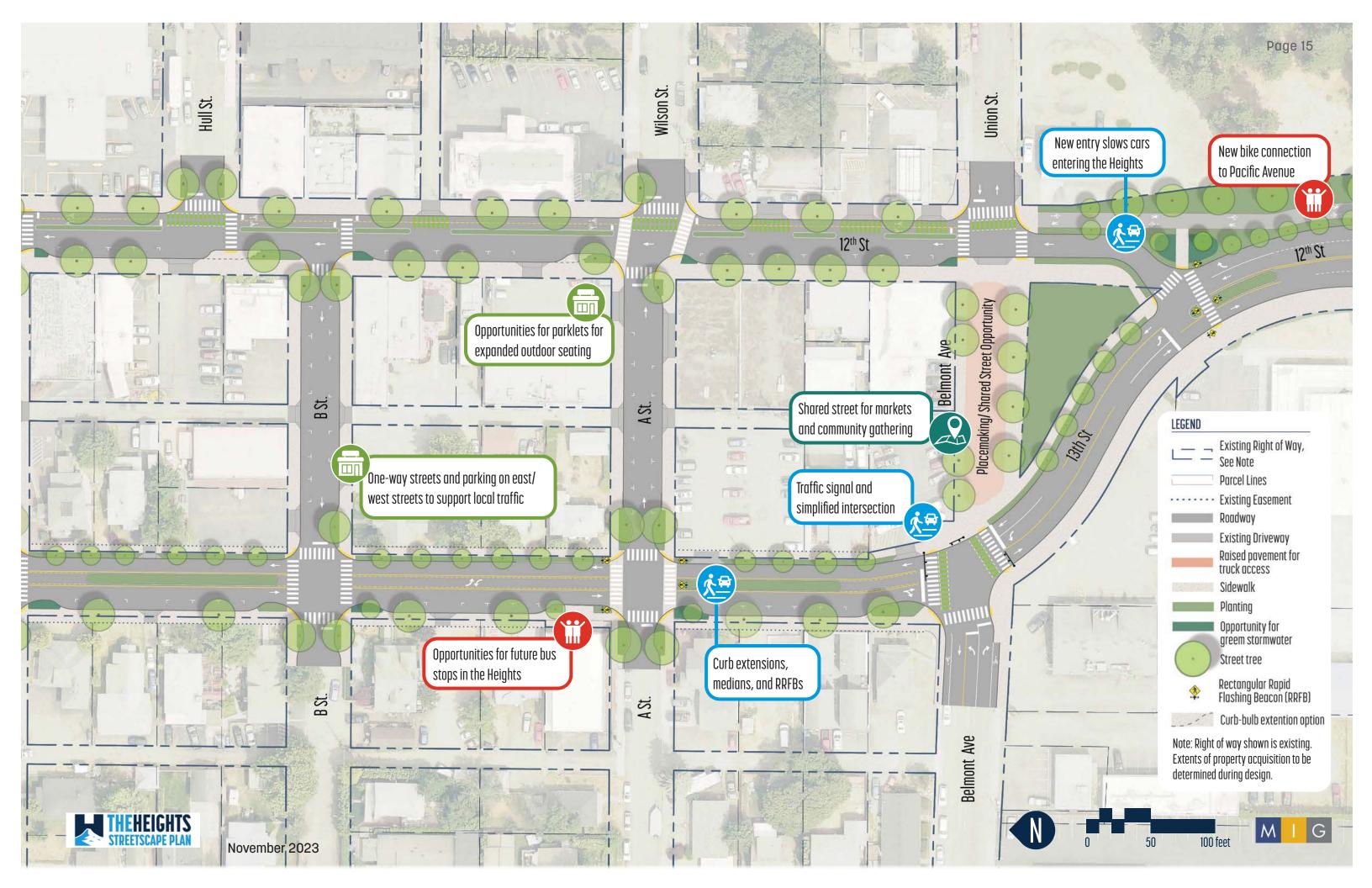




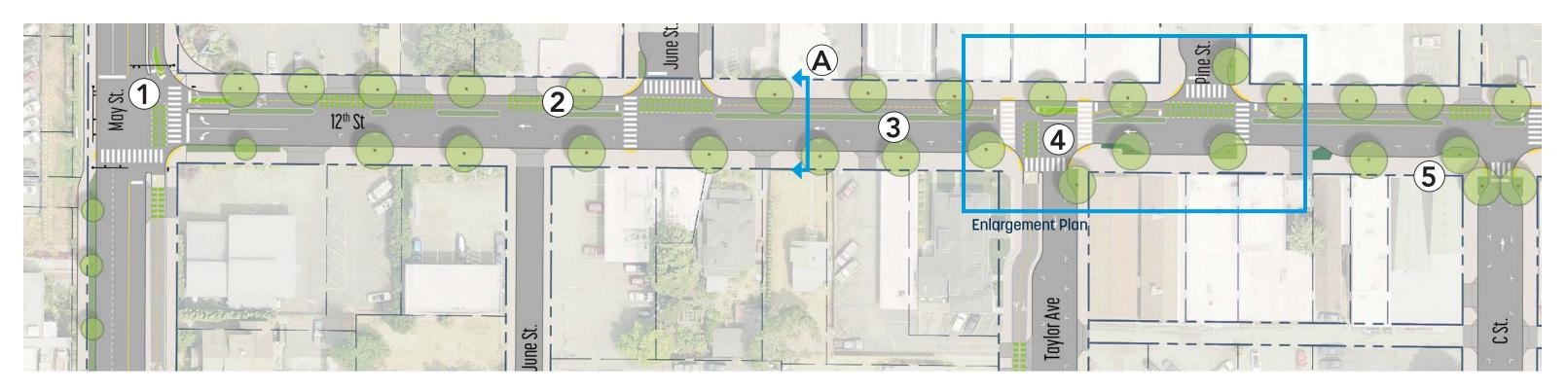








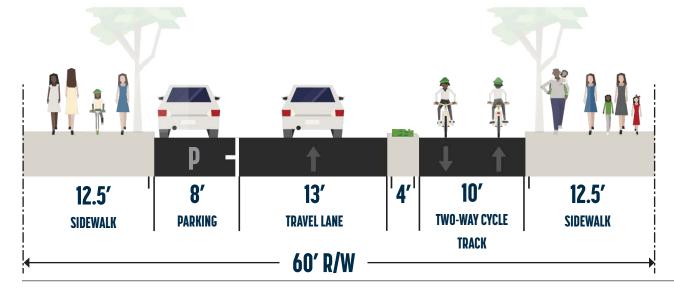
12TH STREET - THE NEIGHBORHOOD STREET



12th Street is designed as a local destination, a nexus of neighborhood life, and a place for people. Wider sidewalks with street trees, a two-way cycle track, and curb extensions all contribute to a street that accommodates more than just vehicle traffic. Slower vehicle traffic allows people to move

along and across the street more comfortably. Businesses have more opportunity to expand into widened sidewalks and people can pause in expanded sidewalk zones at curb extensions creating opportunities for community gathering.

A Typical Street Section (looking north)



Design Features

- 1 Redesigned intersection and traffic signal to provide access for people biking to May Street.
- 2 Potential opportunity for future Columbia Area Transit (CAT) stop to be integrated into the street design.
- (3) Single travel lane slows traffic through the Heights.
- Connection to cycle track at Taylor Avenue to support east/ west neighborhood connection for people biking.
- On-street parking provides opportunities for "Parklets" for adjacent businesses.

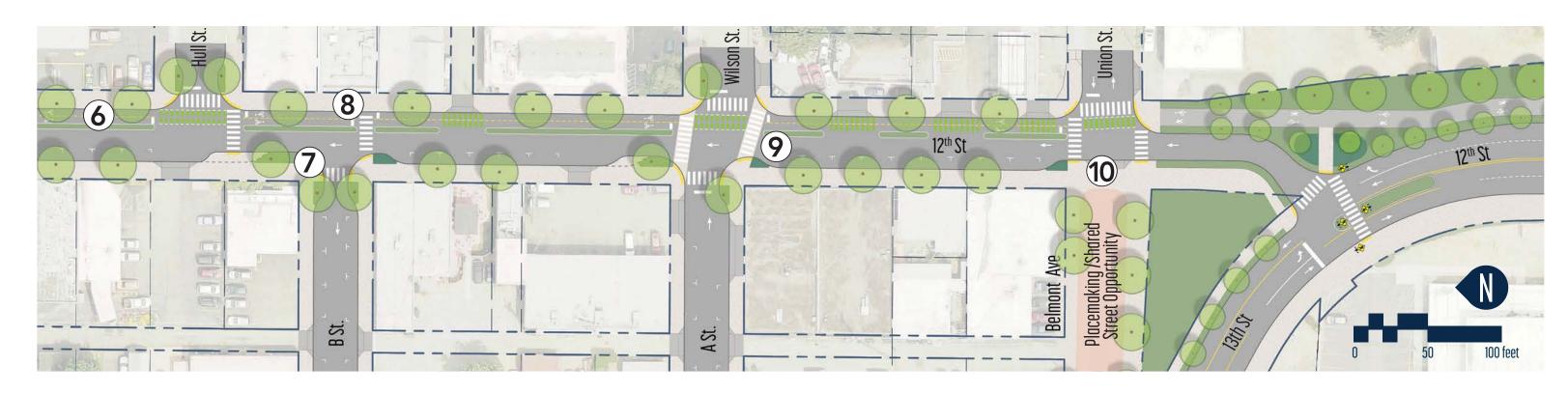












Design Features

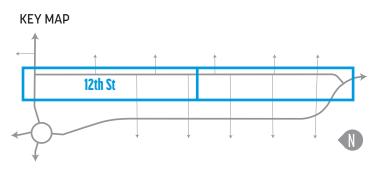
- **6** Two-way protected cycle track.
- Curb extensions reduce crosswalk distances and provide opportunities for planting including green stormwater infrastructure where feasible.
- Wider sidewalks allow for more opportunity for street furnishings along the street.
- Concrete or decorative crosswalk treatments at A Street and Taylor Avenue for improved visibility of crosswalks.
- Access to Belmont Avenue shared street and alley via a new driveway ramp.

















12TH STREET - THE NEIGHBORHOOD STREET





Calm traffic and improve intersections

Pass through traffic remains on 13th Street, allowing 12th Street to become a slower, more comfortable street for walking and biking while people driving to the Heights can park and easily walk to multiple destinations. Cars are slowed down with a single lane of traffic, curb extensions at intersections street trees, and crosswalks.



Livable community and economy

Wider sidewalks, safe bike routes, and public places to rest enable local residents to be more active. New street trees, and planting help reduce the urban heat island effect and create a more pleasant place to spend time outdoors - and patronize local businesses. Businesses can use the wider sidewalks to add seating or sidewalk displays.



Local Identity

The Heights already has its own unique character. Expanded sidewalks and public spaces gives space for local residents and businesses to be themselves. Design features, amenities, and planting will be selected to reinforce the local character.



Safe, comfortable streets for people

Twelve-foot sidewalks provide enough space for a six-foot pedestrian clear zone for as well as cafe seating. A buffered two-way cycle track provides a safe route with connections to parks, schools, and local neighborhood destinations.

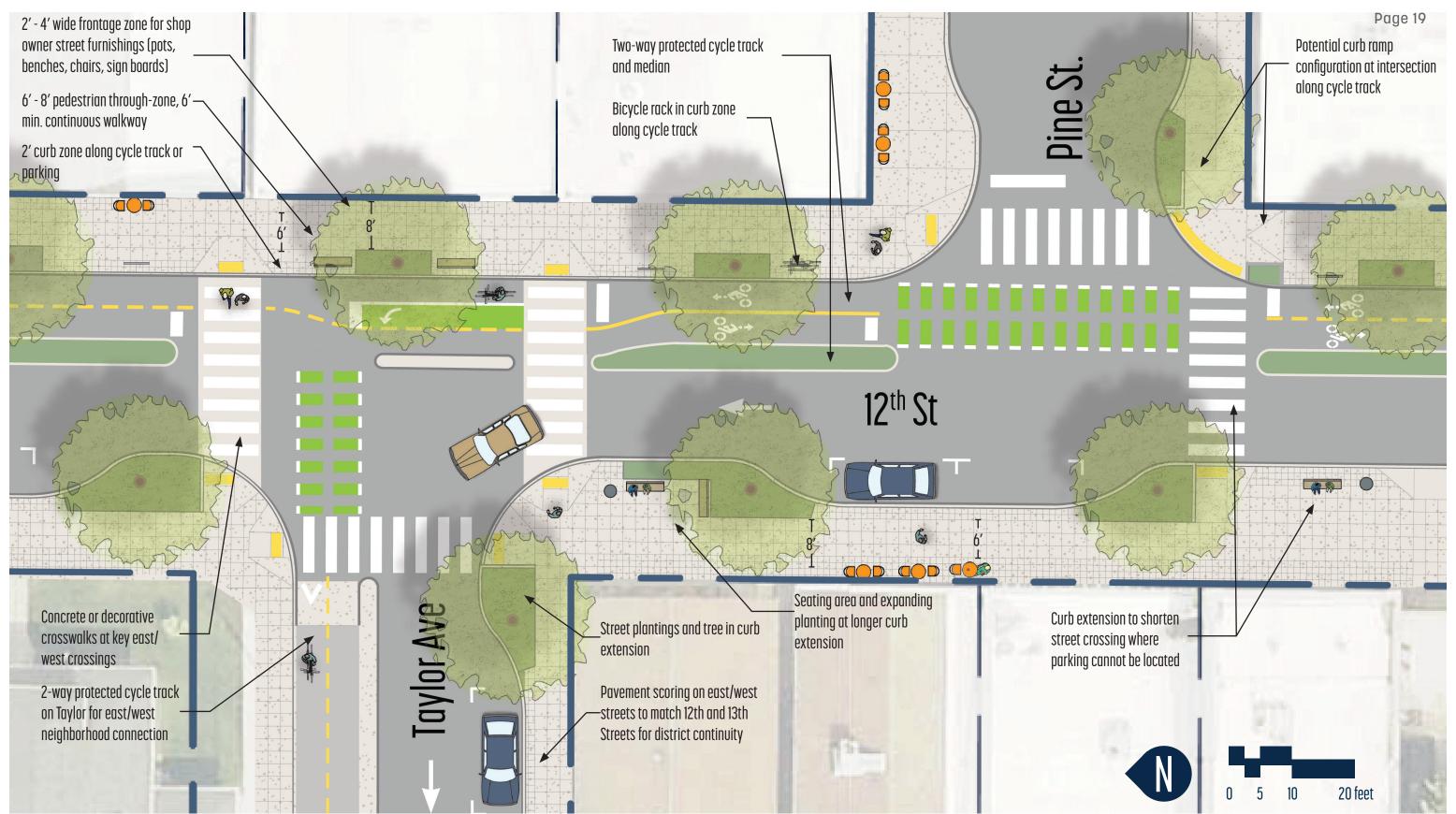


Perspective Illustration (looking south from Taylor Avenue)









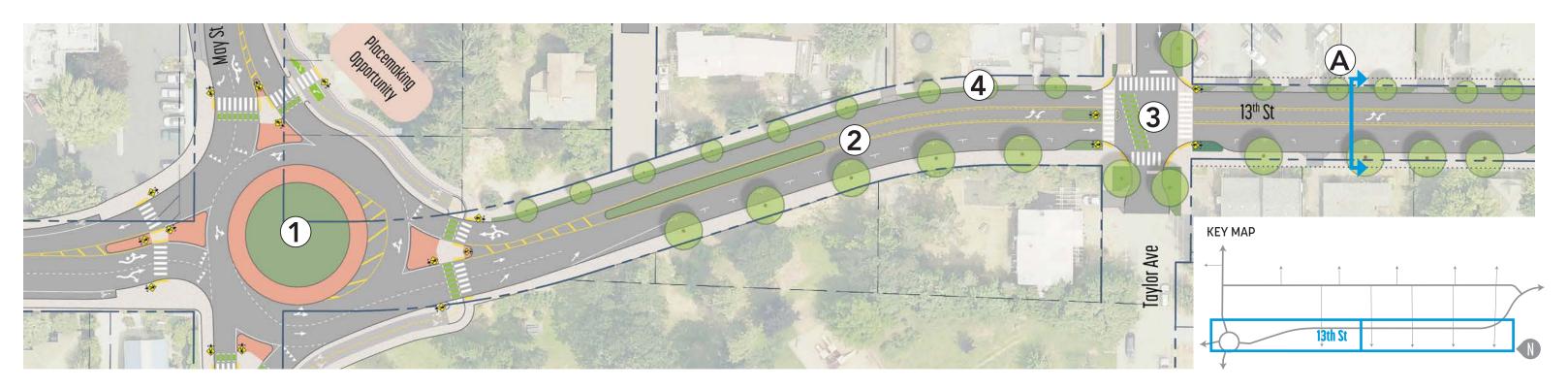
Enlargement Plan of Typical Streetscape on 12th Street



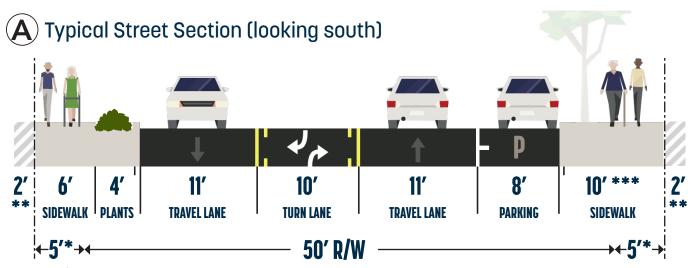




13TH STREET - THE THROUGH STREET



13th Street is designed as a through street with two-way traffic and will attract far more traffic than 12th Street. A center turn lane should help maintain traffic flow allowing people driving opportunities to turn to and from 13th Street. Design features along 13th are focused on slowing traffic and mitigating the impact of the center turn lane. A continuous planting strip with columnar street trees provides separation between the sidewalk and travel lane where there is no on-street parking.



- * Existing utility easements
- **A future sidewalk easement, to be provided as properties redevelop, to allow for additional sidewalk space.
- ***Provide a 5' min. sidewalk width where existing structures and ramps to buildings are located within the 5' utility easement on the west side of 13th Street.

Design Features

- New roundabout to maintain traffic flow and improve access and safety for people walking, biking, and driving through the intersection.
- **2** Two-way traffic and a center turn lane through the Heights.
- (3) Intersection improvements and traffic calming at Taylor Avenue to improve neighborhood access across 13th Street.
- Continuous planting strip between the sidewalk and a new northbound travel lane on the east side of the street.
- 5 Curb extensions and on-street parking along the west side of the street.

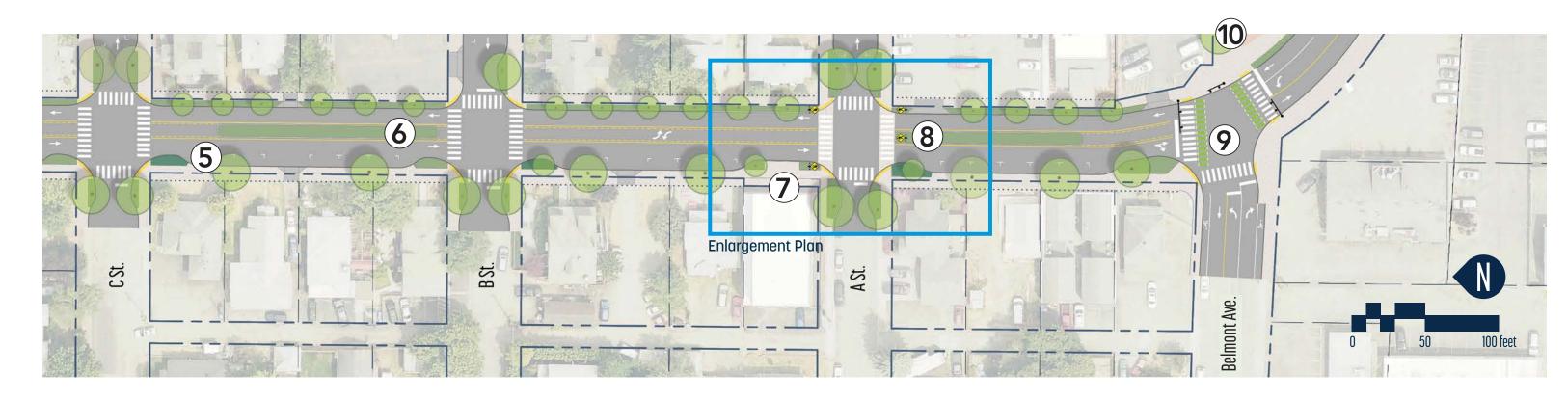












Design Features (cont'd)

- **6** Medians along 13th Street provide traffic calming.
- Potential opportunity for future Columbia Area Transit (CAT) stop to be integrated into the street design.
- 8 Concrete or decorative crosswalk treatments at A Street and Taylor Avenue for improved visibility of crosswalks.
- Redesigned intersection and traffic signal to improve access and safety for people walking, biking, and driving.
- Closing Belmont Avenue creates an opportunity for a larger community gathering space.



















13TH STREET - THE THROUGH STREET





Calm traffic and improve intersections

Changes to key intersections at May Street and Belmont Avenue set the stage for traffic entering the Heights. Medians, curb extensions and rectangular rapid flashing beacons (RRFBs) are proposed to help calm traffic and improve access for people crossing 13th Street.



Livable community and economy

Sidewalks are separated from the roadway by on-street parking or planting strips with street trees. Driveways and off-street parking are encouraged to be accessed from east/west streets or alleys to improve safety, reduce potential conflicts, and maintain traffic flow.



Local Identity

Opportunities for native plantings that reflect character and values of the neighborhood in planting strips, curb extensions and medians. Larger placemaking opportunities are located at key intersections at each end of the Heights along 13th Street.



Safe, comfortable streets for people

13th Street focuses on circulation and access for people driving while providing safe, comfortable streets for walking. Crossings at Taylor Avenue and A Street focus on improving safety for people walking and biking across the street.

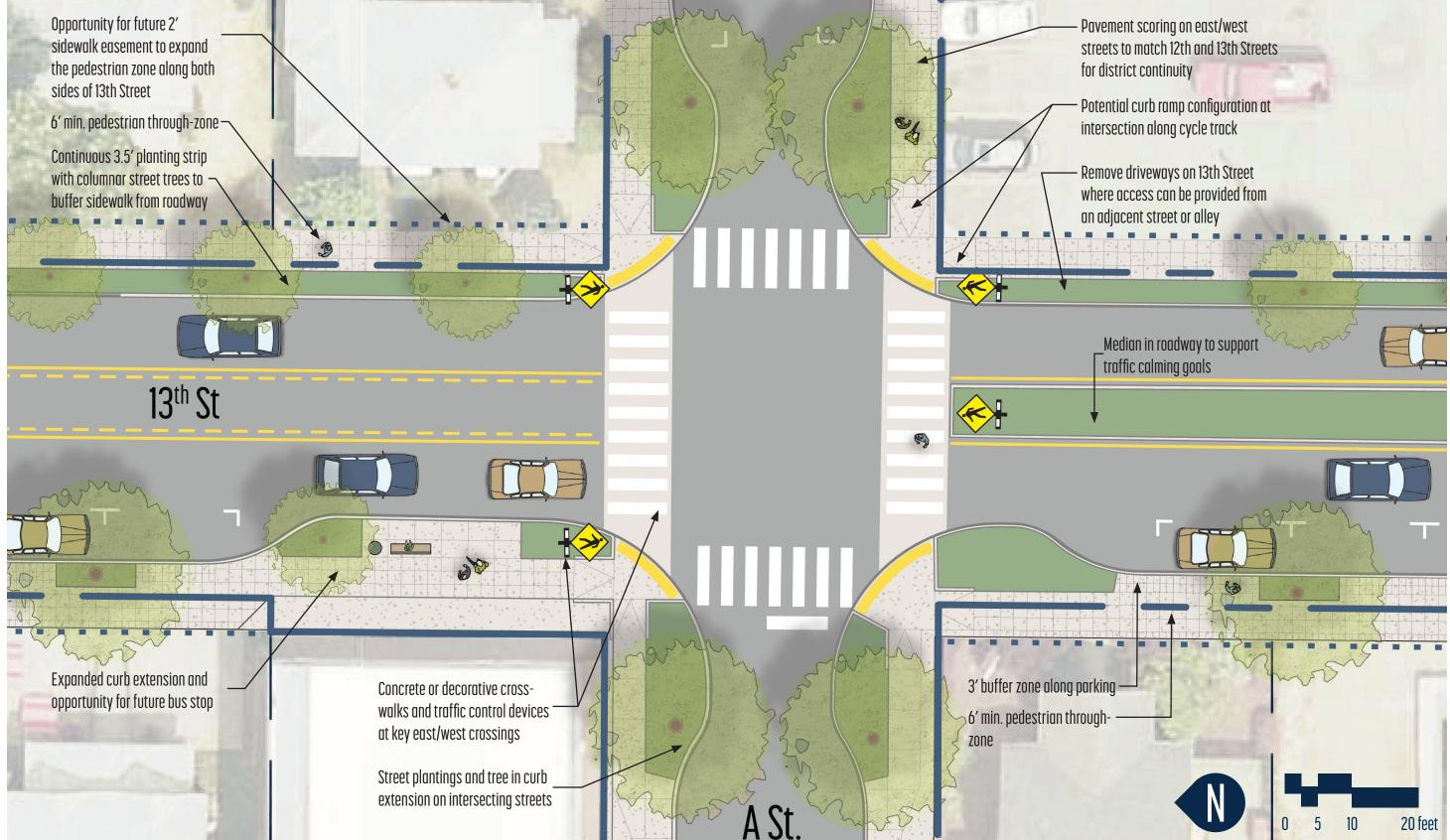


Perspective Illustration (view of 13th Street looking north towards A Street)









Enlargement Plan of Typical Streetscape on 13th Street







MAY STREET AND 13TH STREET ROUNDABOUT

A roundabout at 13th and May Streets will address existing issues, help to maintain traffic flow, minimize traffic delays, and provide safe crossings for people walking and biking. A new two-way cycle track will be integrated into the intersection helping to create a safe route between local schools, parks, and other neighborhood destinations. The expansion of the intersection creates an opportunity for placemaking and a new gateway into the Heights.



Calm traffic and improve intersections

A roundabout reduces conflicts points, improves safety, and supports lower speeds and traffic calming through the intersection.



Livable community and economy

A roundabout helps to maintain traffic flow throughout the year and minimize backups.



Local Identity

A roundabout could include an opportunity for placemaking and a new gateway marking the entry into the Heights.



Safe, comfortable streets for people

Improved crosswalks with RRFBs and a cycle track improve access and safety for people walking and biking.

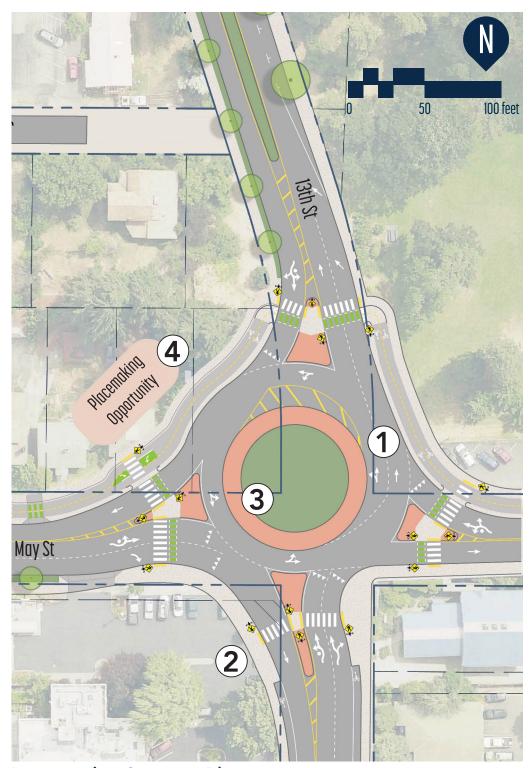


Perspective Illustration (view of May Street and 13th Intersection)









Intersection Concept Plan

KEY MAP

May St



Design Features

- Roundabout layout and sizing to accommodate the planned vehicular traffic needs.
- 2 Rectangular Rapid Flashing Beacon (RRFB) at crosswalks
- Raised pavement surrounding the roundabout and at splitter islands to accommodate truck and bus access.
- **4** Opportunity for placemaking and community gateway.











BELMONT, 12TH, AND 13TH INTERSECTION

A reconfigured intersection closes Belmont
Avenue to vehicles between 12th and13th
Streets to help manage congestion for vehicle
traffic, provide safer crossings for all users, and
slow vehicle traffic before entering the Heights.
The Belmont Avenue block-long street closure
and shared street creates a flexible pedestrianoriented space while allowing vehicle access to
the alley and local businesses. A new shared
use path along 12th Street from Pacific Avenue
connects people walking and biking to the two-way
cycle track along 12th Street at Belmont Avenue.



Calm traffic and improve intersections

Simplified intersections improve operations and slow traffic entering the Heights from the south.



Livable community and economy

The intersection reconfiguration supports goals for all users and access to local businesses.



Local Identity

Opportunities for new planting, street trees, and the Belmont shared street create a destination for local events.



Safe, comfortable streets for people

New bike connections and crosswalks improve safety and support Safe Routes to School goals.



Perspective Illustration (looking north)

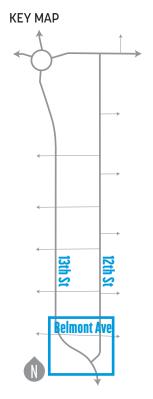








Intersection Concept Plan







Design Features

- Simplified intersection with Belmont Avenue closed and new traffic signal to improve safety and access.
- The Belmont Avenue street closure provides placemaking and an opportunity for a community gathering space.
- A driveway ramp to allows vehicle access to the alley and adjacent business parking.
- A shared use path along 12th Street provides a safe route for walking and biking to Pacific Avenue.
- The realigned intersection of 12th and 13th Streets creates an opportunity for a green stormwater facility.









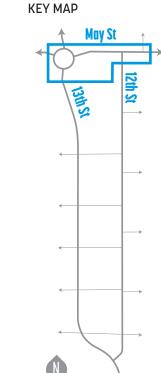
MAY STREET

May Street is designed as a complete street providing a safe route for people traveling to local schools, parks, and other neighborhood destinations. The intersection at 13th Street is redesigned with a roundabout to maintain

traffic flow and reduce potential conflict points between people, walking, biking and driving. The intersection at 12th Street is redesigned to accommodate the new cycle tracks on May and 12th Streets. The continuation of the two-way

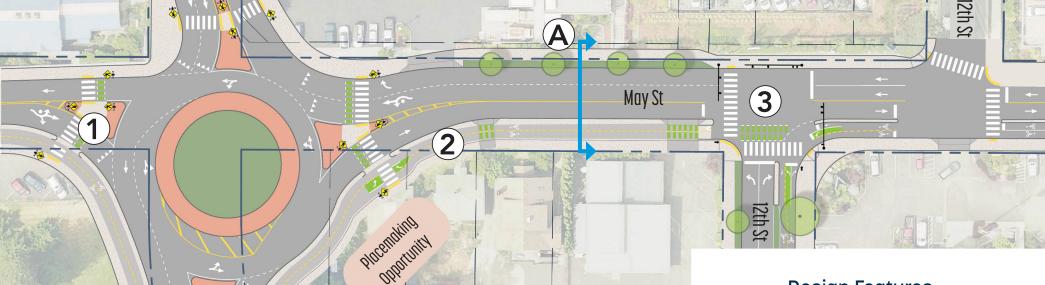
boundary (e.g., east of 12th Street) will need to be coordinated with future city planning and design

cycle track on May Street beyond the project projects.









May Street Plan



Design Features

- Rectangular Rapid Flashing Beacon (RRFB) at roundabout crosswalks.
- A two-way cycle track along the sidewalk on the south side of the street.
- Improved signalized intersection with new infrastructure and traffic signal for people biking.





* Existing utility easements





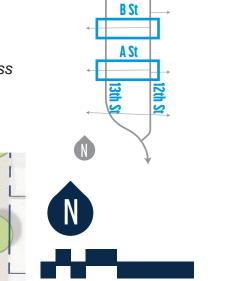
TAYLOR AVENUE AND A, B, AND C STREETS

Taylor Avenue

Taylor Avenue is redesigned to provide a safe, comfortable place for people biking across the Heights. Improvements to the intersections at 12th and 13th Street enhance Taylor Avenue as a key connection across the neighborhood to local schools and parks. To create space for the protected two-way cycle track motorized vehicle traffic is limited to one-way westbound travel.

A, B, and C Streets

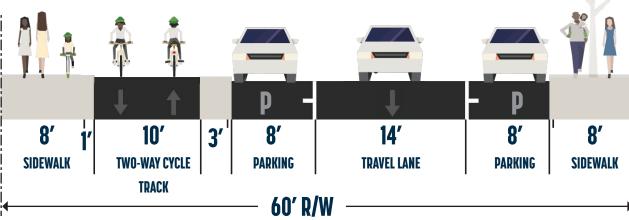
The district's other east/west streets (A, B, and C Streets) also become one-way streets, alternating between eastbound and westbound traffic, to provide predictable circulation and access to on-street parking. By reducing traffic to one-way along these narrow 50-foot rights-of-way, on-street parking can be provided along both sides of the streets with wider sidewalks to improve access for people walking.



100 feet

KEY MAP

Taylor Avenue Plan



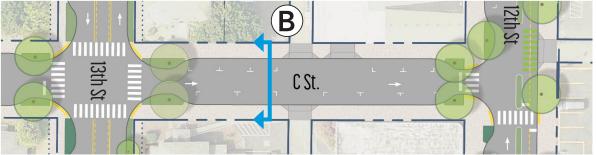
Taylor Ave



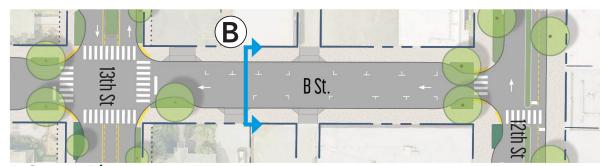
Typical Street Section - Taylor Street (looking east)



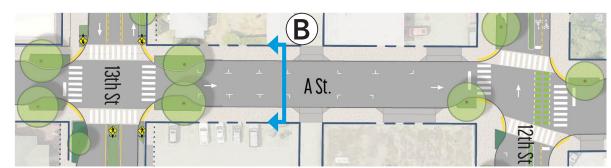




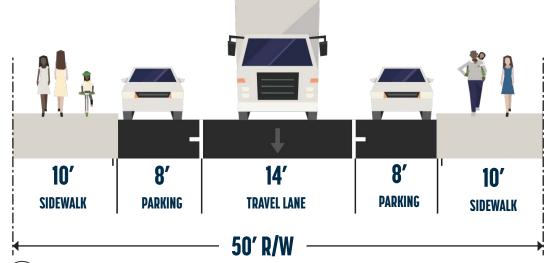
C Street Plan



B Street Plan



A Street Plan

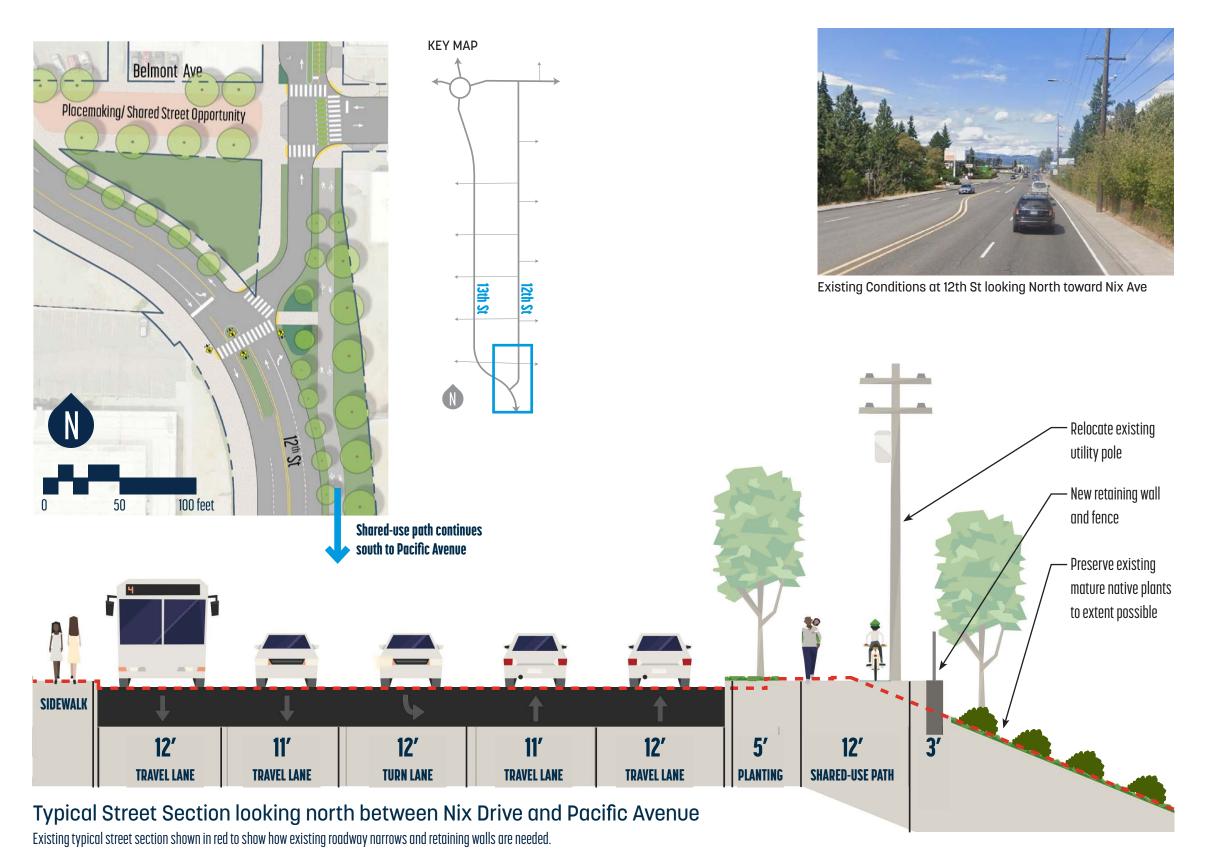


Typical Street Section - A, B, and C Streets (looking east or west)

12TH STREET BIKE CONNECTION TO PACIFIC AVENUE

12th Street is an important north-south route connecting the Heights business district to the residential and commercial areas to the south of Indian Creek. Given the relatively high-speed, high-volume street environment along 12th Street it is envisioned the existing roadway is reconfigured and the sidewalk zone widened to provide a shared-use path for people walking and biking that is separated from the roadway.

Impacts to existing native vegetation planted and maintained by the community on the slope below the path should be minimized and disturbed areas restored with new native plantings to continue to enhance the local landscape.













URBAN DESIGN ELEMENTS







NEIGHBORHOOD CHARACTER

Streetscape elements, which include street furnishings, plantings, green stormwater infrastructure, and even the presence of driveways, play a role in defining the Heights' character. The Heights should build upon its existing identity as an asset to guide the design of future improvements. By cultivating a unique brand of neighborhood character, the Heights will invite more community gathering and strengthen itself as a local destination.

Community engagement and local leadership have helped shape the streetscape elements and neighborhood character documented in this plan, which are offered as a starting point for further conversations and design efforts. As part of a public open house the community was asked to pick from a series of images to help inform the selection of materials and atmosphere for the streetscape. The following images represent the most popular choices from the more than 250 participants.



Create an **identity for the Heights** that reflects the diverse culture and history of the area and as a destination for local residents for goods and services.

Vision for Streetscape Character

- Build upon existing neighborhood character to maintain authenticity.
- Create consistent and inviting places to connect and gather.
- Differentiate the Heights from Downtown.

Open House Most Popular Images: Materials





Open House Most Popular Image: Placemaking



















STREET FURNISHINGS

Street furnishings serve as amenities and part of an interactive experience for both locals and visitors. Along with plantings, paving and streetscape layout, the design of street furnishings help set the tone for the neighborhood identity and

character. Below are recommended furnishing types, materials, and style directions for street furnishings consistent community input. Input from the 2022 Community Open House input was relatively unified in preferring a contemporary,

informal, and lively look and feel. As future street improvement projects are developed and implemented, the City should select a specific family of street furnishings that can be used for all project area streetscapes. The furnishings

selected should be appropriate for the spaces created and align with the local identity and needs of the community. Special consideration should be given to the specific maintenance demands of each piece.



Clean lines and timeless form

Contemporary Classic

Contemporary with Color

Artistically Agrarian



and bold design







Wood and Metal Seating (higher maintenance)













Bicycle Racks







Receptacles













GREEN STORMWATER INFRASTRUCTURE OPPORTUNITIES

Public streets provide a network for moving people and goods and provide space for public infrastructure, both which are vital to serving communities. Streets should also serve as a catalyst for environmental improvements and mitigate the many nuisances associated with urban traffic and "make streets better neighbors" (AASHTO "A Policy on Geometric Design of Highways and Streets", 6th Edition, 2011).

Polluted stormwater runoff from streets is recognized as a major contributor to nonpoint source pollution in our local water bodies and waterways. Each time we drive our vehicles, small filings of heavy metals and drippings of various oils and anti-freezes fall onto the roadway. When rains come, these toxic particles – along with sediment and trash – can be carried into stormwater pipes and discharged into creeks, streams, and rivers, contribute to pollutant loading, and disrupt the chemical composition of the various creates that use our surface waters.

Green stormwater infrastructure (GSI) filters and absorbs stormwater where it falls and reintroduces ecological functions back into the built environment. Using plant or soil systems such as bioretention

cells, GSI intercepts and filters stormwater to improve water quality, reduce flooding events, and support groundwater recharge.

GSI systems can also provide multiple community benefits, promoting health, equity, and human habitat, and be integrated into the street design to realize complementary goals related to safety, livability, and enhanced aesthetics.

The City of Hood River encourages implementing GSI to manage urban stormwater runoff as close to the source as possible. The diagram and images on this page depict potential opportunities for incorporating GSI during the implementation of the Heights Streetscape Plan.

Specific opportunities for integrating GSI into the streetscape will occur as projects are designed. The design and engineering of GSI facilities should take into consideration the presence of existing drainage infrastructure, infiltration capacity of soil, the design of the street, and other factors. The locations shown on the diagram below are based on the locations of existing catch basins and planned curb extensions and opportunities that may be created as part of the design of key intersections and placemaking opportunities.

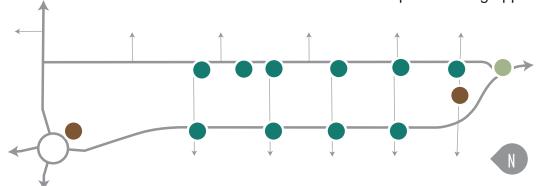


Diagram of potential opportunities; locations dependent on stormwater collection.

Bioretention cells at curb extensions

Bioretention cells can be integrated into curb extensions where stormwater is collected to provide water quality treatment and support goals related to traffic calming and reducing the distance of street crossings.







Opportunities at realigned intersections

The realigned intersections of 12th and 13th Streets may create space and an opportunity for a larger bioretention cell that can manage runoff from adjancent pavement areas.







Placemaking Opportunities

Future designs should explore opportunities for incorporating GSI features into the placemaking opportunities created at key intersections.











PLANT PALETTE: TREES

Adding trees to the Heights' streetscapes will help accomplish multiple goals including traffic calming, a healthy environment, and community gathering. Tree canopy should be maximized, using the largest tree feasible for each location, within constraints such as traffic clearances and below overhead utilities. Street improvements should be designed to provide enough soil volume so trees can realize their full potential. A diversity of species builds resilience to the changing climate, pests, and diseases. To the extent practical existing street trees should also be preserved where the trees are in good health and do not conflict with future street improvements.

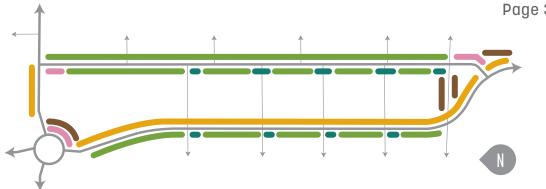


Diagram of preliminary intended locations for tree types

Typical Street Tree

Medium/large trees create an urban forest where space allows.

Cercis canadensis



Koelreuteria paniculata





Zelkova serrata 'Village Green'



Columnar • Used where space is limited adjacent to travel lanes.







Stormwater •

Acer griseum

Used in Green Stormwater Infrastructure.





Small • Used where space is limited and under overhead utility lines.



Lagerstroemia 'Muskogee' Syringa reticulata 'Ivory Silk' Tilia cordata 'Halka'



Gateway





Mark entrances to neighborhood where space allows.

Tsuga mertensiana







PLANT PALETTE: SHRUBS AND GROUNDCOVER

Ground-level plantings help reinforce neighborhood identity and create aesthetic appeal. This palette of many drought-resistant plants are adapted to the current and future Hood Rive climate, reducing long-term maintenance needs. Year-round interest

is created with evergreens, colorful stems, and pollinator-friendly flowers. Importantly, plants must be naturally low growing to maintain sightlines for people walking, biking, and driving, appropriate for site-specific conditions.

General Right-of-Way

Used for all right-of-way planting in planting strips, curb bulbs, and medians that are NOT within sight-distance triangles of intersections, driveways, and crosswalks.

36" maximum height.

Juiperus conferta 'Blue Pacific'



Mahonia nervosa



Sedum spectabile 'Autumn Joy'



Sedum relexum 'Blue Spruce'



Perovskia atriplicifolia 'Little Spire'





Echinacea hybrid 'Cheyenne Spirit'





Spiraea japonica 'Walbuma'

Bouteloua gracilis 'Blonde Ambition'









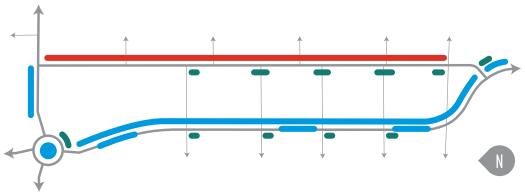


Diagram of preliminary intended locations for planting types

Intersections and Cycle Track

- 18" maximum height along the entire cycle track buffer.
- 24" inch maximum height within sight-distance triangles of intersections, driveways and crosswalks other than the cycle track buffer.

Geranium macrorrhisum



Pennisetum alopecuroides 'Little Bunny' Sedum spectabile 'Autumn Joy'



Stormwater

Plants adapted to both wet and dry conditions with a focus on habitat value.

Asclepias incarnata





Carex elata 'Aurea'



Mahonia nervosa



Cornus sericea 'Kelseyi'



Spiraea japonica 'Walbuma'









ACCESS MANAGEMENT (DRIVEWAYS)

Driveways are an essential part of any street network and represent the start and end points of vehicle trips to a location. Each driveway also represents a conflict point between people driving and people walking or biking. The number of driveways along a street relates to the safety and performance of the street and therefore, access should be managed through thoughtful consideration of context, function, and location.

Reasons for managing driveway access include:

- Driveways are too close to intersections.
- Limited sight distance for judging traffic.
- Reduce conflicts points to increase safety.

Good access management begins at the planning level and proceeds through design, construction, and ongoing maintenance. Driveways can allow all movements or restrict various movements into and out of a driveway. When well executed, access management will result in an appropriate balance between the safety and operating efficiency of the street and effective access to adjacent properties. Access management can also support economic goals within a community.

Goals for managing driveway access in the Heights include:

 Removing (or limiting access at) driveways that cross cycle tracks where possible to reduce conflict points between people driving and biking.

 Removing driveway access from 13th Street where adjacent parcels have access from adjacent streets or alleys to help maintain traffic flow and reduce conflicts for people driving.

The map below identifies existing driveway locations that relate to these goals. As properties redevelop and future street improvements are implemented changes should be considered for these driveways.

RELEVANT COMMUNITY PRIORITY GOAL



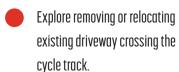
Calm traffic and improve intersections

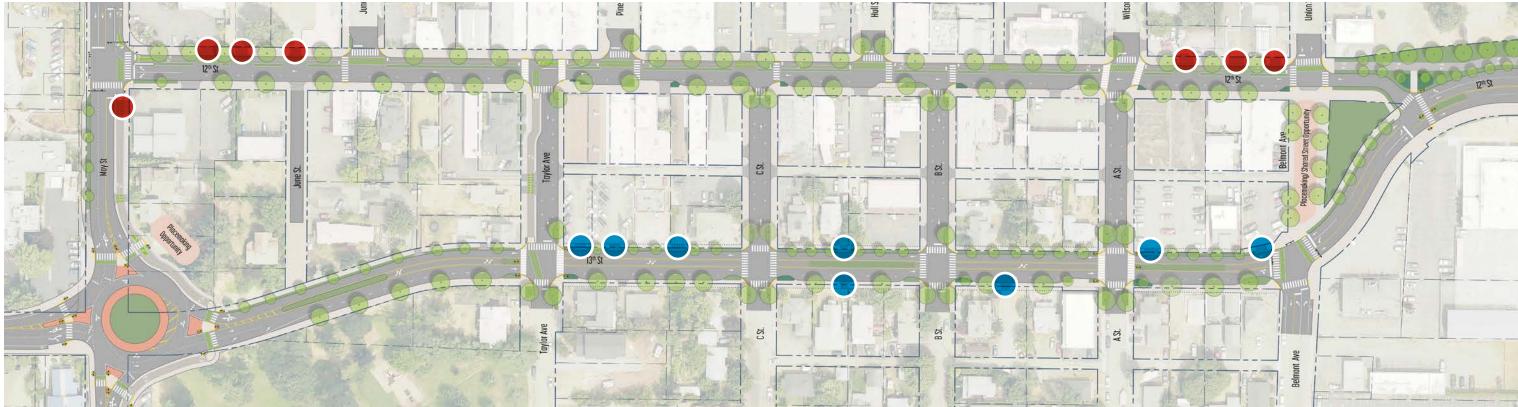


Safe, comfortable streets for people

ACCESS MANAGEMENT RECOMMENDATION

Explore shifting existing driveway access to adjacent side street or alley.





Map of access mangagement opportunities













IMPLEMENTATION PLAN







INTRODUCTION TO IMPLEMENTATION PLAN

The Heights Streetscape Plan changes how streets are used and how traffic and people move through the Heights. This requires improvements at the major intersections of May and 13th Streets and Belmont Avenue and 12th and 13th Streets, and along 12th and 13th Streets in the Heights. Implementing these community priorities will take time and require significant resources. Elements that add to the complexity include:

odot coordination: The city needs to determine whether OR-281 continues to operate under ODOT jurisdiction, or if part or all of the existing highway system through the Heights becomes the City's under a Jurisdictional Transfer.

property acquisition: Intersection improvements require the acquisition of real property to implement future improvements. This process requires specific procedures that must be followed to execute a negotiated purchase of impacted properties and takes time.

PROJECT FUNDING: Funding must also be identified for the future design and construction of improvements.

This implementation plan balances the complexity of large intersection projects with the community's desire to begin implementing improvements quickly. Sequencing incremental improvements that build toward the long-term vision first, the plan identifies opportunities for projects that can be implemented more easily while the more complex intersection and circulation projects are

developed. The plan also focuses on limiting the potential for removal and replacement of infrastructure as changes occur over time. To execute this plan three types of projects have been identified: Smaller Pedestrian and Bicycle Improvements; Key Circulation Projects; and Fill in the Blocks Projects.

Individual project information is provided on a series of Project Profile pages that includes more description of the project scope and design considerations for future implementation.

SMALLER PEDESTRIAN AND BICYCLE IMPROVEMENTS

Smaller-scale projects that advance toward overall project goals and can be executed while key intersection projects are developed.

These projects improve infrastructure for people walking and biking without using significant resources or constructing improvements that will need to be replaced during future implementation.

KEY CIRCULATION PROJECTS

Large, high priority community projects that improve key intersections, converting 13th Street to two-way traffic, and providing safe routes to schools.

After two-way traffic is established, space will be available for the cycle track along 12th St. Initially a cycle track can be constructed with temporary materials until the blocks along 12th St are built out to the final street cross section. These projects include the build out of infrastructure along May St and the widening of 12th St south of Belmont to Pacific Ave.

FILL IN THE BLOCKS PROJECTS

Projects focused on building out 12th Street and east/west streets to the final street cross sections and intersection designs.

Each of these ten blocks and ten minor intersections require curbs to be adjusted to establish new sidewalks widths. The plan recommends phasing the build out of these streets and intersections while allowing flexibility based on community and local business priorities and as needed to support the replacement of existing utility infrastructure planned by the City's Public Works Department.





IMPLEMENTATION PLAN

Start with intersection improvements across 13th St to improve neighborhood access and safety.



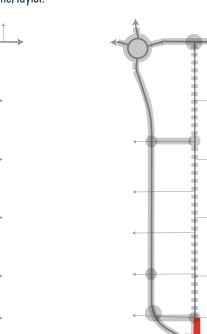






Kev intersection improvements that can be developed without converting 13th Street to twoway traffic.

Complete kev intersections at the south end and convert to two-way traffic on 13th St. Include an interim cycle track on 12th St to connect to Pine/Taylor.



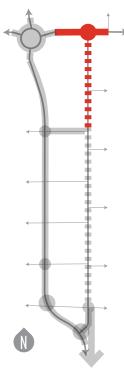
Coordinate with ODOT to

reconfigure and widen 12th St

from Union St to Pacific Ave to

provide a Safe Route to School

Cycle track and street improvements along May St for Safe Routes to School access and extend the interim cycle track on 12th St from Talyor Ave.



May St Safe Route to School

Full street improvements along

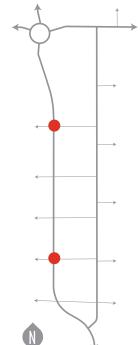
May St between roundabout and

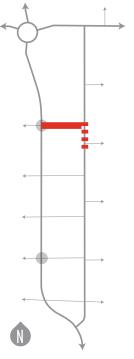
interim cycle track from Taylor Ave

+++++

12th St including traffic signal

improvements to extend the





Taylor Ave Neighborhood Connection

Full reconstruction of Taylor Ave and

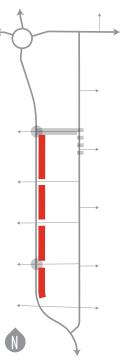
interim improvements on 12th St

between Pine St and Taylor Ave.

+++++

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\$1.2M - \$1.6M



KEY CIRCULATION PROJECTS

May St Roundabout

New roundabout constructed to work with existing one-way traffic until two-way conversion is implemented.

Belmont, 12th, and 13th **Intersections and Two-Way Traffic**

New intersection improvements at 12th St, 13th St, and Belmont Ave; new medians and restriping on 13th St and roundabout modifications for two-way traffic; interim cycle track on 12th St.

+++++ !!!!!

\$11.8M - \$15.1M + Property Aquisition







Bike Connection to Pacific Ave

Restripe 12th St, narrow the roadway, and widen the existing sidewalk with a new retaining wall to allow construction of a shared use path.

+++++ 11111

\$4.3M - \$5.5M





11111

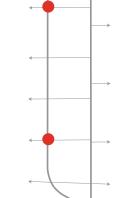
to May St.

\$4.9M - \$6.3M









SMALLER PEDESTRIAN AND BICYCLE IMPROVEMENTS

Key East/West Crossings on 13th St

Curb extensions, RRFBs, and other

improve access and safety at Taylor

+++++

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\$1.3M - \$1.7M

intersection improvements to

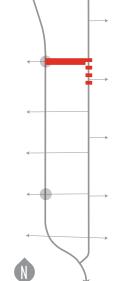
and A Streets.

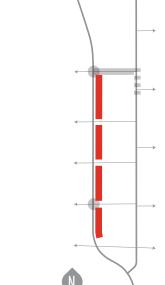
COMPLEXITY

PRIORITY

COST

GOALS





East Sidewalk Along 13th St

New sidewalk and planting strip between (but not at) intersections. Include driveway removals for access management where possible.

+++++ 11111 \$0.8M - \$1.1M









\$12.8M - \$16.4M + Property Aquisition























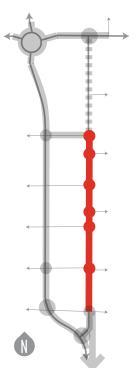




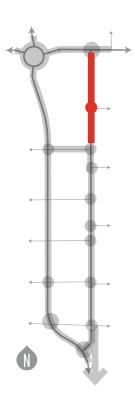




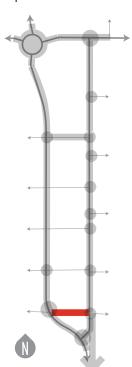




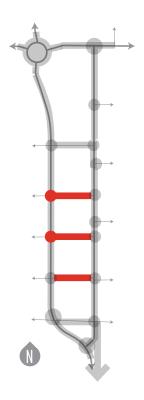
Continued reconstruction of 12th St with new sidewalks and the final cycle track north of Taylor Ave.



Reconstruct Belmont Ave as a shared street and community space for all. Must happen after (or as part of) key intersection improvements at Belmont Ave.



Improve east/west streets with new sidewalks and amenities to complete street improvements in the Heights.



FILL IN THE BLOCKS

12th Street: Belmont Ave to Taylor Ave

Full reconstruction of 12th St in phases between Union St and Taylor Ave to provide wider sidewalks, the protected cycle track, and other streetscape amenities.

12th Street: Taylor Ave to May St

Full reconstruction of 12th St to provide wider sidewalks, the protected cycle track, and other streetscape amenities.

Belmont Shared Street

Full reconstruction of Belmont as a plaza and shared street for all.

A, B and C Streets

Reconstruction of streets to provide new sidewalks and other intersection and infrastructure as needed.

COMPLEXITY +++++ **PRIORITY**

\$10.4M - \$13.4M COST

GOALS









\$3.4M - \$4.4M









\$1.9M - \$2.5M









\$2.8M - \$3.6M







IMPLEMENTATION PLAN LEGEND

COMPLEXITY →++++

The complexity of each project is based on the type of infrastructure to be designed and implemented, the need for property acquisition, the potential need for coordination with ODOT, and overall the change or impact to the exisitng street network.



The priority for each project is based on the community and Urban Renewal Agency's focus, or priority, for improving the Heights.

COST

The cost of each project is based on a planning level opinion of probable construction cost to design and implement future street improvements as documented in this report. This includes costs for design, management, of permitting of each project and design and construction contingencies. The cost does not include property acquisition, undergrounding existing overhead electrical and franchise utilities, or replacing public utilities mains. See project cost appendix for additional information.

GOALS

The goals shown identify how each project aligns with the community's priority goals.



Promote livable community and economy



Calm traffic and improve intersections



Local Identity



Gathering and Placemaking

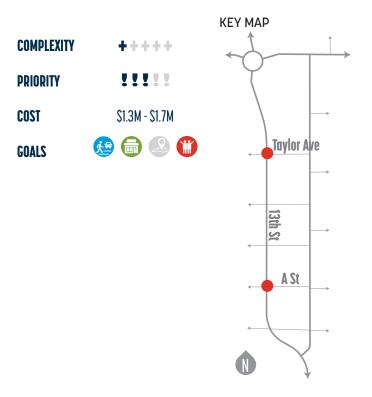






SMALLER PEDESTRIAN AND BICYCLE IMPROVEMENTS

Key East/West Crossings on 13th Street



SCOPE

This project will design and construct the following at A Street and Taylor Avenue:

Curb extensions on the west side of 12th
 Street including curb extensions on A Street
 and on Taylor Avenue as shown in the
 preferred concept plan. Curb extensions on
 the east/west streets should help to calm
 traffic turning to/from 12th Street at these
 intersections.

- Rectangular rapid flashing beacons at crosswalks to improve safety and visibility of crosswalks.
- Curb ramp improvements on the east side of these intersections.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- The curb extension at A Street could be designed to accommodate a future in-lane bus stop for Columbia Area Transit (CAT).
 Coordination with CAT is needed to identify location and size parameters for a future bus stop. It may be appropriate to initially design the curb extension at this location to have more planting that can be removed if a bus stop is installed in the future.
- Consider incorporating specialty or decorative crosswalk markings to increase visibility of these crosswalks and incorporate community identity into the projects.
- Curb returns and curb ramps on the east side of 13th Street should consider the layout of future street improvements on Taylor Avenue and A Street to reduce the potential for future rework as those streets are improved.
- Opportunities for green stormwater infrastructure are shown in the preferred

concept plan based on the location of existing storm drain catch basins, however, flow paths of stormwater runoff will need to be confirmed in the field to identify whether locations shown are appropriate. The project should also consider whether installing stormwater treatment for future street improvements that drain to these intersections is desired to reduce the potential for future rework as those streets are improved.

UTLITY COORDINATION

1. Water main replacement

City CIP Project: U-9

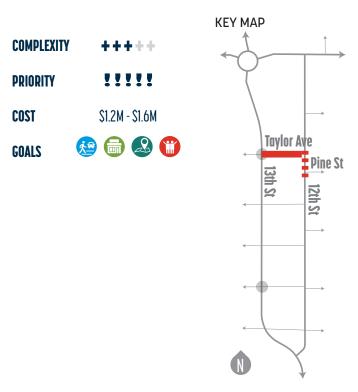
<u>Project Title</u>: A St. between 12th and 17th water main replacement

Project Description: An existing 4-inch lead jointed pipe along May St. between 12th St and 17th St. is scheduled for replacement. This is part of a city-wide project to remove all lead jointed pipe from the City's distribution system. Additionally, currently deficient fire flows will be remedied by up-sizing the 4-inch line to an 8-inch PVC line.



SMALLER PEDESTRIAN AND BICYCLE IMPROVEMENTS

Taylor Avenue Neighborhood Connection



SCOPE

This project will design and construct the following:

- New sidewalks and a two-way cycle track on Taylor Avenue between 12th and 13th Streets.
- Interim improvements on 12th Street to accommodate an interim connection for people biking from Pine Street to Taylor Avenue.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- The proposed cycle track alignment jogs at the east end of Taylor Avenue due to an existing building encroachment into the right of way on the north side of street.
- Existing utility poles may need to be relocated to improve access along the widened sidewalks. Clearances of utility poles should be considered along the cycle track.
- Green bicycle crosswalk markings across 13th Street are recommended to support crossings for people biking.
- Coordination with ODOT will be required to develop a plan for an interim cycle track on 12th Street to facilitate a connection from Pine to Taylor for people biking. The design could explore opportunities for removing existing parking on both sides of the street and shifting the travel lanes to the west of the existing roadway to accommodate a 10-foot two-way cycle track and three-foot buffer, which would allow a physical barrier between the travel lane and cycle track. The length of interim improvements, along 12th Street, will depend on the distance of the lane shift and resulting transition length from the existing roadway to the interim condition.

- Consider opportunities for incorporating interim crosswalk enhancements at the south leg of the 12th and Pine Streets intersection to improve access for people walking across 12th Street.
- Consider where to end street improvements
 at the east end of Taylor Avenue. It may be
 desirable to stop street improvements prior to
 the intersection at 12th Street to reduce the
 potential for future rework at this intersection,
 however, this will need to consider how
 stopping improvements short of the
 intersection will impact accessibility for people
 walking along 12th Street.

UTLITY COORDINATION

1. Water main replacement

City CIP Project: STP-10

<u>Project Title</u>: Heights Waterline Improvements, Taylor Ave, 12th - 18th

Project Description: An existing 4-inch lead jointed pipe along starting at the intersection of 10th and Marion and follows 9th St North to Pine St needs to be replaced. All lead jointed pipe is to be removed from the City's distribution system per the Oregon Health Authority. Additionally, currently deficient fire flows will be remedied by upsizing the 4-inch line to an 8-inch PVC line.

2. Sewer main replacement

City CIP Project: M-4

<u>Project Title</u>: Taylor Ave. 12th to 18th Sewer Pipe Replacement Improvements, Taylor Ave., 12th to 18th St

Project Description: A section of sewer line located on Taylor Ave. between 13th and 18th St. from manhole N35AD08 to manhole N35AC08 will need to be replaced with the same size pipe due to roots and grease buildup. This portion of the sewer line has become a continuous maintenance problem for the City. The pipeline is in poor condition and has a root invasion problem which is a primary contributor to infiltration of water into the sanitary sewer system. The project will replace two sections of 8" concrete pipe totaling approximately 650 feet. The project will also replace two sections of 10" concrete pipe totaling approximately 575 feet.





SMALLER PEDESTRIAN AND BICYCLE IMPROVEMENTS

East Sidewalk Along 13th Street



SCOPE

This project will design and construct new sidewalk and planting strip improvements along 13th Street between Bemont Avenue and Taylor Avenue. Sidewalk improvements are not intended to extend through intersecting east-west streets in order to reduce the potential for future rework at these intersections as future intersection improvements are constructed at A, B, and C Street.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- Coordinate with adjacent property and business owners to explore opportunities for removing existing driveways for access management where possible; see the Access Management (Driveways) section of this plan for more discussion on this topic.
- Street trees will need to be columnar in form due to the limited offset from the adjacent travel lane. Consider using soil cells or structural soil to provide additional soil volume and rooting area for trees to create a better environment for the street trees and opportunity for quick establishment and growth of the trees.
- Consider selecting shrubs and ground covers that help create more buffer between the sidewalk and travel lane.

UTLITY COORDINATION

No planned capital projects overlap with this project based on information provided by the City's Public Works Department.

KEY CIRCULATION PROJECTS

May Street Roundabout

COMPLEXITY

PRIORITY

COST





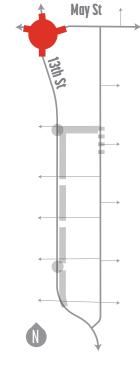
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\$12.8M - \$16.4M







KEY MAP

SCOPE

This project will design and construct a roundabout for the intersection of 13th and May Streets. The roundabout will be designed for two-way traffic on 13th Street; however, when initially implemented the traffic on 13th Street south of May Street will still be one-way traffic. The design should consider what modifications to the intersection are needed to support one-way traffic on 13th Street until the conversion to twoway traffic occurs as part of future improvements

at the intersections Belmont Avenue, 13th Street, and 12th Street.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- The final layout of the roundabout should explore opportunities for reducing impacts to adjacent properties.
- The intersection will need to be regraded and retaining walls constructed to incorporate the roundabout into the intersection area due to the slopes of the existing roadways and grades of adjacent properties.
- If federal funding is used to construct the roundabout the environmental review process associated with USDOT Section 4f is significant and relevant due to impacts to the existing park on the southwest corner of the intersection and should be considered at planning phase to understand the probability of approval.
- Property acquisition is required to construct the improvements; property acquisition and impacts to existing properties tend to be significant with respect to project risk compared to other common projects issues and should be considered and monitored throughout the design process.

Additional background information, traffic studies (e.g. traffic modeling), and findings from the Streetscape Plan study process were developed to inform the planning level intersection layout shown in the final preferred concept plan.

DESIGN CONSIDERATIONS IF THE INTERSECTION REMAINS WITHIN ODOT JURISDICTION

- An Intersection Control Evaluation (ICE) study must be approved by the State Traffic and Road Engineer. ODOT recommends getting this approval before proceeding with engineering design as ODOT will not review the intersection design until the concept has been approved. Note, much of the technical and alternatives analysis work completed as part of the development of the Streetscape Plan would feed into the ICE.
- Mobility standards used for the preliminary evaluation conducted as part of the Heights Streetscape Plan use assumptions that more strongly prioritize multi-modal transportation than ODOT standards. ODOT would typically use standards from the ODOT Highway Design Manual, which requires lower volumeto-capacity (v/c) ratios than were used for the development of the Streetscape Plan. The City was willing to accept a "reasonable" level of vehicle congestion (e.g., v/c less than 1.0) to help to achieve a more multimodal street environment. ODOT's review of an ICE study

may not support those priorities or agree to a design exception.

UTLITY COORDINATION

1. Road Fund

City CIP Project:

Project Title: May Street Elevated Sidewalk

Project Description: This project consists of installing a new retaining wall on the north side of the existing easement and replacing material that has washed away from underneath the sidewalk and roadway with new road fill and surfacing materials. In addition, the existing storm basins and manhole will be replaced and raised to accommodate the restored grades along the sidewalk and replaced road section. Also, part of the project is new ADA ramps at the intersection of May and 13th Street.





KEY CIRCULATION PROJECTS

Belmont Avenue, 12th Street, and 13th Street intersections and Two-way Traffic on 13th Street



SCOPE

This project will design and construct the following:

- Intersection improvements at 13th Street/ Belmont Avenue, 12th Street/Bemont Avenue, and where 12th and 13th Streets merge to create a new intersection.
- Medians and restriping along 13th Street to support two-way traffic between the roundabout at May Street and the new intersection of 12th and 13th Streets.

- Interim cycle track improvements along 12th Street from Union Street to Taylor Avenue.
- As needed modifications to the previously installed roundabout at 13th and May Streets to accommodate two-way traffic on 13th Street.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- Sidewalk improvements along the east side of 13th Street between May Street and Belmont Ave should be installed prior to this project so there is a safe, comfortable pedestrian route adjacent to the new northbound travel lane.
- Future transit stops will need to be coordinated with Columbia Area Transit. The location shown along 13th Street in the southbound direction is based on preliminary coordination during the development of the Streetscape Plan. A future transit stop north of Taylor Avenue in the northbound direction may also be desired; CAT noted this stop could also be located on 12th Street north of June Street, however, a location 12th Street will need to be designed to reduce conflicts with the two-way cycle track. In-lane transit stops will also need to be evaluated according to ODOT standards if 13th Street remains ODOT jurisdiction.

- ODOT has noted the Oregon Bike bill applies to both ODOT and city-owned facilities, which means cyclists must be accommodated on all streets. This may require coordination and documentation showing that a parallel bike facility is provided on 12th Street.
- Interim cycle track improvements along 12th
 Street could be delineated with paint and post
 channelization. Raised planters or wheel stop-type curbing could enhance the interim
 separation between the travel lane and cycle
 track.
- Opportunities for green stormwater infrastructure are shown in the preferred concept plan based on the location of existing storm drain catch basins. Flow paths of stormwater runoff will need to be confirmed in the field to identify whether locations shown are appropriate.

DESIGN CONSIDERATIONS IF THE INTERSECTION REMAINS WITH ODOT JURISDICTION:

An Intersection Control Evaluation (ICE) study must be approved by the State Traffic and Road Engineer. ODOT recommends getting this approval before proceeding with engineering design as ODOT will not review the intersection design until the concept has been approved. Note, much of the technical and alternatives analysis work completed as part of the development of the Streetscape Plan would feed into the ICE.

- ODOT review comments on the preferred concept included a comment that southbound queuing seems excessive, and more analysis may be helpful to understand the queuing.
- ODOT has noted that traffic calming strategies that place vertical elements next to the street (e.g., trees in landscaping strips) will need to be consistent with ODOT's clear zone requirements and would be subject to design evaluation.
- ODOT has specific requirements for addressing standing water in the travel lane and the 11-foot northbound travel may require more catch basins for stormwater collection to meet these requirements.
- An ODOT design exception would be needed for the 10-foot two-way left turn lane. ODOT standards require 11-foot turn lanes.
- An ODOT design exception would be needed for the 6- to 10-foot sidewalks, not including landscaping. ODOT standards in a Central Business District context require 10- to 14-foot sidewalks.

UTLITY COORDINATION

Water main replacement

City CIP Project: U-9

Project Title: A St. between 12th and 17th water main replacement

See description in Project Profile: Key East/West Crossings on 13th Street.







KEY CIRCULATION PROJECTS

Bike Connection to Pacific Avenue

COMPLEXITY +++++ 11111 **PRIORITY**

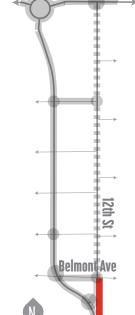
COST





\$4.3M - \$5.5M





KEY MAP

SCOPE

This project will reconfigure and widen the road prism to construct a 12-foot shared use path and 5-foot planting strip along the east side of the roadway.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- Coordination with ODOT will be needed for the widening and rechannelization of 13th Street to accommodate the shared use path and five-foot buffer that is required between the path and travel lane.
- Existing utility poles and overhead distribution will need to be relocated to a new planting strip between the roadway and shared use path.
- Geotechnical engineering will be needed to evaluate the existing slope and provide design recommendations for a retaining wall to enable the widened road prism adjacent at the top of the existing slope.
- Impacts to vegetation on the slope beyond the existing sidewalk should be minimized to the extent possible to reduce impacts to existing native vegetation, which was planted by and is currently maintained by the community.
- The design will need to identify a solution that works at the parcel with the Shell gas station and Dutch Bros. Coffee drive-thru business. It may be necessary to acquire an easement or expand the right-of-way to continue the shared use path. A solution will also be needed to provide a safe route across the existing driveway.

UTLITY COORDINATION

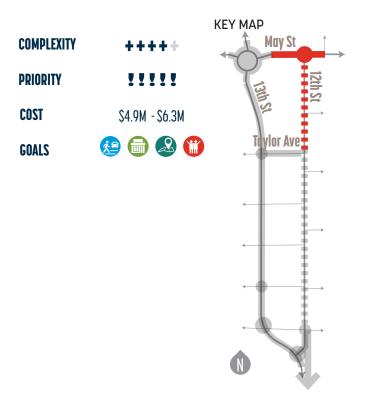
No planned capital projects overlap with this project based on information provided by the City's Public Works Department.





KEY CIRCULATION PROJECTS

May Street Safe Route to School



SCOPE

This project will design and construct the following:

- Full street improvements including restriping, adding a two-way cycle track, and protecting or replacing the street trees and planting strip on May Street from the roundabout at 13th Street to the eastern intersection with 12th Street.
- A new traffic signal with bike signals at 12th

Street.

 Interim cycle track improvements along 12th Street from May Street to Taylor Avenue.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- Considerations for how and where to terminate the two-way cycle track east of 12th Street needs to be determined. The preferred concept plan suggests the two-way cycle track on May Street continues east of 12th Street, however, the City's current TSP shows shared lane markings on May Street east of 12th Street.
- The design of the cycle track at the intersection with 12th Street will need to consider how best to accommodate turning movements for people biking. The preferred concept plan incorporates turning spaces into the cycle track at the intersection.

UTLITY COORDINATION

1. Sewer Fund

City CIP Project: M-14

Project Title: Clay Pipe Replacement- May St

Between Park and 12th

Project Description: A section of sewer pipe that

is located at May St and 12th St will need to be replaced with the same size pipe (8"). This section of pipe was likely installed in the late 1800's or early 1900's and is in poor condition. This project will correspond with the lead jointed water line replacement in the same area. When the two projects are completed all sewer and water pipes in this area of May St. will have been upgraded.

2. Water Fund

City CIP Project: STP-10

<u>Project Title</u>: Heights Improvements: May Park St. -12th St

Project Description: An existing 6-inch lead jointed pipe located on May St between Park St and 12th St needs to be replaced. All lead jointed pipe is to be removed from the City's distribution system per the Oregon Health Authority. Additionally, currently deficient fire flows will be remedied by upsizing the 6-inch line to a 10-inch PVC line.

3. Road Fund

City CIP Project:

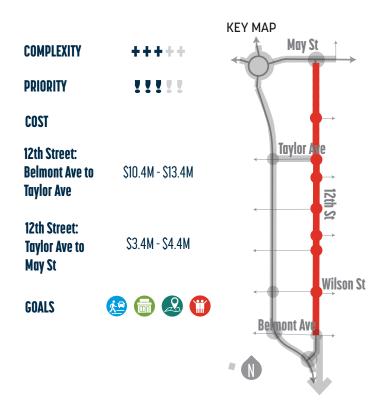
<u>Project Title</u>: Safe Routes to School Infrastructure Improvements

Project Description: Safe Routes to School (SRTS) infrastructure budget is intended to be used to install/expand/upkeep infrastructure projects identified in the 2022 Safe Routes to School Project Report, or similar.



FILL IN THE BLOCKS

12th Street: Belmont Avenue to May Street



SCOPE

This project will design and construct street, sidewalk, and intersection improvements along 12th Street.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- Consider how to transition improvements block-by-block or project-by-project as street improvements are constructed over time.
- Coordinate with adjacent property and business owners to explore opportunities for removing existing driveways to improve safety for people biking by removing conflicts between people biking and driving; see the Access Management (Driveways) section of this plan for more discussion of this topic.
- A future transit stop, just north of June Street
 may be desired by Columbia Area Transit
 (CAT). A design in this location will need to
 consider how to incorporate the cycle track
 through the bus stop area; CAT noted an
 alternate location could be on 13th Street
 north of Taylor Avenue to avoid potential
 conflicts with the two-way cycle track. A stop
 on 13th Street could be implemented as part
 of the Belmont, 12th, and 13th intersections
 and two-way traffic project.
- Opportunities for green stormwater infrastructure are shown in the preferred concept plan based on the location of existing storm drain catch basins. Flow paths of stormwater runoff will need to be confirmed in the field to identify whether locations shown are appropriate.

UTLITY COORDINATION

Water Fund

City CIP Project: LJ-7

Project Title: 12th St. May to Wilson Lead Joint

Pipe Replacement

Project Description: Existing 6-inch cast iron pipe along 12th St. from May St. to Wilson St. needs to be replaced. Since the City requires all new water mains to be a minimum of 8-inches, this project will consist of replacing all sections of pipe along this route with 8-inch PVC. This project will require the replacement of approximately 1,420 feet of 6-inch cast iron pipe with 8-inch PVC.







FILL IN THE BLOCKS

A, B, and C Streets



SCOPE

This project will design and construct street, sidewalk, and intersection improvements as shown in the implementation plan.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- Intersection designs, including the presence and size of curb extensions, should consider how to best support one-way vehicle access to and from 12th and 13th Streets while aligning with the community's vision for safe intersections that are comfortable for people walking and biking.
- Coordinate with adjacent property and business owners during the design including for the placement of driveways and potential creation of on-street loading zones in the parking lane to support delivery needs.

UTLITY COORDINATION

1. Water main replacement

City CIP Project: U-9

<u>Project Title</u>: A St. between 12th and 17th water main replacement

<u>Project Description</u>: An existing 4-inch lead jointed pipe along May St. between 12th St and 17th St. is scheduled for replacement. This is part of a city-wide project to remove all lead jointed pipe from the City's distribution system. Additionally, currently deficient fire flows will be remedied by up-sizing the 4-inch line to an 8-inch PVC line.

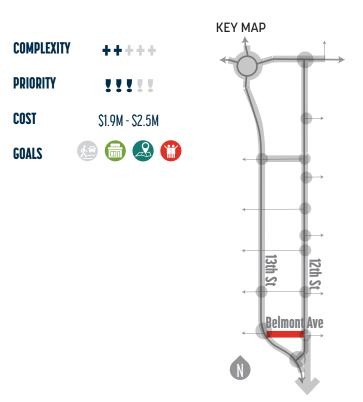






FILL IN THE BLOCKS

Belmont Shared Street



SCOPE

This project will develop and implement a design for a shared street (or festival street) for the purpose of creating a place for pedestrian-oriented special activities, such as outdoor markets, food trucks, community celebrations, and other events. The street is intended to provide a flexible space for events in the right-of-way that can adapt to community needs while maintaining access to the alley and local businesses.

DESIGN CONSIDERATIONS

See the Preferred Concept Plan section of this report for plan view graphics of planned street improvements, typical street cross sections, and key design features where applicable. Additional considerations for this project include:

- Develop and execute a community engagement plan to engage local business and property owners and the community to solicit public input to inform the design of the shared street.
- Confirm existing utility conditions and needs (i.e. locations, extents, size, and any other requirements for replacing utilities) so that future utility work does not impact the newly constructed shared street.
- Consider how the space accommodates and moves people through the space that are biking on Belmont Avene to and from the twoway cycle track on 12th Street.
- Include a curbless street design to allow better flexibility as a public space.
- Incorporate paving materials and other street features to delineate vehicular areas to the alley and parking for local businesses and consider how to accommodate periodic closures to vehicle access for events.
 Materials selected should be durable, maintainable, and allow for needed maintenance access.

- Use paving materials and patterns and vegetation to provide a streetscape with a unique look and feel that also compliments the neighborhood identity.
- The design should consider and respond to the current and envisioned adjacent property uses.
- The design should be inclusive for all users, both in meeting relevant accessibility standards and seeking ways to provide access and an inviting experience for people of all abilities and backgrounds.
- Consider incorporating utility infrastructure to support future events (e.g. electrical infrastructure to power a variety of needs including temporary lights, speakers, vendor needs, and other electrical uses that may be desired during events.
- Explore opportunities for integrating permanent and temporary lighting, including string lighting that could go across the sidewalks and/or roadway.

UTLITY COORDINATION

No planned capital projects overlap with this project based on information provided by the City's Public Works Department.





FUNDING AND GRANT STRATEGIES

A planning level opinion of probable project cost has been developed for each project included in the Implementation Plan. Project costs are based on the street improvements shown in the preferred concept plan and include allowances for design, permitting, and management and contingencies for the design and construction phases of future projects. The project costs do not include costs for property acquisition or the replacement of public or private utilities, which will need to be determined on a project-by-project basis. Project costs were developed to help identify the range in cost that may be needed to facilitate the implementation of future projects, see Appendix X for a summary and additional detail of the planning level opinion of probable project costs.

The total cost of street improvements for all of the projects identified in the preferred concept plan is significant and could cost up to two times the cost of the entire, city-wide Financially Constrained Transportation System Plan as amended April 2021.

To support the funding and implementation of future projects a variety of funding sources will be needed. This will likely include existing and new local revenue streams and other outside funding sources (e.g. state and federal programs and grants). This table identifies potential funding sources for each project that may be applicable and appropriate depending on the final scope of each project.

The list of funding sources was compiled based on a review of the potential funding sources identified in the City's TSP, coordination with city staff, and other current state and federal programs and grants; the City's TSP includes descriptions for many of the funding sources listed.

Table of Funding Sources

	Funding Source	Key East/West Crossings on 13th Street	Taylor Ave Neighborhood Connection	East Sidewalk Along 13th Street	May Street Roundabout	Belmont, 12th, and 13th Intersections	Bike Connection to Pacific Ave	May Street Safe Route to School	A , B and C Streets	12th Street: Belmont Ave to Taylor Ave	12th Street: Taylor Ave to May Steet	Belmont Shared Street
1000	ODOT Jurisdictional Transfer Funding	•		•	•	•	•	•		•	•	
	ODOT Great Streets Program				•	•	•	•				
	ODOT Safe Routes to School Program	•	•		•	•	•	•		•	•	
	ODOT Funding Partnership				•	•	•	•				
	ODOT Statewide Transportation Improvement Program		•		•	•	•	•		•	•	•
City/ Local	Urban Renewal District Funds	•	•	•	•	•	•	•	•	•	•	•
	City General Fund	•	•	•	•	•	•	•	•	•	•	•
	City Road Fund	•	•	•	•	•	•	•	•	•	•	
	City Stormwater Fund	•	•	•	•	•	•	•	•	•	•	•
	City Sewer Fund		•		•			•				
	City Water Fund	•	•		•	•		•	•	•	•	
	Business Improvement District		•	•	•	•	•	•	•	•	•	•
	Local Improvement District	•	•	•	•	•	•	•	•	•	•	•
	Street Utility Fee or Transportation System Development Charge	•	•	•	•	•	•	•		•	•	
	Fee-In-Lieu Charge from Redevelopment in the Heights	•	•	•	•	•	•	•	•	•	•	•
Federal	Surface Transportation Block Grant Program				•	•	•	•				
	Transportation Alternatives Program				•	•	•	•				
	Safe Streets and Roads for All Program		•		•	•	•	•		•	•	
Other	Direct appropriations from State				•	•						
	Developer Implemented Street Improvements								•	•	•	
	Franchise utility providers		•		•	•	•	•	•	•	•	•
	Hood River Valley Park and Rec						•					•







IMPLEMENTATION NEXT STEPS

Upon approval of the final Heights Streetscape Plan the City of Hood River and Urban Renewal Agency will need to update existing plans and begin to plan future projects. Key steps of this includes:

- 1. Updating the City's Transportation System
 Plan to reflect the Heights Streetscape Plan,
- 2. Updating the Heights District Urban Renewal Plan, and
- 3. Coordinating with ODOT to implement future projects and discuss a potential jurisdictional transfer of OR-281 through the Heights.

Jurisdictional Transfer

A jurisdictional transfer is the process of changing authority and responsibility of highway rights-ofway from the State to a local jurisdiction.

BACKGROUND

The function of OR-281 through the Heights has changed as the state highway system, the City of Hood River, and the neighborhood have grown and evolved.

Historically 12th Street provided access through the Heights and a way to and from the City of Hood River from areas to the south for goods movement. This route expanded with the addition of 13th Street through the ravine, improving the connection and access through the Heights, and over time 12th and 13th Streets became a state highway (OR-281). As a District Highway within the state highway system OR-281 provides connections between small urban areas, rural centers, and urban areas and serves local access and traffic. As the Interstate and State highway systems were built out to provide more efficient long-distance travel options the function of the existing District Highways was replaced.

Unfortunately, the roadway classification and the physical design of 12th, 13th, and May Streets, which make up OR-281, have not changed to meet the needs of the local community. Today, the primary use of 12th, 13th, and May Streets is intra-city commuters and patrons to the district's businesses and the most efficient routes for goods movement are either OR-35 or rural road connections to US-30, chiefly Frankton Rd., and Country Club Rd.

ODOT AS A PARTNER

ODOT was involved in this study process, reviewing, and providing comments on the preliminary design alternatives and the preferred concept plan. ODOT has also identified potential challenges for obtaining ODOT design approval for the community's vision if 12th, 13th, and May Streets remain a part of the state highway system. These challenges focus on design elements from the preferred concept plan that do not meet ODOT's Highway Design Manual standards.

Transferring OR-281, or a portion of OR-281, from ODOT's jurisdiction to the City's jurisdiction could provide the opportunity for the streets and

intersections to be reconstructed and operated consistent with local design standards and in a more urban and multi-modal way that better responds to the community's vision.

While each Jurisdictional Transfer is location specific, a common framework includes the following steps:

- Identifying geographic boundaries of the transfer and documenting current jurisdictional authorities and maintenance responsibilities.
- 2. Preparing research and analyses, including:
 - A current conditions assessment that estimates the cost to bring the transfer area to a "state of good repair", commonly referred to as a SOGR Analysis.
 - An inventory of the transfer area capital projects and costs in the ODOT Surface Transportation Improvement Plan.
 - c. An estimate ongoing operations and maintenance expenses at current and desired service levels.
- Negotiating the Transfer Agreement, including roles and responsibilities for district improvements and ongoing maintenance. This may require securing funding through state or federal appropriations, grants, or other external sources.

ODOT recognizes, and has communicated to the city, that a jurisdictional transfer may be necessary to help the city and community achieve their vision. ODOT supports moving forward with a transfer process and recommends starting the jurisdiction transfer process prior to beginning the design process for future projects.

RESOURCES

In 2018 Oregon Metro, the agency serving the Portland Metropolitan Area, conducted a Regional Framework for Highway Jurisdictional Transfer Study to support local leaders identify and facilitate successful transfers of roadway ownership. In addition to summarizing "the legal, regulatory, and policy framework for highway jurisdictional transfers" the study identified "best practices based on examples of completed roadway transfers in Oregon. The summary gives decision-makers the overarching policy framework, relevant case studies and best practices needed to identify, analyze, and implement jurisdictional transfers."

As part of this framework the document outlines the legal process for a jurisdictional transfer in Oregon, which can take years of planning and negotiation. This document also references ODOT's Transferring Roads: A handbook for making jurisdictional transfers (2003).

The city has completed a jurisdictional transfer for OR-30 through downtown and has some familiarity with the transfer process. We recommend the city review the Oregon Metro study report, review the process that was completed for the transfer of OR-30, and coordinate with ODOT to develop a Memorandum of Understanding to begin a jurisdictional transfer process.







APPENDICES







Content is for exhibit working document purposes only. Scale is approximate. NOT FOR CONSTRUCTION. Utilities are diagrammatic and are approximate locations based on City of Edmonds Web Map Data



