Flourishing Natural Environment

Healthy Built Environment

Vibrant Economy

Authentic Public Participation

Creating Connections

Healthy Community

Innovation

Charming • Safe • Beautiful

btw
BIKING • TRANSIT • WALKING

CITY OF MUKILTEO

By The Way Plan

Adopted by City Council on March 6, 2017
Resolution 2017-01

Acknowledgments:

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Preface: Moving Mukilteo Forward

"Moving Mukilteo Forward" provided the motto in the recently adopted Comprehensive Plan. Notably, this Comprehensive Plan introduced a story of Mukilteo that differed from previous plans. While previous plans focused on the future development of Mukilteo, Moving Mukilteo Forward engaged decision makers in the story of Mukilteo. This story introduced the vision and goals of enhancing the livability of the community.

To reach higher levels of livability and improved quality of life, *residents must have the choice* of how they want to move about the community. Parents should feel safe as their children walk to school; and anyone should not have to wear a safety vest just to go for a walk. Cyclists should feel safe within our roadways; and transit riders should find easy and convenient access to transit.

Moving Mukilteo Forward identified specific policies for implementation that would be identified through a functional plan. This plan, the Bike - Transit - Walk (BTW) Plan, is that document to implement the identified policies of the Comprehensive Plan. Some of these policies included adopting street standards to include pedestrian-oriented streetscape elements and bicycle facilities (TR6) as well as ensuring that street standards provide bike lanes, convenient bus stops, discourage high travel speeds, minimize significant environmental impacts and maintain character of existing residential neighborhoods (TR6a). Not only does the Comprehensive Plan require standards that include bike, pedestrian, and bus facilities; the Comprehensive Plan also identified destinations or 'points of interest' that these facilities must provide connectivity between parks, retail centers, schools, and regional transportation nodes (TR9).

By identifying selected alternatives and a priority criteria, these projects will be funded in the Capital Facilities Plan (CFP) and the Transportation Improvement Plan (TIP) as updated annually. While the total cost of the project list within this plan is quite large, this plan presents projects to be completed over a 30-year horizon in a prioritized fashion. Through this approach, additional opportunities for external funding sources may become more readily available as well as project pairing with adjacent infrastructure improvements including surface water, roadway resurfacing, water and sewer improvements, and private development along primary street frontage.

The realization of Moving Mukilteo Forward is based on the success of enhancing Mukilteo's healthy and livable community for future generations of residents. Through the implementation of the BTW Plan, the ability to move about the community regardless of mode will provide residents a deeper connection to the community while encouraging a healthy and safe environment for all ages and abilities.

By The Way Plan:
Bike - Transit - Walk

Mukilteo's history of development has created a pedestrian and bicycle network that lacks a north-south corridor from the Waterfront to the Southern City Limits. The purpose of this plan is to identify projects that promote the availability of options to residents to have more control of the travel choices.

While a corridor spine exists as the Mukilteo Speedway, this roadway is currently inadequate for safe usage by most pedestrians and bicycles. The BTW Plan recognizes that the Mukilteo Speedway is a state route highway with the primary focus on providing vehicle access to and from the Mukilteo Ferry. Even though the facility requires certain key pedestrian and bicycle improvements within destinations, such as Midtown, long-term solutions can be paired to complement the Mukilteo Speedway for a safe pedestrian and bicycle corridor.

Not only has Mukilteo's development lacked a central pedestrian spine, many neighborhoods lack a sense of safety to and from the neighborhood. Areas such as Sky-Hi-La are dependent on 8th Drive for a route to school, but many parents fear for the safety of their children walking to school. Some neighborhoods may be a mere few hundred feet from a destination, but barriers exist to reroute individuals over one half-mile out of the way, eliminating the reasonable choice of walking. Harbour Pointe, a master planned community, has the highest quantity of sidewalks in Mukilteo, but the neighborhood lacks bicycle facilities for the common user.

Goals:

The BTW Plan will meet the following goals:

1. Projects will provide safe connection between neighborhoods, parks, commercial districts, transit stops, schools, and regional pedestrian and bicycle networks.
2. Routes located within one half-mile of schools will identify projects to meet the principles and policies of Safe Routes to School.
3. Project corridors will provide multi-modal facilities to promote the choice of travel mode within the community.
4. Mukilteo Greenway signage and wayfinding will provide residents a sense of location and connection to better identify safe routes to move about the community.

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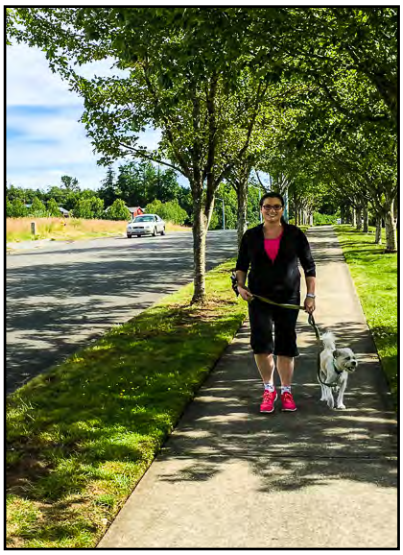
1

EXECUTIVE SUMMARY



Executive Summary

The Bike - Transit - Walk (BTW) Plan is a functional document as an extension of the Mukilteo Comprehensive Plan. The BTW Plan has identified a list of projects to improve connectivity between origins and destinations to provide a higher level of mobility and enhanced livability within Mukilteo. In order to identify these projects, a **data inventory** was conducted to identify existing facilities for pedestrian and bicycles, transit facilities, barriers, and safe routes to school. This inventory led to a **data analysis** to determine the existing gaps between where people are (origins) and places people want to go (destinations). This analysis included community outreach. These primary components led to a expansive list of projects.

To create a manageable list, the identified projects were classified based on the scale and grouped between:

- City-Wide Connections
- Local Connections
- Regional Facilities

From this grouping, the BTW Plan determined whether a project should be completed within the 'Near-Term' (less than 7-years), 'Mid-Term' (between 8-20 years), and 'Far-Term' (more than 20 years). By comparing these two lists, the BTW Plan creates a clear **Preferred Project** List, and a **Future Project** List.

By grouping these projects based on scale and connectivity, future decision makers are able to better identify projects for funding and implementation. To present conceptual project alternatives and begin to move towards **project implementation** through the Capital Facilities Plan and Capital Improvements Plan, this plan provides additional information including conceptual project cost, project priority score, and the timeline category. The priority scoring criteria was determined by the Planning Commission to consider different characteristics of each project such as proximity to schools as well as sense of safety.

To reach a level of preferred funding per year, the Preferred Projects were plotted into a management matrix into six sectors to determine which projects offer a high priority score and a low cost. Through the analysis of the management matrix, projects that were considered above average in priority score and less than twice the average project cost (Sectors 1&2) were identified the recommended annual funding level of $435,000.

The known limitations of the BTW Plan include the best available cost estimates and dependence on external funding. The cost estimates are limited due to changes of development costs of stormwater facilities, City staffing levels, and accuracy of projecting inflation. The other disclaimer is that under current revenue generation by the City of Mukilteo, project implementation will require external funding. While external funding seems like 'free money', there is project management costs that must be accounted for within the project costs.

Early Success & Future

One of the early success of the BTW Plan has been the implementation of bike lanes on Harbour Pointe Boulevard. With an estimated cost of over $200,000 to implement bike lanes as an individual project, the Public Works Department was able to continue an inter-jurisdictional agreement with Snohomish County to stripe the bike lanes with the annual roadway striping. Between the agreement and the work of our own Public Works Crews, Mukilteo has added over 2.5 miles worth of bike lanes for very little cost.

This type of success and innovation will allow Mukilteo to reach a level of connectivity that has limited Mukilteo Residents for so many years. Map 2 of the Executive Summary represents the future connectivity of Mukilteo within our community, and to our regional partners.

- Easy Wins -

Easy Wins are identified throughout this document to highlight different ways projects or interim projects can be implemented at low cost. Such easy wins include utilizing development standards upon development, project pairing, or project phasing.

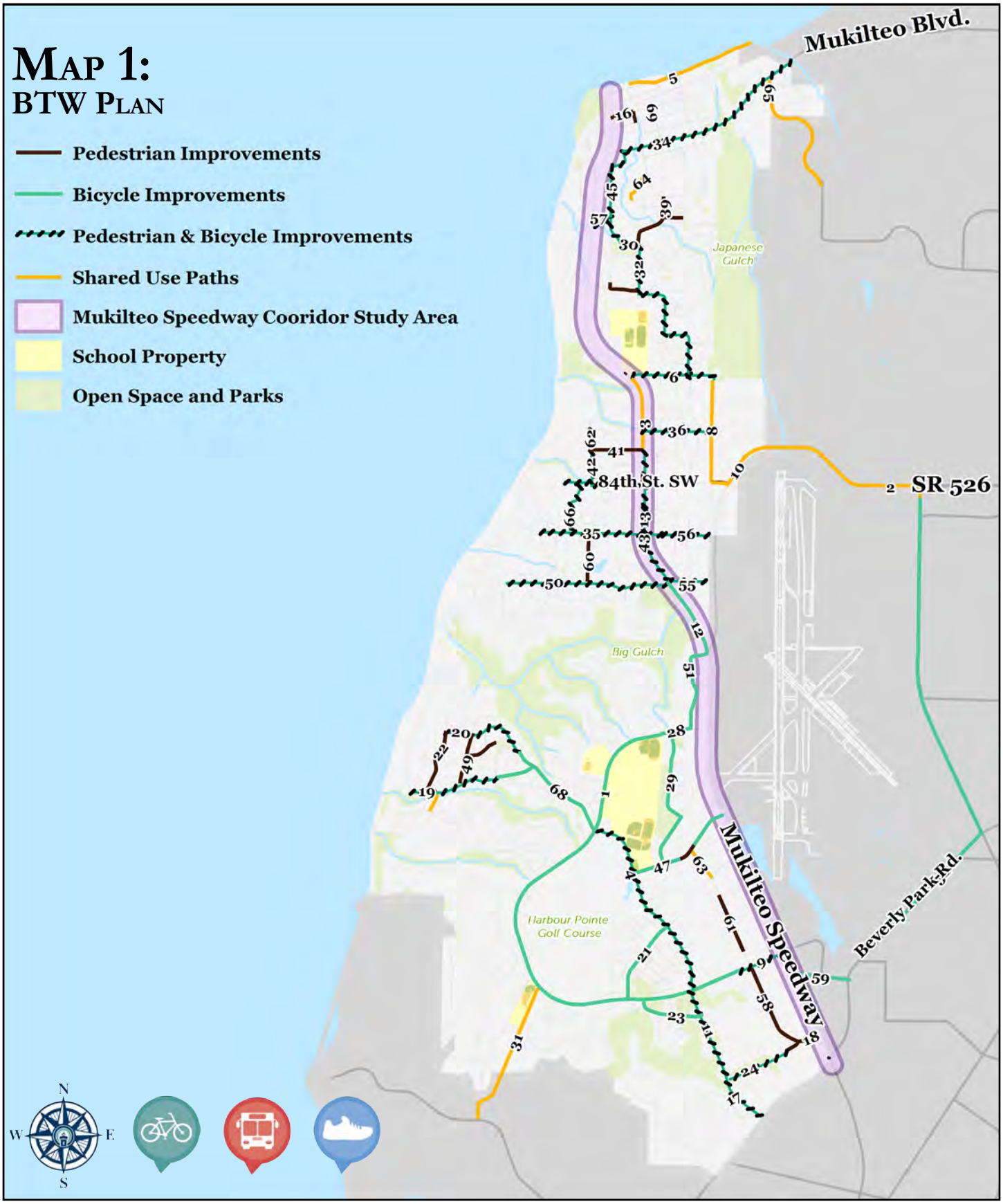
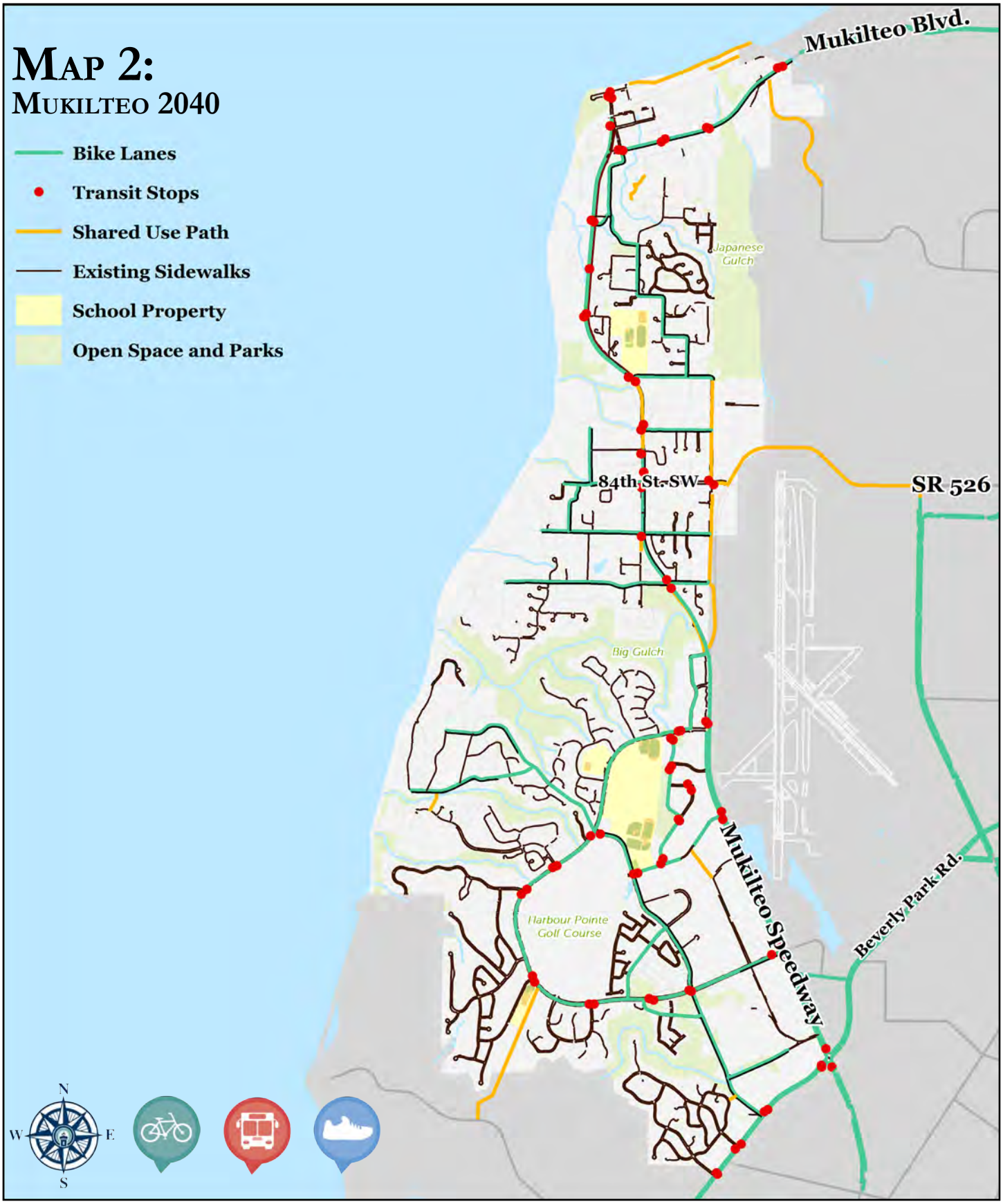

Map 1:
BTW Plan
Pedestrian Improvements
Bicycle Improvements
Pedestrian & Bicycle Improvements
Shared Use Paths
Mukilteo Speedway Cooridor Study Area
School Property
Open Space and Parks
Mukilteo Blvd.
84th St. SW
SR 526
Mukilteo Speedway
Beverly Park Rd.
Japanese Gulch
Big Gulch
Harbour Pointe Golf Course
N
W
E
S

Table 1: BTW Plan Project List

Project Number	Priority Score	Project Name	Project Number	Priority Score	Project Name
1	114	Harbour Pointe Blvd. Bike Markings	36	63	80th Sidewalks & Sharrows
2	95	526 Shared Use Path	37	60	88th Street Sidewalks & Bike Markings
3	94	SR 525 Sidewalks - Safe Route to School	38	60	Beverly Park Intersection Improvements
4	93	Harbour Reach Drive Bike Retrofit	39	58	Sky-Hi-La Pathway Safe Route to School
5	90	Waterfront promenade multi-use path	40	55	2nd Street Crosswalk
6	89	76th Street Sidewalks & Bike Markings	41	54	81st Place SW
7	89	Mid-Town Mukilteo Sidewalk & Bike Markings	42	49	53rd Avenue Sidewalks & Bike Markings
8	88	44th Shared-Use Path	43	46	49th Place Transit Connection
9	85	Harbour Pointe Blvd. S Widening	44	43	11th Street Sidewalk
10	82	SR 526 Sidewalks	45	43	Washington Ave Sidewalks
11	82	Harbour Reach Drive Extension	46	41	Possession View Lane Sidewalks
12	81	SR 525 Bike Lane	47	39	Chennault Beach Road Bike Markings
13	77	SR 525 Sidewalks & Bike Markings	48	36	Park Ave Sidewalks
14	68	84th Street Sidewalks	49	35	62nd Street & Canyon Road
15	60	Chennault Beach Road Sidewalks	50	71	92nd Street Sidewalk & Bike Markings
16	57	2nd Street Sidewalks	51	66	Harbour Place Shared Use Path
17	57	Harbour Reach Drive Connection	52	60	Airport Road Shared Use Path
18	43	Cyrus Way Sidewalks	53	60	Beverly Park Intersection Improvements
19	40	Chennault Beach Drive Sidewalk & Bike Markings	54	57	84th Street Sidewalks
20	40	Central Drive Sidewalk & Bike Markings	55	56	92nd Street Sidewalk & Bike Markings
21	37	Possession Way Bike Markings	56	51	88th Sidewalks & Bike Lanes
22	36	64th Place West	57	51	Goat Trail Pedestrian Bridge
23	34	Blue Heron Drive Bike Markings	58	47	Cyrus Way Sidewalks
24	30	South Road Markings	59	47	121st Bike Connection
25	95	80th/81st Crossing	60	45	53rd Avenue Sidewalks & Bike Markings
26	87	SR 525 Corridor Study	61	43	Cyrus Way Sidewalks
27	86	76th Street Crossing	62	41	53rd Avenue Sidewalks & Bike Markings
28	83	Harbour Pointe Blvd. North Cycle Track	63	41	Cyrus Way Road Extension
29	77	47th Bike Improvements	64	37	Shared Use Path to Old Town
30	73	Goat Trail Path & Bike Markings	65	36	Share Use Path from Mukilteo Blvd to Boeing Recreation Center
31	72	Endeavor Elementary Shared Use Path	66	36	54th Avenue Sidewalks & Bike Markings
32	71	Stairstep Path & Bike Markings	67	34	Chennault Beach Gulch Shared Use Path
33	70	86th Crossing	68	32	Chennault Beach Road Bike Markings
34	64	5th Street Pedestrian Projects	69	29	Loveland Avenue Sidewalks
35	63	88th Street Sidewalks & Bike Markings			

Near Term Projects **Mid-Term Projects** **Far-Term Projects**

Map 2:
Mukilteo 2040



2

DATA INVENTORY

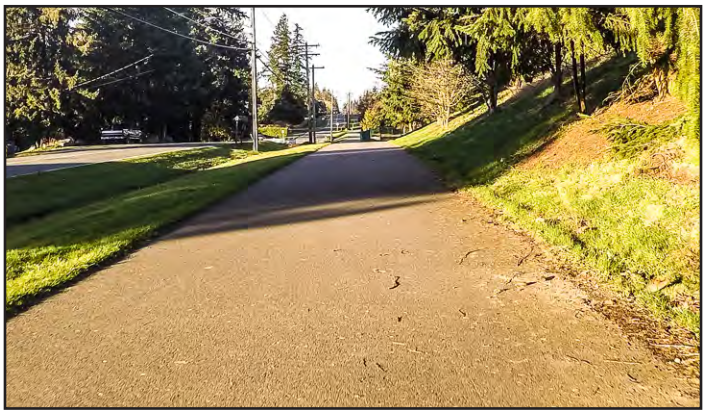
Existing Pedestrian & Bike Facilities
Transit Inventory
Destinations Inventory
Barriers
Walking Audits

Existing Pedestrian & Bike Facilities:

In order to implement the goals of the BTW Plan, including connectivity between destinations, safe routes to school, multi-modal design, and future greenways, an inventory was conducted to identify existing facilities. One inventory included identifying existing sidewalks, shared use paths, bike lanes, buffered bike lanes, and bike sharrows. These five different facilities represent typical facilities that can be used to improve connectivity throughout a community. While other options, such as a cycle track, provide for a sixth facility, the application typically requires very specific conditions for implementation.

Sidewalk

Typical residential sidewalks range from 4-feet to 6-feet in width and commercial sidewalks can be much larger. These facilities are commonly made out of concrete. While sidewalks construction is costly, alternative facilities such as a widened shoulder or gravel paths provide little improvement to the pedestrian and even less service to those with disabilities.



Shared Use Path

A shared use path is a facility that is typically used as an 'urban-trail'. This facility is usually 6- feet to 15-feet in width and provides both a recreation and commuting purpose and is commonly made out of asphalt. The user groups of a shared use path is much more diverse than sidewalks and can provide adequate facilities within a common space with less footprint.

Bike Lanes & Buffered Bike Lanes

Bike lanes originated as a conversion of existing shoulders to provide a marked facility for cyclists within the roadway. Today bike lanes tend to be a minimum of 5-feet in width traveling with the flow of traffic. An improved alternative that requires additional pavement is the buffered bike lane that provides a form of additional buffer between cyclists and motorists.

Bike Sharrows

At times, roadways that are underutilized, cyclists can safely travel within the lane of travel. To notify motorists and establish a bicycle route, a 'sharrow' is used as a painted marking. The sharrow identifies the location of the cyclist and the direction of travel. Sharrows are common on roadways of 25 MPH or less in residential areas.

Map 3:
Existing Pedestrian & Bike Facilities

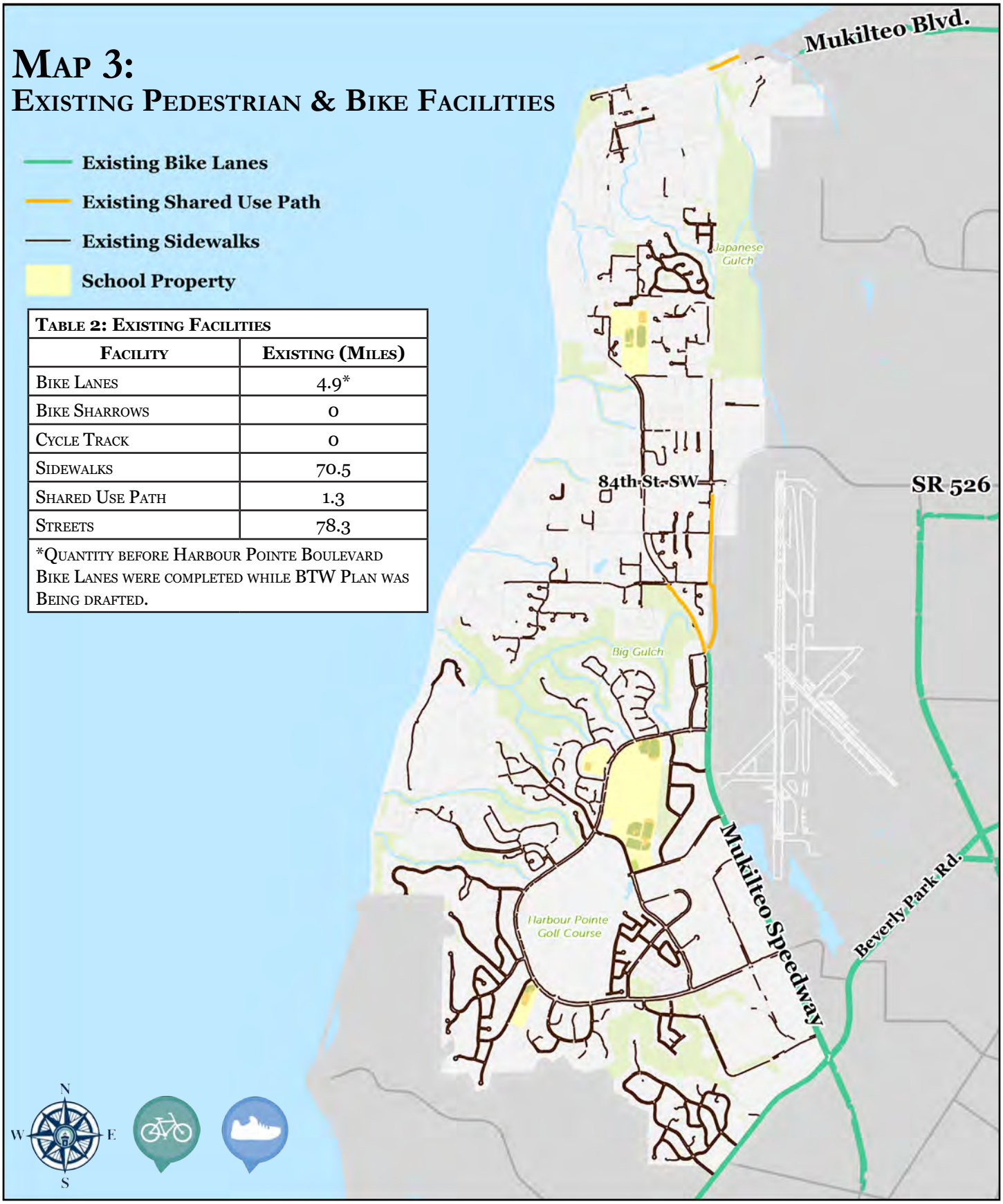


Table 2: Existing Facilities

Facility	Existing (Miles)
Bike Lanes	4.9*
Bike Sharrows	0
Cycle Track	0
Sidewalks	70.5
Shared Use Path	1.3
Streets	78.3

*Quantity before Harbour Pointe Boulevard Bike Lanes were completed while BTW Plan was being drafted.

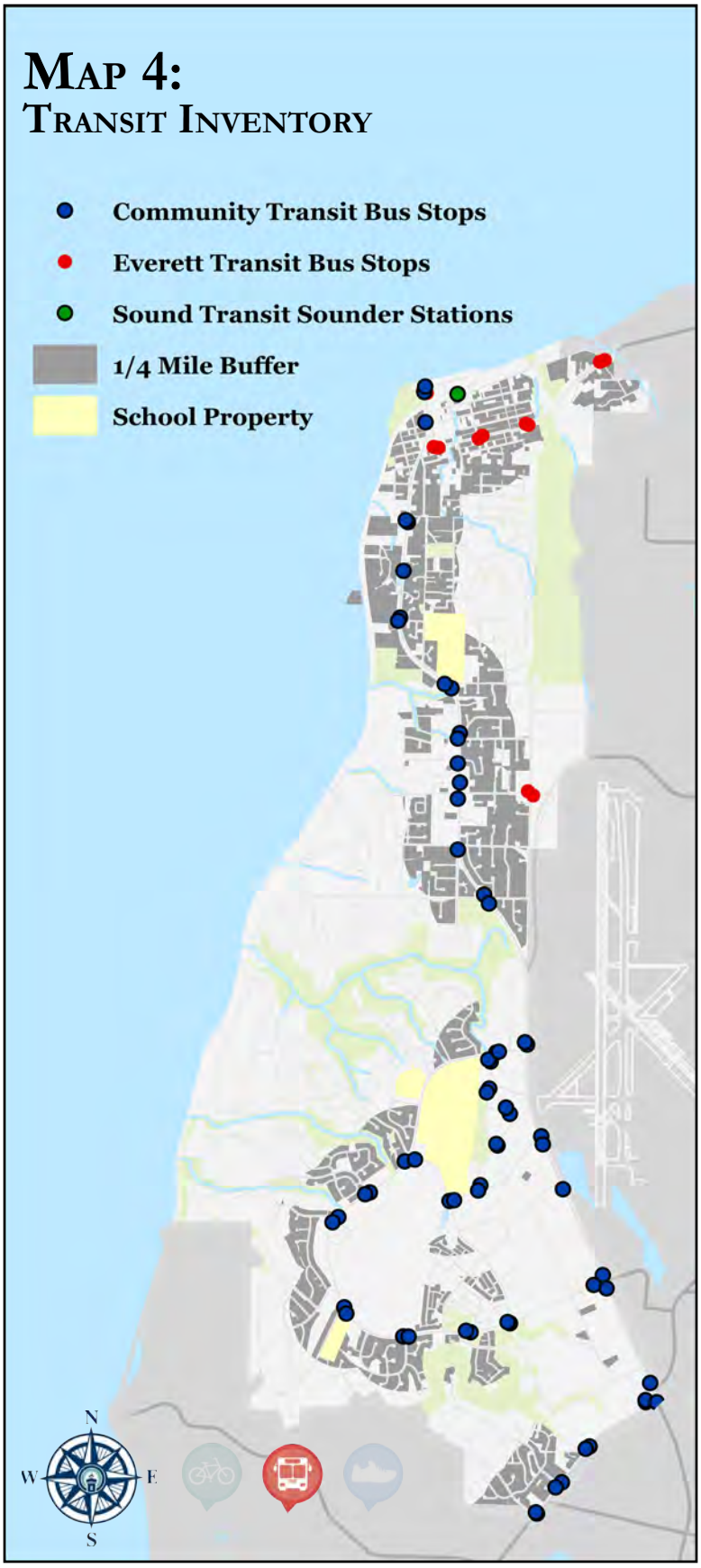
Transit Inventory:

In addition to the different facilities for walking and bicycling, an inventory was conducted to identify how many transit facilities exist within Mukilteo including routes, bus stops, and number of properties within quarter mile radius of bus facilities. The quarter-mile radius represents the most reasonable distance an individual may be willing to walk in order to reach transit facilities. While the 'reasonable walking distance' can vary based on hills, the distance provides a metric for potential transit users.

One challenge that faces transit users is ensuring that routes are not only between primary destinations, but also provide convenient route frequency, known as headways. Many routes along major corridors feature approximately 10-15 minute headways whereas routes in less dense service areas may feature 30 minute or greater headways. As frequency of transit increases, so does the convenience for transit users. Unfortunately, greater frequency incurs greater costs. To offset the costs, the ridership of the route must also increase.

Table 3: Existing Transit Facilities

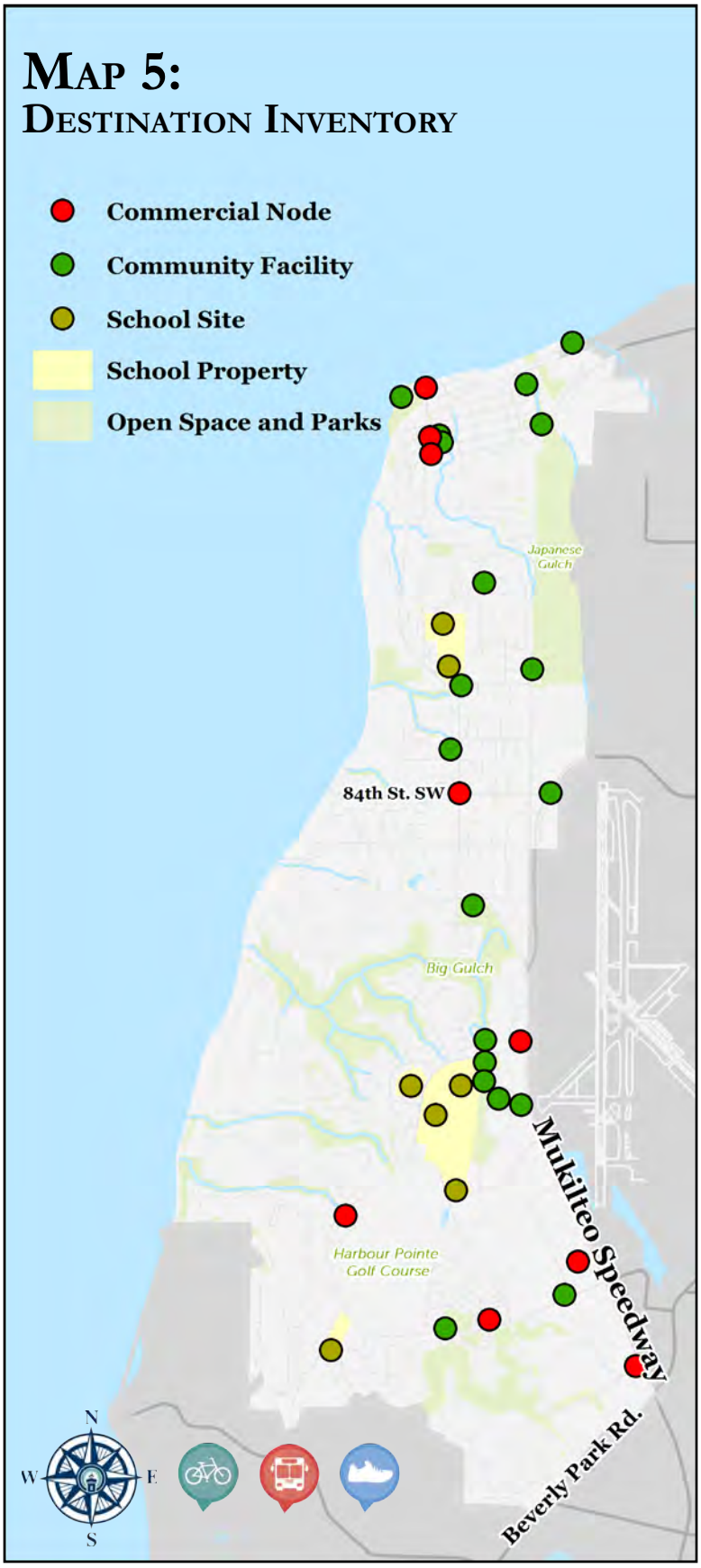
Facility:	Notes:
Routes:	6
CT-113	30 Min Monday-Friday 60 Min Saturday-Sunday
CT-417	30 Min Monday-Friday - *5 Services to/From Downtown - Seattle*
CT-880	30 Min Monday-Friday - *4 Services to/From University District - Seattle*
ET-18	30 Min Monday-Friday
ET-70	45 Min Monday-Friday - *4 Services to/From Boeing*
Sounder	30 Min Monday-Friday - *4 Services to/From Seattle*
Transit Stops	120
Single-Family Residences within 1/4 Mile Buffer: 2,703	



Destinations Inventory:

The data inventory has reviewed the available facilities for different modes available for bike, transit, and walking. The next critical element of pedestrian planning is the human choice aspect, 'Where Do People Want To Go?'.

Map 4 provides an inventory of the different activity areas including schools, commercial nodes, and external network connections. Map 4 also identifies the Open Space and Parks within Mukilteo that have a variety of activities. One aspect to consider is that neighborhoods are not identified as destinations, but are considered origins. The intent of the BTW Plan is not to connect neighborhoods to neighborhoods, but to connect neighborhoods to specific destinations. By focusing on origin-destination planning, additional opportunities for neighborhood-neighborhood connections will occur organically.

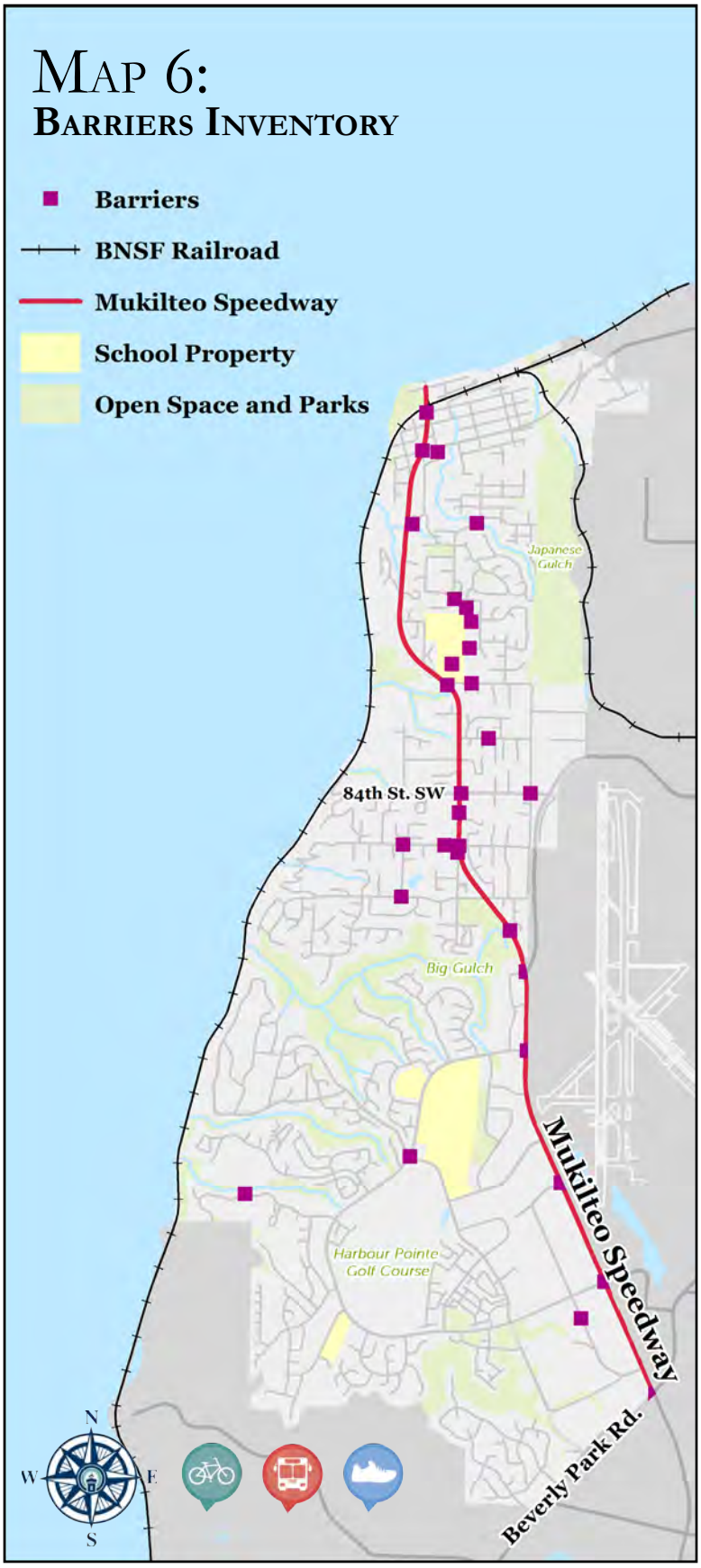


Barriers Inventory:

Barriers are physical obstructions or certain conditions that discourage individuals from the choice to bike, use transit, or walk. Certain barriers may include fences preventing connectivity or users lacking the sense of safety. For example, a sidewalk facility may be located on the correct route, with the correct width, but without the correct lighting the facility's use drops significantly during the evening and early morning.

Map 5 is an inventory of barriers that discourage individuals from alternative forms of commuting. One barrier is a 'limiting intersection' that includes places without a signalized crosswalk. These barriers include:

- Steep Grade Hills
- Areas of Low Lighting
- Limiting Intersections
- Missing Connections
- Traffic Speed



Walking Audits:

"In 2012, the District's Public Health Advisory Council evaluated more than 80 health indicators for Snohomish County. The 27 indicators with the worst risk scores were then evaluated in terms of their size, seriousness, the existence of evidence-based practices/community interventions, and whether there are community values attached to the issue. Using these criteria, the members of the Council chose priority health issues in need of community action. One of these priority issues was obesity prevention. Obesity affects 27% of adults and 11% of children in Snohomish County, double the 1994 obesity rates. It is a contributing factor to heart disease, certain cancers, and diabetes. There is a need for coordinated efforts that will increase physical activity and improve nutritional quality in Snohomish County. The Health District embarked on a collaborative effort with community partners and key stakeholders to develop Community Health Improvement Plans (CHIPs) for priority areas. In an effort to meet the obesity prevention objective of "Increasing school-based best-practice policies that promote physical activity for children and families in a minimum of three Snohomish County school districts" the collaborative identified the need to conduct a county-wide assessment of current physical activity practice and policies in elementary schools in order to identify districts or schools with the greatest need. A walking audit of all elementary schools in Snohomish County is one element of this assessment" (Snohomish Health District - Walking Audit, 2015).

The Snohomish Health District did a significant amount of leg work and research regarding the connectivity to and from Mukilteo's Elementary Schools. On the following page are the top observations of the conclusions for Mukilteo Elementary, Columbia Elementary, and Endeavour Elementary. These reports can be found in the Appendix for additional information.

Mukilteo Elementary:
Top Observations:
1. The crossing over Mukilteo Speedway was one of the most hazardous that we have observed in the county. Visibility of crossing and guard are very poor even on a clear day (no rain, no fog). Traffic was heavy and fast. Crosswalk signs are difficult to see and invisible for cars traveling behind larger vehicles.

Columbia Elementary:
Top Observations:
1. Columbia Elementary has ideal walking and biking conditions and excellent sidewalk access/trail access, safe crossings,and is well manned by both staff and student crossing guard at start and dismissal times. Though there were many students observed taking advantage of walkability, an above-average volume of parent drop off/pick up traffic was also observed resulting in congestion on school grounds and Harbour Pointe Blvd.

Endeavour Elementary:
Top Observations:
1. The parking lot and drop off/pick up area of this school are confusing, but make the most of the space available. Congestion from parent traffic is substantial.

2. Walking conditions around this school are excellent, with good sidewalks on all surrounding major and secondary/residential streets.

3

DATA ANALYSIS

Community Workshop
Gap Analysis

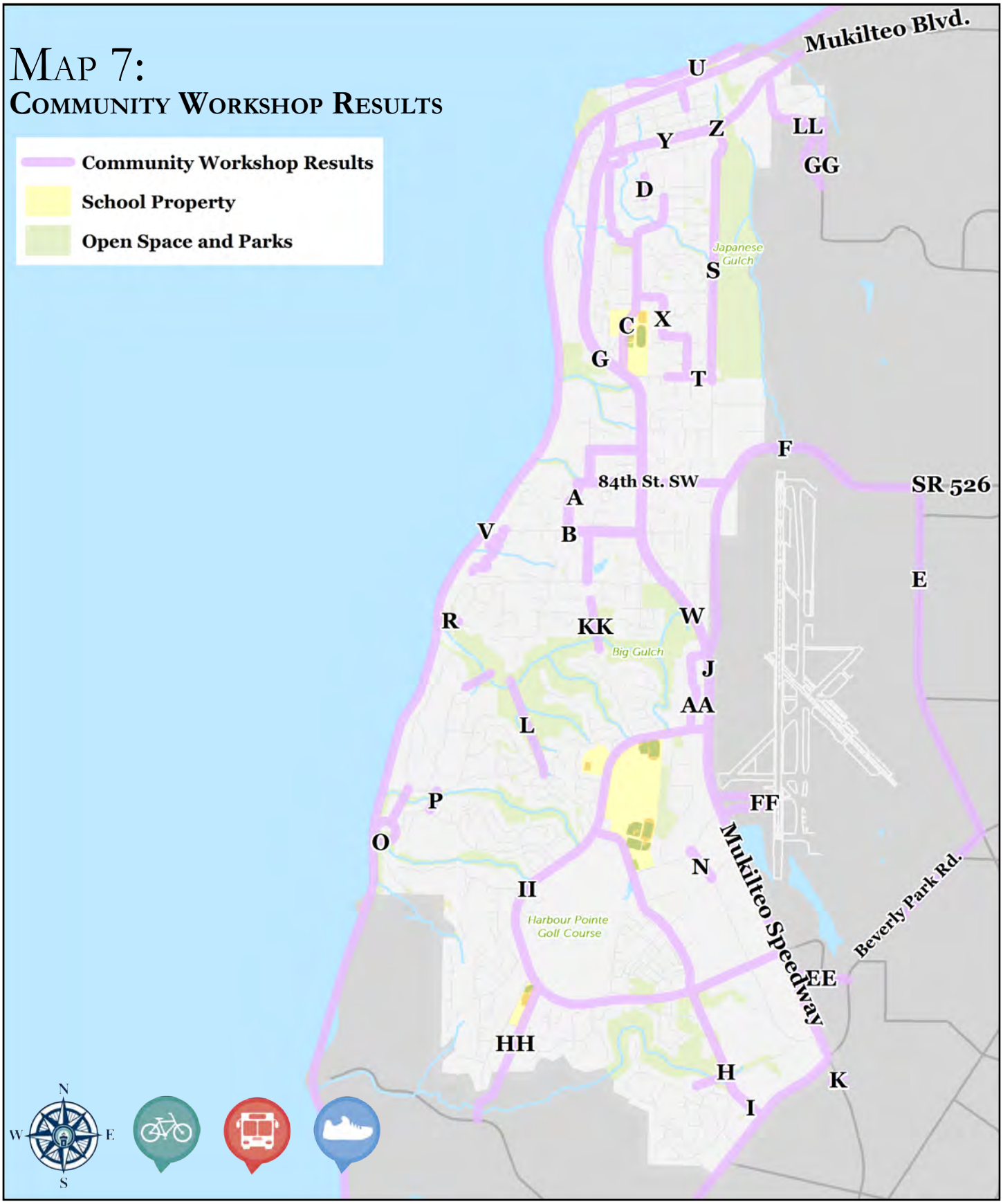
Community Workshop:

Public outreach is critical to the success of any long range planning project. So critical that the Comprehensive Plan's 'Goals to Achieve a Livable Mukilteo' identified that Authentic Participation leads to transparency, collaborative planning, an engaged public, and responsive leadership. Following the data inventory, an Open House was held in October, 2015 to assist staff in further identifying routes and project ideas that would improve their ability to move about the community. Following the Open House, the exercise was repeated with the Planning Commission and Wise Investment in Transportation Taskforce (WITT). In total, approximately 50 residents participated in the workshop exercise to help shape the preferred routes of the BTW Plan. The summar of the results identified through the workshop are in Table 4 and Map 7.

Table 4: Community Workshop Projects

Project Number	Description	Project Number	Description
A	Bike connection through Mid-town	U	Waterfront promenade multi-use path
B	Pedestrian connection through Mid-town	V	Rails to Trails multi-use path
C	Public school pedestrian path	W	Pedestrian connection on east side of SR525 between 92nd St and SR526 spur
D	Pedestrian connection to Old Town	X	Pedestrian path along stairsteps and between Goat Trail Road and 9th St
E	Bike lanes from SR526 to Boeing looping to the Heritage Flight Museum, Beverly Park Rd, back to SR525	Y	Pedestrian connection along 5th Street
F	Transit routes from SR526 to Everett	Z	Bike connection along 5th Street
G	Multi-use path from 92nd Street to Ferry/Old Town	AA	Multi-use path along Harbour Pl between SR525 and Harbour Pointe Blvd.
H	Bike path along Harbour Reach Corridor	BB	Multi-use connection between Harbour Reach Drive and 130th Pl SW
I	Pedestrian path along Harbour Reach Corridor	CC	Pedestrian path between Mukilteo Lane and 3rd Street along Cornelia Avenue
J	Transit route along SR525 & Beverly Park Road	DD	Road noise
K	Pedestrian bridge across SR525	EE	Bike connection between Beverly Park Road and SR525 along 121st St.
L	Trail through Big Gulch connecting to Chennault Beach Road	FF	Transit loop around Park & Ride at Bernie Webber Drive with bike storage lockers
M	Bike connection from Cyrus Way to Chennault Beach Rd	GG	Multi-use path connection to Seaway Blvd.
N	Pedestrian connection from Cyrus Way to Chennault Beach Road	HH	Endeavour Elementary pedestrian path
O	Pedestrian path connection from Marine View Drive to Waterton Circle	II	Protected bike lanes along Harbour Pointe Blvd. and Chennault Beach Road
P	Bike connection from Chennault Beach Drive to Harbour Heights Pkwy	JJ	Change from private road to public access road
Q	Pedestrian connection from Chennault Beach Drive to Harbour Heights Pkwy	KK	Pedestrian bridge across Big Gulch connecting 52nd Ave. W to 52nd Ave. W
R	Pedestrian trail between West end of Big Gulch Trail and waterfront access	LL	Multi-use path from Mukilteo Blvd to Boeing Recreation Center
S	Multi-use path connecting through Japanese Gulch	MM	Park and ride at Harbour Pointe Shopping Centre
T	Pedestrian improvements to 76th Street		

Map 7:
Community Workshop Results



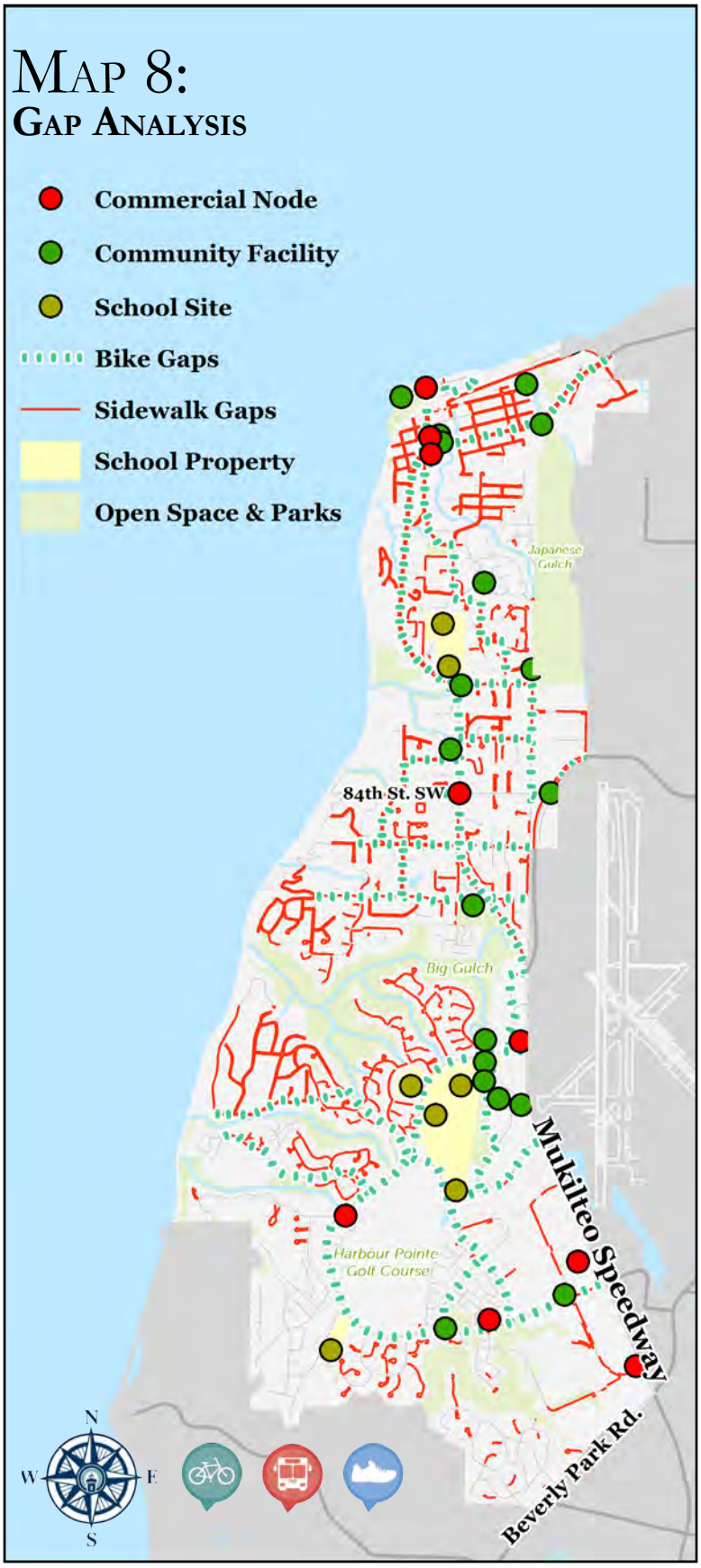
Gap Analysis:

A gap analysis is the process of reviewing existing facilities to identify unserviced areas. Another way to consider a gap analysis is the inverse of an inventory. This process can identify gaps that may be short or long in terms of scope and investment. Short gaps may be cheaper projects that are prioritized in order to create consistent corridors, whereas gaps that cover a large distance may require larger financial support. This gap analysis is for bikes and sidewalks and does not include a gap analysis for shared-use paths, as shared-use paths are site specific design solutions for both pedestrian and cyclists.

The gap analysis also does not include transit gaps, because the focus of the improvements is to increase connectivity to existing facilities. This will allow the increased ridership developed through connectivity to create the demand for more facilities.

Map 8 represents the areas of facility gaps and is tallied in Table 5. Some of these gaps include areas without sidewalks along major corridors or known preferred bike routes that lack facilities. While these areas are identified as 'gaps' some locations may not require a facility. Such locations include areas where the street serves both pedestrians and motorists safely without the requirement of a sidewalk. These areas tend to have a travel speed of less than 25 MPH with very low average daily trips.

Table 5: Gap Analysis	
Facility	**Mileage**
Sidewalks - Existing	70.49
Sidewalks - Gaps	61.12
Bike Facilities - Existing	4.86*
Bike Facilities - Gaps	18.37
*Quantity before Harbour Pointe Boulevard Bike Lanes were completed while BTW Plan was being drafted.	



4

MAKING CONNECTIONS

City-Wide Connections
Local Connections
Regional Connections
Project Timeline

City-Wide Connections

In order to create a network, various types of connections are utilized. These different types of connections are rated based on their ability to improve connectivity such as pathways that have significant ability to network throughout Mukilteo are considered 'City-Wide' and projects that provide connectivity localized to a specific neighborhood is considered a 'Local Connection'. A typical City-Wide Connection provides connectivity to the Library, Commercial Nodes, and to external facilities.

5th Street Connector

The 5th Street Connector provides a connection from the Downtown Business District at Lincoln Avenue to the eastern city limits which connects to the Everett bike lanes on Mukilteo Boulevard.

Mukilteo Speedway - Bike Route

While the BTW Plan identifies that the Mukilteo Speedway requires a corridor study to better analyze the opportunities and constraints of the roadway, one likely result of the study will include designating the Mukilteo Speedway as a 'Bike Route'.

Stair-Step Greenway

This long used pedestrian and bicycle route connects 5th Street to 44th Avenue West. This route provides an alternative north-south route from the Mukilteo Speedway.

Harbour Place Connector

The Harbour Place Connector is located at the 'Spur' and provides connection from the Harbour Pointe Loop to either the Mukilteo Speedway or to the Stair-Step Greenway.

Harbour Pointe Loop

The Harbour Pointe Loop is a combination of the existing shared use path and the recently completed bike lanes on Harbour Pointe Blvd. This route provides connection to the schools, library, commercial nodes, and to other routes.

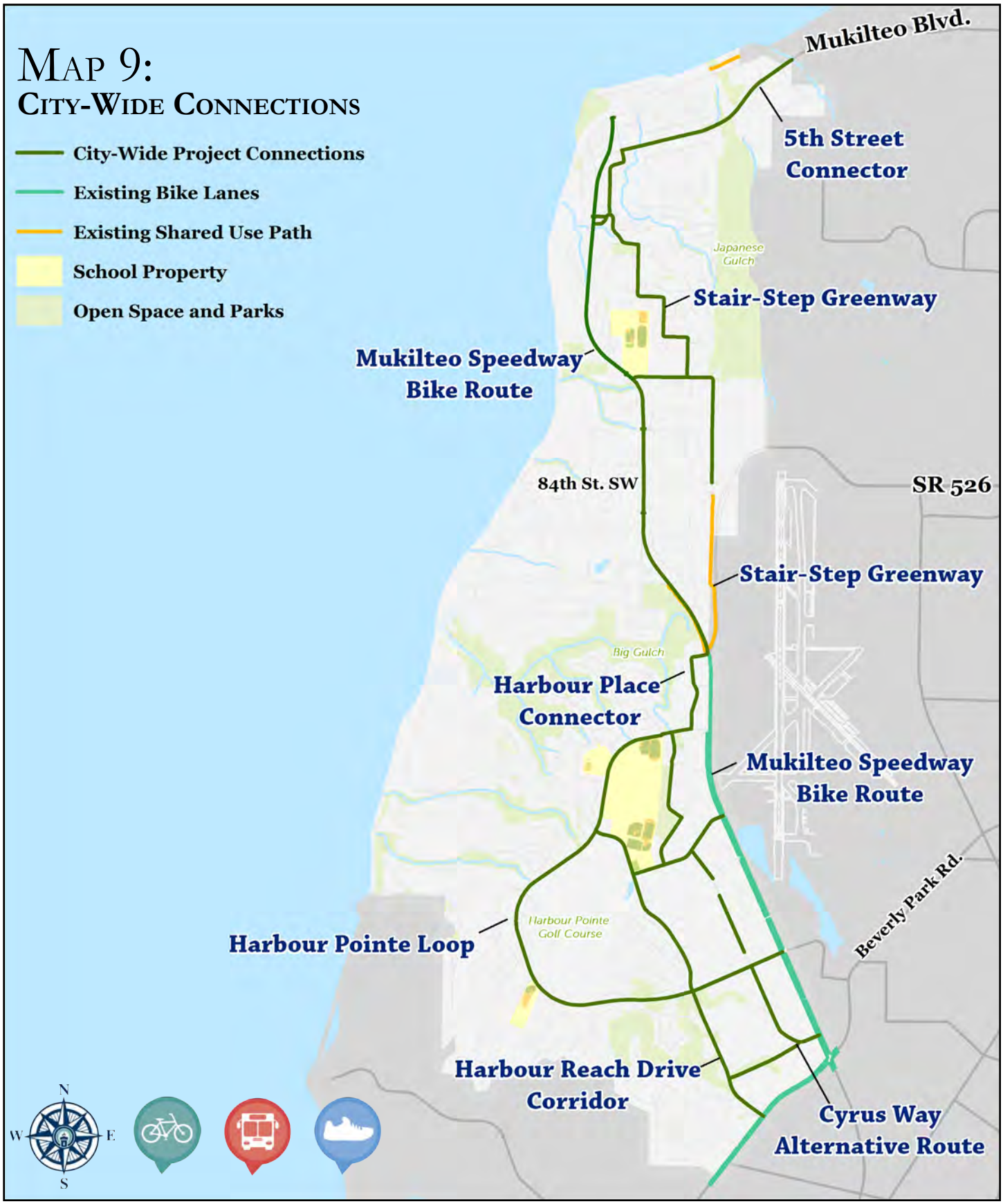
Harbour Reach Drive Corridor

Harbour Reach Drive Corridor provides connection from Beverly Park Road to the Stair-Step Greenway without requiring access onto the Mukilteo Speedway.

Cyrus Way Alternative Route

As an alternative to the Mukilteo Speedway, the Cyrus Way Alternative provides connection to Chennault Beach Road from Evergreen Drive.

Map 9:
City-Wide Connections



Local Connections

The next type of connections include the 'Local' Connections'. These types of connections provide access to 'City-Wide Connections' or provide better access within the neighborhoods. A 'Local Connection' would typically see a lower level of use than 'City-Wide Connections', the users of a 'Local Connection' tend to be primarily neighbors. By having facilities that not only connect to 'City-Wide Connections', these 'Local Connections' provide greater interaction with our own neighbors.

Sky-Hi-La Connectors

Being on top of a hill, this neighborhood is fairly well cut-off with only one primary entrance/exit for motorists on 8th Drive. These connectors will provide access to 5th Street as well as to the Stair-Step Greenway.

Mid-Town Neighborhood Greenway

Mid-Town, also known as Mid-Mukilteo, is the area that extends from 76th Street to approximately the 'Spur' at the intersection of Paine Field Boulevard and Mukilteo Speedway. This area requires a new network of pedestrian and bicycle facilities which will connect the neighborhoods together, but also connect the neighborhoods to the 'City Wide' routes.

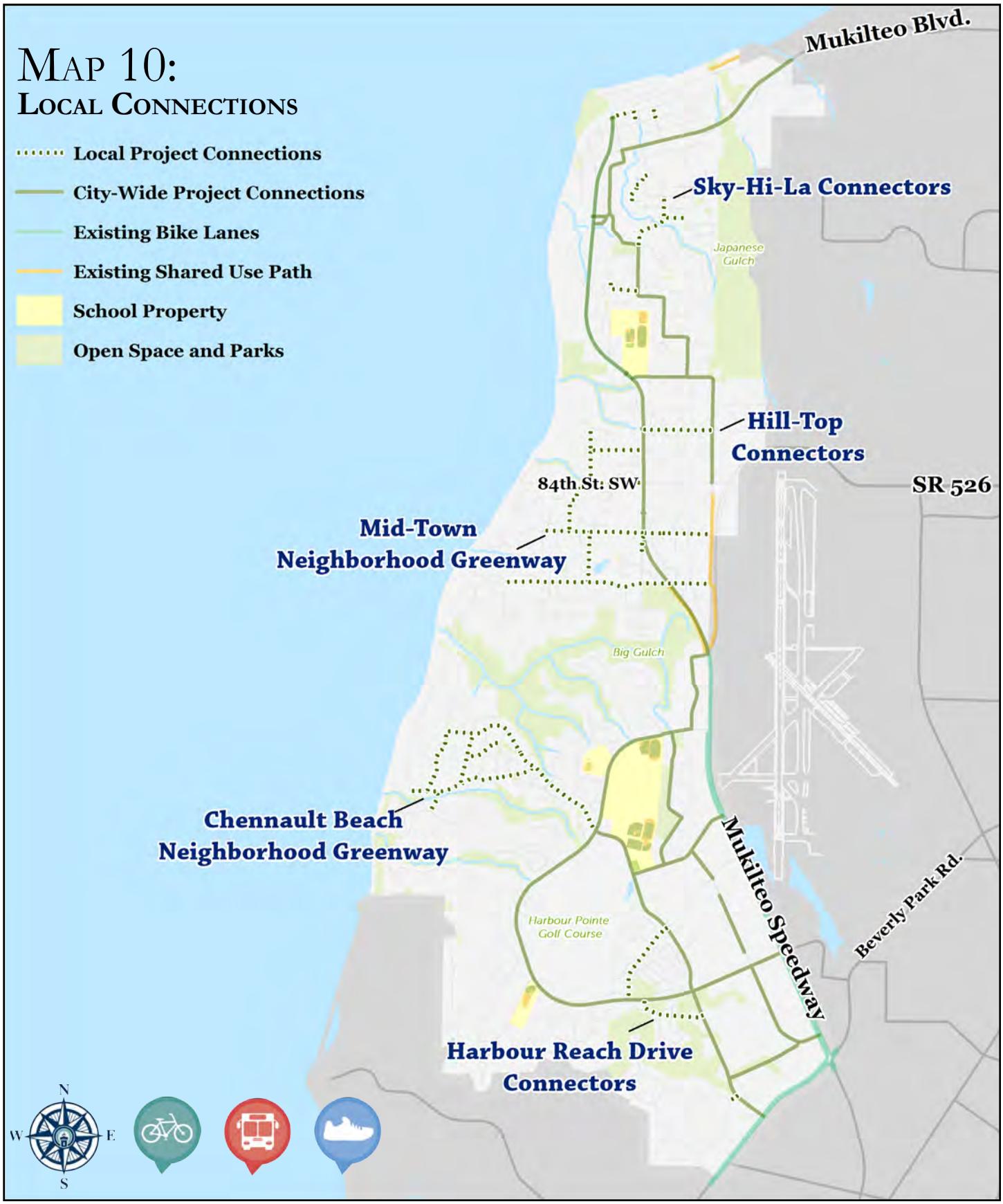
Chennault Beach Neighborhood Greenway

The Chennault Beach Neighborhood Greenway system provides higher mobility within the Chennault Beach Community that is accessed on one route from Harbour Pointe Blvd. Part of the greenway system is to open up a second pedestrian and bicycle access to Harbour Heights Drive that will improve opportunity to travel to and from the community without a vehicle.

Harbour Reach Drive Connectors

Harbour Reach Drive Corridor will provide north-south pedestrian and bicycle connections, but equally important are the connections to the Harbour Reach Drive Corridor. These two connections will primarily establish Possession Way and Blue Heron Drive as Bike Routes.

Map 10:
Local Connections



Regional Facilities

The last type of connection under consideration by the BTW Plan are the facilities that truly operate as a regional asset for the greater Snohomish County Area. These projects extend either outside Mukilteo's boundaries or serve users that will primarily be non-residents.

Waterfront Promenade

The Waterfront Promenade is considered a regional facility as it provides services to users of the Multi-Modal Center with Washington State Ferries, Sound Transit, Community Transit, and Everett Transit all converging into a single hub. This hub is not only a destination to leave Mukilteo and head to Seattle or Everett, but this hub is also the end destination. This project will primarily be led through the implementation of the Downtown Waterfront Master Plan.

Boeing Recreation Shared Use Path

The proposed Boeing Recreational Shared Use Path is to provide connectivity between 5th Street up to 36th Ave West in Everett. This project will provide active Boeing commuters a route between the Mukilteo Multi-Modal Terminal and the Boeing Recreation Facility with showers and lockers. Understandably, controlled access of the Boeing Facility is important in the design consideration with this project and the Boeing Company is the primary partner with this project.

SR 526 Shared Use Path

Currently the City is working with regional partners on the design of the SR 526 Shared Use Path. This project would provide connection from 84th Street SW to Airport Road by utilizing a shared use path on the south side of SR 526.

Airport Heritage Loop

The Airport Heritage Loop concept is to provide a separated shared use path between 84th Street SW and Beverly Park Road. This project requires partnerships with the Boeing Company, Snohomish County, Paine Field Airport, and WSDOT to make this joint partnership project a reality.

Endeavour Shared Use Path

The proposed Endeavour Shared Use Path would connect Harbour Pointe Blvd to Picnic Point Road through an existing utility easement. This connection between Harbour Pointe Blvd and Picnic Point Road is primarily a recreational facility as Picnic Point Road connects to the Picnic Point Park with beach access.

Map 11:
Regional Facilities

Project Timeline:

The implementation of the BTW Projects will occur through various methods and funding sources. The BTW Plan is a long range vision and will require many years, and possibly generations to implement these projects, but by focusing resources to a specific project criteria, public funding can be allocated in the most rational and logical method possible. In order to prioritize and fund the identified projects, these projects were broken into three categories:

- Near-Term (Less than 7 years)
- Mid-Term (Less than 20 Years)
- Far-Term (More than 20 Years)

By identifying these three groups of projects, decision makers are better able to determine funding needs for each project. While a project may be listed as 'Mid-Term' that does not preclude the opportunity to fund the project earlier if additional funding becomes available through external sources or internal revenue generators.

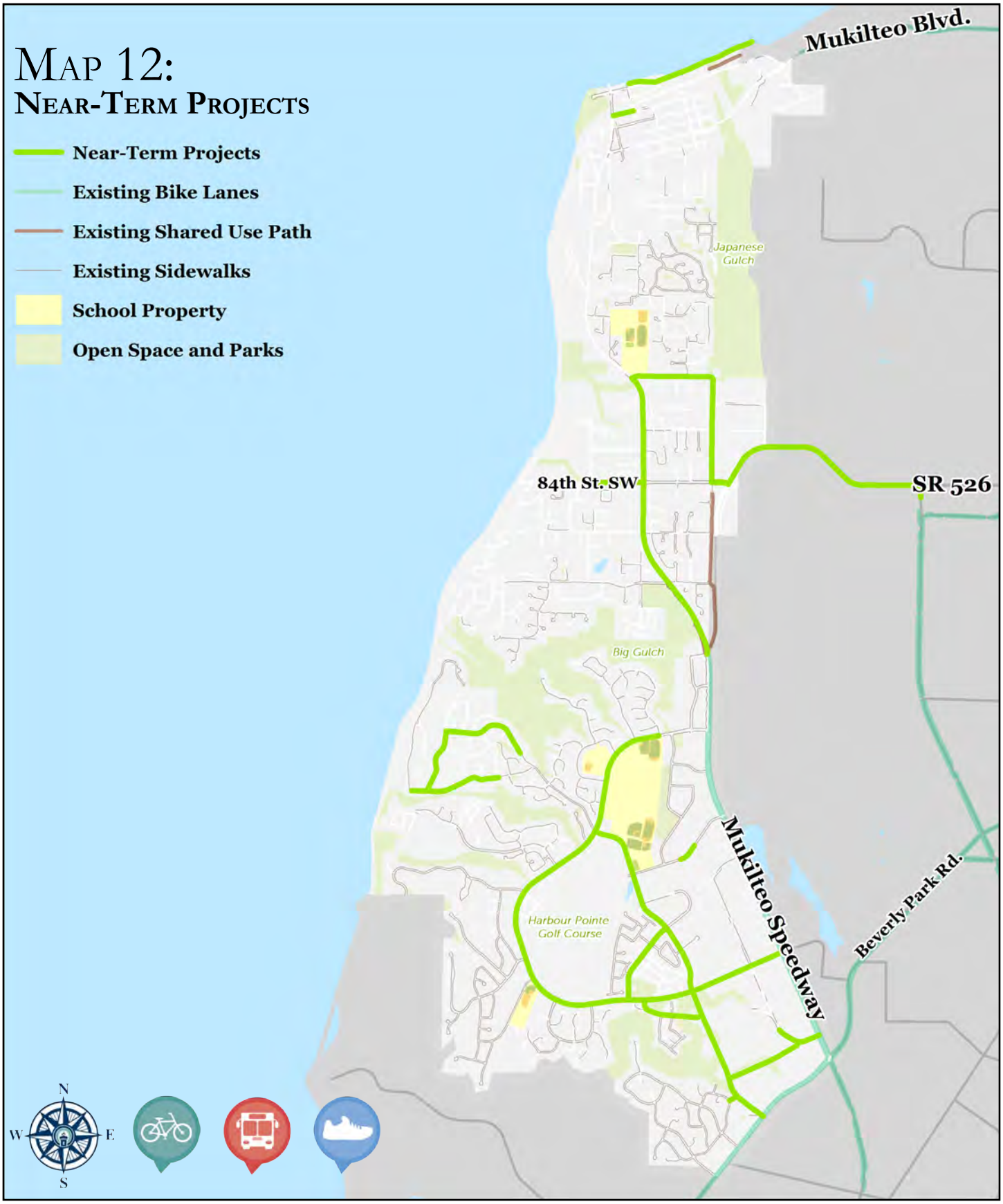
Near-Term Projects

When reducing the project list to the near-term projects, the determining factors for project as near-term were based on the project's:

- Ability to fill gaps within existing routes;
- Ability to reduce barriers;
- Create connections to existing facilities;
- Projects currently under review or project development; and
- Project pairing to other capital projects.

Map 12 on the following page identifies the existing bike lanes, shared use paths, and sidewalks. From the existing facilities, the added near-term projects layer (green) showcases the increased network connectivity.

Map 12:
Near-Term Projects



Mid-Term Projects

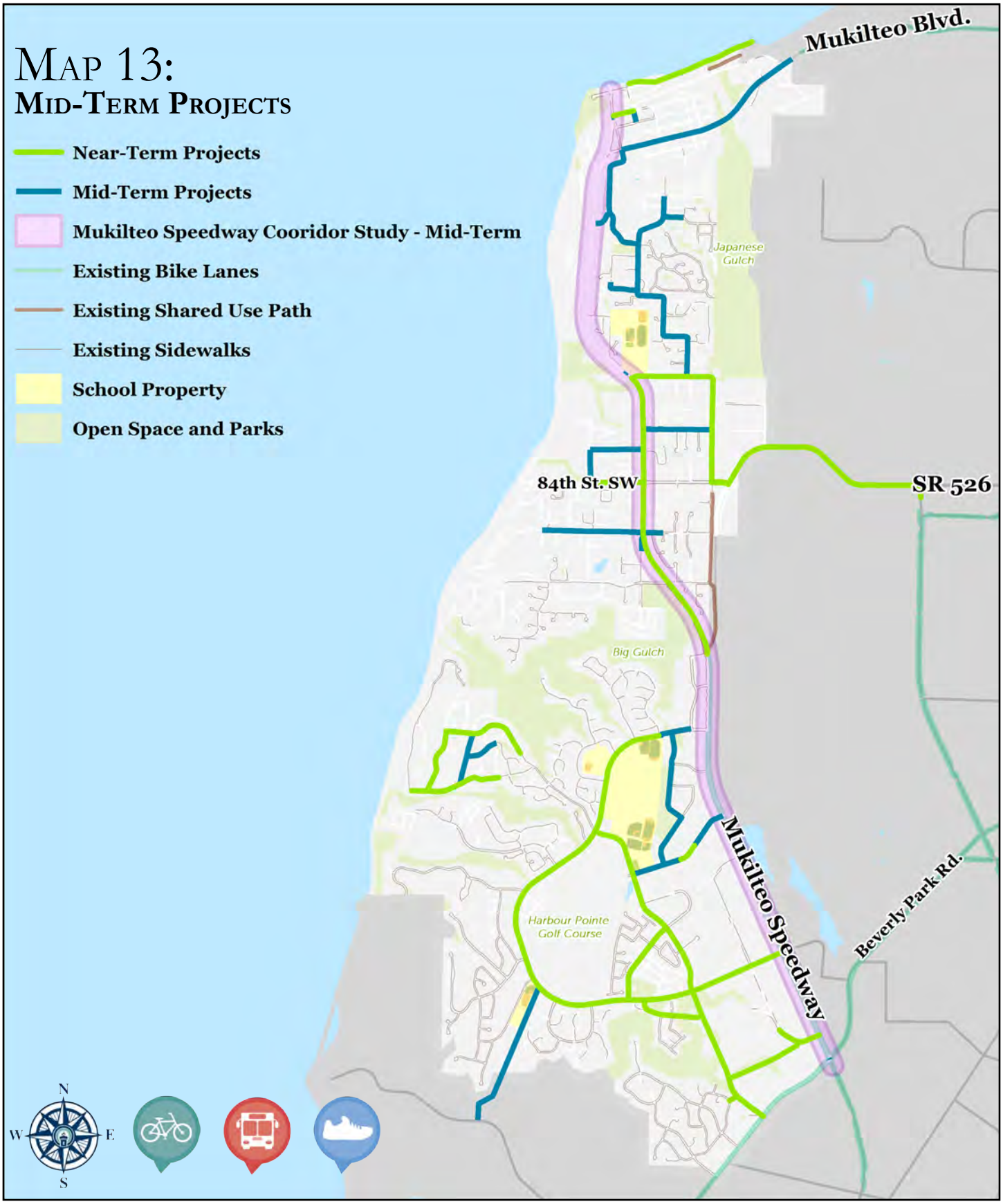
Following the selection of the near-term projects, the mid-term projects were then selected based on the same criteria as the near-term projects. One unique project within the mid-term projects is the Mukilteo Speedway Corridor Study. This project could easily be considered a near-term project, but due to ferry relocation, the corridor will need time reflect the change of traffic conditions so there is a better understanding of the opportunities of the roadway.

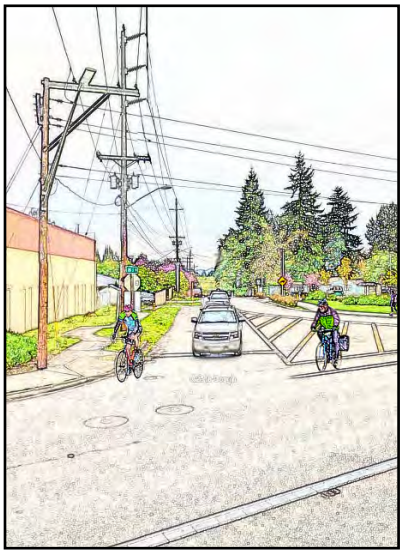
Following the identified 7 year period for the near-term projects, an update to the BTW Plan should be considered in run concurrent with the Mukilteo Speedway Corridor Study to:

- Address projects costs of the Mukilteo Speedway Corridor;
- Remove Completed Projects within the BTW Plan;
- Review annual funding opportunities to address implementation of projects identified as 'Mid-Term' Projects;
- Move 'Mid-Term' Projects to 'Near-Term' List that connect to completed projects and/or pair with identified capital improvement projects; and
- Provide public outreach opportunity to address new community concerns.

Map 13 on the following page identifies the existing facilities, near-term projects (green), and the mid-term projects (blue). The mid-term projects specifically provide improved connectivity in North Mukilteo.

Map 13:
Mid-Term Projects



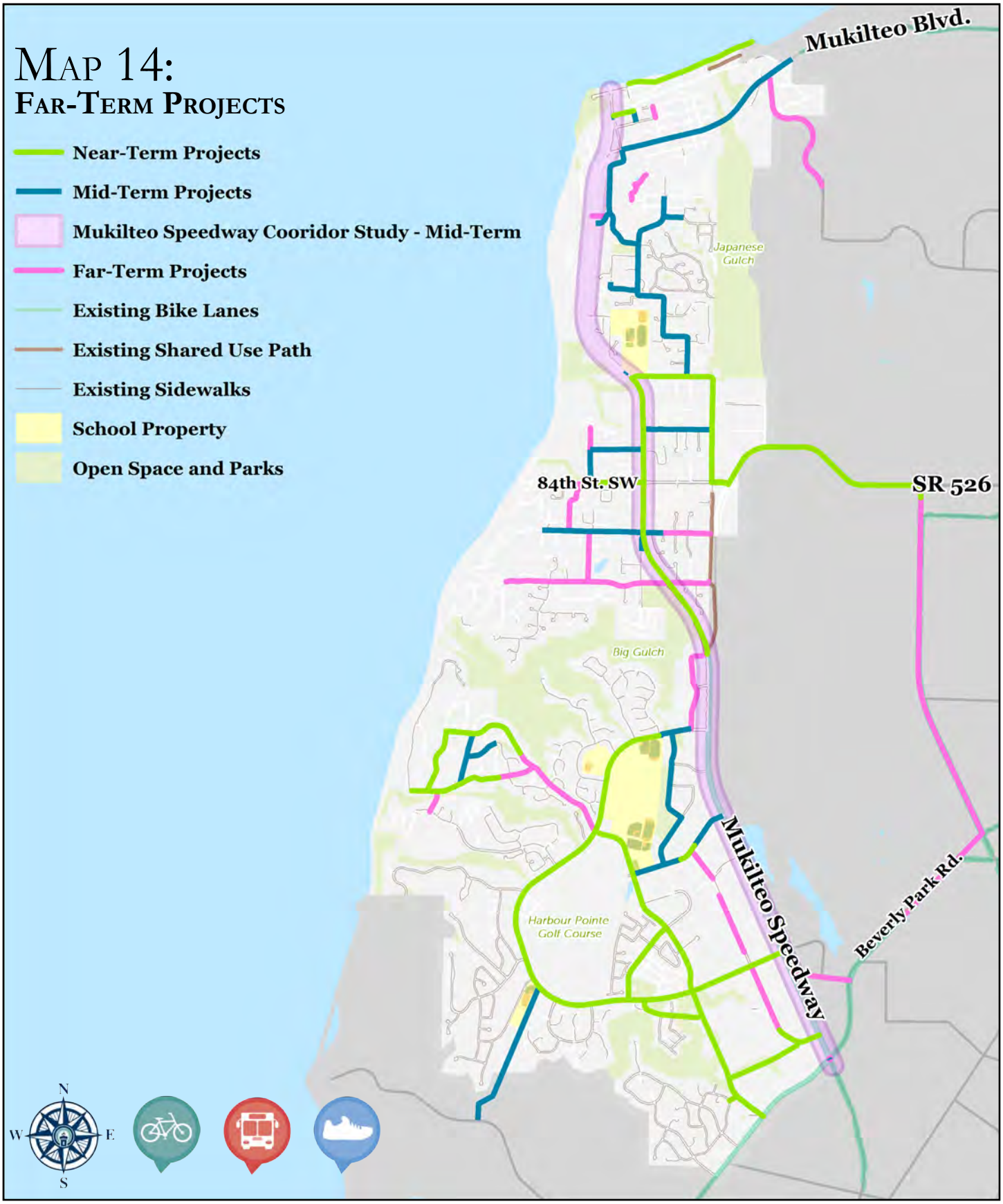


Far-Term Projects

The last group of projects are projects that are slated for 20 years or more away. These projects were identified as far-term projects primarily because the projects were either improving existing facilities or were connecting to projects that were identified in the near or mid-term projects. These far-term projects should be evaluated for their timeline with the update of the BTW Plan when running concurrent with the Mukilteo Speedway Corridor Study. The criteria to consider when advancing projects from the far-term list to the mid-term list include:

- Completed connections from near-term and mid-term projects;
- Pairing opportunities from other updated capital project lists; and
- Maintaining opportunistic approaches for external funding availabilities.

Map 14:
Far-Term Projects



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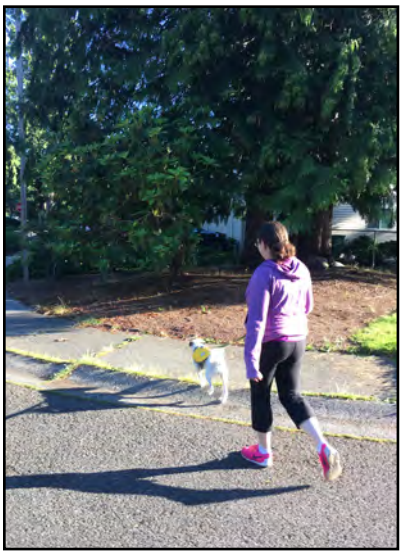
5

PREFERRED PROJECTS

Priority Matrix

Preferred Projects



Preferred Projects:

The preferred projects section is structured based on the project timeline of near-term, mid-term, and far-term projects, as well as the priority score of the project. This organization creates a project list for direct integration into the Capital Improvement Projects list. The design of Chapter 5 and Chapter 6 is the distinction between what projects are considered 'preferred projects' and what projects are 'future projects'. Because near-term projects are designated to happen in a shorter time frame, it makes reasonable sense to discuss near-term projects from mid-term and far-term projects. Chapter 5 is focused on individual near-term projects (preferred projects), where Chapter 6 is more focused on the generalities of the mid-term and far-term projects (future projects).

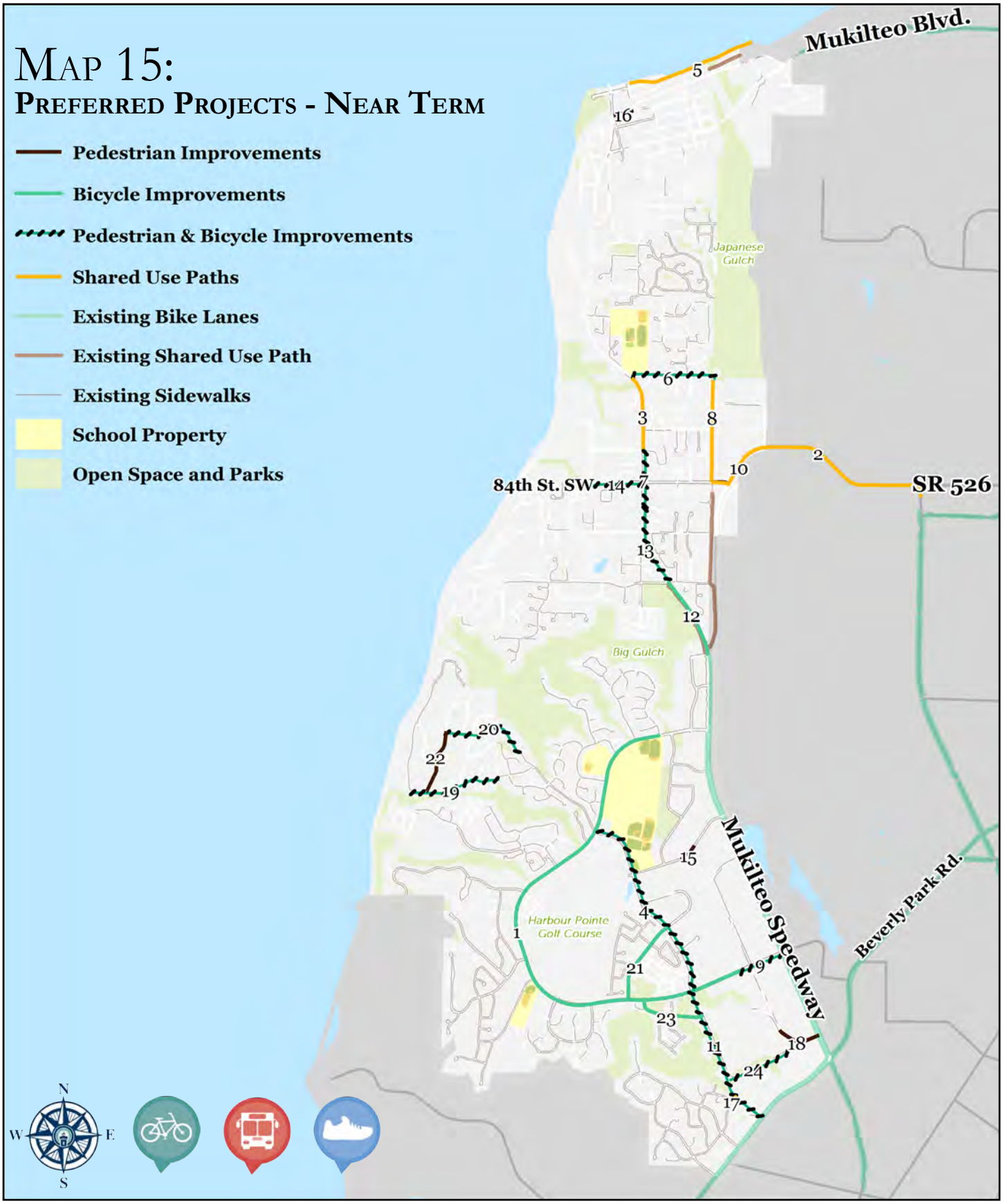
Priority Matrix

To determine a priority matrix with which to assess each projects, City Staff completed a workshop with the Planning Commission to discuss how should one project characteristic should be weighted against another project characteristics. This discussion led to the following criteria list and points eligible for the project:

- **Connectivity**
  - 20 Points - Proximity to Schools
  - 15 Points - Proximity to Community Facilities (YMCA, Rosehill, Boys & Girls Club, Medical Facilities, Parks, Trails, City Hall, and similar)
  - 10 Points - Transit Connections
  - 5 Points - Proximity to Commercial/Employment Centers
  - 5 Points - Connections to 'Greenways'
- **Safety**
  - 10 Points - Speed of Vehicles
  - 10 Points - Accident History
  - 5 Points - Existing Bicycle Facilities
  - 5 Points - Existing Pedestrian Facilities
  - 5 Points - Separated Facility
  - 5 Points - Number of Daily Vehicle Trips (ADT)
- **Other**
  - 20 Points - Project Pairing Opportunities
  - 10 Points - Grant Eligible
  - 10 Points - Social Equity
  - 5 Points - Public Outreach

In order to continue a grading methodology for 'which projects to fund', Chart 1 and Chart 2 on page 90 plots the projects into a management matrix based on the project's priority score and cost.

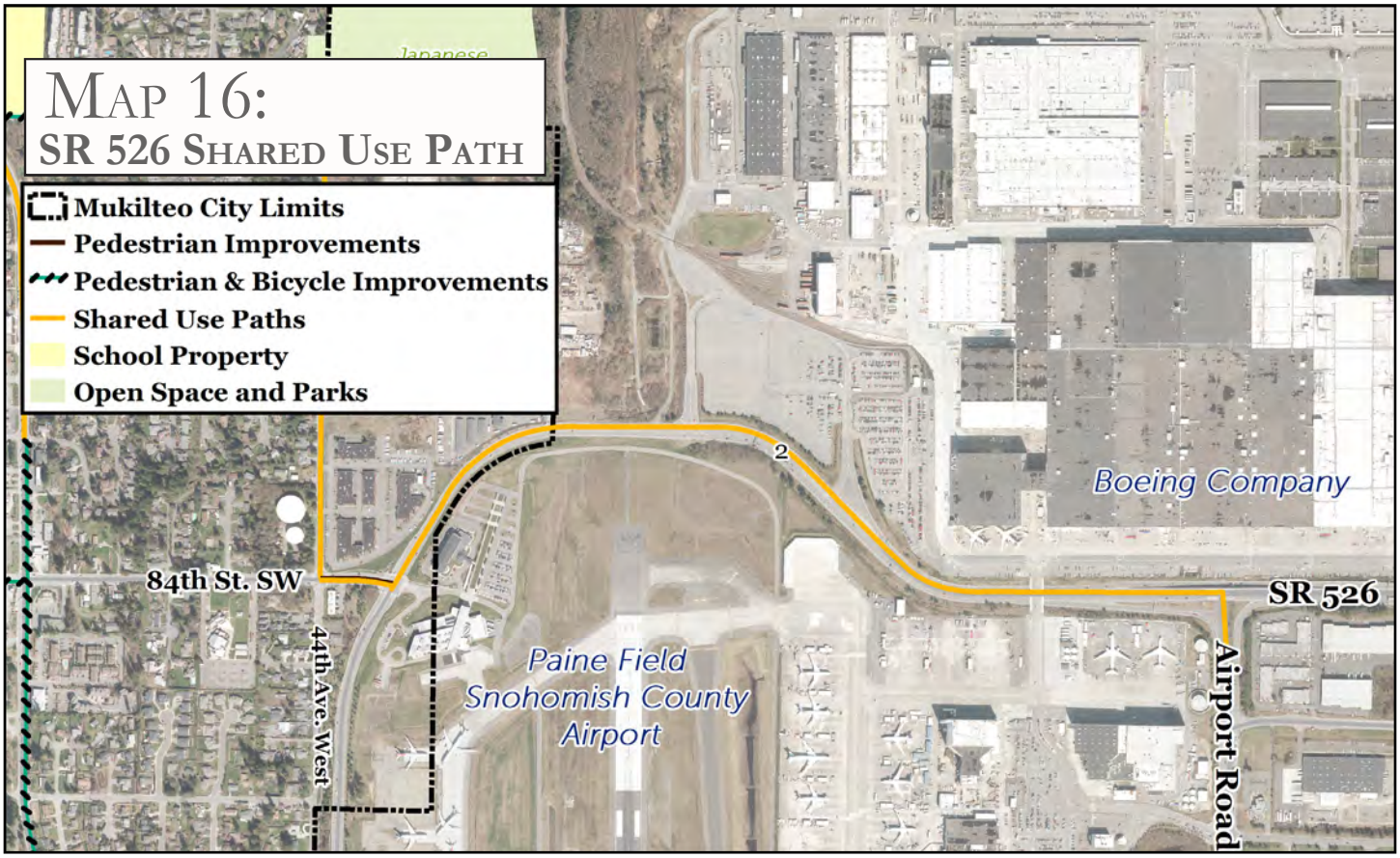
Map 15:
Preferred Projects - Near Term



1. Harbour Pointe Boulevard
Priority Score: 114

Project 1 is nearly complete and was started after the BTW Plan process had begun. This project for Harbour Pointe Boulevard was a primary example of the ingenuity of the Public Works Department to further a current partnership with Snohomish County by implementing bike lanes with the annual restriping project. During this striping project, the soft costs associated with city management, mobilization, and typical overhead costs are practically zero given the partnership with Snohomish County who conducts the annual roadway striping project. This is an easy win.

The previous facility was designed that pedestrian and cyclists would be able to adequately share a single recreation path. This 5 mile roadway is no longer adequate for all modes of travel, as many cyclists choose to ride the roadway and not on the recreation path. Given the width of the existing lanes, most places within Harbour Pointe Boulevard are suitable for a standard bike lane or at minimum bike sharrows at narrow lane portions. By implementing this option, the existing recreational path is less dependent for cyclists and provides more capacity for pedestrians.



2. SR 526 Shared Use Path
Priority Score: 95

Currently the City is working with regional partners on the design of the SR 526 Shared Use Path. This project would provide connection from 84th Street SW to Airport Road by utilizing a shared use path on the south side of SR 526. While funding only currently exists for the design phase, future construction funds may become available through grant opportunities and lobbying for additional state, and county funds for the regional connection. This pathway will provide safer bicycling access to the Boeing Facility, and ultimately connect to Project 52 - Airport Road Shared Use Path.

The table to the right identifies the total cost expectations of the projects for all parties of the project.

Table 6: SR 526 Shared Use Path	
Total Work Done by Contractor	$3,421,000
Design, Sales Tax, Contingency, Permits	$1,836,393
Subtotal	**$5,257,393**
Additional Contingency(30%)	$1,395,768
Estimated Total	**$6,653,161**
2021 Dollars at 3% Annual	**$7,712,344**

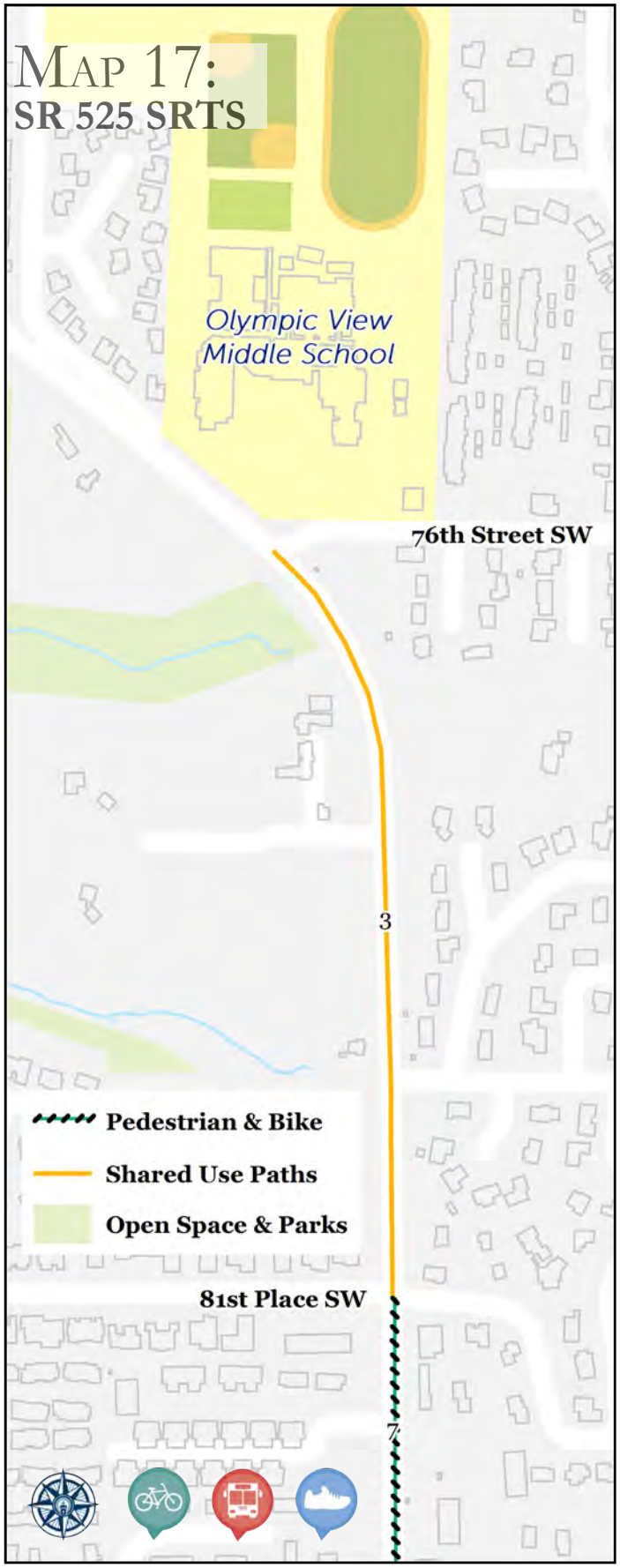
While the Mukilteo Speedway will be studied in the corridor analysis, during the public outreach for the BTW Plan several projects were identified as important to many residents. To ensure that these projects are further researched in the Corridor Study, they are identified below:

3. SR 525 Safe Route to School Priority Score: 94

The existing sidewalk on the Mukilteo Speedway between 76th Street SW and 81st Place SW is inadequate for a safe route to school. While the facility exists, there lies the opportunity to increase the size of the sidewalk as a shared use path facility. This size of facility will provide the opportunity for students to walk or ride safely along the Mukilteo Speedway.

Table 7: SR 525 SRTS	
Total Work Done by Contractor	$698,131
Design, Sales Tax, and Permits	$346,273
Estimated Total	**$1,044,404**
2021 Dollars at 3% Annual	**$1,210,674**

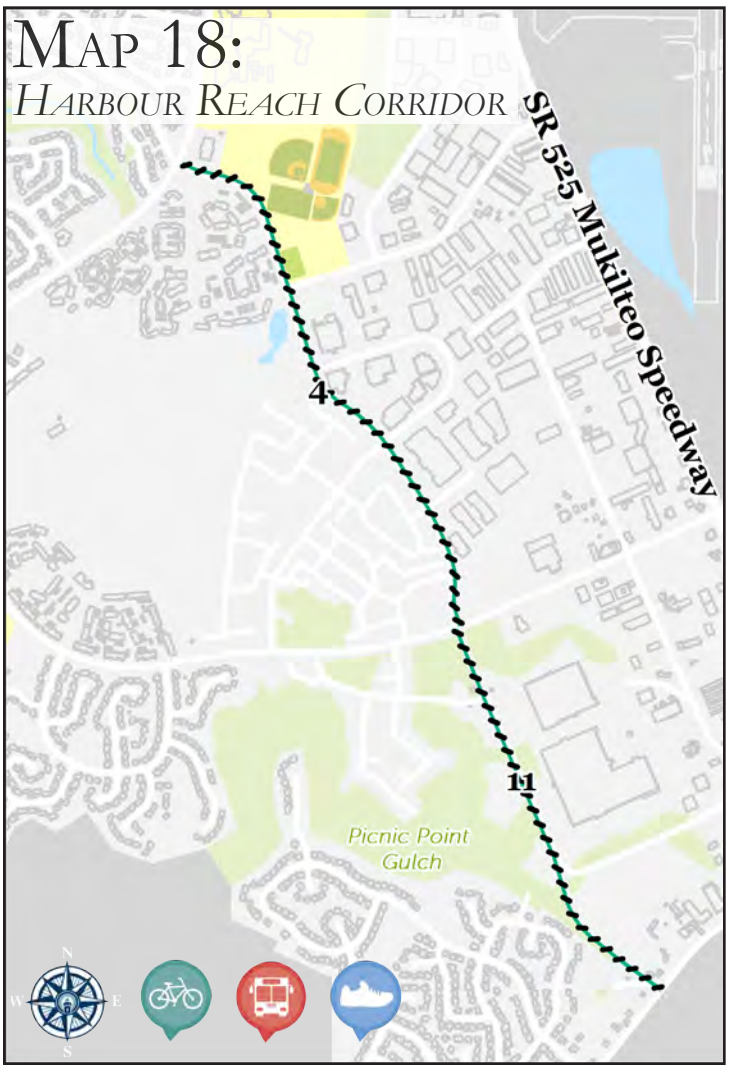
SR 525 Facing South



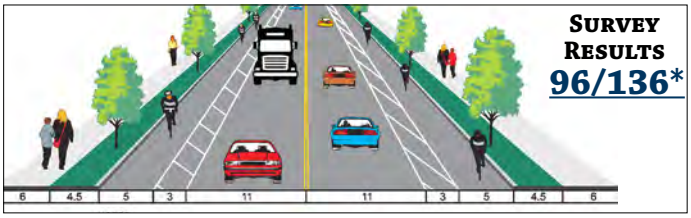
Harbour Reach Corridor - Project 4 - Priority Score 93 & Project 11 - Priority Score 57

Harbour Reach Drive is an existing roadway that will be extended to connect Harbour Pointe Boulevard South to Beverly Park Road. This project is a capacity project as it will alleviate congestion at the intersection of SR 525 & Harbour Pointe Blvd as well as SR 525 & Beverly Park. As Project 11 - Harbour Reach Corridor is a fully funded project currently under development, Project 4 - Harbour Reach Drive Retrofit will reformat the existing roadway to conform to the proposed cross section. As Harbour Reach Corridor is fully funded, final construction cost estimates will allow City Staff and HW Lochner, consulting engineering firm, to determine the feasibility of implementing a retrofit project. Because the retrofit project is dependent upon the extension project, the BTW Plan did not perform cost estimates at this time. Should the Harbour Reach Corridor be unable to perform the necessary level of retrofitting, the City shall consider Project 4 incomplete and maintain the project on the 6-year list with cost estimates determined by HW Lochner.

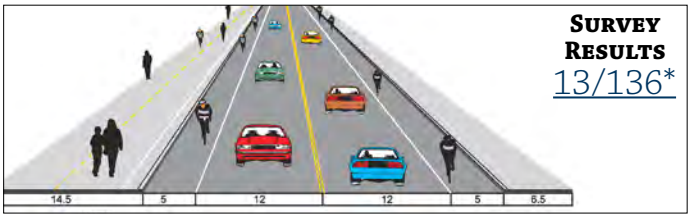
During the public outreach for the BTW Plan, an online-survey was conducted for the Harbour Reach Corridor to determine the preferred street cross-section. This survey presented four different cross-sections, which showed various levels of bike facilities and pedestrian facilities with consistent vehicle facilities. The survey results on each option are indicated below.



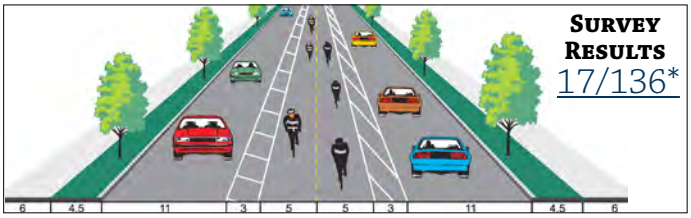
Option 1 - Buffered Bike Lanes



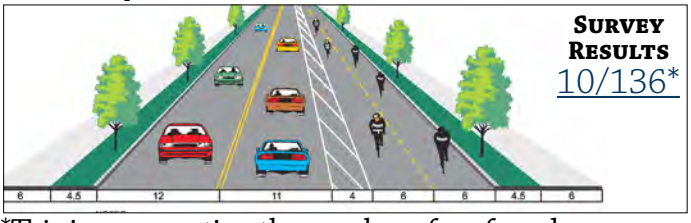
Option 2 - Shared Use Path



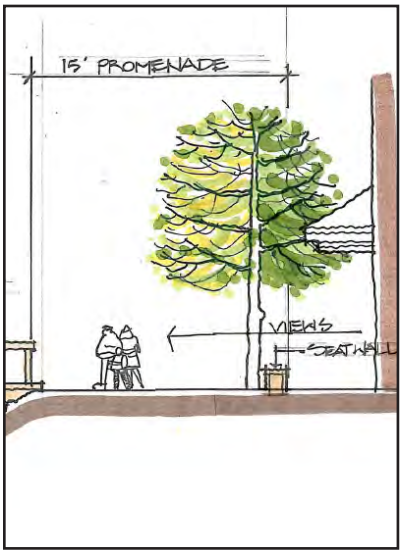
Option 3 - Center Cycle Track



Option 4 - Side Cycle Track



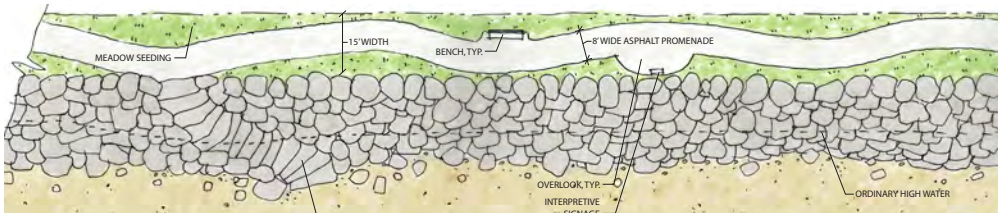
*This is representing the number of preferred responses to the total number of responses.



5. Waterfront Promenade - Priority Score 90

The Waterfront Promenade is considered a regional facility as it provides services to users of the Multi-Modal Center with Washington State Ferries, Sound Transit, Community Transit, and Everett Transit all converging into a single hub. This hub is not only a destination to leave Mukilteo and travel to Seattle or Everett, but this hub is also the end destination. The implementation of the Mukilteo Downtown Waterfront Master Plan will make the Mukilteo shoreline a vivid and vibrant place to experience Possession Sound's gorgeous shorelines and interact with our aquatic nature. Not only will the Waterfront Promenade provide recreational amenities with the transportation hub, but will provide connectivity between the Waterfront and Japanese Gulch Park's expansive trails. The Waterfront Promenade is a project that should be led through the implementation of the Downtown Waterfront Master Plan and the cost estimates for an interim promenade are shown. As the City continues the preliminary design work of the promenade additional cost estimates regarding the final design will become more readily available and should be incorporated into future updates of this plan.

Table 8: Interim Promenade Design Per Downtown Waterfront Master Plan	
Total Construction Cost	$127,186
Design, Sales Tax, Contingency, Permits	$104,587
Subtotal (2014 U.S.D.)	**$231,773**
Inflation over 5 years	$34,766
Total (2019 U.S.D.)	**$266,539**
City Staff PE/CE	$52,769
Grand Total (2019 U.S.D.)	**$319,309**



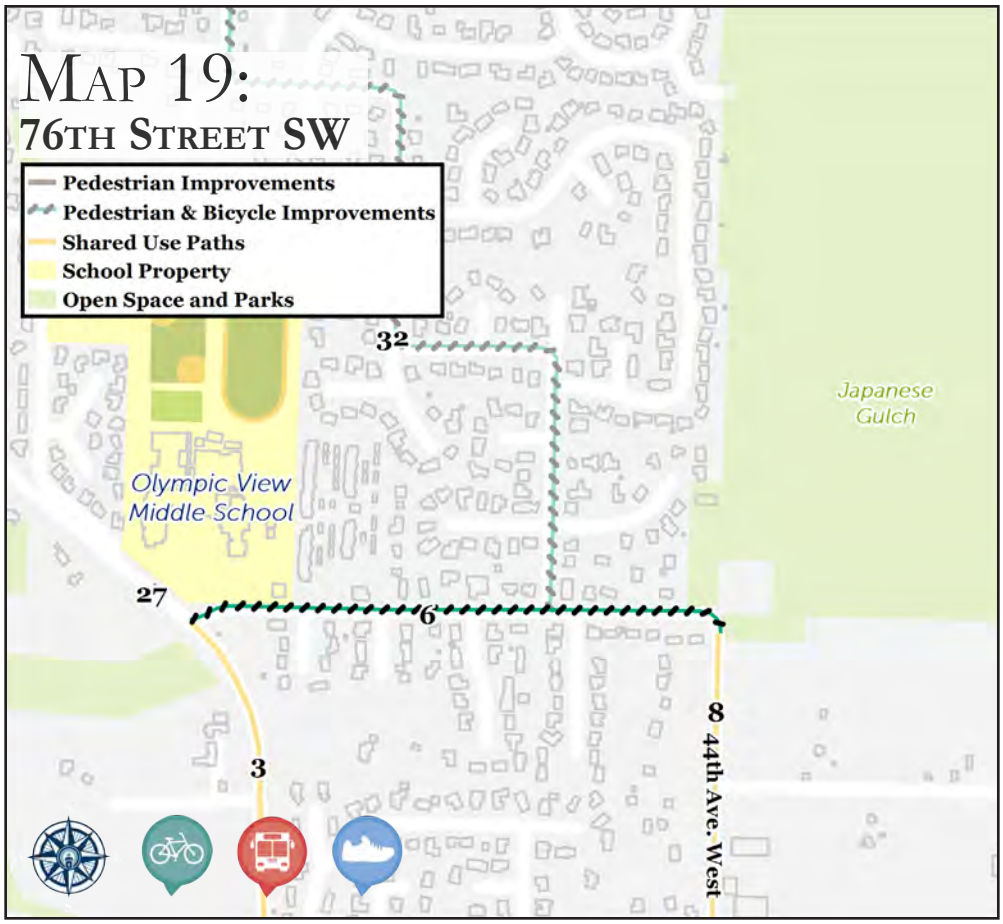
Downtown Waterfront Master Plan
Interim Promenade Design

6. 76th Street SW - Priority Score 89

76th Street SW is a destination connector, meaning that at either end of the roadway are two primary destinations within the City. Olympic View Middle is at one end while the 76th Street Trailhead and access to Japanese Gulch Park is at the other end. The proposed project includes completing the sidewalk system and adding new bike facilities. More detailed information about the sidewalk estimating can be found under the Tuttle Sidewalk Report located in the Appendix. These costs may be lower depending on project pairing.

Table 9: 76th Street SW Project 6	
Total Work Done by Contractor	$893,539
Design, Sales Tax, Contingency, Permits	$443,195
Estimated Total	**$1,336,734***
2021 Dollars at 3% Annual	**$1,549,541***

*The cost estimates below differ from those provided by the Tuttle Report, because the previous estimates did not include the costs of bike facilities which City Staff included at a rate $539 per 100 feet of construction costs.

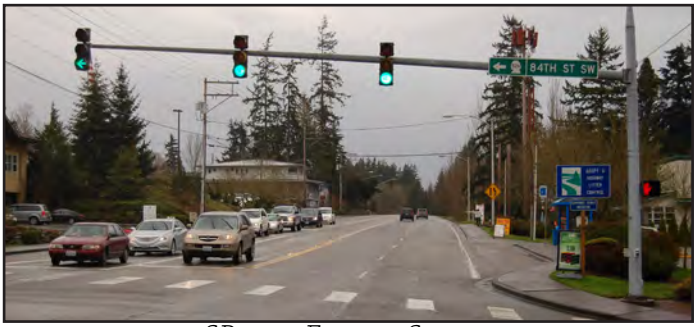


7. Midtown Sidewalks & Bike Lanes Section 1 - Priority Score: 89

In connection with Project 3 - SR 525 Safe Route to School, the focus of the improvements along SR 525 is to take advantage of opportunities to improve connectivity prior to the Mukilteo Speedway Corridor Plan, should they be available.

The Mid-Mukilteo Commercial Corridor currently lacks adequate facilities to fully support commerce by feet and pedal, not by car. As the City has identified the need for the Midtown Mukilteo to be studied further in LU6 of the Comprehensive Plan and potentially consider a Subarea Plan, the identified costs below represent a sample cost of potential improvements. This roadway should be reviewed more with the public outreach of the Midtown Mukilteo.

Table 10: Midtown Mukilteo Section 1	
Total Work Done by Contractor	$2,962,241
Design, Sales Tax, Contingency, Permits	$2,355,575
Subtotal	**$4,512,086**
Additional Contingency(20%)	$805,730
Estimated Total	**$5,317,816**
2021 Dollars at 3% Annual	**$6,164,412**



SR 525 Facing South

8. 44th Shared Use Path Priority Score: 88

The City had previously completed a shared use project on 44th Ave West, south of 84th Street SW, with the development of Paine Field Blvd. This project proposes to continue the existing path north to 76th Street SW. This 10'-15' shared use facility can have significant portions constructed with the development of vacant industrial land or the City could construct the frontage improvements as an economic development initiative to better market the development of these lots. This facility, along with the previously mentioned projects, will finish the north-south connection from 5th Street to Paine Field Blvd & SR 525 at the 'Spur'.

Since the start of the BTW Plan drafting, an industrial project permit has been submitted. Under this permit, the requirement the street frontage will be for sidewalks, and bike lanes and not the preferred shared use path. The City should be flexible with design considerations for the remaining portions of the roadway.

- Easy Wins -

Perform frontage improvements as an economic development initiative to develop the vacant industrial land.

Table 11: 44th Ave West - Project 8	
Total Work Done by Contractor	$1,083,750
Design, Sales Tax, Contingency, Permits	$567,018
Subtotal	**$1,650,768**
Additional Contingency(20%)	$294,780
Estimated Total	**$1,945,548**
2021 Dollars at 3% Annual	**$2,255,279**

Existing 44th Shared Use Path

9. Harbour Pointe Boulevard Widening
Priority Score: 85

Project 9 is a capacity project that will improve the level-of-service (LOS) at the intersection of Harbour Pointe Boulevard and SR 525. This intersection is currently at an LOS D (Rated A to F) and is projected to decrease to LOS E with no improvements. The proposed project will add a second right turn lane to head south on SR 525. This project, paired with Harbour Reach Corridor, should decrease the signal delays at Harbour Pointe Boulevard and Beverly Park Road and increase the traffic flow through these intersections. This project is fully funded at a project costs of $1,900,000.

Harbour Pointe Blvd Facing East Towards SR 525

10. SR 526 Sidewalk
Priority Score: 82

As identified by the Tuttle Report, the need for sidewalks on SR 526 is clear. This section of roadway has seen the establishment of a 'goat' trail that borders several of the properties. This has been created by individuals continuing to walk on the same pathway over and over again. Future consideration should be given as to if Project 10 is no longer needed or significantly less needed with the implementation of Project 2 for the SR 526 Shared Use Path on the other side of the roadway.

Table 12: SR 526 Sidewalks	
Total Work Done by Contractor	$167,293
Design, Sales Tax, Contingency, Permits	$82,978
Estimated Total	**$250,271**
2021 Dollars at 3% Annual	**$290,114**

Existing 'Goat Trail' as Pedestrian Refuge Route

12. Midtown Bike Lanes
Priority Score: 81

The existing Mukilteo Speedway Shared Use Path provides adequate pedestrian facilities into Midtown Mukilteo, however the existing bicycle facilities along this primary route are lacking. During the public outreach, it was expressed that using the shared use path for all cyclists in both directions was inadequate, and many cyclists will choose to still ride in the shoulder. To provide for an adequate bike facility for cyclists who are destination oriented and are traveling at speeds higher than appreciated by pedestrians, the creation of a bike lane in each direction at this location will provide the necessary connectivity needed. This project should be further studied with the Mukilteo Speedway Corridor Plan.

Table 13: Midtown Bike Lanes	
Total Work Done by Contractor	$23,020
Design, Sales Tax, Contingency, Permits	$11,417
Estimated Total	**$34,437**
2021 Dollars at 3% Annual	**$39,920**

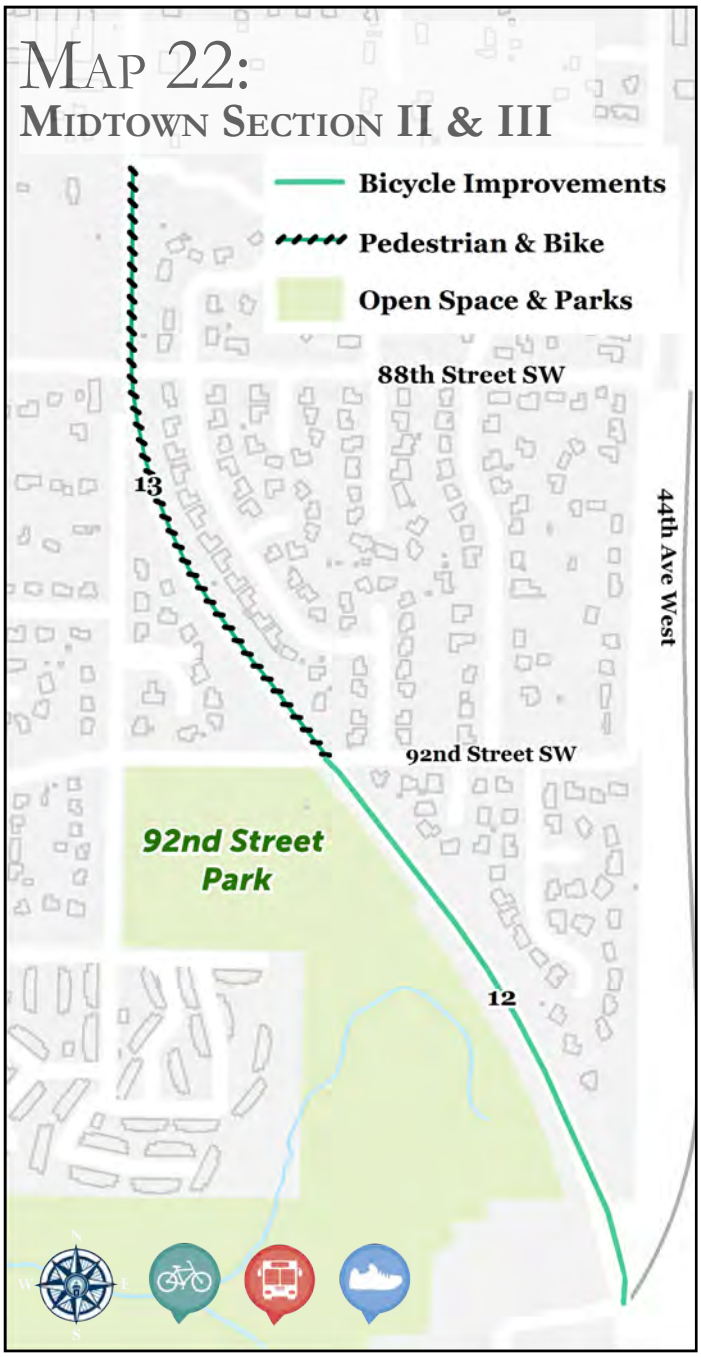
13. Midtown Sidewalks & Bike Lanes
Priority Score: 77

The Midtown Section 1 supported connectivity for commerce purposes, whereas Section 2 supports the quality of life connectivity by providing a safe route to 92nd Street Park and the existing Mukilteo Speedway Shared Use Path to Harbour Pointe. Phase 2's project area is from the 8600 Block of SR 525 to 92nd Street SW.

Table 14: Midtown Mukilteo Sidewalks & Bike Lanes	
Total Work Done by Contractor	$1,284,466
Design, Sales Tax, Contingency, Permits	$637,095
Subtotal	**$1,921,561**
2021 Dollars at 3% Annual	**$2,227,474**

- Easy Wins -

- Implement Signage on SR 525 when shoulders either narrow/end as caution for both motorists and cyclists.
- Provide additional wayfinding to support slower cyclists on the existing shared use path.
- Transition existing shoulders to Bike Lanes.



SR 525 Facing North Towards 88th Street SW

14. 84th Street Sidewalks
Priority Score: 68

This section of roadway is apart of the Smuggler's Gulch Local Connections that provides improved mobility throughout the 81st to 92nd Street community. This specific section is an area that provide connectivity to the commercial area and is the first leg of creating the network for other projects to connect to. This connection would connect 54th Place West to SR 525.

Table 15: 84th Street Sidewalks	
Total Work Done by Contractor	$502,768
Design, Sales Tax, Contingency, Permits	$249,374
Subtotal	**$752,142**
2021 Dollars at 3% Annual	**$871,883**

84th Street SW Facing East Towards 53rd Ave West

15. Chennault Beach Road Sidewalk
Priority Score: 60

Chennault Beach Road is defined as an urban collector and transports residential and commercial traffic from SR 525 to Harbour Reach Drive. This section of roadway, much like 47th Ave West, has a significant number of employers, providing adequate pedestrian and bicycle facilities along this section will provide connectivity between dense residential development within Harbour Pointe, large employers, and a regional transit facility. This project will complete a sidewalk gap and allow for future projects as a mid-term to implement bicycle facilities.

Table 16: Chennault Beach Road Sidewalk	
Total Work Done by Contractor	$157,836
Design, Sales Tax, Contingency, Permits	$78,286
Estimated Total	**$236,122**
2021 Dollars at 3% Annual	**$273,713**

Chennault Beach Road Facing East Towards SR 525

- Easy Wins -

Pair bike improvements with annual roadway striping

16. 2nd Street Sidewalks
Priority Score: 57

2nd Street was designated as a pedestrian-oriented street within the Downtown Business District Subarea Plan. This purpose of this designation is to increase mobility to promote a vibrant commerce area. The reason for 2nd Street as a near-term project is provide the opportunity to pair the projects with pending pedestrian bridge over the BNSF Right-of-Way. By identify this project now, the intent is to continue the conversation about improving this section if additional funding becomes available to create a better connection to the future pedestrian bridge.

This section is proposed from SR 525 to Park Avenue.

Table 17: 2nd Street Sidewalks	
Total Work Done by Contractor	$587,017
Design, Sales Tax, Contingency, Permits	$291,160
Subtotal	**$878,177**
2021 Dollars at 3% Annual	**$1,017,984**

2nd Street Facing East towards Park Avenue

Connections to Harbour Reach Corridor

17. Possession Bay Connection: Priority Score: 57

Following public outreach and preliminary designs of the Harbour Reach Corridor, it was determined that Project 17 is infeasible to develop due to grade differential.

18. Cyrus Way Sidewalks - Priority Score: 43

To create an additional connection from Harbour Reach Corridor to SR 525 for pedestrian, Project 18 will fill in missing sidewalk section to create better connections to the existing small commercial hub. This will provide the ability for residents of Crown Park to walk to get a cup of coffee without the dependency on Harbour Pointe Blvd or SR 525.

21. Possession Way Bike Markings & 23. Blue Heron Drive Bike Markings & 24. South Road Markings

Project 21 (Priority Score 37), Project 23 (Priority Score 34), and Project 24 (Priority Score 30) are practically the same project. The intent is to simply utilize the existing roadway and provide signage for pedestrian and bike markings to create an easy route for bicyclists and pedestrians to find their way to and from Harbour Reach Corridor. These projects differ slightly as Project 24 will require more pedestrian wayfinding than Project 21 and 23 given the general locations between the existing commercial sections. Essentially, it is less likely that someone will be disoriented in Project 21 or Project 23 areas than on Project 24 area.

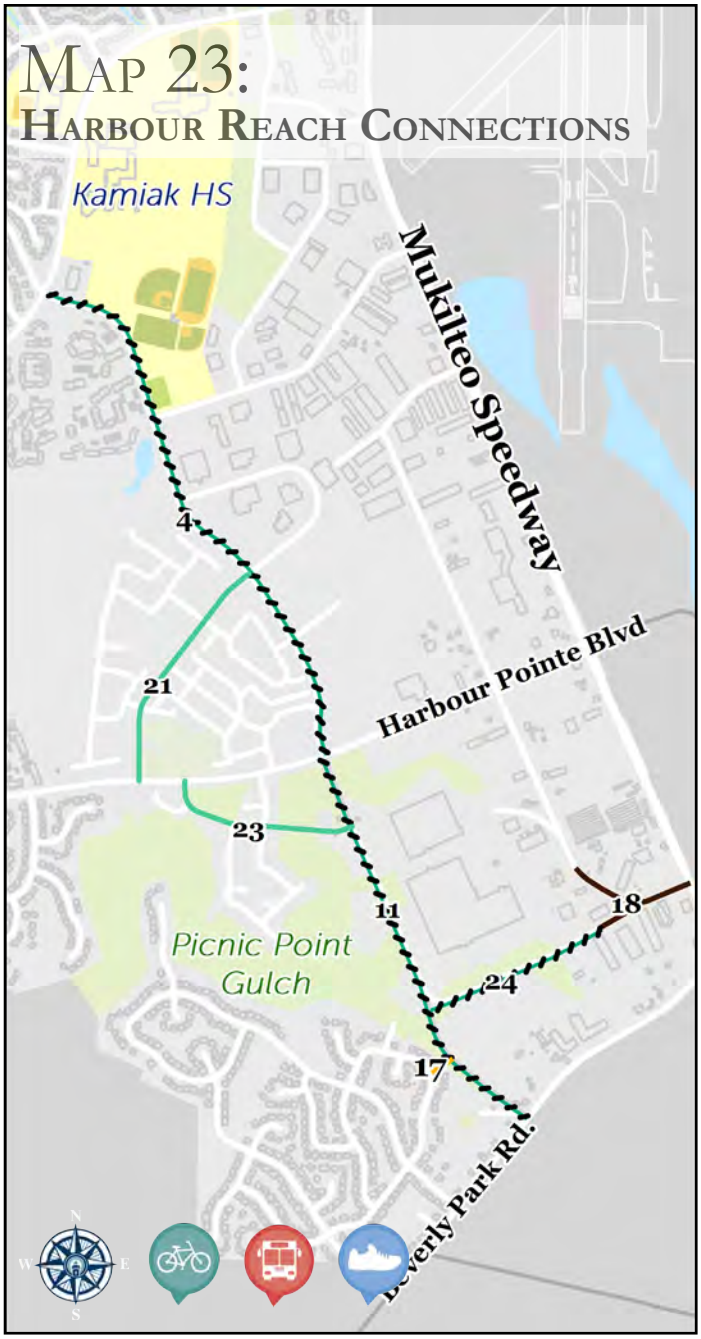
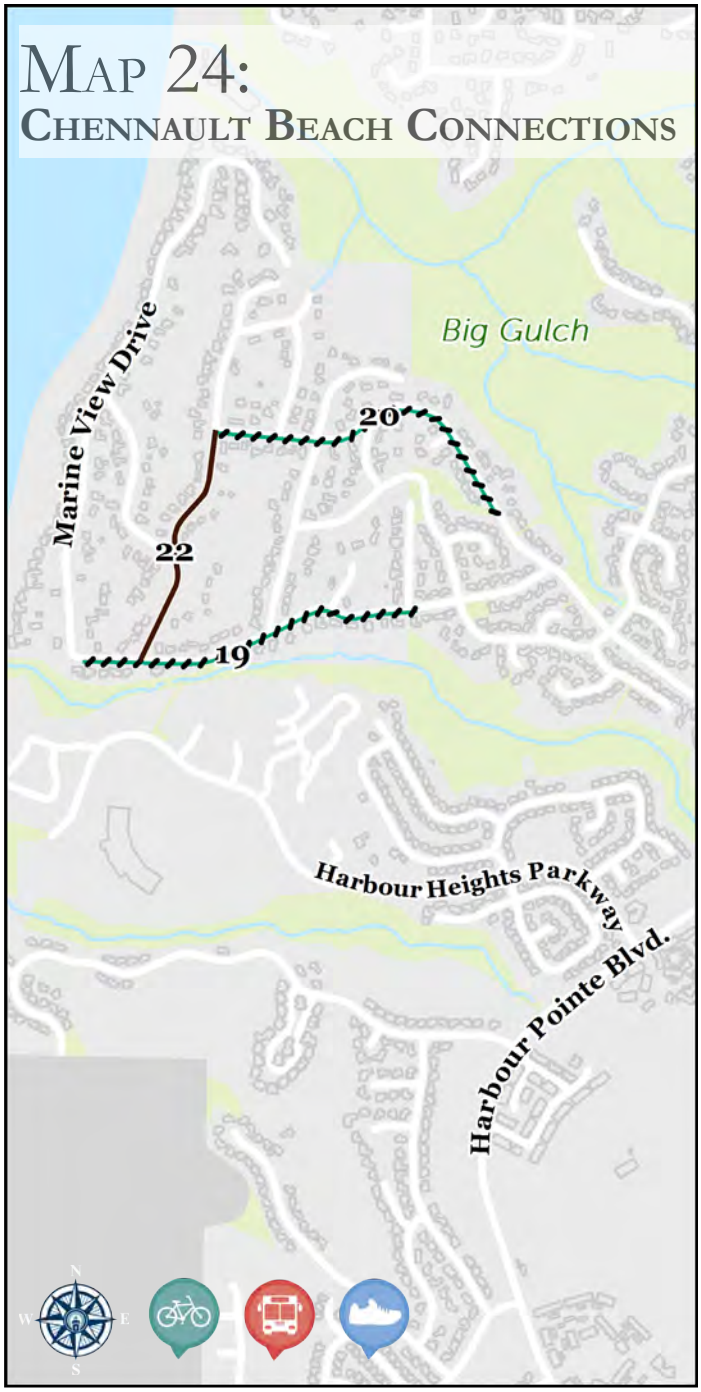


Table 18: Chennault Beach Primary Connections

	Total Work Done by Contractor	*Design, Sales Tax, Contingency, Permits*	*Total ($2021)*
18. Cyrus Way Sidewalk	$511,247	$253,579	**$764,826**
21. Possession Way Bike Markings	$50,644	$25,119	**$75,763**
23. Blue Heron Drive Bike Markings	$18,326	$9,089	**$27,415**
24. South Road Markings	$57,550	$28,544	**$86,094**
Estimated Grand Total			**$954,098**
2021 Dollars at 3% Annual			**$1,105,990**

Chennault Beach Connections

The Chennault Beach Plat was recorded during World War II and would develop into an affluent single family community with a single access point in and out of the community. These proposed connections are to improve connectivity within the neighborhood of over 350 homes as well as provide access to Boeing Harbour Pointe Technical Center.



19. Chennault Beach Drive (Priority 40)& 20. Central Drive (Priority 40) & 22. 64th Place West (Priority 36)

Project 19 & 20 are similar projects to provide a safe bike lane in the uphill direction while also providing a sidewalk to promote a connection to Harbour Pointe Boulevard. While some of this route is supported by a widened shoulder, for a community of over 350 homes these two routes require a minimum of a 6-ft. sidewalk with an uphill bike lane on the primary routes. Bicycle sharrows can be used in the 'downhill fashion' as the speed limit is 25 MPH. Once constructed, these two pedestrian and bicycle paths will promote a higher level of mobility to connect to the existing pedestrian facilities on Chennault Beach Drive. Project 22 is to support pedestrian mobility within the community including the interim options for widened shoulder if curb & gutter sidewalks are infeasible.

- Easy Wins -

- **Project Pairing:** The Comprehensive Surface Water Management Plan (SWMP) Update identifies opportunity for project pairing of BTW Plan's 19 & 20 with the SWMP's #1 & #6
- Add sharrows in 'downhill fashion' with road striping projects.
- Sign as a bike a route and add a bicycle awareness at the intersection of Central Drive and Chennault Beach Road.

Table 19: Chennault Beach Primary Connections

Bike-Transit-Walk Plan	*Total Work Done by Contractor*	*Design, Sales Tax, Contingency, Permits*	*Total ($2021)*	*2015-SWMP*
Project 19 - Chennault Beach Drive	$2,419,083	$1,923,655	**$4,342,738**	#1 - $3,811,000
Project 20 - Central Drive Sidewalks	$1,656,762	$1,317,457	**$2,974,219**	#6 - $5,267,000
Project 22 - 64th Place West	$1,179,981	$869,298	**$2,046,279**	#4 -$1,202,000
Estimated Total			**$8,496,938**	**$10,280,000**
2021 Dollars at 3% Annual			**$9,849,650**	

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6

FUTURE PROJECTS

Introduction
Mukilteo Speedway Projects
Old Town Projects
North Mukilteo Network
Mid-Mukilteo Network
Harbour Pointe Connections
Extra-Jurisdictional Projects

Future Projects:

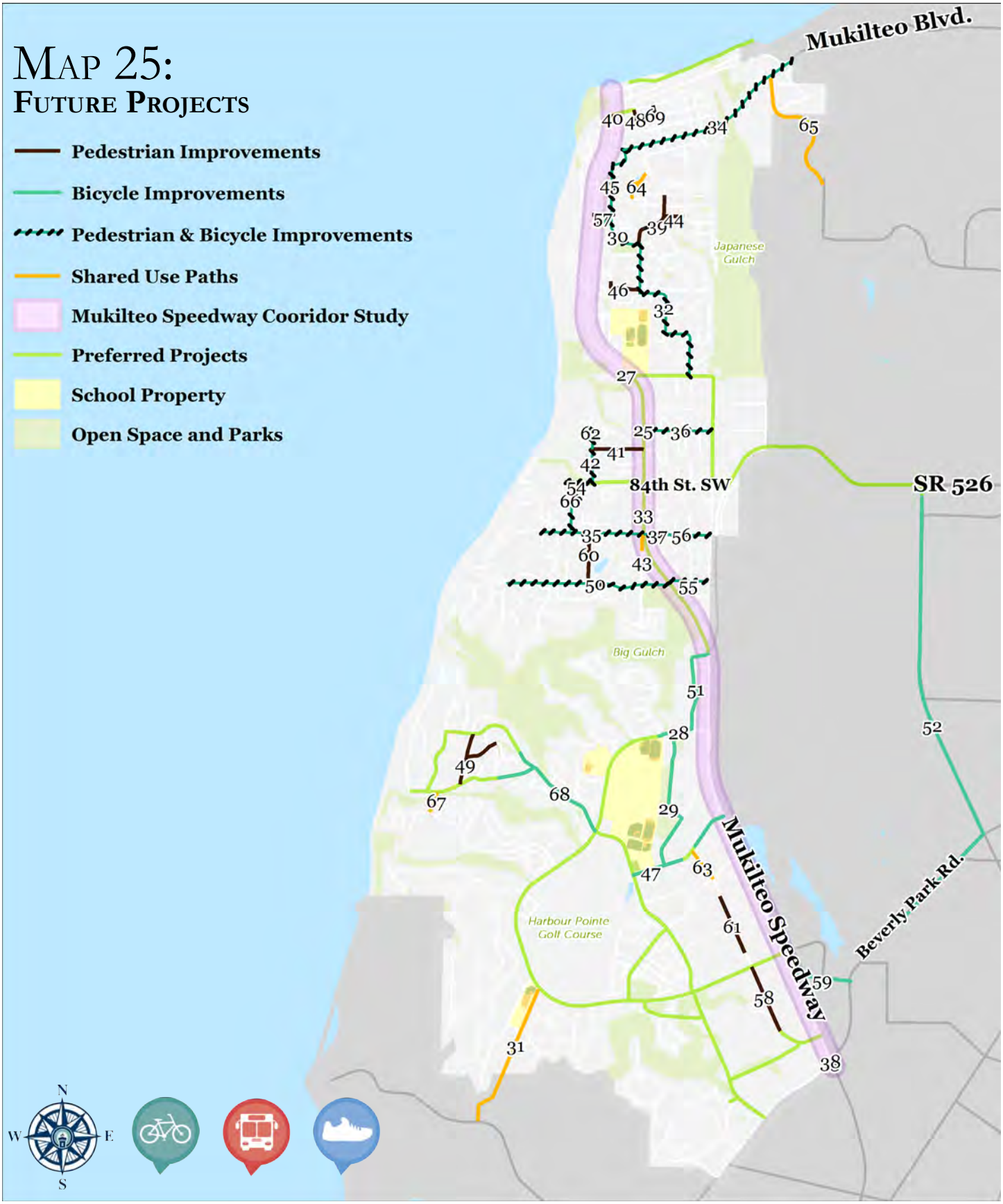
Chapter 5 established the 'preferred projects' to be developed over the next 7 years, but what happens after 7 years? The expectation is that some projects from the preferred projects will not have been completed, and some may not even have been started. As identified Chapter 4 - Making Connections, the criteria to consider when advancing projects from one timeline list to another include:

- Completed connections from near-term and mid-term projects;
- Pairing opportunities from other updated capital project lists; and
- Maintaining opportunistic approaches for external funding availabilities

One additional consideration is the public desire for projects that aren't prioritized. Many of these projects are most likely future projects, but if neighborhoods are interested in advancing projects from the Future Project List to the Preferred Project List, one method may be a Local Improvement District that is explored in Chapter 8.

On the following page is Map 25 that identifies the future projects, and their connections to the Preferred Projects that were discussed in Chapter 5. One important characteristic to note is the number of projects identified within North Mukilteo and Mid-Mukilteo. These areas act together as a network system of multiple projects and is explored further in this chapter.

Map 25:
Future Projects



Mukilteo Speedway - SR 525 Projects 25, 26, 27, 33, & 40

The Mukilteo Speedway is both Mukilteo's largest weakness and largest opportunity to provide facilities for a large variety of user groups. The Mukilteo Speedway has had some significant improvements in the last 15 years and until recently possessed the only existing bike lanes within the City, however other areas of the Mukilteo Speedway require improvements to provide adequate levels of service. In addition to the projects listed below, the BTW Plan calls for a Corridor Study to better understand the long term potential of the roadway. While the identified projects provide a stop-gap between the existing conditions and desired conditions, the changing conditions of the ferry-holding lane on SR 525 provide a significant opportunity for Mukilteo that may significantly change the design approach for biking, walking, and transit usage. This study will require the participation of Washington Department of Transportation, Community Transit, Everett Transit, Mukilteo School District, adjacent property owners, commercial businesses, residents, and special interest stakeholders.

To improve the Mukilteo Speedway, the BTW Plan identifies several future projects in addition to the Preferred Projects that vary in priority and project ranking, but functionally require reviewing together.

*Community Transit Photo courtesy of www.flickriver.com - "Double-Deck Buses and Trams Outside the British Isles", *accessed November 6, 2016*.

Mukilteo Speedway Crossings
Priority Score: 51 to 95

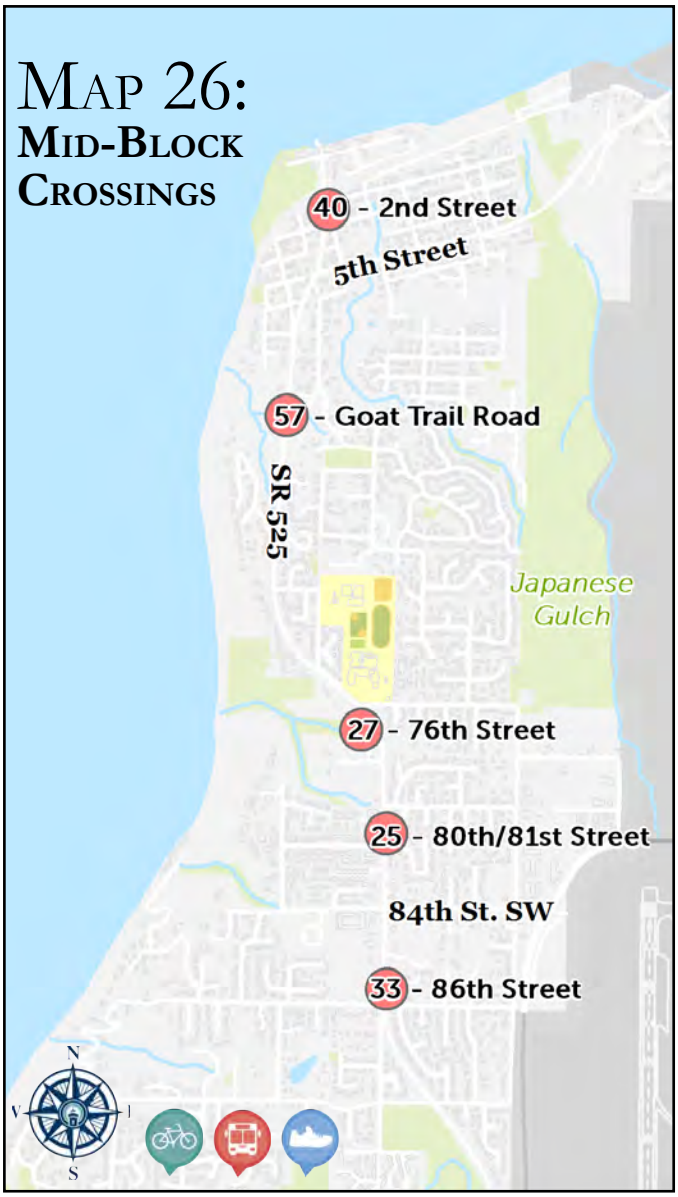
One of the challenges identified during the public outreach was the inability to safely and efficiently cross SR 525. Each of these facilities will require approval from WSDOT and will contribute into the corridor plan as identified on page 64. If the opportunity to establish a mid-block crossing prior to the approval of the corridor plan, the City should pursue the opportunity for implementation.

One option to implement a higher safety factor is the development of a pedestrian refuge island as pictured below. In the diagonal refuge island below, the user is forced to change body direction. By forcing the pedestrian to change directions by a few degrees, the user will visually engage oncoming traffic. This small environmental shift promotes higher communication between motorists and pedestrians while also providing a safe crossing location. These projects costs approximately $121,000 each and include:

- Project 25 - 80th/81st Crossing - Priority Score 95
- Project 27 - 76th Street Crossing - Priority Score 86
- Project 33 - 86th Street Crossing - Priority Score 71
- Project 40 - 2nd Street Crossing - Priority Score 55

The Goat Trail Road crossing is slightly more complicated. Given the adjacent terrain and speed of vehicles, a more suitable long-term option for crossing SR 525 is a pedestrian bridge that would connect to 11th Street. **Project 57**, priority score of 51, is for the implementation of a bridge and comes with a price tag of over $7,000,000. However an interim solution of rapid flashing beacons, ADA improvements and signage could be implemented with a price tag of closer to $60,000.

Diagonal Mid-Block Crossing
Courtesy WSDOT Design Manual



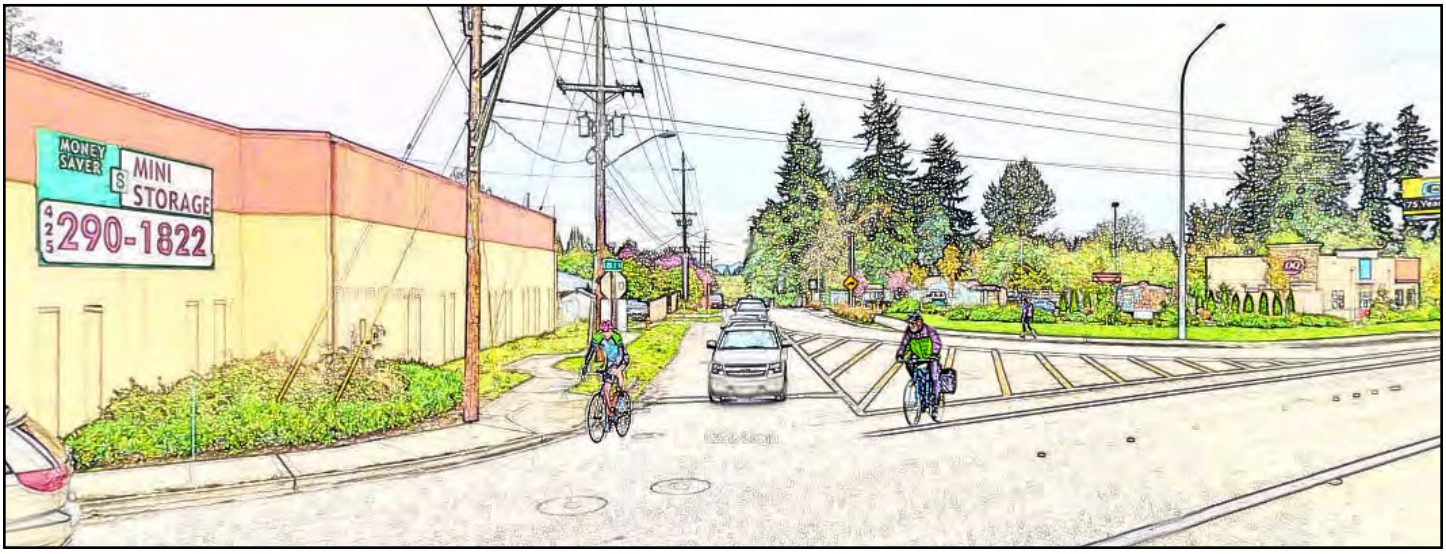
26. Mukilteo Speedway - SR 525 Corridor Study - Priority Score: 87 --- Estimated Cost $130,000

The purpose of the Mukilteo Speedway - SR 525 Corridor Study is to better identify the 20 year vision for the primary route north and south within Mukilteo. This study extends well beyond the depth of the BTW Plan. The Corridor Study will provide more detailed design and transportation engineering regarding traffic engineering whereas the BTW Plan focuses on identification of routes and connections in Mukilteo. There are three primary drivers for the use of a corridor plan:

1. The construction of the new Multimodal Ferry Terminal has a very high likelihood of reducing the required length of ferry holding lanes located on SR 525. With the reduction in this demand, a roadway reconfiguration project has merit where the vehicle holding lane could potentially serve as a pedestrian facility during non-peak ferry demand (under 85th percentile). This potential means that additional pedestrian facilities could be added to the Mukilteo Speedway without the requirement of expanding the footprint of the roadway.
2. Mid-Mukilteo is quickly becoming a prime location for redevelopment. This area from 76th Street SW to 88th Street SW has the opportunity to become a true neighborhood center for the Mid-Mukilteo neighborhood with the opportunity for mixed-use development and revitalized commercial opportunities. Here the Mukilteo Speedway divides the subarea into an east and west portion and challenges the design efforts for a pedestrian oriented development as envisioned by the Comprehensive Plan. The Corridor Study will have the opportunity to review this vision with connection to the ferry holding lane segment.
3. The changes identified in the two reasons stated above provide the opportunity to reconsider bike, transit, and walking movement throughout the entire corridor. While a significant portion of SR 525 has been improved, alternatives for a single shared use path may be feasible whereas the BTW Plan identifies projects below as 'stop-gap' options in response to existing conditions.

59. 121st Street Improvements
Priority Score: 47 --- Estimated Costs $380,000

The intersection at 121st Street and the Mukilteo Speedway is a vital link between Beverly Park Road and the Mukilteo Speedway. This link provides the opportunity for pedestrians and bicyclists to reduce their route by approximately 3,000 feet. This efficiency increases opportunity for a connection to the Paine Field Community Park, but currently 121st Street lacks safe bike connections. The proposal would be to add bike lanes on this roadway and the improve connection between 121st Street and Harbour Pointe Boulevard SW.



38. & 53. Interim & Final Build of Beverly Park Road Intersection Improvements
Priority Score: 60 --- Estimated Total Costs $1,690,000

The intersection at Beverly Park Road is at the boundary between the City of Mukilteo and unincorporated Snohomish County. This area has seen some significant growth of multi-family residential and is a regional corridor bicycling to connect to Edmonds, Lynnwood, and the Interurban Trail. Due to the high volume of vehicle movement, the pedestrian crossing are physically long distance. One method to make this walkway more pedestrian friendly is to add 'pork chops' that would decrease the crossing distances as shown below.

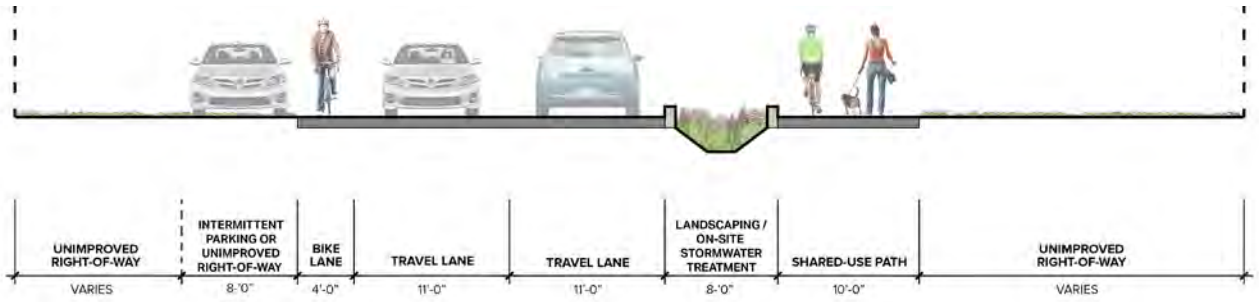
Old Town Projects

5th Street serves Mukilteo as a principal arterial including connection to the entire Mukilteo Boulevard Community, Glenwood Avenue, and 41st Street. Within the Everett jurisdiction, the Mukilteo Boulevard has been treated with bike lanes in a converted shoulder. In order to connect to this regional facility, the preferred alternative must balance the neighborhood character, meet on-street parking demand, and maintain reasonable project cost. Previously, the TIB (Transportation Improvement Board) approved a grant for the City of Mukilteo to make 5th Street into a boulevard roadway with a raised planter median. Following neighborhood backlash against the project, the TIB grant was given back. In order to prevent such occurrences in the future, public outreach must be conducted during conceptual design, preliminary design, and construction. The City conducted extensive outreach with the community and this conceptual design captures the general opinion.

To ensure that this plan meets the public opinion and is supported by the Community, City Staff held a *5th Street Neighborhood Meeting* on March 31, 2016 to discuss potential alternatives. During this discussion, it was identified that many residents supported the overall intent to limit the total amount of pavement, but many individuals would like to have some sort of bike facilities and pedestrian facilities. There were additional concerns expressed by a few that any change would negatively impact the community. To balance these opinions, the BTW Plan identifies an alternative that maintains the existing character of the roadway while providing necessary pedestrian amenities.

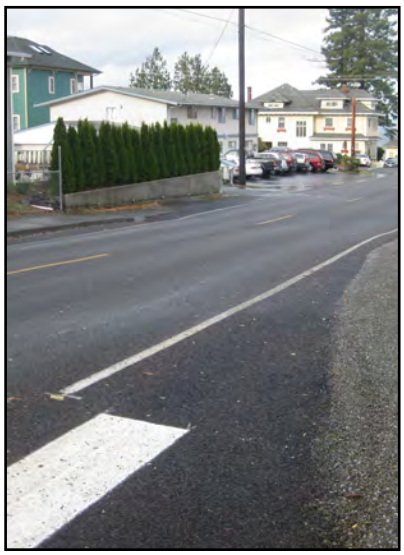
34. 5th Street - Priority Score: 64 --- Estimated Cost $2,500,000

Throughout the BTW Plan Public Outreach, the consideration for implementation included an interim solution and a future final build solution, however Staff identified an alternative to merge the benefits of interim solutions and final build while controlling costs to create a feasible option. This alternative became known as 'Alternative 3'. Alternative 3 identifies opportunity for parking, one bike lane, and shared use path. The principle with the alternative is to implement the desired facilities within the existing 'improved area' of approximately 44 feet. One the challenges to address is on-street parking, and this interim design proposes to transfer the use of existing on-street parking into intermittent parking as needed on both sides of the roadway. The intent of intermittent parking is to provide high flexibility to meet true parking demands while minimizing pavement. As the properties along the north side of 5th Street have access to either a garage or alley parking, the final design is expected to minimize on-street parking. With the proposed design, on-site stormwater management may be required and to meet this potential a flexible space for a bioswale is identified or could also be used as landscaping and parking. Alternative 3 still provides flexibility to meet changing demands. This flexibility provides the opportunity for additional public input and at this stage is a conceptual design only for planning, and cost estimating purposes. *The City will continue public outreach efforts with the residents on 5th Street to address any adverse impacts to landscaping.*



- Easy Wins -

- Roadway east of the Dog Park can be implemented with a re-striping project.
- Identify future water and waste water capital projects that require significant work within the right-of-way for project pairing.
- Minimize use of physical barriers (curbs) to lower costs of implementing (project costs) and maintaining (future costs) ADA facilities.

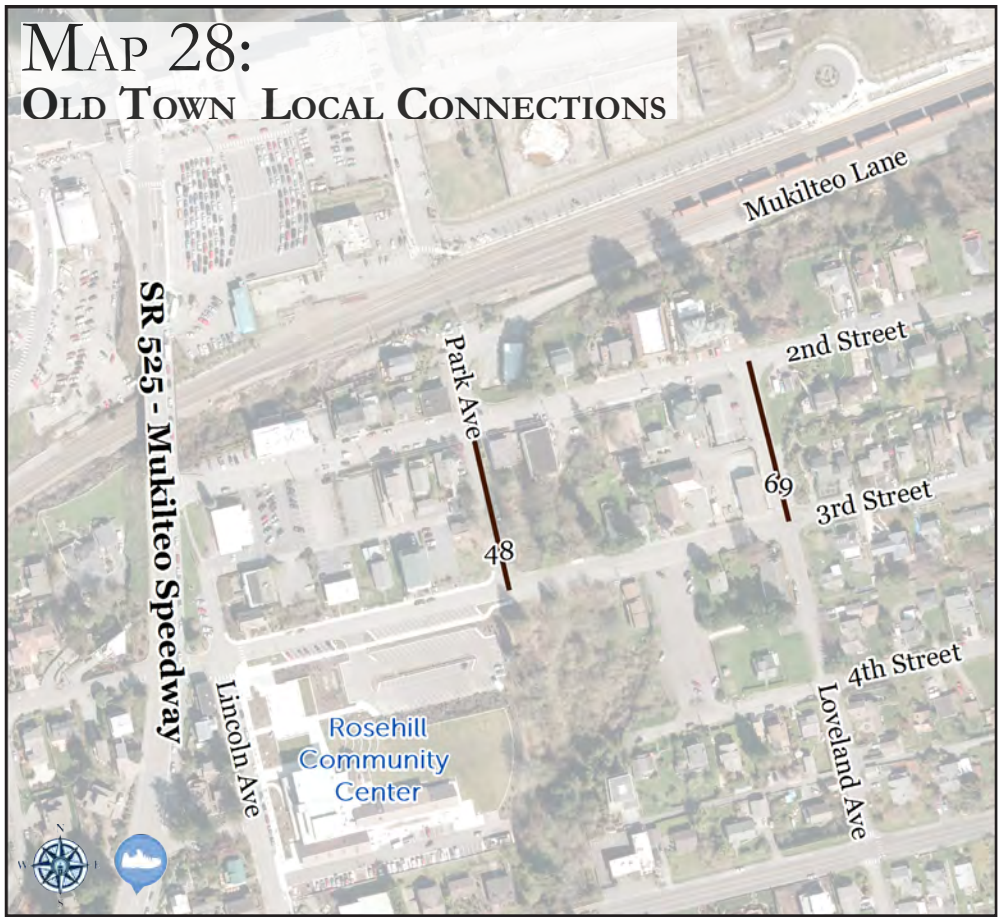


Old Town Projects
- Priority Score: 36-57 -
Total Estimated Cost $804,000

Old Town's unique character of a beach town with lumber mill history recognizes that the residential portions of Old Town function well as a complete street without typical curb, gutter, and sidewalks. However, the adjacent commercial and community assets, including Rosehill Community Center require a certain level of typical sidewalks through these portions to support commerce and mobility. These projects are in addition to Project 16 - 2nd Street Sidewalks that were identified through the Tuttle Sidewalk Assessment and included cost estimates as identified in 20.

Table 20: Old Town Local Connections		
Project:	*Costs:*	*Priority Score:*
Project 48 - Park Ave Sidewalks	$584,078	36
Project 69- Loveland Sidewalks	$220,181	29
Estimated Total	**$804,259**	

Mid-Term Projects **Far-Term Projects**



North-Mukilteo Network

North Mukilteo is composed of remaining neighborhoods north of 76th Street that aren't located in Old Town. This area includes Elliot Pointe, Sky-Hi-La, Goat Trail, Horizon Heights, and several other neighborhoods. Part of North-Mukilteo includes Olympic View Middle School and Mukilteo Elementary, for some of these communities, there is no bus service, but walking isn't the preferred option due to the lack of pedestrian facilities.

North Mukilteo Safe Routes to School - Priority Score: 41-58
Total Estimated Cost $804,000

Projects 39 & 44: 8th Drive & 11th Street Sidewalks - Safe Routes to School

Connecting neighborhoods to schools is incredibly important for the health and safety of children within the community. Currently, 8th Drive is a narrow roadway with a steep grade and limited sight distance. While the roadway includes a widened shoulder, the facility is inadequate to provide the sense of safety and security for parents to allow their children to walk to Mukilteo Elementary. The intent of Projects 39 and 44 is to remove the barrier and create a sense of safety and security promoting walkability within young students and connect to the Stair-Step Greenway as illustrated on page 70**.** One future consideration in addition to Projects 39 and 44 is to activate Goat Trail Park as a school drop off location which should be vetted in the Parks Master Plan update.

46. Possession View Lane Sidewalks - Safe Routes to School

The Possession View Lane section of Goat Trail 'C' Community is the bottom leg of multiple small developments that create a 'C' shape on Goat Trail Road. This specific section was originally platted as part of Snohomish County and includes limited right-of-way and no pedestrian facilities. Unfortunately this is the section of the 'C' Community that is closest to the access at Mukilteo Elementary. Project 46 would propose to add a sidewalk on the north side of Possession View Lane.

64. Water Tower Path - Estimated Cost $670,000

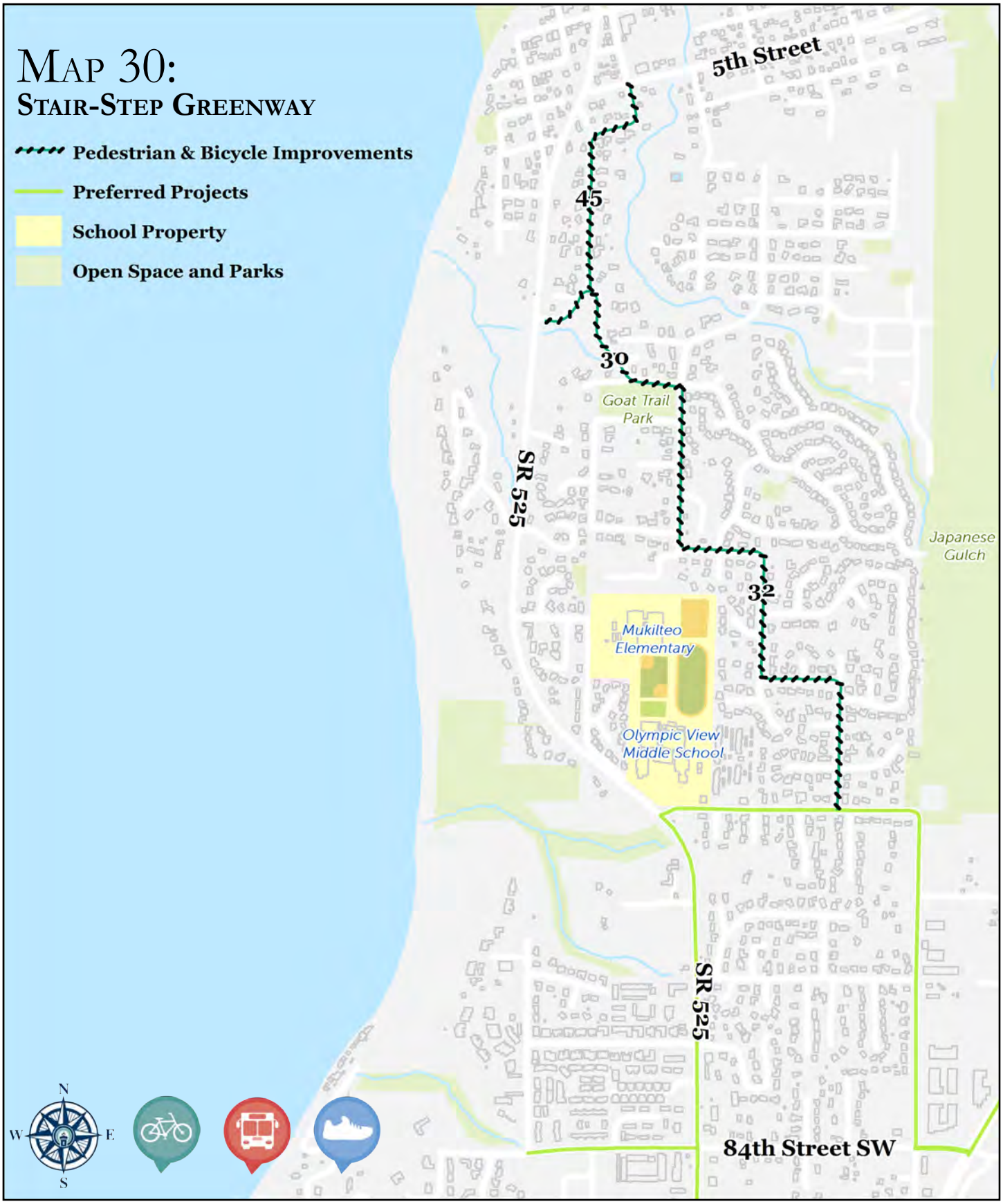
This trail project is a formalization of an existing trail that currently crosses over private property. While the Mukilteo Water Wastewater District is one of the property owners, additional outreach and communication will be required to formalize the trail segment. The completion of this trail segment will provide a formalized connection for residents to Old Town.

Table 21: North Mukilteo Connections

Project	*Cost*	*Priority*
Project 39 - 8th Drive Sidewalks	$2,479,848	58
Project 44 - 11th Street Sidewalks	$561,670	43
Project 46 - Possession View Lane	$892,253	41
Project 64 - Water Tower Path	$667,590	37
Estimated Total	**$3,933,771**	

Mid-Term Projects **Far-Term Projects**

Map 30:
Stair-Step Greenway



Mukilteo Stair-Step Greenway
Projects 30, 32, & 45

The north-south alternative to the Mukilteo Speedway is a path starting at 5th Street and winding up through the Goat Trail Community and eventually to the Hilltop Community at 44th Ave West. This route is known as the stair steps because of the 90-degree turns on the corridor. Most of this route is on an Urban Collector with a speed limit of 25 MPH and is primarily residential in character with connection to industrial development on 44th Ave West. This Greenway Route also serves as a connector to the Olympic View Middle School and Mukilteo Elementary.

30. Goat Trail Road - Priority Score: 73 --- Estimated Cost $2,300,000

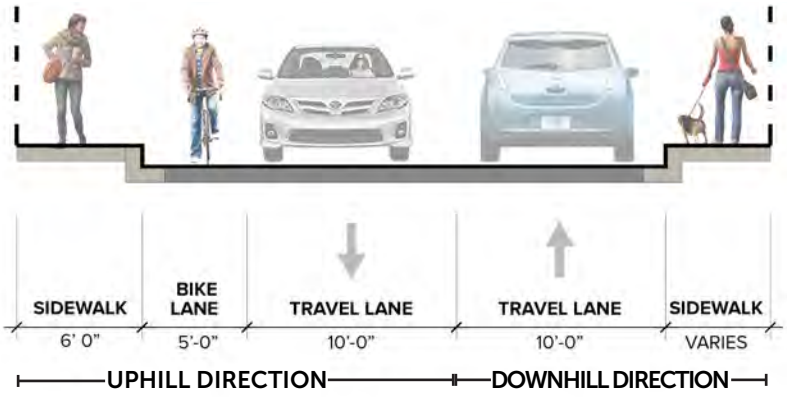
The middle section of the Stair-Step Greenway is Goat Trail Road to 8th Drive. This section of roadway exists in a prescribed easement as the roadway does not solely exist within the dedicated right-of-way. This issue has faced Mukilteo for many years as the recognized property lines significantly differ from the surveyed property lines. Unfortunately, to implement a sidewalk or bike lane within the right-of-way, the City will have to commit to working with the property owners to reach an agreement to resolve the surveying issue. By solving this issue, not only will the City have the ability to implement additional pedestrian and bike facilities, the affected property owners will no longer be faced with lot boundary challenges

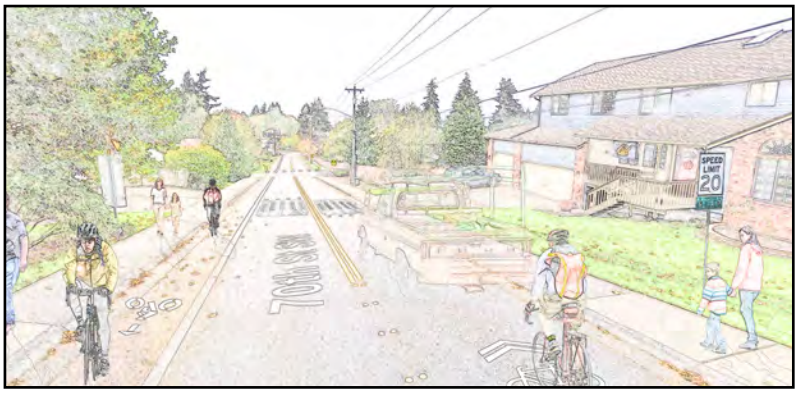
32. Stair-Step Path - Priority Score: 73 --- Estimated Cost $5,800,000

The south and largest section is the roadway that most resembles stairs. This section extends from 8th Drive up to 76th Street SW. Much of this area includes a widened shoulder that currently serves cyclists and pedestrians, but given the immediate connection to the schools this widened shoulder should be transformed to a sidewalk with a bike lane in the uphill route.

45. Washington Ave - Priority Score: 45 --- Estimated Cost $3,600,000)

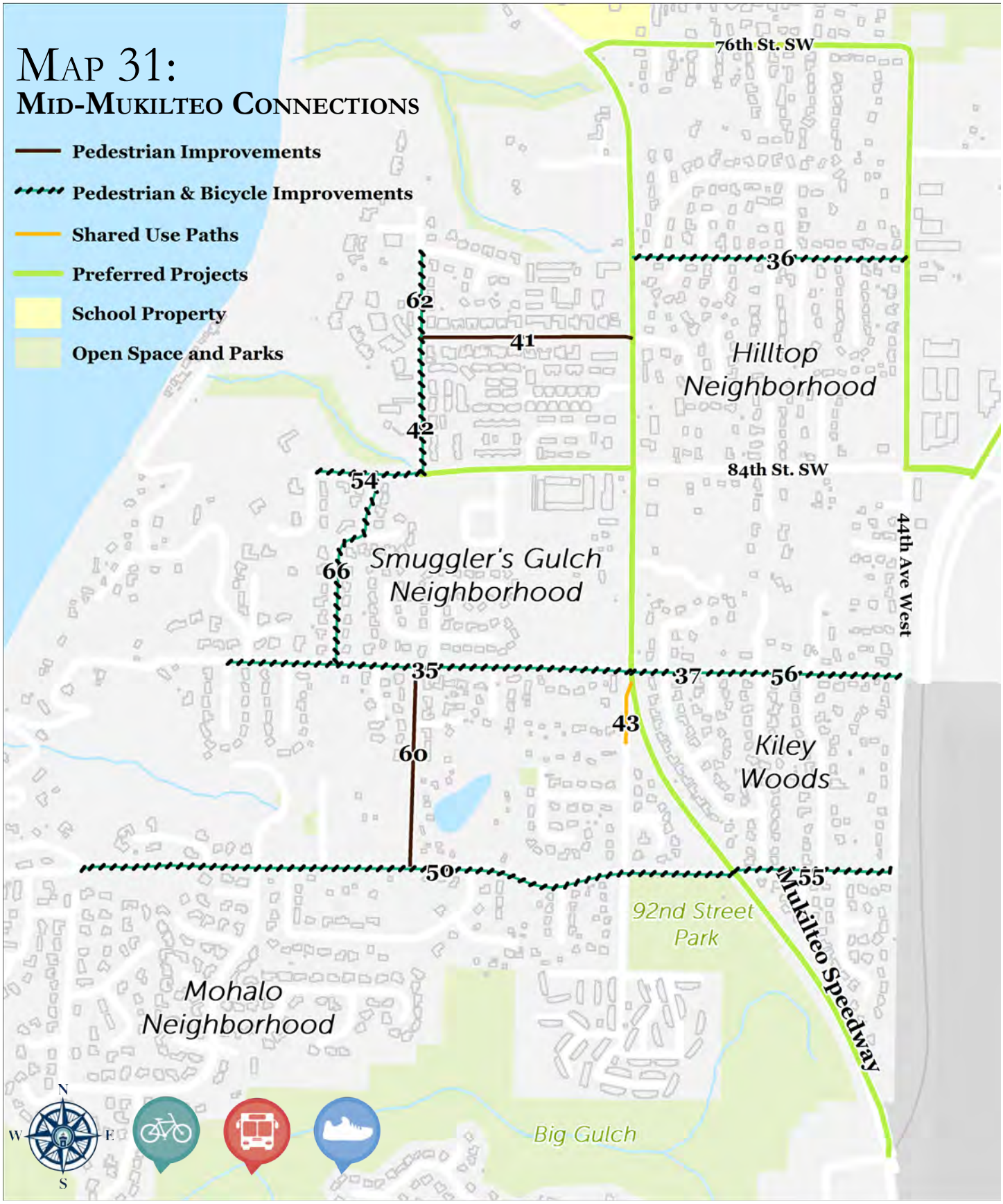
The north section of the Stair-Step from 5th Street lies primarily on Washington Avenue. This section curbed section to provide refuge to pedestrians, but does not fully provide a path for both cyclists and pedestrians. The most preferred design option would include transitioning the existing curbed area into the bike facility, add sharrows in the downhill travel lane, and implement a new sidewalk portion as several properties have already. Due to the terrain of several properties, this option may not be entirely feasible.





- Easy Wins -

- Implement Greenway Signage
- Implement Downhill Sharrows
- Move the Mailboxes out of the Pedestrian Path


Map 31:
Mid-Mukilteo Connections
Pedestrian Improvements
Pedestrian & Bicycle Improvements
Shared Use Paths
Preferred Projects
School Property
Open Space and Parks
76th St. SW
36
62
41
Hilltop
Neighborhood
42
84th St. SW
54
44th Ave West
66
Smuggler's Gulch
Neighborhood
35
37
56
43
Kiley
Woods
60
50
55
92nd Street
Park
Mukilteo Speedway
Mohalo
Neighborhood
Big Gulch
N
W
E
S

Mid-Mukilteo Network

Mid-Mukilteo is the area that extends from 76th Street to approximately the 'Spur' at the intersection of Paine Field Boulevard and Mukilteo Speedway. This neighborhood was primarily developed when Mukilteo was considered the 'woods' and was developed as an autodominate community. Even after the annexation of 1980, this area has primarily remained the same regarding pedestrian facilities with the exception of a few projects (92nd Street) and new development. In order to provide higher connectivity to primary corridors, Mid-Mukilteo needs a significant amount of pedestrian and bicycle facilities. This section identifies the projects based on locations starting with Project 35 - 88th Street SW and continues the conversation based on connectivity of the neighborhoods. The projects are discussed within the **Smuggler's Gulch Community** and the **Hilltop Community.**

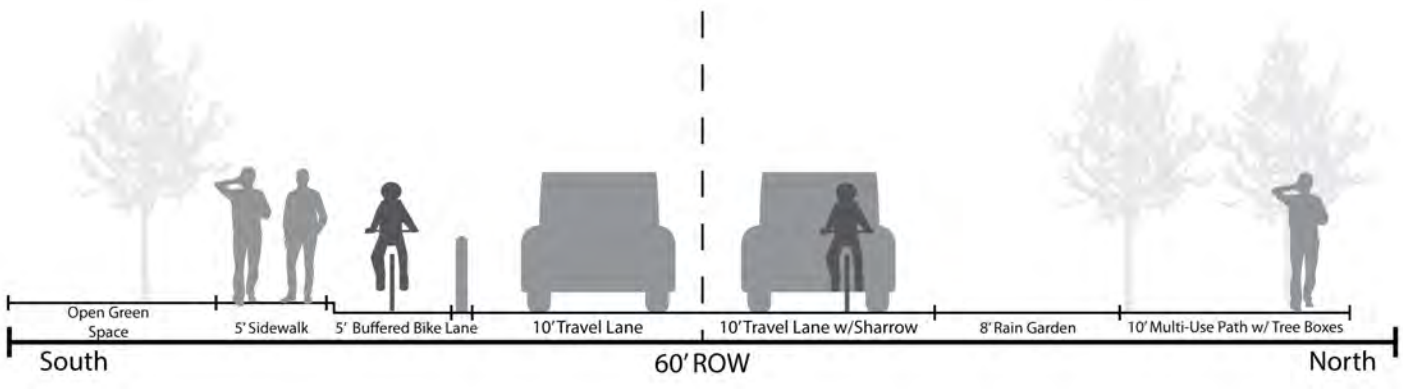
Smuggler's Gulch

Smuggler's Gulch neighborhood extends from 76th Street to Big Gulch that is west of the Mukilteo Speedway. This large area includes several different connection opportunities to provide for mobility throughout the community. The challenges within the section is that existing pedestrian facilities are disconnected. The intent of the identified projects is to provide for routes from residences to the destinations of 92nd Street Park, Mid-Mukilteo Commercial Corridor, and connections to the City-Wide Connections.

35. 88th Street SW - Priority Score: 63 --- Estimated Cost $6,500,000

88th Street SW is one of Mukilteo's designated 'urban collectors' that provides direct connection for local neighborhoods to the Mukilteo Speedway. Typically an urban collector is a 30-35 MPH roadway with a center turn lane, but this road is another roadway developed in unincorporated Snohomish County. It was originally constructed as a two lane local access road with 10' lanes at 25 MPH, and has remained relatively the same since. As patchwork development occurred on the roadway, 88th was not improved. To bring this roadway up to the livability standards the Mukilteo Comprehensive Plan identifies, there must be a large commitment of funds to this roadway.

The 88th Street Proposal below includes deviations from the existing urban collector standards to support maintaining the roadway as a 25 MPH path. This cross-section includes a limited footprint of 60 feet of ROW where there is an existing 80 feet of ROW.



Proposed 88th Street SW Cross-Section from SR 525 to 56th Place West

Smuggler's Gulch Local Connections - Priority Score: 36-57 - Total Estimated Cost $8,400,000

Project 41, 42, 54, 62, & 66 - 81st to 88th Street

These identified projects will provide pedestrian and bicycle facilities for a large portion of the multifamily development that is outside of Harbour Pointe. What is unique about this community is that most of the dwelling units are serviced by different owners, unlike large single owner complexes. Several of these units are under-market rate and provide for a high level of affordability to families. These identified projects would follow the typical local access cross section with on-street parking, and sidewalks, with bike sharrows. When funding becomes available for design, additional landscaping should be included into the project.

Easy Wins

- Pave gravel sections for a widened shoulder when available.
- Restripe roadway to 10' travel lanes to increase shoulder width.
- Formalize pedestrian routes to define on-street parking locations.

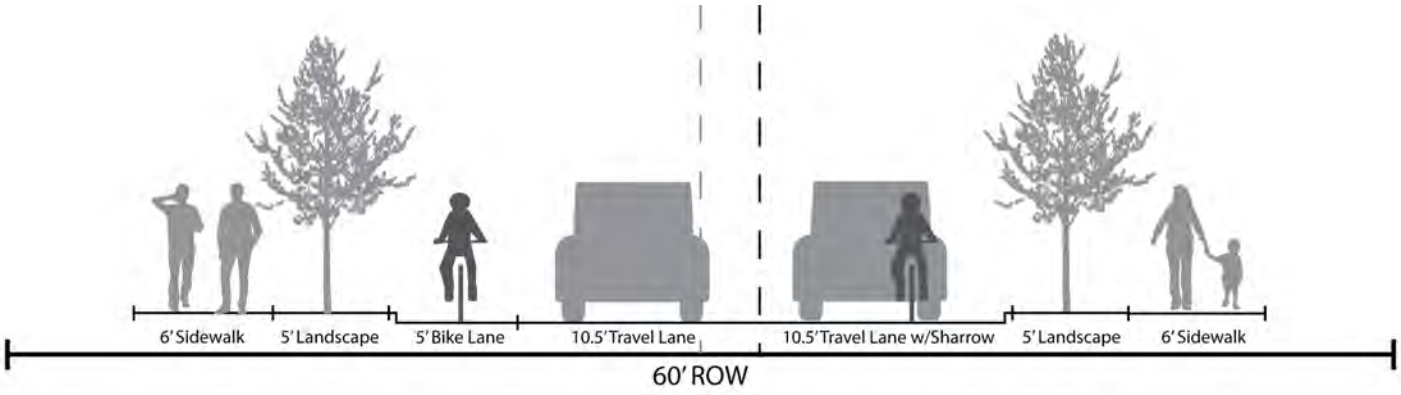
Table 22: 81st to 84th Street		
Project:	*Costs:*	*Priority Score:*
Project 41 - 81st Place	$2,910,364	54
Project 42 - 53rd Phase 1	$570,979	49
Project 54 - 84th Street SW Section 2	$1,044,570	57
Project 62 - 53rd Phase 2	$1,185,704	41
Project 66 - 54th Place West	$2,694,782	36
Estimated Total ($2016)	**$8,406,399**	

Mid-Term Projects Far-Term Projects

50. 92nd Street SW -
Priority Score: 71 --- Estimated Cost $4,400,000

Similar to 88th Street SW, this roadway was initially developed as a County road with a speed limit of 25 MPH. Unlike 88th Street, the 92nd Street Corridor is designated as a **Far-Term Project** because during the mid-2000s the City completed a project that installed a sidewalk along the southern portion of 92nd Street. Prior to the sidewalk concept, a widened shoulder was considered as the preferred alternative and received stiff objection from the neighborhood who successfully advocated for a sidewalk. This project is a continuation of that previous intent in order to finish the roadway.

The proposed cross-section below is similar in style to 88th Street SW, but differs because 88th Street SW is less constrained by private property and cut slopes when compared to 92nd Street. This is because development around 88th Street SW identified an 80 ft. wide right-of-way whereas 92nd Street is a 60 ft. wide right-of-way. The image below identifies the addition of a 5' bike lane and to 'shift' the center of the roadway to the north as illustrated by the ghosted centerline. As some of 92nd Street has portions of sidewalks, the design below is the ideal concept, but should incorporate existing facilities as much as reasonably possible.



Proposed 92nd Street SW Cross-Section from SR 525 to 91st Place Intersection

43. 49th Avenue Transit Connection - Mid-Term Project
Priority Score: 46 --- Estimated Cost $220,000

This connection is currently an established connection, but has a sidewalk gap between the existing facilities and the transit stop. This pathway has become overgrown and shrunk in width, but is still an existing connection which serves a legitimate purpose. The purpose of Project 30 is to take an existing connection that is deficient and improve the connection to a widened shoulder/shared-use pedestrian path. Phase 1 of the project is an 'easy win' which would include no new pavement surfaces and would focus on restriping. This section includes access to only one residence and with creative restriping, a dedicated walking path can be created within the existing roadway. This restriping is considered 'Phase 1' and is a functional alternative until future redevelopment of the property occurs. When redevelopment occurs, Phase 2 of the connection would be the construction of a large portion of the sidewalk. The missing gap would require the City to complete approximately 139 ft of sidewalk.

- Easy Win -

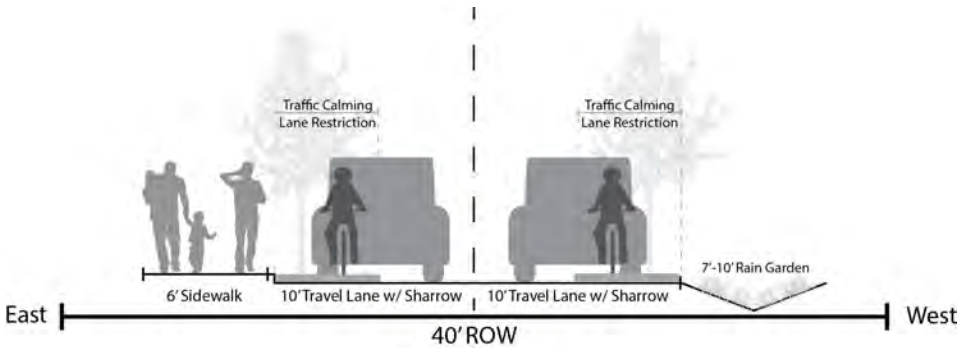
- Cut back brush
- Implement Phase 1 including restriping roadway with annual maintenance

60. 53rd Ave West - Far-Term Project
Priority Score: 45 --- Estimated Cost $700,000

To connect 88th and 92nd Street together, 53rd Ave West provides a great neighborhood connection. Currently this connection is approximately a 20 ft paved two lane road with no pedestrian or bike facilities. This roadway between 88th and 92nd Street is extremely important to ensure that Mid-Mukilteo Commercial Corridor and 92nd Street Park are connected to each other though routes other than the Mukilteo Speedway. One consideration with this roadway is to ensure that 53rd Ave West does not become a 'cut through' for vehicle traffic. Part of the character on 53rd Ave West is the limited facilities and woodsy feel. Given the 25 MPH speed limit and existing 40 ft. of right-of-way, the proposed design for 53rd Ave West is minimal, but provides for all modes of connection. This BTW Plan design varies from the proposed design and costs as identified in the Tuttle Report to maintain the existing character.

- Easy Win -

Implement a widened path for a future sidewalk as an interim option.



Proposed 53rd Ave West Cross-Section from 88th Stret SW to 92nd Street SW

Hilltop Community

The Hilltop Community is essentially Mid-Mukilteo that is east of SR 525 and includes the Kiley Woods Development. The following projects provide increased connection between the SR 525 and the 44th Shared Use Path in addition to 76th Street SW Project 6 as identified in City-Wide Connections.

Hilltop Connections
- Priority Score: 36-57 -
Total Estimated Cost $3,600,000

Projects 36, 37, 55, & 56 - SR 525 to 44th Shared Use Path

These projects would include the implementation of a sidewalk and downhill sharrows with a sidewalk and bike lane in the uphill direction. The identified project locations include 80th Street SW, 88th Street SW, and 92nd Street SW. These three different roadways have varied widths of improved area, but includes some portions of completed sidewalks such as 92nd Street. One benefit with these roadways is that there are limited number of driveways that access directly to the roadway.

Table 23: Hilltop Local Connections		
Project:	*Costs:*	*Priority Score:*
Project 36 - 80th Street SW	$2,155,825	63
Project 37 - 88th Street SW Section 1	$214,523	60
Project 55 - 92nd Street SW	$593,333	56
Project 56 - 88th Street SW Section 2	$678,095	51
Estimated Total	**$3,641,776**	

Mid-Term Projects **Far-Term Projects**

- Easy Wins -

- Implement Bike Sharrows in 'Downhill Fashion' and Sign as Bike Route
- Convert the Widened Shoulder on 88th to Uphill Bike Lane, Sign 'No Parking'
- Sign Connection from 92nd Street Park up 92nd Street to 44th Shared Use Path to connect 92nd Street Park to 76th Street Trailhead.


Map 32:
Harbour Pointe Connections
Pedestrian Improvements
Bicycle Improvements
Shared Use Paths
Preferred Projects
School Property
Open Space and Parks
92nd Street SW
44th Ave West
Big Gulch
51
28
49
68
67
29
47
47
63
Mukilteo Speedway
61
Harbour Pointe
Golf Course
Harbour Pointe Blvd
58
31
Picnic Point
Gulch
Beverly Park Rd.
N
W
E
S

Harbour Pointe Connections

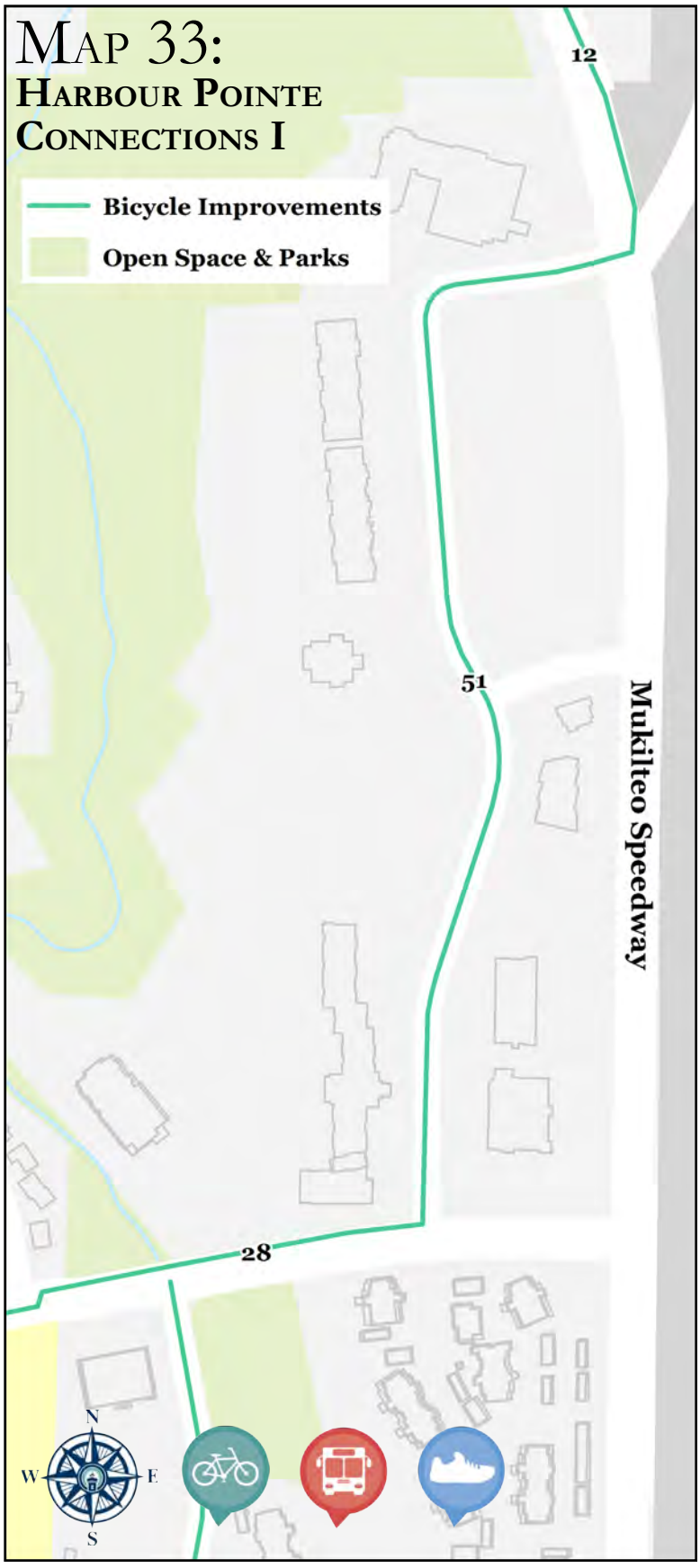
The Harbour Pointe Master Planned Community contains the highest level of sidewalks per household throughout the neighborhoods. This feature provides excellent connection throughout each subdivision, but for the greater community connectivity is lacking for all modes of transportation. The identified projects will improve connectivity for all modes for both inside the Harbour Pointe community and connection within Mukilteo.

51. Harbour Place Shared Use Path
Priority Score: 66
Total Estimated Cost $1,500,000

Harbour Place is a roadway that connects to two shared use paths from 44th Ave West, and SR 525. Utilizing bike markings in this location makes logical sense to continue the path as far as reasonably possible as sidewalks already exist within the area and the intent is to provide clarity for cyclists to connect to and from the shared use paths.

- Easy Wins -

Maintain concurrency with Engineering Standards for development of shared use path with requirements of new development at Sector 3.

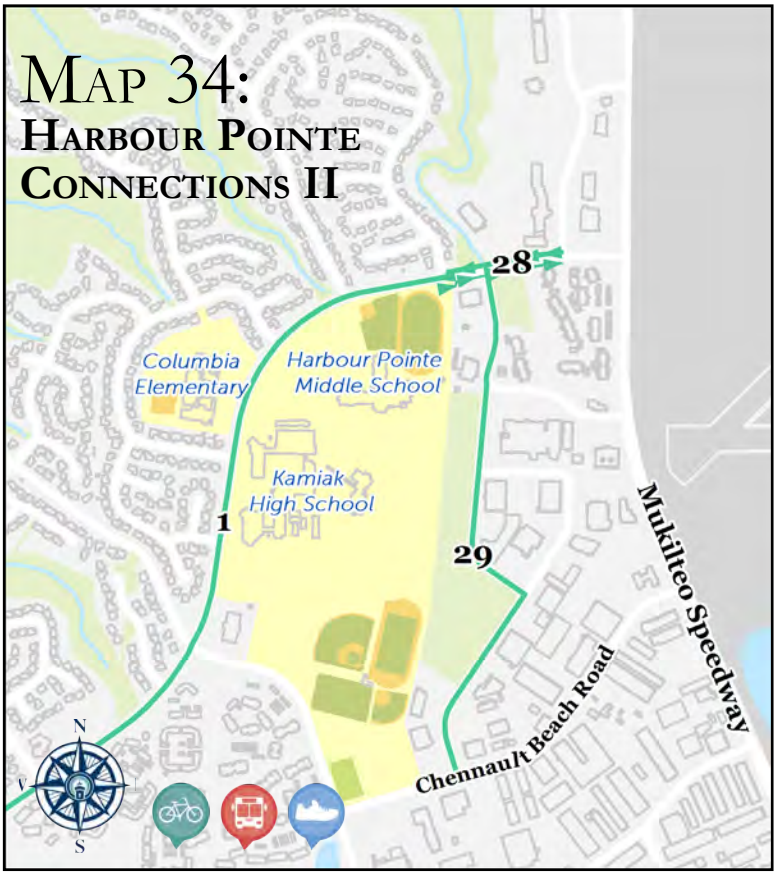


28. Harbour Pointe Blvd. Cycle Track - Priority Score: 83 --- Estimated Cost $88,000

Cycle tracks are an incredible way for cyclists to move about a community, but are seldom used for specific locations when using bike lanes make more sense. This project proposes to transition the dual bike lanes as completed in Project 1 to a cycle track on the north side of Harbour Pointe Blvd. By doing so, a cyclist attempting to connect to Harbour Place's Shared Use Path will have a safer turning movement. The existing turning movement includes climbing a hill in order to make a left in front of two lanes of oncoming traffic while waiting in a center-turn lane. The proposed project design will allow cyclists to transition to the north side of the roadway near the 4800 block of Harbour Pointe Blvd where the terrain is still flat, and then transition on Harbour Place to the preferred facility.

29. 47th Place West Priority Score: 77 --- Estimated Cost $152,000

47th Place West is a roadway that connects several important community assets including the YMCA, Police Station, Fire Station 25, and the future Boys & Girls Club Facility. These community assets are also adjacent to several employers that will have the opportunity to enjoy an increased level of mobility. Because of the number of employers, there appears to be an overflow of parking onto the street. To ensure that there is adequate parking for both peak demand of the employers and community assets, *the City should review a striping and pavement marking design that would ensure bicycle facilities while balancing the demand for parking.*



Harbour Pointe Connections III - Priority Score: 41-47 Total Est. Cost $7,950,000

47. Chennault Beach Road Bike Lanes

This project is to add bike facilities on Chennault Beach where the sidewalks gaps where completed with Project 15. This completion provides a better connection from Harbour Reach Corridor to Mukilteo Speedway.

58, 61, & 63 - Cyrus Way Projects

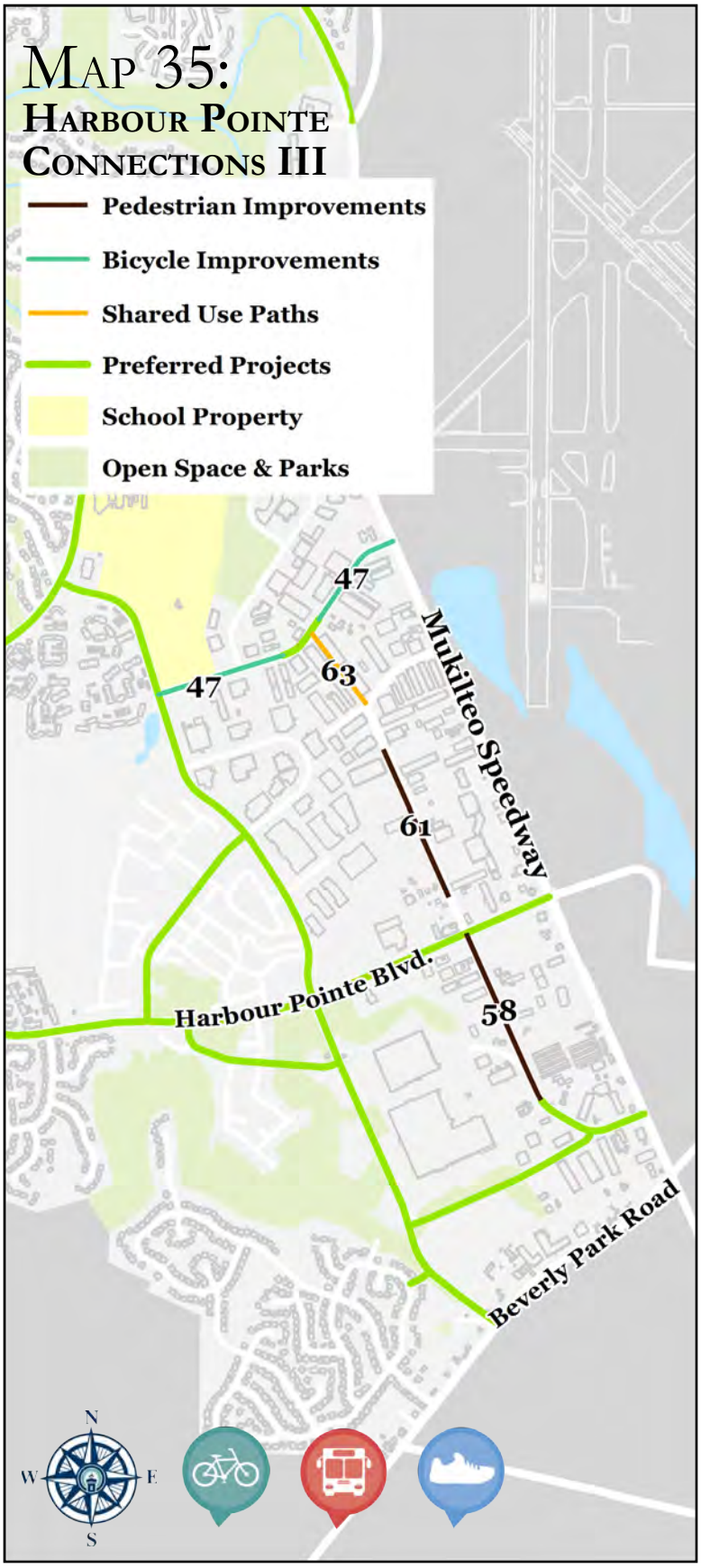
In connection with Project 18, Projects 58, 61, and 63 are all far-term projects to eliminate sidewalks gaps along the existing roadway. Project 63 is to extend Cyrus Way to Chennault Beach when industrial redevelopment is to occur to improve truck routes.

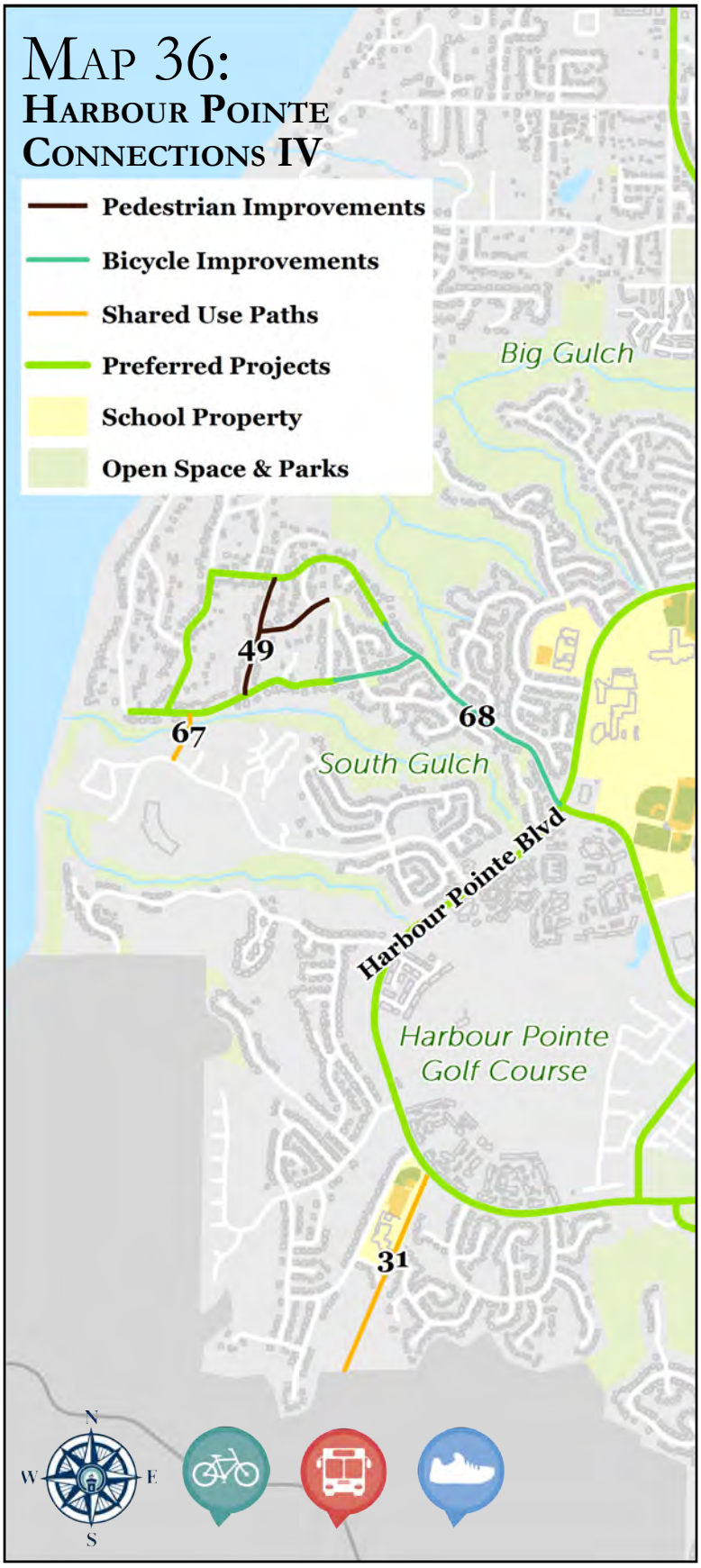
Table 24: Harbour Pointe III

Project	*Cost*	*Priority*
47. Chennault Beach Road	$37,898	39
58. Cyrus Way Sidewalks	$842,682	47
61. Cyrus Way Sidewalks	$694,177	43
63. Cyrus Way Extension	$5,527,497	41
Estimated Total	**$7,953,174**	

Mid-Term Projects

Far-Term Projects





49. 62nd Street & Canyon Road - Priority Score: 35 --- Estimated Cost $890,000

Project 49 is a midterm project that is paired with the Comprehensive Surface Water Management Plan (SWMP) similar to Project 22. This project location is listed in the SWMP as Project #7 with an estimated cost of $2,852,000 provides a potential project to be paired with.

68. Chennault Beach Road Bike Markings Priority Score: 32 --- Estimated Cost $30,000

To better connect Central Drive and Chennault Beach Drive for bicycles, Project 68 identifies the need for some form of bike markings. Preliminary indications identify that the existing curb to curb is too limited for bike lanes, however the roadway is an existing 25 MPH that could support the use of sharrows as a traffic calming mechanism.

31. Endeavour Shared Use Path
Priority Score: 72 ---
Estimated Cost $1,100,000

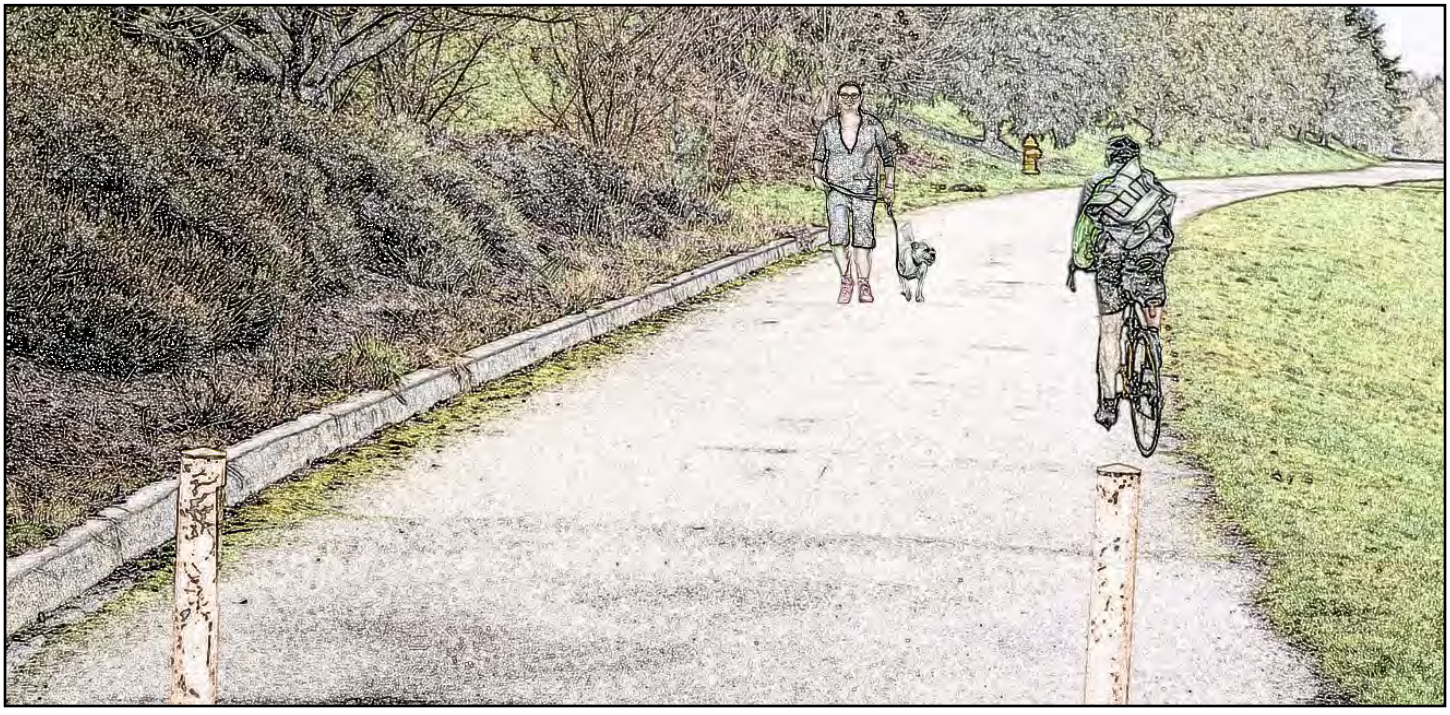
The proposed Endeavour Shared Use Path would connect Harbour Pointe Blvd to Picnic Point Road through an existing utility easement. This connection between Harbour Pointe Blvd and Picnic Point Road is primarily a recreational facility as Picnic Point Road connects to the Picnic Point Park with beach access. By providing this connection with a shared use path, individuals will be able to travel from Picnic Point Park to Edgewater Beach and Lighthouse Park without the use of the Mukilteo Speedway by connection through Japanese Gulch Park. However, before this level of connection could be made, additional partnerships with Snohomish County is required as pedestrian facilities on Picnic Point Road are lacking. If the Endeavour Shared Use Path is developed, there will be additional projects needed outside the boundaries of Mukilteo to provide adequate facilities to Picnic Point Park.

67. South Gulch Shared Use Path
Priority Score: 34
Estimated Cost: $220,000

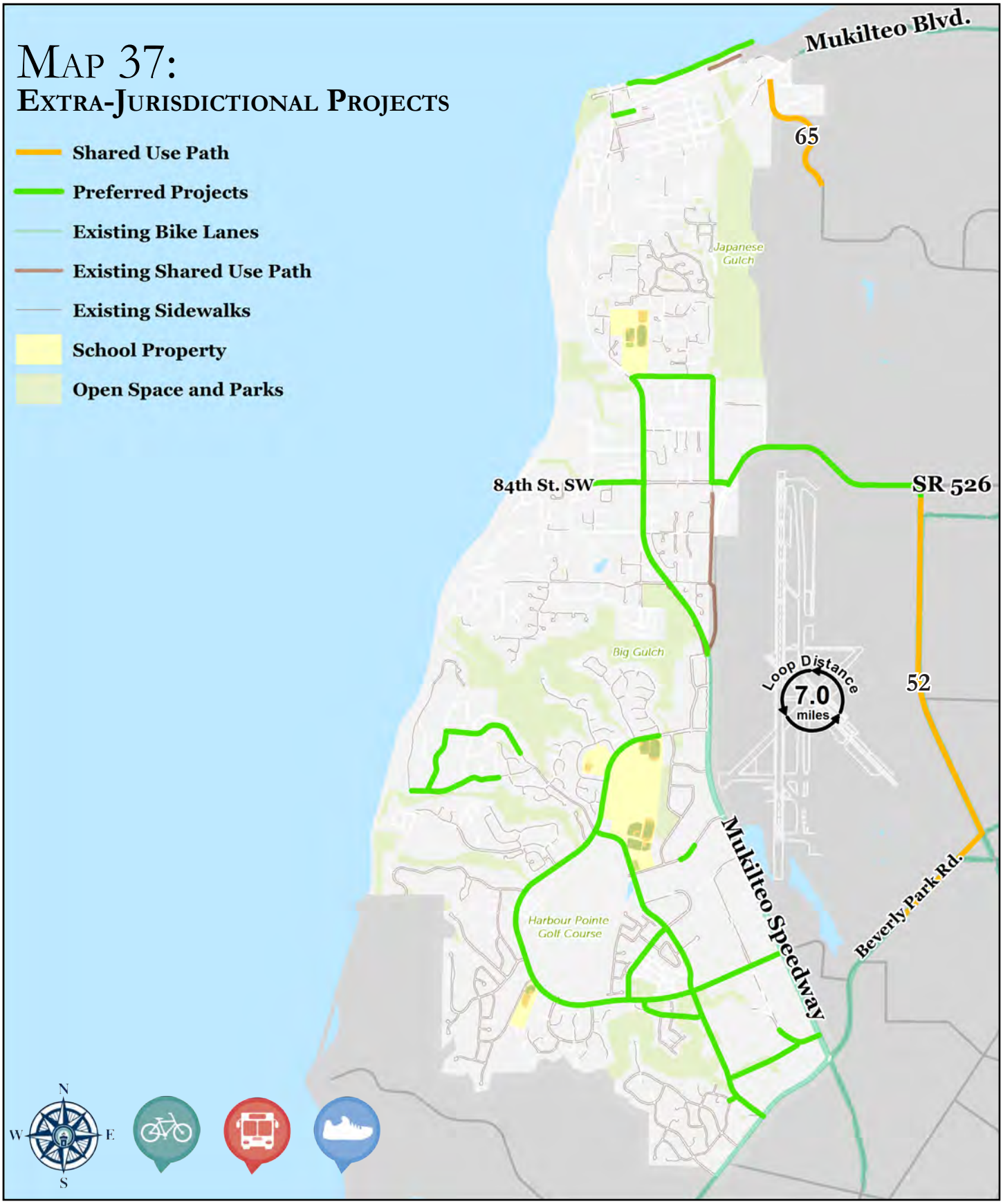
Project 45 is to establish a connection between Chennault Beach Drive and Harbour Heights Parkway over South Gulch. This shared use path would exist within a stretch of property that is owned by the City of Mukilteo used for utilities and would cross South Gulch. This site includes an existing pathway that requires review to see what level of maintenance needs to be performed. The existing path may be in such condition that an asphalt overlay is sufficient to create the connection.

- Easy Wins -

- Implement an interim trail within the property to create a usable connection until funding is available for the shared use path construction.



Map 37:
Extra-Jurisdictional Projects



Extra-Jurisdictional Projects

52. Airport Road Shared Use Path
Priority Score: 60 ---
Estimated Cost $14,700,000

The Airport Road Shared Use Path is a proposed pedestrian and bike facility separate from Airport Road. Currently, Airport Road is a 45 MPH Arterial with heavy flows of traffic during rush-hour events, and the existing bike lanes and sidewalks are inadequate for a roadway with this volume and speed. This project is a long-range project, and the opportunity to implement this project is when Airport Road requires additional capacity due to a reduced level of service. When additional capacity is needed, the existing bike lanes could be transitioned into additional width for vehicle travel lanes. If the bike lanes are removed, a shared use path should be the preferred alternative. This shared use path should be setback from the roadway by a minimum of 25 feet and incorporate landscaping for additional sensory protection from the high traffic volumes and travel speeds.

65. Boeing Recreation Shared Use Path
Priority Score: 36 ---
Estimated Cost $2,800,000

The proposed Boeing Recreational Shared Use Path is to provide connectivity between 5th Street up to 36th Ave West in Everett. This project will provide active Boeing commuters a route between the Mukilteo Multi-Modal Terminal and the Boeing Recreation Facility with showers and lockers. Understandably, controlled access of the Boeing Facility is important in the design consideration with this project and the Boeing Company is the primary partner with this project.

The route of this pathway is undetermined at this point, because the route requires significant flexibility to address concerns of future stakeholders.

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7

FUNDING

Funding for Preferred Projects
Management Matrix
Funding Recommendation
Transportation Impact Fees

Funding for Preferred Projects:

The Preferred Projects have a total of $51,073,235. Some of these projects are either currently funded or are anticipated to be externally funded through current grant applications. What remains is the responsibility of the City of Mukilteo. This means that over 7 years, if all preferred projects were implemented, the City of Mukilteo would have to identify approximately $24,100,000 or $3,500,000 to be spent annually.

The reality is that the City of Mukilteo is extremely thrifty when it comes to utilizing external resources and innovative practices to create 'in-house' cost savings. The expectation is that the through these practices there would be a 60% cost savings for the preferred projects meaning the City of Mukilteo would need to identify approximately $10,000,000 or $1,375,000 to be spent annually to implement the Preferred Projects. This ratio is based on the City funding the 'soft costs' (36%) including design costs to create 'shovel-ready' projects that are more successful in grant applications. The additional 4% is to account for opportunities the City of Mukilteo may identify for in-house savings. Because this reduction level will vary depending on each project, one project may be significantly more dependent on internal funding whereas other projects may succeed primarily on external funding.

This funding level is unfeasible within the existing revenue structure of the City of Mukilteo. However, not all preferred projects may meet constraints of the City's fiscal limits. In order to identify 'which project should get funding' a management matrix was utilized to identify the 'High-Priority - Low Cost' projects. This management matrix is discussed on page 90.

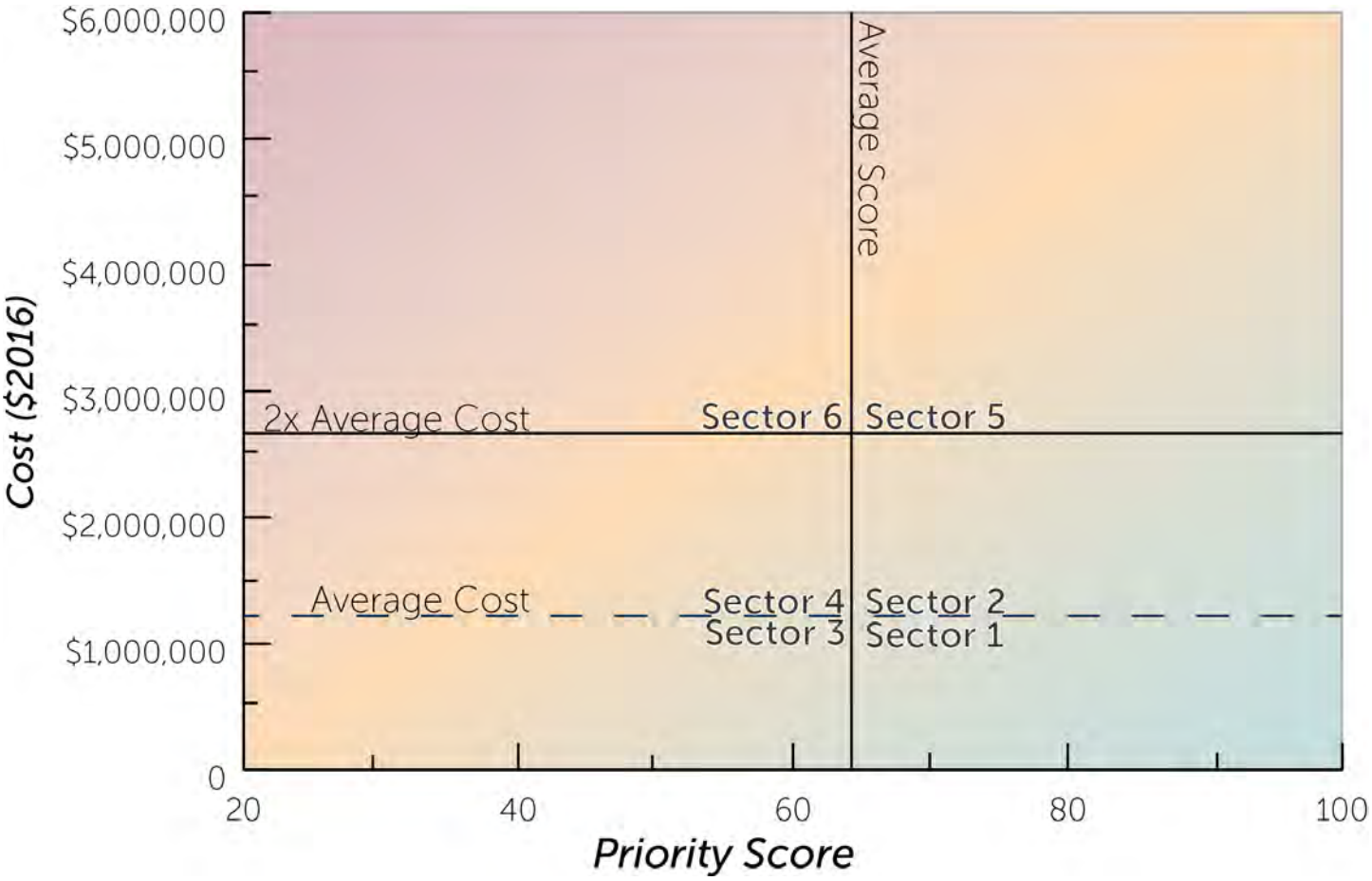
One additional consideration is the inclusion of three near-term projects within the Chennault Beach Neighborhood. These projects are prioritized on the Stormwater CIP, and the opportunity to pair a BTW Project with a Stormwater Project can provide some cost savings. These cost savings can include savings in mobilization, design, and reducing redundant construction costs. One of the highest cost savings may not be known until the projects move to design in order to address any additional stormwater needs of the increased impervious surfaces of the project area.

Preferred Projects

Table 25: Preferred Project List			
Project Number	**Project Name**	**Priority Score**	**Cost ($ 2016)**
Existing Projects*			
1	Harbour Pointe Blvd. Bike Markings	111	$217,390.34
2	526 Shared Use Path	95	$6,653,161.00
4	Harbour Reach Corridor Retrofit	93	$2,200,000
9	Harbour Pointe Blvd. S Widening	85	$1,929,850.00
11	Harbour Reach Corridor	82	$16,000,000.00
Proposed Preferred Projects			
3	SR 525 Sidewalks - Safe Route to School	94	$1,044,404.73
5	Waterfront promenade multi-use path	90	$319,309.00
7	Mid-Town Mukilteo Sidewalk & Bike Markings	89	$5,317,815.73
6	76th Street Sidewalks & Bike Markings	89	$1,336,733.89
8	44th Shared-Use Path	88	$1,945,548.00
10	SR 526 Sidewalks	82	$250,271.36
12	SR 525 Bike Lane	81	$34,437.92
13	SR 525 Sidewalks & Bike Markings	77	$1,921,561.54
14	84th Street Sidewalks	68	$752,142.42
15	Chennault Beach Road Sidewalks	60	$236,122.92
16	2nd Street Sidewalks	57	$878,178.47
18	Cyrus Way Sidewalks	43	$764,826.02
19	Chennault Beach Drive Sidewalk & Bike Markings	40	$4,342,738.00
20	Central Drive Sidewalk & Bike Markings	40	$2,974,219.00
21	Possession Way Bike Markings	37	$75,763.42
22	64th Place West Sidewalks	36	$1,765,251.58
23	Blue Heron Drive Bike Markings	34	$27,415.69
24	South Road Markings	30	$86,094.80
	Median Priority Score:		**64.00**
	Existing Project List:		**$27,000,401**
	Proposed Preferred Projects:		**$24,072,833**
	Grand Total:		**$51,073,235**

** Funded, Under Construction, Under Funding Review, Or Anticipated for 100% External Funded*
***Project 17 was Deleted as a Preferred Project Due to Grading Differentials as an Infeasible Project*

Chart 1: *Management Matrix*

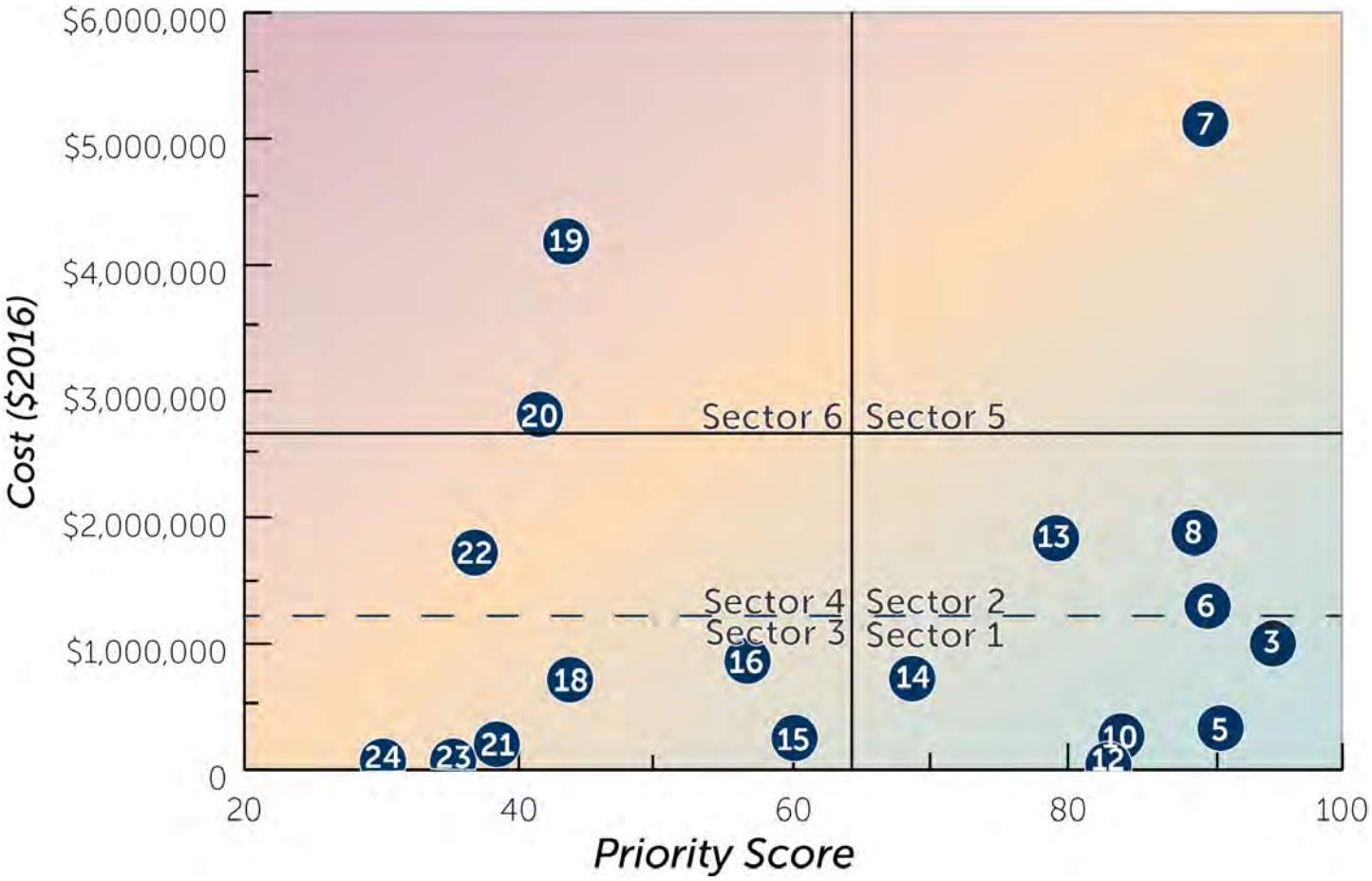


Management Matrix:

The Management Matrix shown above allows decision makers to plot projects based on the priority score and the cost of the project. This matrix above has been tailored for the BTW Plan to identify different 'Sectors' of considerations and how to implement the projects within each sector. The matrix is shaded from green to yellow to red to represent projects that are low cost with a high priority (green) to projects with a high cost with a low priority (red). This illustration assists decision makers to better understand the complexity of the project funding opportunities and limitations. In addition to the sectors, and shading, this matrix identifies the average cost, 2x average cost, and the average score. The different sectors are described below:

Sector 1: High Priority - Low Cost - City Led Projects
Sector 2: High Priority - Medium Cost - City Led Projects
Sector 3: Low Priority - Low Cost - Most Likely Completed In House
Sector 4: Low Priority - Medium Cost - Implemented with other CIP Projects
Sector 5: High Priority - High Cost - Implemented through Phased Approach
Sector 6: Low Priority - High Cost - Implemented with Subsidized Local Improvement District (LID)

Chart 2: *Preferred Projects - Costs vs. Priorities*



Management Matrix Results:

The Preferred Projects were plotted above to identify which sector each project falls into. The results above are great pieces to consider as Projects 3 & 6 fell into Sector 1 and Sector 2 (respectably). Both of these projects are identified as Safe Routes To School (SRTS) which was given the highest importance in the priority matrix. As a review continues on the plotted information, the project placement is in accordance with the priorities set by the Planning Commission as identified on page 42.

Projects 19, 20, and 22 fell into Sector 4 & 6 would be paired with other CIPs or utilize a subsidized LID. These projects are all located in the Chennault Beach Neighborhood where the inclusion of these projects into the Preferred Project List was based on being identified in the SWMP. When preparing for the SWMP implementation, consideration with teh neighborhood of implementing an LID should be further researched, because these projects are only connections for residents who live in the immediate vicinity. This makes the boundary identification for an LID extremely simple.

Funding Recommendation - Preferred Projects

Table 26: Preferred Project List					
Project Number	Project Name	Priority Score	Cost ($ 2016)	Sector	Recommended for Funding?
*Existing Projects**					
1	Harbour Pointe Blvd. Bike Markings	111	$217,390.34		Underway
2	526 Shared Use Path	95	$6,653,161.00		Underway
4	Harbour Reach Corridor Retrofit	93	$2,200,000		Underway
9	Harbour Pointe Blvd. S Widening	85	$1,929,850.00		Underway
11	Harbour Reach Corridor	82	$16,000,000.00		Underway
Proposed Preferred Projects Ordered by Management Matrix					
3	SR 525 Sidewalks - Safe Route to School	94	$1,044,404.73	Sector 1	Yes
5	Waterfront promenade multi-use path	90	$319,309.00	Sector 1	Yes
10	SR 526 Sidewalks	82	$250,271.36	Sector 1	Yes
12	SR 525 Bike Lane	81	$34,437.92	Sector 1	Yes
14	84th Street Sidewalks	68	$7521,42.41	Sector 1	Yes
6	76th Street Sidewalks & Bike Markings	89	$1,336,733.89	Sector 2	Yes
8	44th Shared-Use Path	88	$1,945,548.00	Sector 2	Yes
13	SR 525 Sidewalks & Bike Markings	77	$1,921,561.54	Sector 2	Yes
15	Chennault Beach Road Sidewalks	60	$236,122.92	Sector 3	No
16	2nd Street Sidewalks	57	$878,178.47	Sector 3	No
18	Cyrus Way Sidewalks	43	$764,826.02	Sector 3	No
21	Possession Way Bike Markings	37	$75,763.42	Sector 3	No
23	Blue Heron Drive Bike Markings	34	$27,415.69	Sector 3	No
24	South Road Markings	30	$86,094.80	Sector 3	No
22	64th Place West Sidewalks	36	$1,765,251.58	Sector 4	No
7	Mid-Town Mukilteo Sidewalk & Bike Markings	89	$5,317,815.73	Sector 5	No
19	Chennault Beach Drive Sidewalk & Bike Markings	40	$4,342,738.00	Sector 6	No
20	Central Drive Sidewalk & Bike Markings	40	$2,974,219.00	Sector 6	No
		Subtotal of Sector 1-2:	**$4,604,408.85**		
		Less External Funding and In-House Project Savings (60%):	**$4,562,645.31**		
		Total:	**$3,041,763.54**		
		Project Timeline:	**7 Years**		
		Recommended Annual Funding:	**$434,537.64**		

** Funded, Under Construction, Under Funding Review, Or Anticipated for 100% External Funded*

***Project 17 was Deleted as a Preferred Project Due to Grading Differentials as an Infeasible Project*

Funding Recommendation - Future Projects

The Future Projects have a total amount of $85,850,000 ($2016) which is currently unfunded.. However, because these projects are identified as future projects to be completed within the next twenty-years, considering the annual funding expenditures is not justified. To best use these figures, the City should advance projects from the 'Far-Term' list into the Near or Mid-Term lists as conditions change and update the required annual funding based on those conditions. Below is a table that identifies which sector each project falls into. The average cost of future projects is $1,805,083 with an average priority score of 55.

Table 27: Future Project List (Mid-Term Projects)

Project Number	Project Name	Priority Score	Cost ($ 2016)	Sector
25	80th/81st Crossing	95	$120,946.34	Sector 1
26	SR 525 Corridor Study	87	$129,399.59	Sector 1
27	76th Street Crossing	86	$120,946.34	Sector 1
28	Harbour Pointe Blvd. North Cycle Track	83	$88,144.32	Sector 1
29	47th Bike Improvements	77	$152,904.37	Sector 1
31	Endeavor Elementary Shared Use Path	72	$1,108,536.00	Sector 1
32	Stairstep Path & Bike Markings	71	$5,788,392.17	Sector 1
33	86th Crossing	70	$120,946.34	Sector 1
37	88th Street Sidewalks & Bike Markings	60	$214,523.40	Sector 1
38	Beverly Park Intersection Improvements	60	$287,267.08	Sector 1
40	2nd Street Crosswalk	55	$120,946.34	Sector 1
30	Goat Trail Path & Bike Markings	73	$2,306,767.76	Sector 2
34	5th Street Pedestrian Projects	64	$2,506,817.28	Sector 2
36	80th Sidewalks & Sharrows	63	$2,155,825.76	Sector 2
39	Sky Hila Pathway Safe Route to School	48	$2,479,848.08	Sector 2
42	53rd Avenue Sidewalks & Bike Markings	49	$570,979.29	Sector 3
43	49th Place Transit Connection	46	$222,806.34	Sector 3
44	11th Street Sidewalk	43	$561,670.95	Sector 3
46	Possession View Lane Sidewalks	41	$892,254.43	Sector 3
47	Chennault Beach Road Bike Markings	39	$37,898.17	Sector 3
48	Park Ave Sidewalks	36	$584,078.55	Sector 3
49	62nd Street & Canyon Road Sidewalks	35	$892,254.43	Sector 3
41	81st Place SW Sidewalks	54	$2,910,364.78	Sector 4
32	Stairstep Path & Bike Markings	71	$5,788,392.17	Sector 5
35	88th Street Sidewalks & Bike Markings	63	$6,532,152.05	Sector 5
45	Washington Ave Sidewalks	43	$3,658,716.87	Sector 6

Funding Recommendation - Future Projects Cont.

Table 28: Future Project List (Far-Term Projects)				
Project Number	Project Name	Priority Score	Cost ($ 2016)	Sector
51	Harbour Place Shared Use Path	66	$1,482,352.74	Sector 1
53	Beverly Park Intersection Improvements	60	$1,411,207.00	Sector 1
54	84th Street Sidewalks	68	$1,044,570.79	Sector 1
55	92nd Street Sidewalk & Bike Markings	56	$593,333.26	Sector 1
56	88th Sidewalks & Bike Lanes	51	$678,095.15	Sector 3
58	Cyrus Way Sidewalks	47	$842,682.10	Sector 3
59	121st Bike Connection	47	$381,031.20	Sector 3
60	53rd Avenue Sidewalks & Bike Markings	45	$706,349.12	Sector 3
61	Cyrus Way Sidewalks	43	$694,177.58	Sector 3
62	53rd Avenue Sidewalks & Bike Markings	41	$1,185,704.17	Sector 3
64	Shared Use Path to Old Town	37	$667,590.00	Sector 3
67	Chennault Beach Gulch Shared Use Path	34	$220,716.10	Sector 3
68	Chennault Beach Road Bike Markings	32	$30,779.87	Sector 3
69	Loveland Avenue Sidewalks	29	$220,181.76	Sector 3
65	Share Use Path from Mukilteo Blvd to Boeing Recreation Center	36	$2,781,490.06	Sector 4
66	54th Avenue Sidewalks & Bike Markings	36	$2,694,782.20	Sector 4
50	92nd Street Sidewalk & Bike Markings	71	$4,419,442.81	Sector 5
52	Airport Road Shared Use Path	60	$14,761,032.00	Sector 5
57	Goat Trail Pedestrian Bridge	51	$7,763,975.16	Sector 6
63	Cyrus Way Road Extension	41	$5,527,497.09	Sector 6

Capacity Projects:

Impact fees are assessed to new development in order to expand the capacity of the system. If a development is proposing to add 100 single-family homes to an existing system, it is reasonable to charge the development for new demands on the parks system, traffic system, and school system to pay for projects that maintain the same level-of-service that existed prior to development.

Pedestrian, Bike, and Transit projects can provide additional capacity to the system by providing alternative transportation modes. The BTW Capacity Projects are eligible to receive impact fee funding from the Transportation Impact Fee, however the current Impact Fee Ordinance may need to be revised to represent mode split. One opportunity is that instead of charging impact fees based on PM Peak Trips, the fee is charged based on passenger trips and then with a mode split percentage for vehicles, transit, and walking/biking. This division could provide better funding towards pedestrian and bike infrastructure.

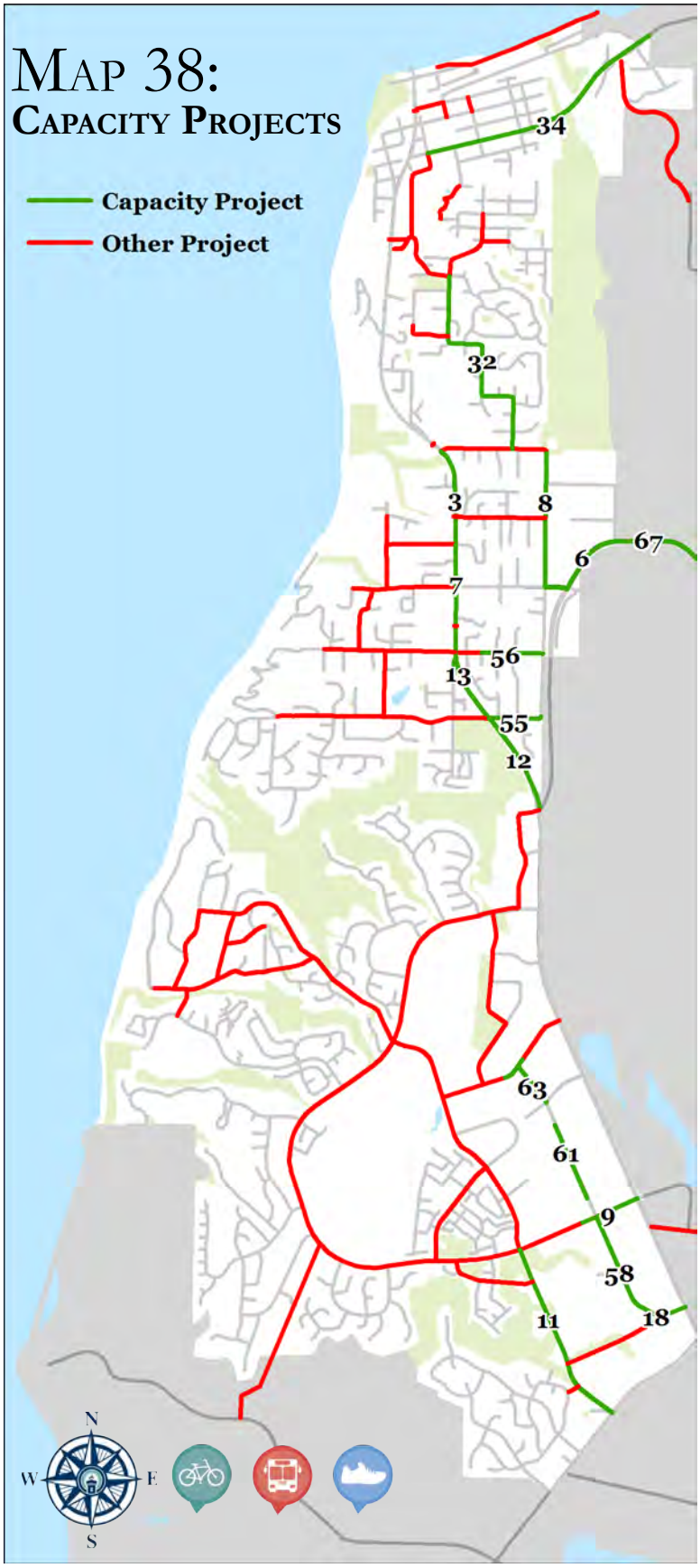
Example:
PM Peak Trips = 50 Trips
Passenger Trips = 50 x 1.13 (Occupancy) =

56.6 Passenger Trips

80% Vehicle:	45.2 Passenger Trips
12% Transit:	6.8 Passenger Trips
8% Walking/Biking:	4.5 Passenger Trips

The City should consider alternative ways of structuring an impact fee to ensure new development is paying their fair share towards the impacts on the communities.

Map 38 identifies the capacity projects within the BTW Plan.



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As we journey forward into implementation, it is important that this Bike – Transit - Walk Plan not sit on a shelf, and be a document that was produced just By the Way. Our city staff, City Council, and I will take seriously the next steps needed to make the vision that is described here come to life.

I believe in ensuring our City is a safe place to bike, walk, and access transit, for all of our residents and our visitors. From walking to school, bicycling for recreation, or hopping a bus to get to work: Mukilteo should be a place where all of these choices are possible. As described in our vision for Mukilteo, one aspect of our safe, strong neighborhoods includes improved accessibility and mobility. The BTW Plan lays the ground work for creating that network of connections.

Moving around our community on our own two feet or two wheels connects us with each other, and provides a little space and breathing room to appreciate the world around us. I will ensure that our City does everything we can to make healthy transportation choices ones that are easy to make.

Mayor Jennifer Gregerson, 2016

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APPENDIX

Walking Audits Prepared By Snohomish Health District

Planning-Level Sidewalk Assessment 2014 By Tuttle Engineering

Project Cost Rates By City Staff

Individual Project Estimates By City Staff

Walking Audit

Mukilteo Elementary
Mukilteo School District

2600 Mukilteo Speedway
Mukilteo, WA 98275

April 2015

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Overview:

In 2012, the District's Public Health Advisory Council evaluated more than 80 health indicators for Snohomish County. The 27 indicators with the worst risk scores were then evaluated in terms of their size, seriousness, the existence of evidence-based practices/community interventions, and whether there are community values attached to the issue. Using these criteria, the members of the Council chose priority health issues in need of community action. One of these priority issues was obesity prevention. Obesity affects 27% of adults and 11% of children in Snohomish County, double the 1994 obesity rates. It is a contributing factor to heart disease, certain cancers, and diabetes. There is a need for coordinated efforts that will increase physical activity and improve nutritional quality in Snohomish County. The Health District embarked on a collaborative effort with community partners and key stakeholders to develop community health improvement plans (CHIPs) for priority areas. In an effort to meet the obesity prevention objective of "Increasing school-based best-practice policies that promote physical activity for children and families in a minimum of three Snohomish County school districts" the collaborative identified the need to conduct a county-wide assessment of current physical activity practice and policies in elementary schools in order to identify districts or schools with the greatest need. A walking audit of all elementary schools in Snohomish County is one element of this assessment.

Methodology:

Each school's surrounding neighborhoods were visited. Walking maps required of schools were also collected, analyzed, and verified. Notes and photographs were taken on pedestrian infrastructure surrounding the school campus. At least one site visit was conducted at school arrival or dismissal to observe student arrival/release, bus, and traffic pick-up patterns. Based on the information collected and observed, assets were identified and recommendations for improving walkability were documented.

Auditors were supplied with maps, clipboards, Health District IDs, and digital cameras. Their notes and photo documentation were compiled into this final report to be made available to school, district, and city officials.

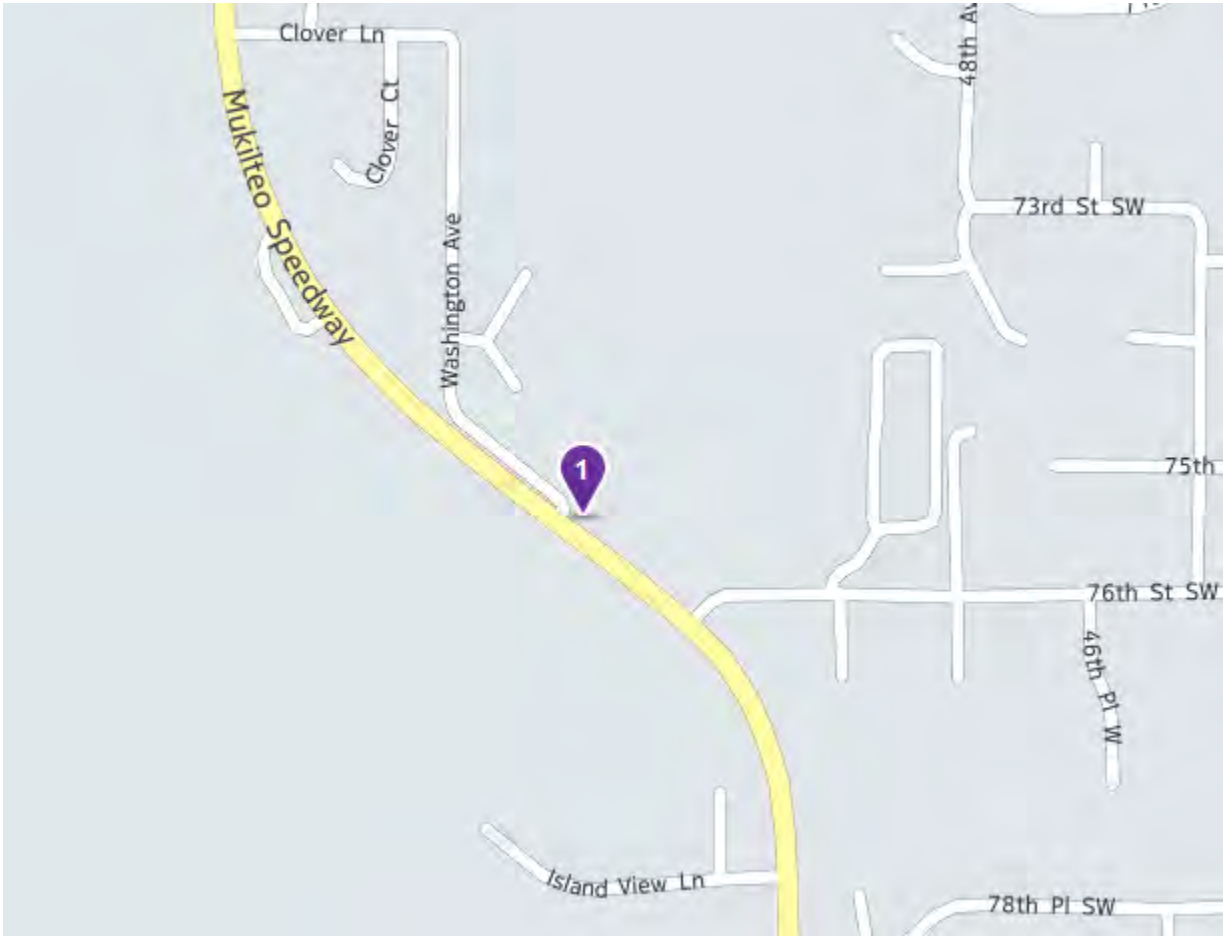
Community Resources:

School Principal:	Josh Benedict, 425.366.3100
District Superintendant:	Marci Larsen, 425.356.1274
District Transportation Director:	Cindy Steigerwald, 425.356.1258
City Planning & Public Works Director:	Glen Pickus, 425.263.8042
Health District Staff:	Carrie Parker, 425.339.8634
Safe Routes to School Website:	http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes

Mukilteo Elementary School Walking Audit

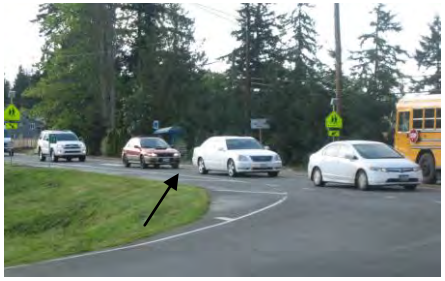
Neighborhood Reference Map:

2600 Mukilteo Speedway, Mukilteo, WA 98275



School-Recommended Walking Routes:

Walking Audit Notes:

Street/Intersection	Observations	Recommendations	Photo
Mukilteo Speedway	Mukilteo Speedway is a very fast moving, congested highway. There are shoulders, but no sidewalks on either side of the street. There is one crossing of the Speedway for students. It is very difficult to see. Indicator signs are low and not visible as you approach in heavier traffic. Office staff and crossing guard indicated there have been several near-miss incidences in this crosswalk.	Improve visibility of crosswalk.	 

Washington Ave	Washington Avenue has sidewalks on the east side (school side), but not the west. Most walkers approach from stairs/trail leading to neighborhoods and cross at crosswalk just south of school exit drive. There is a very faded crosswalk, signage at a guard at this crossing. Illegal parking on this street by parents looking to avoid the traffic of drop off is a problem! Restricts visibility and forces traffic exiting the school to turn wide in to oncoming lanes that have poor visibility due to sharp bend on north end of the street.	Refresh paint on crossing (almost completely gone). Enforce parking regulations, especially to the north of school.	 

70th Place SW & Goat Trail Road	Sidewalks present on 70th Pl SW and on the east side of Goat Trail Rd. This intersection has an unmanned crosswalk. It is a low-traffic road.	Refresh paint on crosswalk.	
70th Street SW	Flashing “school zone” sign. 70th becomes 48th Ave W, after this there is no sidewalk and a narrow shoulder.	Install sidewalk on 48th Ave W.	 

49th Avenue W & 70th Street SW	Crosswalk and "Stop for pedestrians" sign at this intersection. Low traffic road but speeding was observed during audit.	Refresh paint on crosswalk.	
71st Place SW & 48th Avenue W	Unmanned crosswalk with worn paint. Speeding traffic observed during audit.	Refresh paint on crosswalk.	
School Driveway (Approach from Mukilteo Speedway)	The entrance to this school is a long two lane, one way drive from Mukilteo Speedway. All traffic enters here. It was very busy, but there is a sidewalk approach that runs right along the neighboring middle school and is well buffered from traffic (though there is a unmanned, unmarked crossing to access this).		

School access paths	There are a number of excellent access paths connecting neighborhoods to the north and east with Mukilteo Elementary. This connectivity means students can avoid roads entirely, as well as shorten their transit time to school.	Continue to maintain access paths, and require new ones to be built with any new construction.	   

Bus and Drop Off/Pick Up Traffic Notes:

Bus and parent pick up both enter from the Mukilteo Speedway, split to different drop off/pick up curbs and then exit on to Washington Ave. Parent traffic was very heavy, though both seemed to run relatively smooth for campus capacity. There was some crossing of the bus lane (runs between the parent parking lot and the school curb) that could be a hazard. There is a non-manned crosswalk for this purpose.

Bicycling Notes:

Does the school provide bike racks?	✓ Yes	☐ No
Are they covered?	☐ Yes	✓ No
Are they in good repair?	✓ Yes	☐ No
Is capacity adequate?	✓ Yes	☐ No
Are there designated bike lanes around the school?	☐ Yes	✓ No

Additional Comments: School requires that students are in at least the third grade in order to bike or scooter to school. Helmets are required and bike and scooters are to be walked on school grounds.

Summary & Recommendations

Top Observations:

1. The crossing over Mukilteo Speedway was one of the most hazardous that we have observed in the county. Visibility of crossing and guard are very poor even on a clear day (no rain, no fog). Traffic was heavy and fast. Crosswalk signs are difficult to see and invisible for cars travelling behind larger vehicles.

2. Cars illegally park on the curb north of the school exit on to Washington Avenue. This creates a substantially hazard as cars and buses exiting right of the school have to turn wide to avoid parked cars in to the oncoming lane which comes blindly around the bend. Illegal parking around the Washington Avenue exit also restricts visibility of the crosswalk just south of the turnout.

Top Recommendations:

1. Re-install overhead crosswalk indicator and/or flashing ground lights on Mukilteo Speedway crossing.

2. Increase law enforcement and permanent visible “No Parking” indicators on Washington Avenue, especially north (right) of the school turnout.

3. Refresh paint on Washington Avenue crossing.

Auditor: Carrie Parker, BS MSHS
Keri Moore, BA MPH

Walking Audit

Columbia Elementary
Mukilteo School District

10520 Harbour Pointe Blvd
Mukilteo, WA 98275

September 2015

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Bicycling Notes 12

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Overview:

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Methodology:

Each school's surrounding neighborhoods were visited. Walking maps required of schools were also collected, analyzed, and verified. Notes and photographs were taken on pedestrian infrastructure surrounding the school campus. At least one site visit was conducted at school arrival or dismissal to observe student arrival/release, bus, and traffic pick-up patterns. Based on the information collected and observed, assets were identified and recommendations for improving walkability were documented.

Auditors were supplied with maps, clipboards, Health District IDs, and digital cameras. Their notes and photo documentation were compiled into this final report to be made available to school, district, and city officials.

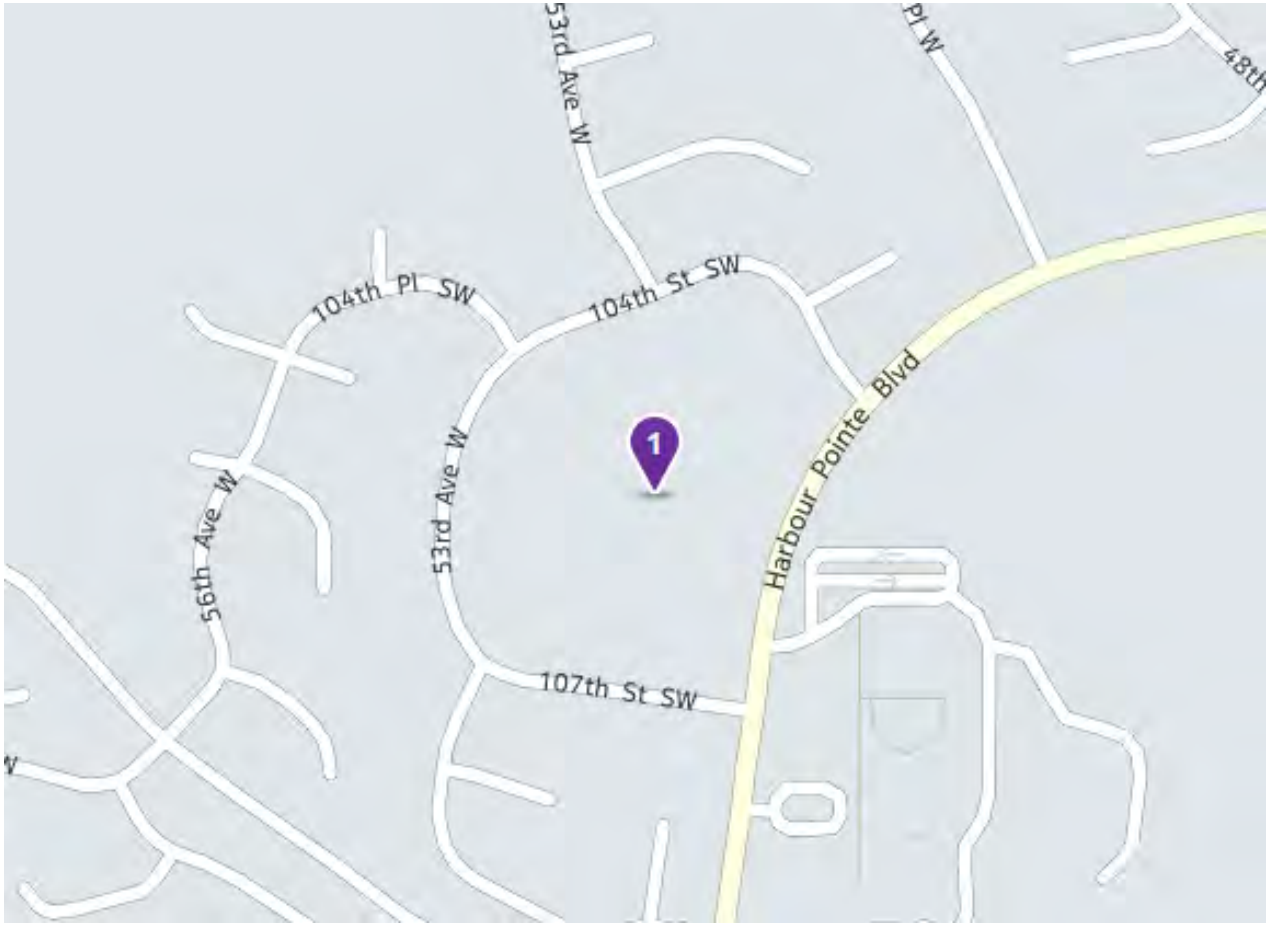
Community Resources:

School Principal:	Wendy Eidbo, 425.366.2600
District Superintendant:	Marci Larsen, 425.356.1274
District Transportation Director:	Cindy Steigerwald, 425.356.1258
City Planning & Public Works Director:	Glen Pickus, 425.263.8042
Health District Staff:	Carrie Parker, 425.339.8634
Safe Routes to School Website:	http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes

Columbia Elementary School Walking Audit

Neighborhood Reference Map:

10520 Harbour Pointe Boulevard, Mukilteo, WA 98275



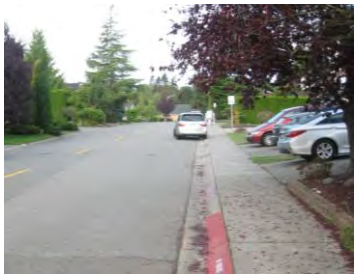
School-Recommended Walking Routes:

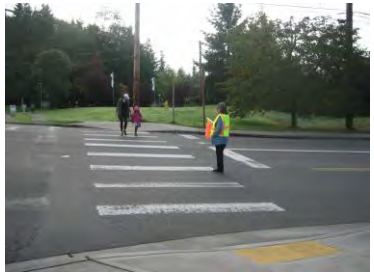
School Walking Policy:

Bus service is not available within one mile radius. Walking is at parent discretion.

Walking Audit Notes:

Street/Intersection	Observations	Recommendations	Photo
Harbour Pointe Boulevard	Busy road but with excellent sidewalks, wide buffers, and multiple types of school zone signage (there are three schools in a row on this road).		
53rd Avenue W & 104th Place SW	Neighborhood intersection crossing to school access trail on west side of school campus. Sidewalks on one side of both streets and well marked crossing. Unmanned. Low traffic.		

Neighborhood Access Trail	Well maintained and well traveled trail accessing school grounds from the west for surrounding neighborhoods.		
Harbour Pointe Blvd & 107th Street SW	Well marked, unmanned crossing. 3-way intersection (most walkers would be crossing 107th Street SW, not Harbor Pointe Blvd). 107th Street SW is a sidewalked, low traffic, residential street.		 

Harbour Pointe Blvd & 108th Street SW	Well marked, unmanned crossing. 3-way intersection (most walkers would be crossing 108th Street SW, not Harbor Pointe Blvd). 108th Street SW is a sidewalked, low traffic, residential street.		
Harbour Pointe Blvd & Chennault Beach Drive	High traffic crossing. Well marked and staffed.	Due to traffic volume (including nearby high school traffic) crossing would benefit from lighted signage/alerts. City committed to this and even installed cabling years ago, but still no flashing signal light is present. Recommend finishing project for pedestrian safety.	

Bus and Drop Off/Pick Up Traffic Notes:

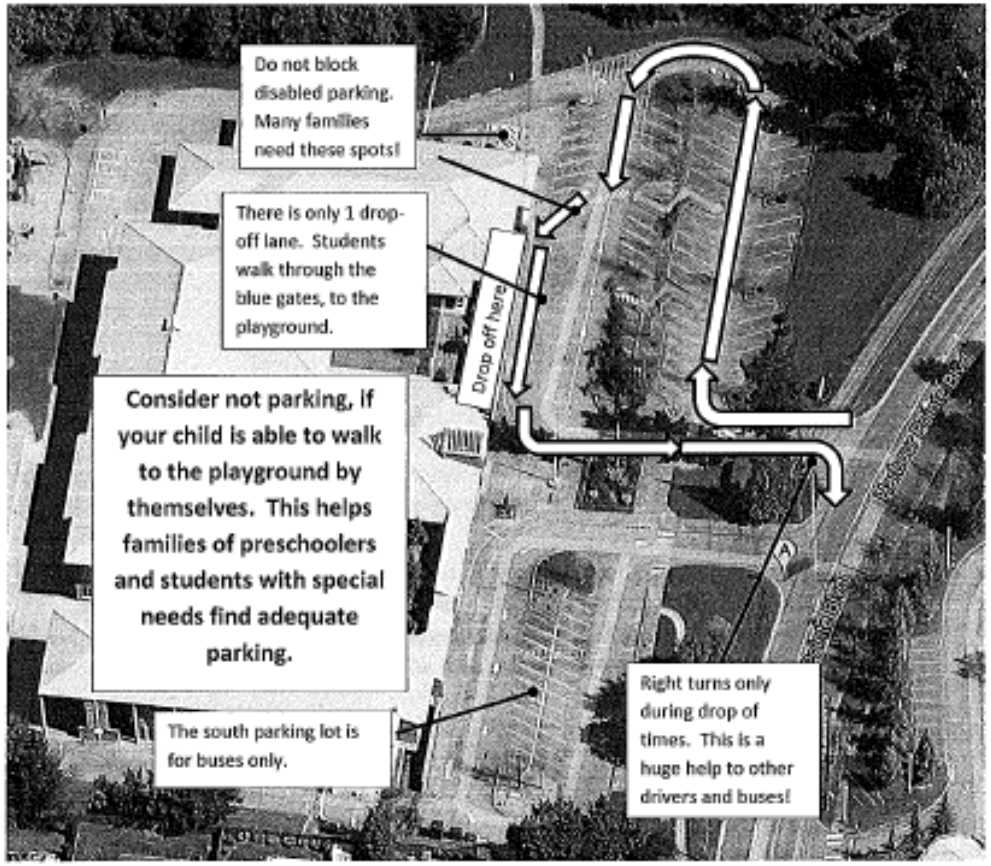
Columbia Elementary has three regular bus routes, but 12 to 15 buses that transport special needs students for their special education programs. Bus drop off/pick up occurs in the circular parking lot off Harbour Pointe Blvd, to the east and is completely separate from parent traffic areas. While it is a high volume of buses, congestion was minimal and there was a lot of staff presence at the bus area to assist with students coming on to school grounds. There was some parent traffic observed attempting to use this lot to avoid the more congested parent lot, but they were quickly diverted by staff and students were not allowed to exit parent vehicles on this side. There is good sidewalk and school entrance access from this area. There is a crossing at the entrance of the bus lot that was staffed by student crossing guards.

Parent drop off/pick up occurs in an identical circular lot off of Harbour Pointe Blvd to the west. Instructions for parent traffic and parking were available and visible in the main office (*see following page*). There are two lanes designated for drop off and one thru-lane. There was considerable parent traffic for such a highly walkable school/surrounding areas causing high congestion and back up on to Harbour Pointe Blvd. There is good sidewalk and school entrance access from this area. There is a crossing at the entrance of the parent lot that was staffed by student crossing guards.

Columbia Elementary Student Drop Off Process

Every day we have students who ride buses, walk and who are picked up by vehicle. In addition, we share our parking lot with over a dozen bus routes. Coordinating the pick-up process is important so that we can ensure the safety of all students and have the system run efficiently.

If you pick up your child from school, please follow the procedures below and always remain patient. When everyone works together and does their part, the whole process is safely completed in only 15 minutes. Remember, your child will raise his/her hand to indicate you have arrived in the pick-up lanes, and staff will walk your child to your vehicle.



- Do not idle over disabled parking spots or crosswalks.
- Remain with your vehicle at all times. Our loading area doubles as a fire lane.
- When leaving the parking lot, do not make left turns, *even if you think the coast is clear*. Making left turns is unfair to other drivers and buses, because it inevitably backs up traffic and slows down the pick-up process.

Bicycling Notes:

Does the school provide bike racks?	✓ Yes	☐ No
Are they covered?	☐ Yes	✓ No
Are they in good repair?	✓ Yes	☐ No
Is capacity adequate?	✓ Yes	☐ No
Are there designated bike lanes around the school?	☐ Yes	✓ No

Additional Comments:

Columbia has no official biking policy. Riding to school is at parent discretion. School reports a fair amount of bikers and recently installed a third bike rack to accommodate volume.

Summary & Recommendations

Top Observations:

1. Columbia Elementary has ideal walking and biking conditions and excellent sidewalk access/trail access, safe crossings, and is well manned by both staff and student crossing guard at start and dismissal times. Though there were many students observed taking advantage of walkability, an above-average volume of parent drop off/pick up traffic was also observed resulting in congestion on school grounds and Harbour Pointe Blvd

Top Recommendations:

1. Parent education (including a walking map) and encouragement! This school is one of the most walk-able in the county, and the volume of parent transportation was very high.

2. Work with the city to complete the flashing crossing indicator project and Harbour Pointe Blvd and Chennault Beach Drive.

Cable for unfinished indicator light at Harbour Pointe Blvd & Chennault Beach Dr corssing

Auditor: Carrie Parker, BS MSHS
Keri Moore, BA MPH

Walking Audit

Endeavour Elementary
Mukilteo School District

12300 Harbour Pointe Blvd
Mukilteo, WA 98275

February 2016

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District Superintendant:	Marci Larsen, 425.356.1274
District Transportation Director:	Cindy Steigerwald, 425.356.1258
City Planning & Public Works Director:	Glen Pickus, 425.263.8042
Health District Staff:	Carrie Parker, 425.339.8634
Safe Routes to School Website:	http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes

Endeavour Elementary School Walking Audit

Neighborhood Reference Map:

12300 Harbour Pointe Blvd, Mukilteo, WA 98275

School-Recommended Walking Routes:

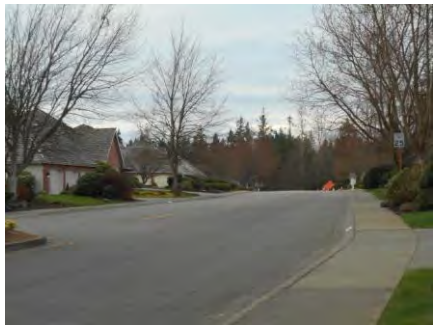
School Walking Policy:

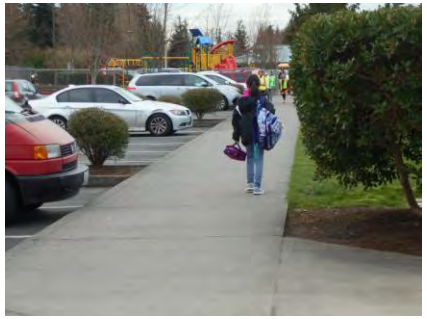
Walking is at parent discretion.

Walking Audit Notes:

Street/Intersection	Observations	Recommendations	Photo
Harbour Pointe Blvd	Busy road. Sidewalks and wide buffers on both sides of the street. School zone signage and flashers present. Good walking conditions.		
Double Eagle Drive	Low traffic residential area. Sidewalks and intermittent buffers on both sides of the street.		

Harbour Pointe Blvd & Double Eagle Drive	4 way intersection, 2 way stop. 2 way crossing. Well painted. Manned. Pedestrian activated flashers. High traffic and pedestrian use.		
West School Access Trail	Short access path connecting the west side of campus with Double Eagle Drive. Neighborhood complains that parents park on this street to use trail for alternate drop off/pick up location. Public access.		 

55th Place W	Quiet residential to the south. Sidewalks, no buffer on both sides of street. Apartment/Condo complex on the north with walking paths.		 
Harbour Pointe Blvd & 55th Place W	4 way intersection, 2 way stop. 2 way crossing. Painted with crosswalk signage. Flasher present for stopping traffic, but not thru traffic on Harbour Pointe Blvd. Unmanned. Busy.	Add a crossing guard and/or pedestrian activated crossing flashers.	

School Driveway	Long drive accessing the school. Sidewalk available on the west side. Dirt trail on the east side, though use is not necessary with crosswalk at the top of the drive.		 
Harbour Pointe Blvd & School Driveway	3 way intersection, 1 way stop. Heavy traffic and pedestrian use. Marked, painted and manned. No left turn allowed at drop off/pick up time (often disregarded).		

Bus and Drop Off/Pick Up Traffic Notes:

Buses approach the school down the main driveway, and pull in to the front school lot to drop off/pick up students directly in front of the main school entrance. Staff was present to assist with loading and unloading.

Parent drop off and pick up occurs in a designated area just behind bus traffic, though they use a different approach and holding area. Parent traffic is routed through the north parking lot. Direct approach via the school driveway is coned-off and only bus traffic can pass. This north lot detour provides two lanes of traffic waiting area before cars proceed in to the front lot of drop off and prevents blocking of the buses. Students are not to enter/exit vehicles before their vehicle approaches the designated area. Staff was present to assist students with loading/unloading.

The drop off/pick up area was very congested and confusing; however the current system takes advantage of as much holding space as possible for traffic. Some back up on to the driveway and Harbor Pointe Blvd still occurs.

Bicycling Notes:

Does the school provide bike racks?	✓ Yes	☐ No
Are they covered?	☐ Yes	✓ No
Are they in good repair?	✓ Yes	☐ No
Is capacity adequate?	✓ Yes	☐ No
Are there designated bike lanes around the school?	☐ Yes	✓ No

Additional Comments:

Students must be in at least the third grade to bike to school. A helmet is required.

Summary & Recommendations

Top Observations:

1. The parking lot and drop off/pick up area of this school are confusing, but make the most of the space available. Congestion from parent traffic is substantial.

2. Walking conditions around this school are excellent, with good sidewalks on all surrounding major and secondary/residential streets.

Top Recommendations:

1. Explore ways to encourage to use bus and walking routes (excellent) available to them in order to reduce traffic and congestion on and around the school grounds.

2. Add a crossing guard and/or pedestrian activated crossing flashers at Harbour Pointe Blvd & 55th Place W.

Auditor: Carrie Parker, BS MSHS
Keri Moore, BA MPH

TUTTLE ENGINEERING AND MANAGEMENT

December 12, 2014

Robert McGaughey, P.E.
Director of Public Works - City of Mukilteo
11930 Cyrus Way
Mukilteo, WA 98275

Subject: City of Mukilteo - Planning-Level Sidewalk Assessments
Draft Submittal

Mr. McGaughey,

Please find enclosed our draft submittal for the City's sidewalk assessments effort. Included for your review are a single-page prospectus, a planning-level cost summary, and a detailed breakdown of bid items at each of the 14 locations predetermined by the City of Mukilteo. Field assessments were performed in an effort to assist the City in scoping and programming key sidewalk improvement projects throughout the City and for use in securing possible grant funding for these sections to be designed and constructed.

Collectively, the prospectus and cost summary identify possible improvements that could be completed as well as the costs for the City's efforts to secure grants, design each improvement, complete P,S&E and Ad & Award, construct the improvements, as well as provide monies for the City's administration and management of the construction contract. Field assessments and the associated assumptions of cost were developed in a manner consistent with the guidelines and standards found within the City's *Development Standards*, used procedures and practices consistent with the Washington State Department of Transportation as well as those of generally accepted engineering practices.

Planning-level assessments were completed at each of the locations on December 5, 8, and 9, 2014. Our assessments focused on many site characteristics including pedestrian activity, surrounding land uses, critical areas, drainage systems, utilities, and the overall use and functionality of the roadway. We used roadway sections from the City's *Development Standards* as the basis for our assessments. More specifically, we used Figure 1 for our analysis of principal arterials, minor arterials, and urban collectors and Figure 2 for our analysis of local access roadways. We compared the City's roadway standards against existing roadway conditions to predict a section that would both resolve current pedestrian deficiencies and that would be appropriate for construction. As part of our field review, we did identify existing roadway and sidewalk improvements abutting the proposed locations that may not be consistent with the City's standard roadway sections. In developing proposed improvements further, coordination may be needed to reconcile the desired section to compliment or be consistent with what might already be completed within the section or corridor itself.

Cost estimates were prepared using planning-level analysis in order to estimate an order of magnitude for the effort that may be needed at each location. As the proposed sites are prioritized and positioned for improvement, it is recommended that the design for each section be completed to ensure the proposed solution can be made to fit current conditions and so the costs for the actual construction work can be determined. Costs were developed under the assumption that each site is a specific project effort for both design and construction. Allocated funding will most likely be better utilized by combining some of the sites into logical projects, as might be appropriate, for a program of improvements over

275 West Rio Vista, Suite 1 Burlington, WA 98233 Phone: 360.899.5953 Cell: 360.920.7030 jtuttle@tuttle-team.com

time. This could help to provide larger construction contracts so economies of scale for constructed solutions can be realized. This approach would help to create design and construction efficiencies by lowering unit bid prices for construction as well as reducing costs for the City's design and management of the effort.

Our intent has been to provide these assessments in a manner that meets your expectations as well as the standards of accuracy used for planning-level scoping and cost estimating. Once you've had a chance to review our documentation we would like to schedule a time to meet with you so that we can discuss our findings and results as well as answer any questions you may have. We want to be sure that the scoping assessments fully meet your expectations and that they can be effectively used for future funding and programming efforts. If upon your review changes or modifications are needed, we will compile them along with our discussions from the meeting and will promptly complete a final submittal for your use.

Respectfully,

John R. Tuttle

John R. Tuttle, P.E.
Principal

City of Mukilteo Planning-Level Sidewalk Assessments

Project #	Segment Description	Segment Length
2	2nd Street Sidewalks - SR 525 to Park Avenue	510 feet
3	Loveland Avenue Sidewalks - 2nd Street to 3rd Street	275 feet
6	Park Avenue Sidewalks - 2nd Street to 3rd Street	275 feet
7	76th Street Sidewalks - SR 525 to 44th Avenue	2,340 feet
8	53rd Avenue Sidewalks - 84th Street to 81st Place	800 feet
9	SR 526 Sidewalks - 84th Street to 40th Avenue	1,310 feet
10	84th Street Sidewalks - SR 525 to 53rd Avenue	1,460 feet
12	88th Street Sidewalks - SR 525 to 47th Street	405 feet
13	SR 525 Sidewalks - 92nd Street to 86th Street	2,230 feet
14	53rd Avenue Sidewalks - 88th Street to 92nd Street	1,250 feet
16	Chennault Beach Road Sidewalks - 4400 Block	500 feet
17	Cyrus Way Sidewalks - Harbour Pointe Boulevard to SR 525	1,400 feet
19	Cyrus Way Sidewalks - Evergreen Drive to South Road	1,900 feet
20	Cyrus Way Sidewalks - Harbour Pointe Boulevard to Evergreen Drive	1,945 feet

CITY OF MUKILTEO

11930 Cyrus Way, Mukilteo, WA 98275 425.263.8000 www.mukilteo.wa.us

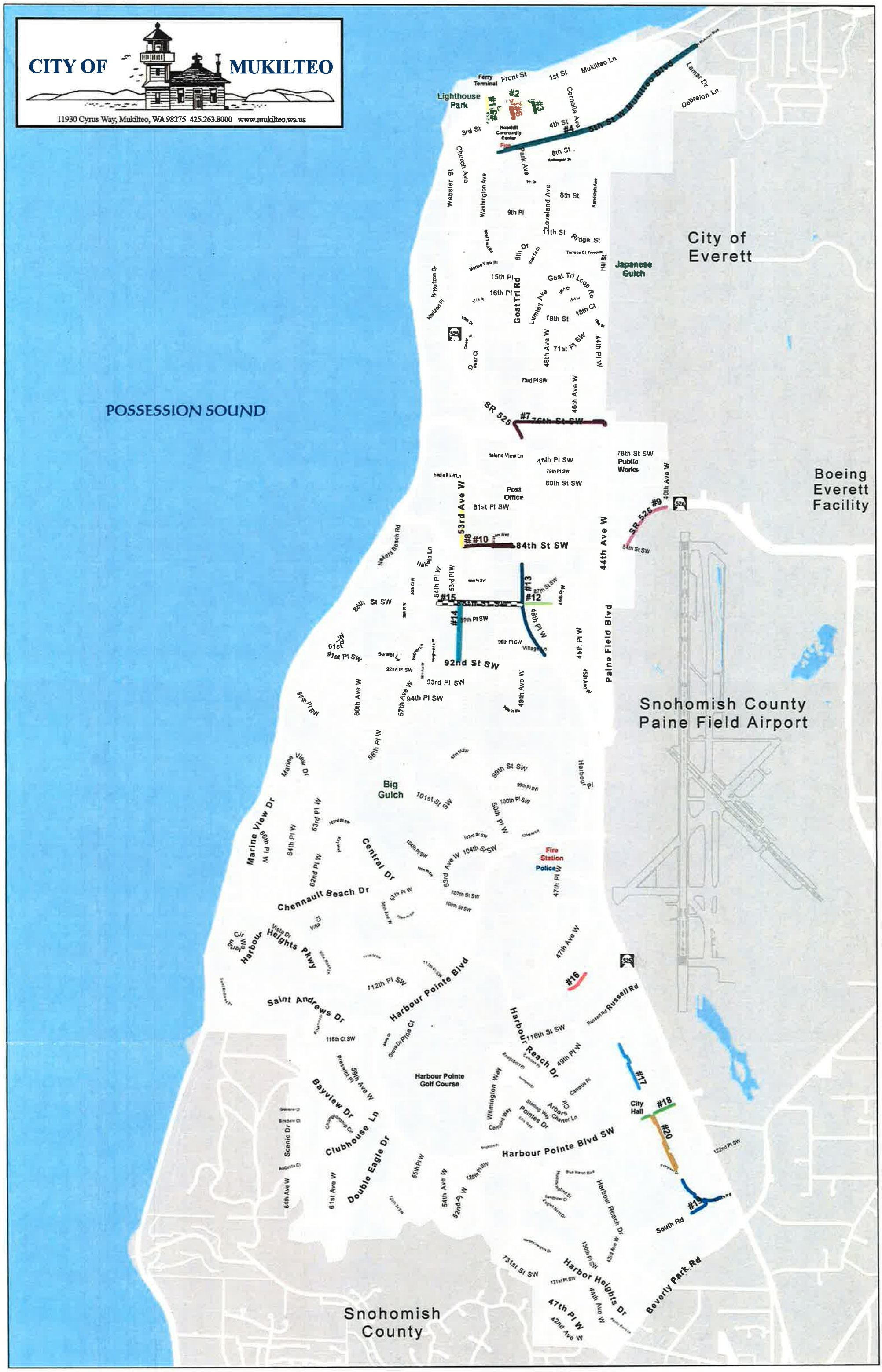


Figure 6

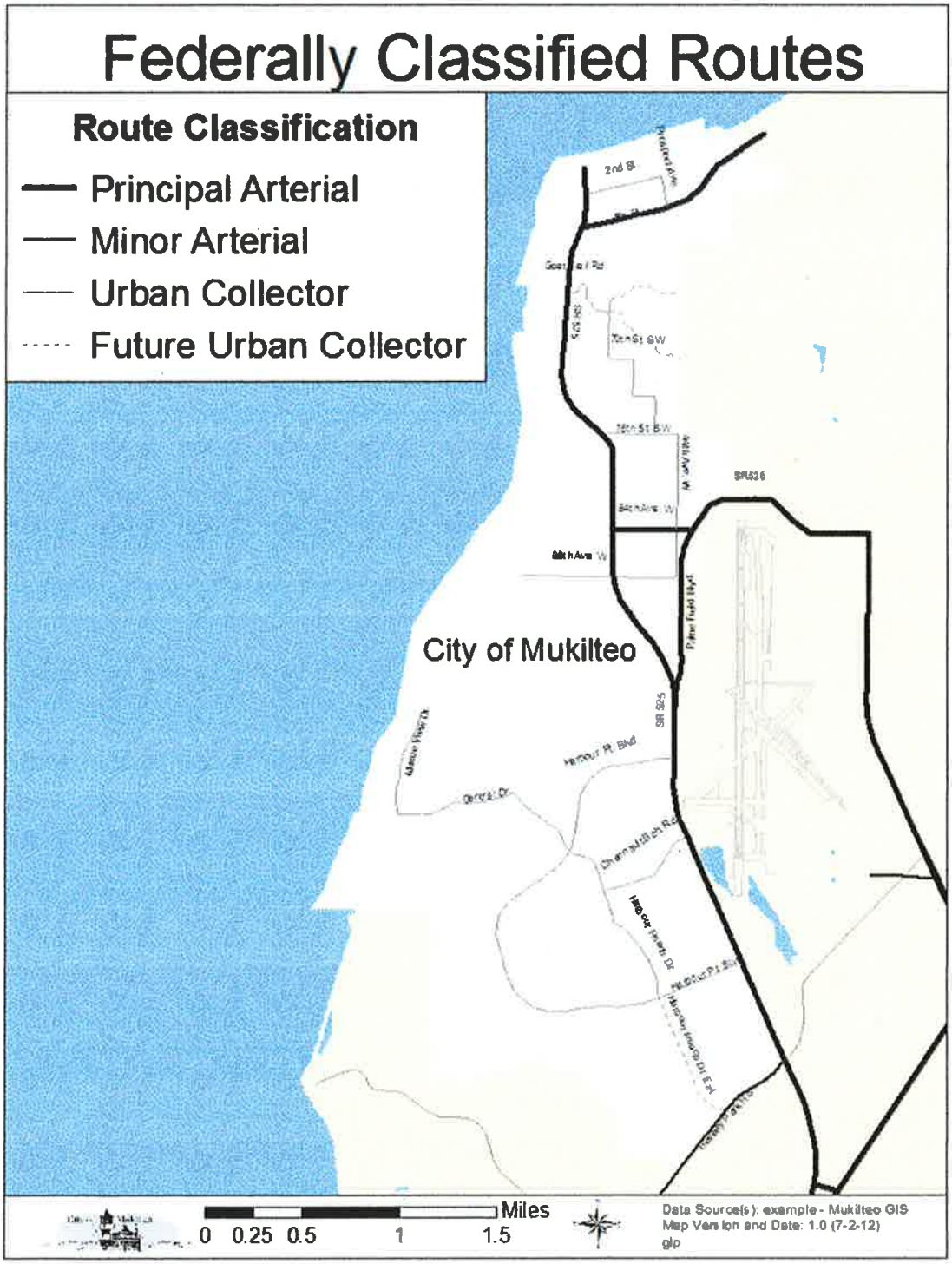

Federally Classified Routes
Route Classification
Principal Arterial
Minor Arterial
Urban Collector
Future Urban Collector
City of Mukilteo
SR 525
SR526
Miles
0 0.25 0.5 1 1.5
Data Source(s): example - Mukilteo GIS
Map Version and Date: 1.0 (7-2-12)
gip

FIGURE 1

MINIMUM STANDARD

PRINCIPAL ARTERIAL
MINOR ARTERIAL
URBAN COLLECTOR

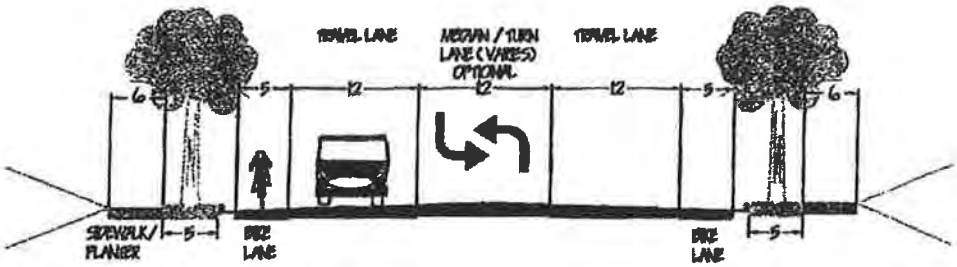
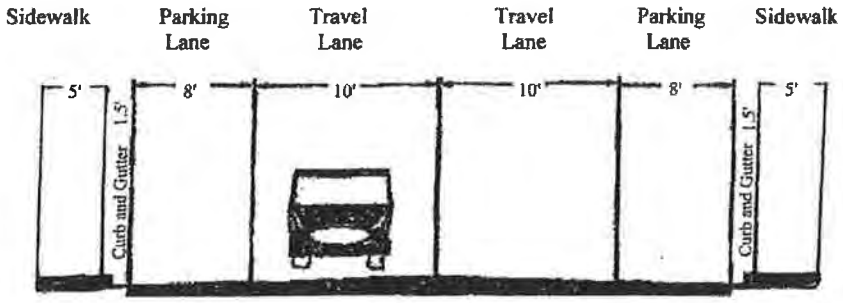


FIGURE 2

MINIMUM STANDARD

LOCAL ACCESS



SITE #2
2ND STREET SIDEWALKS - SR 525 TO PARK AVENUE

CURRENT CONDITIONS

The study area is located in historic downtown Mukilteo and is lined with residential and commercial uses. 2nd Street is classified as an urban collector with surrounding uses requiring adequate parking be provided both on-street and off-street. The existing two-lane roadway is paved with a 42-foot pavement width that accommodates a travel lane and parallel parking in each direction. Outside of the parking, shoulder treatments include concrete curbing and sidewalks, connecting driveways, small retaining structures, and landscaped slopes. Runoff sheet flows toward existing curbing until it is collected by existing catch basins positioned throughout the corridor. Pedestrians in the study area are comprised of local residents, tourists, and business patrons and employees. Field evaluations assessed 510 feet of roadway and identified obstructed sight lines, disconnected pedestrian routes, steep site accesses and non-compliant ADA accessibility.

SITE CHALLENGES

Existing utilities will need relocation, coordination will be required to reconcile private use of the public right-of-way, improvements will degrade existing driveway connections and create design and construction challenges, existing handicap parking may be lost, topography will provide challenges to full ADA compatibility, large retaining walls will be required to install improvements, community outreach will be required to reach a consensus on parking, landscaping, access, and other proposed roadway characteristics.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and corridor continuity issues by the reconstructing the outside edges of the existing roadway, installing pedestrian improvements, and by installing a new storm conveyance system. Construction elements include site preparation, roadway excavation, stormwater structures and piping, defined parking stalls, new curb and gutter to manage runoff, new sidewalks and curb ramps to expand pedestrian accessibility, retaining wall structures, appropriate lighting and landscaping, and adjustments to street signage and utility features. Proposed improvements will be performed on both sides of 2nd Street and will look to match as closely as possible the roadway section one block south on 3rd Street.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$587,017.69**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$70,442.12
PE (Prelim. Engineering for Environmental and Permits) - 2%	$11,740.35
CE (Construction Contract Administration/Construction Management) - 12%	$70,442.12
City of Mukilteo Management of Design and Construction Effort - 5%	$29,350.88
City of Mukilteo Owner's Reserve or Contingency - 5%	$29,350.88
Schedule Total	**$798,344.06**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #2: 2nd Street Sidewalks - SR 525 to Park Avenue**	
County:	Snohomish	
Total Approximate Length:	510 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$64,505.52
	Grading	$14,850.00
	Drainage	$0.00
	Storm Sewer	$42,600.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$19,050.00
	Hot Mix Asphalt	$51,530.00
	Erosion Control	$27,500.00
	Traffic	$92,694.00
	Other Items	$152,825.00
	Subtotal Work Done Contractor	$465,554.52
	Planning Level Design Contingency - 20%	$93,110.90
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$28,352.27
	Total Estimated Cost Work Done Contractor	**$587,017.69**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$70,442.12
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$11,740.35
	CE (Construction Contract Administration/Construction Management) - 12%	$70,442.12
	City of Mukilteo Management of Design and Construction Effort - 5%	$29,350.88
	City of Mukilteo Owner's Reserve or Contingency - 5%	$29,350.88
	Schedule Total	**$798,344.06**

Disclaimers:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #2: 2nd Street Sidewalks - SR 525 to Park Avenue

Approximate Length of Section: 510 LF

	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1	LS	$34,485.52	$34,485.52
2	Clearing and Grubbing	0.1	AC	$3,500.00	$350.00
3	Sawcutting	1,020	LF	$2.50	$2,550.00
4	Removal of Structure and Obstruction	1	LS	$20,000.00	$20,000.00
5	Removing Cement Conc. Sidewalk	335	SY	$8.00	$2,680.00
6	Removing Cement Conc. Curb and Gutter	600	LF	$4.00	$2,400.00
7	Removing Asphalt Conc. Pavement	510	SY	$4.00	$2,040.00
				Preparation Total:	**$30,020.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	1,000	CY	$11.50	$11,500.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	200	TN	$16.00	$3,200.00
10	Embankment Compaction	100	CY	$1.50	$150.00
				Grading Total:	**$14,850.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	10	EA	$1,200.00	$12,000.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	1,020	LF	$30.00	$30,600.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$42,600.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	1,300	TN	$9.00	$11,700.00
18	Crushed Surfacing Top Course	350	TN	$21.00	$7,350.00
				Surfacing Total:	**$19,050.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	500	TN	$100.00	$50,000.00
20	Longitudinal Joint Seal	1,020	LF	$1.50	$1,530.00
				Hot Mix Asphalt Total:	**$51,530.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$2,500.00	$2,500.00
22	Landscaping	1	LS	$25,000.00	$25,000.00
				Erosion Control Total:	**$27,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	1,020	LF	$18.00	$18,360.00
24	Cement Conc. Pedestrian Curb	60	LF	$16.00	$960.00
25	Paint Line	1,530	LF	$0.50	$765.00
26	Plastic Crosswalk Line	475	SF	$5.00	$2,375.00
27	Plastic Stop Line	60	LF	$15.00	$900.00
28	Plastic Bicycle Lane Symbol	4	EA	$68.00	$272.00
29	Pedestrian Traffic Control	1	LS	$10,000.00	$10,000.00
30	Plastic Traffic Letter/Arrows	4	EA	$68.00	$272.00
31	Raised Pavement Marker - Type 1 and 2	1	HUND	$290.00	$290.00
32	Permanent Signing	1	LS	$3,500.00	$3,500.00
33	Illumination System	1	LS	$30,000.00	$30,000.00
34	Temporary Project Traffic Control	1	LS	$25,000.00	$25,000.00
				Traffic Total:	**$92,694.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	375	CY	$9.00	$3,375.00
36	Contractor Provided Construction Surveying	1	LS	$4,500.00	$4,500.00
37	Cement Conc. Sidewalk	750	SY	$33.00	$24,750.00
38	Cement Conc. Driveway	60	SY	$60.00	$3,600.00
39	Cement Conc. Curb Ramp	4	EA	$1,200.00	$4,800.00
40	Modular Gravity Block Wall	1,440	SF	$35.00	$50,400.00
41	Adjust Utility Structures	14	EA	$300.00	$4,200.00
42	Relocate Existing Fire Hydrant	1	EA	$2,000.00	$2,000.00
43	Force Account Potholing Utilities	1	EST.	$500.00	$500.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$35,000.00	$35,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	180	LF	$90.00	$16,200.00
				Other Items Total:	**$152,825.00**
				Estimated Work Done Contractor Subtotal:	**$465,554.52**

SITE #3
LOVELAND AVENUE SIDEWALKS - 2ND STREET TO 3RD STREET

CURRENT CONDITIONS

The study area is located in a neighborhood at the interface of residential and commercial uses in historic downtown Mukilteo. Loveland Avenue is classified as a local access. The existing two-lane roadway is paved with a west side pavement width of 12 feet accommodating a travel lane and shoulder. The east side 11-foot pavement width provides for a travel lane and a narrow shoulder. Runoff sheet flows from the existing roadway into existing grassed areas, to a single catch basin positioned outside paving, or is conveyed by asphalt swales to storm structures outside the study limits. Pedestrian input to the study area is generated by local residents and patrons from local amenities. Field evaluations assessed 275 feet of roadway and identified deficient stormwater facilities and disconnected pedestrian routes that mandate non-motorized traffic to use narrow shoulders.

SITE CHALLENGES

Existing utility poles may need relocation, the existing centerline striping and pavement crown do not align with the adjacent block thus requiring the west half of the roadway to be reconstructed to correct the profile and alignment, coordination will be required to reconcile private use (retaining walls and fencing) of the public right-of-way, street conditions on the west side of the study area satisfy the needs of pedestrians, but do not meet the City's functional classification.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and drainage issues by the reconstructing half of the existing roadway, installing a new storm conveyance system, and by installing pedestrian improvements. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to expand pedestrian accessibility, and adjustments to street signage and utility features. Proposed improvements will be confined to the southbound lane of Loveland Avenue and will match the roadway configuration of the City's local access functional classification.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$147,180.32**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$17,661.64
PE (Prelim. Engineering for Environmental and Permits) - 2%	$2,943.61
CE (Construction Contract Administration/Construction Management) - 12%	$17,661.64
City of Mukilteo Management of Design and Construction Effort - 5%	$7,359.02
City of Mukilteo Owner's Reserve or Contingency - 5%	$7,359.02
Schedule Total	**$200,165.23**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #3: Loveland Avenue Sidewalks - Second Street to Third Street**	
County:	Snohomish	
Total Approximate Length:	275 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management,	
	Modular Block Gravity Wall, Etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$17,231.40
	Grading	$14,512.50
	Drainage	$0.00
	Storm Sewer	$11,850.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$5,700.00
	Hot Mix Asphalt	$10,825.00
	Erosion Control	$1,000.00
	Traffic	$22,382.50
	Other Items	$33,225.00
	Subtotal Work Done Contractor	$116,726.40
	Planning Level Design Contingency - 20%	$23,345.28
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$7,108.64
	Total Estimated Cost Work Done Contractor	**$147,180.32**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$17,661.64
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$2,943.61
	CE (Construction Contract Administration/Construction Management) - 12%	$17,661.64
	City of Mukilteo Management of Design and Construction Effort - 5%	$7,359.02
	City of Mukilteo Owner's Reserve or Contingency - 5%	$7,359.02
	Schedule Total	**$200,165.23**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #3: Loveland Avenue Sidewalks - Second Street to Third Street

	Approximate Length of Section	275	LF		
	Description	**Quantity**	**Unit**	**Unit Price**	**Estimated Amount**
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$8,646.40	$8,646.40
2	Clearing and Grubbing	0.1	AC	$3,500.00	$350.00
3	Sawcutting	550	LF	$2.50	$1,375.00
4	Removal of Structure and Obstruction	1	LS	$5,000.00	$5,000.00
5	Removing Cement Conc. Sidewalk	45	SY	$8.00	$360.00
6	Removing Cement Conc. Curb and Gutter	75	LF	$4.00	$300.00
7	Removing Asphalt Conc. Pavement	300	SY	$4.00	$1,200.00
				Preparation Total:	**$8,585.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	825	CY	$11.50	$9,487.50
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	300	TN	$16.00	$4,800.00
10	Embankment Compaction	150	CY	$1.50	$225.00
				Grading Total:	**$14,512.50**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	3	EA	$1,200.00	$3,600.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	275	LF	$30.00	$8,250.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$11,850.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	400	TN	$9.00	$3,600.00
18	Crushed Surfacing Top Course	100	TN	$21.00	$2,100.00
				Surfacing Total:	**$5,700.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	100	TN	$100.00	$10,000.00
20	Longitudinal Joint Seal	550	LF	$1.50	$825.00
				Hot Mix Asphalt Total:	**$10,825.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$1,000.00	$1,000.00
22	Landscaping	0	LS	$0.00	$0.00
				Erosion Control Total:	**$1,000.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	275	LF	$18.00	$4,950.00
24	Cement Conc. Pedestrian Curb	60	LF	$16.00	$960.00
25	Paint Line	825	LF	$0.50	$412.50
26	Plastic Crosswalk Line	432	SF	$5.00	$2,160.00
27	Plastic Stop Line	60	LF	$15.00	$900.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$0.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$12,000.00	$12,000.00
				Traffic Total:	**$22,382.50**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	100	CY	$9.00	$900.00
36	Contractor Provided Construction Surveying	1	LS	$3,000.00	$3,000.00
37	Cement Conc. Sidewalk	175	SY	$33.00	$5,775.00
38	Cement Conc. Driveway	0	SY	$60.00	$0.00
39	Cement Conc. Curb Ramp	4	EA	$1,200.00	$4,800.00
40	Modular Gravity Block Wall	150	SF	$35.00	$5,250.00
41	Adjust Utility Structures	0	EA	$300.00	$0.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	0	EST.	$0.00	$0.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$10,000.00	$10,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	0	LF	$90.00	$0.00
				Other Items Total:	**$33,225.00**
				Estimated Work Done Contractor Subtotal:	**$116,726.40**

SITE #6
PARK AVENUE SIDEWALKS - 2ND STREET TO 3RD STREET

CURRENT CONDITIONS

The study area is located on a steep side street in historic downtown Mukilteo. Park Avenue is classified as local access. The existing two-lane roadway is paved with areas widened for parking in the northwest and southeast corners of the site. Outside of travel lanes, shoulder treatments include narrow sidewalks, connecting driveways, and grass slopes. Runoff flows from existing surfaces against thickened asphalt edges until it is collected by catch basins positioned at natural low points inside and outside the study limits. Pedestrians in the study area are comprised of local residents, tourists, and business patrons and employees. Field evaluations assessed 275 feet of roadway and identified no pedestrian accessibility, poor stormwater management, and narrow parking facilities.

SITE CHALLENGES

Existing utility poles may need relocation, stairways, alleys and driveways will need to be reconstructed with walls to maintain private access, coordination will be required to reconcile private use of the public right-of-way, an existing stream lies immediately adjacent to expected construction limits, will constrain design alternatives and construction activities, and will require mitigation if impacted, existing retaining structures will need to be removed and new very tall retaining walls will be required to support proposed improvements, limited space is available to construct improvements.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access, parking, and drainage issues by the widening the existing roadway, installing a new storm conveyance system, and by installing pedestrian improvements. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to expand pedestrian accessibility, large retaining walls, and adjustments to street signage and utility features. Proposed improvements will be performed on both sides of Park Street and will match the roadway configuration of the City's local access classification.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$390,426.84**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$46,851.22
PE (Prelim. Engineering for Environmental and Permits) - 2%	$7,808.54
CE (Construction Contract Administration/Construction Management) - 12%	$46,851.22
City of Mukilteo Management of Design and Construction Effort - 5%	$19,521.34
City of Mukilteo Owner's Reserve or Contingency - 5%	$19,521.34
Schedule Total	**$530,980.50**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #6: Park Avenue Sidewalks - 2nd Street to 3rd Street**	
County:	Snohomish	
Total Approximate Length:	275 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management,	
	Modular Gravity Block Retaining walls, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$58,436.40
	Grading	$10,475.00
	Drainage	$1,000.00
	Storm Sewer	$22,200.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$11,400.00
	Hot Mix Asphalt	$3,750.00
	Erosion Control	$2,500.00
	Traffic	$22,430.00
	Other Items	$177,450.00
	Subtotal Work Done Contractor	$309,641.40
	Planning Level Design Contingency - 20%	$61,928.28
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$18,857.16
	Total Estimated Cost Work Done Contractor	**$390,426.84**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$46,851.22
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$7,808.54
	CE (Construction Contract Administration/Construction Management) - 12%	$46,851.22
	City of Mukilteo Management of Design and Construction Effort - 5%	$19,521.34
	City of Mukilteo Owner's Reserve or Contingency - 5%	$19,521.34
	Schedule Total	**$530,980.50**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #6: Park Avenue Sidewalks - 2nd Street to 3rd Street

	Approximate Length of Section	275	LF		
	Description	**Quantity**	**Unit**	**Unit Price**	**Estimated Amount**
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$22,936.40	$22,936.40
2	Clearing and Grubbing	0.1	AC	$3,500.00	$350.00
3	Sawcutting	500	LF	$2.50	$1,250.00
4	Removal of Structure and Obstruction	1	LS	$30,000.00	$30,000.00
5	Removing Cement Conc. Sidewalk	25	SY	$8.00	$200.00
6	Removing Cement Conc. Curb and Gutter	75	LF	$4.00	$300.00
7	Removing Asphalt Conc. Pavement	850	SY	$4.00	$3,400.00
				Preparation Total:	**$35,500.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	550	CY	$11.50	$6,325.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	250	TN	$16.00	$4,000.00
10	Embankment Compaction	100	CY	$1.50	$150.00
				Grading Total:	**$10,475.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	20	CY	$50.00	$1,000.00
				Drainage Total:	**$1,000.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	6	EA	$1,200.00	$7,200.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	500	LF	$30.00	$15,000.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$22,200.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	800	TN	$9.00	$7,200.00
18	Crushed Surfacing Top Course	200	TN	$21.00	$4,200.00
				Surfacing Total:	**$11,400.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	30	TN	$100.00	$3,000.00
20	Longitudinal Joint Seal	500	LF	$1.50	$750.00
				Hot Mix Asphalt Total:	**$3,750.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$2,500.00	$2,500.00
22	Landscaping	0	LS	$0.00	$0.00
				Erosion Control Total:	**$2,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	500	LF	$18.00	$9,000.00
24	Cement Conc. Pedestrian Curb	30	LF	$16.00	$480.00
25	Paint Line	750	LF	$0.50	$375.00
26	Plastic Crosswalk Line	225	SF	$5.00	$1,125.00
27	Plastic Stop Line	30	LF	$15.00	$450.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$0.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$10,000.00	$10,000.00
				Traffic Total:	**$22,430.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	200	CY	$9.00	$1,800.00
36	Contractor Provided Construction Surveying	1	LS	$6,000.00	$6,000.00
37	Cement Conc. Sidewalk	300	SY	$33.00	$9,900.00
38	Cement Conc. Driveway	45	SY	$60.00	$2,700.00
39	Cement Conc. Curb Ramp	0	EA	$1,200.00	$0.00
40	Modular Gravity Block Wall	2,865	SF	$40.00	$114,600.00
41	Adjust Utility Structures	5	EA	$300.00	$1,500.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	0	EST.	$500.00	$0.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$10,000.00	$10,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	305	LF	$90.00	$27,450.00
				Other Items Total:	**$177,450.00**
				Estimated Work Done Contractor Subtotal:	**$309,641.40**

SITE #7
76TH STREET SIDEWALKS - SR 525 TO 44TH AVENUE

CURRENT CONDITIONS

The study area is located primarily in a residential district in central Mukilteo. 76th Street is classified as an urban collector. The existing two-lane roadway is paved with a south side lane width of 12 feet and a shoulder varying from one to four feet consisting of both gravel and asphalt. No areas of designated on-street parking exist along the corridor. A combination of concrete curbing, catch basins, open ditches, and cross street culverts serve to collect and convey roadway runoff on both sides of the street. Pedestrian input to the study area is generated by local residents with defined routes restricted to only the north side of the roadway. Field evaluations assessed 2,340 feet of roadway and identified disconnected pedestrian routes, obstructed sight lines, private property amenities on public right-of-way, and areas of unmanaged drainage.

SITE CHALLENGES

Existing utilities will need relocation, coordination will be required to reconcile private use of the public right-of-way, improvements to existing road approaches and driveway connections will create design and construction challenges, large retaining walls will be required to install improvements, the proposed street section will need to be reconciled against existing roadway conditions in order to approximate the City's arterial functional classification, no stormwater treatment appears to exist with improvements requiring a regional review of stormwater management.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and drainage issues by widening the existing roadway, installing a new storm conveyance system, and by installing pedestrian sidewalk and bicycle improvements. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for bicycle use, new curb and gutter to manage runoff, new sidewalks and curb ramps to improve pedestrian accessibility, large-scale retaining walls, and adjustments to street signage and utility features. Proposed improvements will be confined to the eastbound lane of 76th Street until the existing park entrance where both sides of the roadway will be improved. The proposed roadway section will match that of the City's arterial functional classification.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$868,313.49**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$104,197.62
PE (Prelim. Engineering for Environmental and Permits) - 2%	$17,366.27
CE (Construction Contract Administration/Construction Management) - 12%	$104,197.62
City of Mukilteo Management of Design and Construction Effort - 5%	$43,415.67
City of Mukilteo Owner's Reserve or Contingency - 5%	$43,415.67
Schedule Total	**$1,180,906.35**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #7: 76th Street Sidewalks - SR 525 to 44th Avenue**	
County:	Snohomish	
Total Approximate Length:	2,340 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$92,060.80
	Grading	$39,525.00
	Drainage	$0.00
	Storm Sewer	$82,800.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$48,900.00
	Hot Mix Asphalt	$68,510.00
	Erosion Control	$25,000.00
	Traffic	$92,550.00
	Other Items	$239,300.00
	Subtotal Work Done Contractor	$688,645.80
	Planning Level Design Contingency - 20%	$137,729.16
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$41,938.53
	Total Estimated Cost Work Done Contractor	**$868,313.49**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$104,197.62
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$17,366.27
	CE (Construction Contract Administration/Construction Management) - 12%	$104,197.62
	City of Mukilteo Management of Design and Construction Effort - 5%	$43,415.67
	City of Mukilteo Owner's Reserve or Contingency - 5%	$43,415.67
	Schedule Total	**$1,180,906.35**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #7: 76th Street Sidewalks - SR 525 to 44th Avenue

Approximate Length of Section: 2,340 LF

No.	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$51,010.80	$51,010.80
2	Clearing and Grubbing	0.4	AC	$3,500.00	$1,400.00
3	Sawcutting	2,340	LF	$2.50	$5,850.00
4	Removal of Structure and Obstruction	1	LS	$30,000.00	$30,000.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	950	SY	$4.00	$3,800.00
				Preparation Total:	**$41,050.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	3,000	CY	$11.50	$34,500.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	300	TN	$16.00	$4,800.00
10	Embankment Compaction	150	CY	$1.50	$225.00
				Grading Total:	**$39,525.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	18	EA	$1,200.00	$21,600.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	2,040	LF	$30.00	$61,200.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$82,800.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	3,450	TN	$9.00	$31,050.00
18	Crushed Surfacing Top Course	850	TN	$21.00	$17,850.00
				Surfacing Total:	**$48,900.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	650	TN	$100.00	$65,000.00
20	Longitudinal Joint Seal	2,340	LF	$1.50	$3,510.00
				Hot Mix Asphalt Total:	**$68,510.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$5,000.00	$5,000.00
22	Landscaping	1	LS	$20,000.00	$20,000.00
				Erosion Control Total:	**$25,000.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	2,340	LF	$18.00	$42,120.00
24	Cement Conc. Pedestrian Curb	195	LF	$16.00	$3,120.00
25	Paint Line	4,680	LF	$0.50	$2,340.00
26	Plastic Crosswalk Line	756	SF	$5.00	$3,780.00
27	Plastic Stop Line	60	LF	$15.00	$900.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	1	LS	$5,000.00	$5,000.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	1	HUND	$290.00	$290.00
32	Permanent Signing	1	LS	$5,000.00	$5,000.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$30,000.00	$30,000.00
				Traffic Total:	**$92,550.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	900	CY	$9.00	$8,100.00
36	Contractor Provided Construction Surveying	1	LS	$6,000.00	$6,000.00
37	Cement Conc. Sidewalk	1,300	SY	$33.00	$42,900.00
38	Cement Conc. Driveway	195	SY	$60.00	$11,700.00
39	Cement Conc. Curb Ramp	13	EA	$1,200.00	$15,600.00
40	Modular Gravity Block Wall	3,000	SF	$35.00	$105,000.00
41	Adjust Utility Structures	5	EA	$300.00	$1,500.00
42	Relocate Existing Fire Hydrant	2	EA	$2,000.00	$4,000.00
43	Force Account Potholing Utilities	1	EST.	$1,000.00	$1,000.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$40,000.00	$40,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	0	LF	$90.00	$0.00
				Other Items Total:	**$239,300.00**
				Estimated Work Done Contractor Subtotal:	**$688,645.80**

SITE #8
53RD AVENUE SIDEWALKS - 84TH STREET TO 81ST PLACE

CURRENT CONDITIONS

The study area is located in a residential district in central Mukilteo. 53rd Avenue is classified as a local access. The existing two-lane roadway is paved with a east side pavement width of 15 feet that accommodates both lane travel and very narrow on-street parking. The west side pavement is wide enough for vehicular travel only. Existing gravel and paved shoulder widths vary from one to six feet. Runoff sheet flows from the existing roadway against thickened asphalt edges until it is collected by existing catch basins found in multiple locations inside the study limits. Pedestrian input to the study area is generated by local residents, with no pedestrian route existing within the corridor. Field evaluations assessed 800 feet of roadway and identified parked vehicles encroaching on travel lanes, exposed landscape areas discharging sediment to the existing storm system, and non-existent pedestrian routes that require non-motorized traffic to use narrow shoulders.

SITE CHALLENGES

Existing utility poles and structures will need relocation, coordination will be required to reconcile private use of the public right-of-way, retaining walls will be required to install improvements, the existing storm system does not appear to provide stormwater treatment prior to discharge into the existing large gully downstream of the study area.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access, parking, and drainage issues by the widening the existing roadway, upgrading the existing storm system, and by installing pedestrian sidewalk improvements. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to improve pedestrian accessibility, small-scale retaining walls, and adjustments to street signage and utility features. Proposed improvements will be confined to the northbound lane of 53rd Avenue and will match the roadway configuration of the City's local access classification.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$381,670.65**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$45,800.48
PE (Prelim. Engineering for Environmental and Permits) - 2%	$7,633.41
CE (Construction Contract Administration/Construction Management) - 12%	$45,800.48
City of Mukilteo Management of Design and Construction Effort - 5%	$19,083.53
City of Mukilteo Owner's Reserve or Contingency - 5%	$19,083.53
Schedule Total	**$519,072.08**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #8: 53rd Avenue Sidewalks - 88th Street to 92nd Street**	
County:	Snohomish	
Total Approximate Length:	800 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management,	
	Modular Block Retaining Wall, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$32,947.00
	Grading	$11,500.00
	Drainage	$0.00
	Storm Sewer	$24,600.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$13,800.00
	Hot Mix Asphalt	$31,200.00
	Erosion Control	$3,500.00
	Traffic	$41,400.00
	Other Items	$143,750.00
	Subtotal Work Done Contractor	$302,697.00
	Planning Level Design Contingency - 20%	$60,539.40
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$18,434.25
	Total Estimated Cost Work Done Contractor	**$381,670.65**
Additional R/W		$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%		$45,800.48
PE (Prelim. Engineering for Environmental and Permits) - 2%		$7,633.41
CE (Construction Contract Administration/Construction Management) - 12%		$45,800.48
City of Mukilteo Management of Design and Construction Effort - 5%		$19,083.53
City of Mukilteo Owner's Reserve or Contingency - 5%		$19,083.53
Schedule Total		**$519,072.08**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #8: 53rd Avenue Sidewalks - 88th Street to 92nd Street

Approximate Length of Section: 800 LF

No.	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$22,422.00	$22,422.00
2	Clearing and Grubbing	0.2	AC	$3,500.00	$525.00
3	Sawcutting	800	LF	$2.50	$2,000.00
4	Removal of Structure and Obstruction	1	LS	$5,000.00	$5,000.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	750	SY	$4.00	$3,000.00
				Preparation Total:	**$10,525.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	1,000	CY	$11.50	$11,500.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	0	TN	$16.00	$0.00
10	Embankment Compaction	0	CY	$1.50	$0.00
				Grading Total:	**$11,500.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	6	EA	$100.00	$600.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	800	LF	$30.00	$24,000.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$24,600.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	950	TN	$9.00	$8,550.00
18	Crushed Surfacing Top Course	250	TN	$21.00	$5,250.00
				Surfacing Total:	**$13,800.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	300	TN	$100.00	$30,000.00
20	Longitudinal Joint Seal	800	LF	$1.50	$1,200.00
				Hot Mix Asphalt Total:	**$31,200.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$2,500.00	$2,500.00
22	Landscaping	1	LS	$1,000.00	$1,000.00
				Erosion Control Total:	**$3,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	800	LF	$18.00	$14,400.00
24	Cement Conc. Pedestrian Curb	0	LF	$16.00	$0.00
25	Paint Line	800	LF	$0.50	$400.00
26	Plastic Crosswalk Line	0	SF	$5.00	$0.00
27	Plastic Stop Line	40	LF	$15.00	$600.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$0.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$25,000.00	$25,000.00
				Traffic Total:	**$41,400.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	300	CY	$9.00	$2,700.00
36	Contractor Provided Construction Surveying	1	LS	$4,500.00	$4,500.00
37	Cement Conc. Sidewalk	450	SY	$33.00	$14,850.00
38	Cement Conc. Driveway	80	SY	$60.00	$4,800.00
39	Cement Conc. Curb Ramp	0	EA	$1,200.00	$0.00
40	Modular Gravity Block Wall	2,800	SF	$35.00	$98,000.00
41	Adjust Utility Structures	18	EA	$300.00	$5,400.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	0	EST.	$500.00	$0.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$10,000.00	$10,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	0	LF	$90.00	$0.00
				Other Items Total:	**$143,750.00**
				Estimated Work Done Contractor Subtotal:	**$302,697.00**

SITE #9
SR 526 SIDEWALKS - 84th STREET TO 40th AVENUE

CURRENT CONDITIONS

The study area is located in a heavily commercialized business district along State Route 526 in east Mukilteo. This section of principal arterial serves as one of the gateway entrances into Mukilteo and has an average daily traffic of 33,000 vehicles per day. The existing four-lane roadway is paved with two 12-foot travel lanes and a two-foot shoulder in each direction. Runoff in this super-elevated section of roadway sheet flows from north to south, is intercepted by curbing, then discharged into open ditches. The north side of the road is elevated above the roadway surface. Pedestrian input is generated by patrons and employees of local businesses with prominent signs of pedestrian and bicycle use defined by worn paths in existing landscape beds lining the roadway. Field evaluations assessed 1,310 feet of roadway and identified no pedestrian routes to separate non-motorized traffic from the busy roadway surface.

SITE CHALLENGES

Existing utility poles, fencing, and mature landscaping will require detailed design b conducted in order to reduce impacts to these features, existing soils may prevent effective use of low-impact development measures.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian issues by installing pedestrian improvements both separated and elevated from the highway. Construction elements include site preparation, roadway excavation, a new meandering shared-use pathway, discrete path lighting to improve pedestrian safety, and landscaping enhancements. Proposed improvements will be confined to only the north side of SR 526 and will closely match the roadway section found in the City's arterial classification.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$167,293.69**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$20,075.24
PE (Prelim. Engineering for Environmental and Permits) - 2%	$3,345.87
CE (Construction Contract Administration/Construction Management) - 12%	$20,075.24
City of Mukilteo Management of Design and Construction Effort - 5%	$8,364.68
City of Mukilteo Owner's Reserve or Contingency - 5%	$8,364.68
Schedule Total	**$227,519.42**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #9: SR 526 - 84th Street to Airport Road**	
County:	Snohomish	
Total Approximate Length:	1,310 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$11,228.00
	Grading	$5,125.00
	Drainage	$0.00
	Storm Sewer	$0.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$1,575.00
	Hot Mix Asphalt	$0.00
	Erosion Control	$27,500.00
	Traffic	$18,000.00
	Other Items	$69,250.00
	Subtotal Work Done Contractor	$132,678.00
	Planning Level Design Contingency - 20%	$26,535.60
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$8,080.09
	Total Estimated Cost Work Done Contractor	**$167,293.69**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$20,075.24
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$3,345.87
	CE (Construction Contract Administration/Construction Management) - 12%	$20,075.24
	City of Mukilteo Management of Design and Construction Effort - 5%	$8,364.68
	City of Mukilteo Owner's Reserve or Contingency - 5%	$8,364.68
	Schedule Total	**$227,519.42**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #9: SR 526 - 84th Street to Airport Road

Approximate Length of Section: 1,310 LF

	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$9,828.00	$9,828.00
2	Clearing and Grubbing	0.4	AC	$3,500.00	$1,400.00
3	Sawcutting	0	LF	$2.50	$0.00
4	Removal of Structure and Obstruction	0	LS	$20,000.00	$0.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	0	SY	$4.00	$0.00
				Preparation Total:	**$1,400.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	300	CY	$11.50	$3,450.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	100	TN	$16.00	$1,600.00
10	Embankment Compaction	50	CY	$1.50	$75.00
				Grading Total:	**$5,125.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	0	EA	$1,200.00	$0.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	0	LF	$30.00	$0.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$0.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	0	TN	$9.00	$0.00
18	Crushed Surfacing Top Course	75	TN	$21.00	$1,575.00
				Surfacing Total:	**$1,575.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	0	TN	$10.00	$0.00
20	Longitudinal Joint Seal	0	LF	$1.50	$0.00
				Hot Mix Asphalt Total:	**$0.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$2,500.00	$2,500.00
22	Landscaping	1	LS	$25,000.00	$25,000.00
				Erosion Control Total:	**$27,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	0	LF	$18.00	$0.00
24	Cement Conc. Pedestrian Curb	0	LF	$16.00	$0.00
25	Paint Line	0	LF	$0.50	$0.00
26	Plastic Crosswalk Line	0	SF	$5.00	$0.00
27	Plastic Stop Line	0	LF	$15.00	$0.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$10,000.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	1	LS	$12,000.00	$12,000.00
34	Temporary Project Traffic Control	1	LS	$5,000.00	$5,000.00
				Traffic Total:	**$18,000.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	0	CY	$9.00	$0.00
36	Contractor Provided Construction Surveying	1	LS	$3,000.00	$3,000.00
37	Cement Conc. Sidewalk	1,750	SY	$33.00	$57,750.00
38	Cement Conc. Driveway	0	SY	$60.00	$0.00
39	Cement Conc. Curb Ramp	0	EA	$1,200.00	$0.00
40	Modular Gravity Block Wall	0	SF	$35.00	$0.00
41	Adjust Utility Structures	0	EA	$300.00	$0.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	0	EST.	$500.00	$0.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$5,000.00	$5,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	0	LF	$90.00	$0.00
				Other Items Total:	**$69,250.00**
				Estimated Work Done Contractor Subtotal:	**$132,678.00**

SITE #10
84TH STREET SIDEWALKS - SR 525 TO 53RD AVENUE

CURRENT CONDITIONS

The study area is located in a residential district at the eastern edge of commercial use fronting State Route 525 in central Mukilteo. 84th Street is classified as local access. The existing two-lane roadway is paved and has both gravel and paved shoulders ranging from one to eight feet wide. Areas of existing shoulder are currently being used for parking. Open ditches and cross street culverts collect and convey roadway runoff in front of older homes with new developments having enclosed drainage for stormwater management. Pedestrian input to the study area is generated by local residents with standard pedestrian routes available only on segmented sections of sidewalk. Field evaluations assessed 1,460 feet of roadway and identified areas of unmanaged drainage and disconnected pedestrian routes that require non-motorized traffic to use narrow shoulders.

SITE CHALLENGES

Existing utility poles and structures will need relocation, mature trees will need removal, few areas exist for water quality treatment upstream of the existing gully at the discharge point, coordination will be required to reconcile private use of the public right-of-way, retaining walls will be required to widen the road for on-street parking, and signs of erosion and shoulder scour will mandate large-scale upgrades to the existing storm network.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian and drainage issues by the widening the existing roadway, installing a new storm conveyance system, and by installing pedestrian sidewalk improvements. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to improve pedestrian accessibility, retaining wall structures, and adjustments to street signage and utility features. Proposed improvements will be confined to both sides of 53rd Avenue and will match the roadway section defined by the City's local access functional classification.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$502,738.99**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$60,328.68
PE (Prelim. Engineering for Environmental and Permits) - 2%	$10,054.78
CE (Construction Contract Administration/Construction Management) - 12%	$60,328.68
City of Mukilteo Management of Design and Construction Effort - 5%	$25,136.95
City of Mukilteo Owner's Reserve or Contingency - 5%	$25,136.95
Schedule Total	**$683,725.02**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #10: 84th Street Sidewalks - SR 525 to 53rd Avenue**	
County:	Snohomish	
Total Approximate Length:	1,460 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$36,534.40
	Grading	$25,875.00
	Drainage	$0.00
	Storm Sewer	$58,200.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$17,850.00
	Hot Mix Asphalt	$37,190.00
	Erosion Control	$7,500.00
	Traffic	$53,490.00
	Other Items	$162,075.00
	Subtotal Work Done Contractor	$398,714.40
	Planning Level Design Contingency - 20%	$79,742.88
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$24,281.71
	Total Estimated Cost Work Done Contractor	**$502,738.99**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$60,328.68
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$10,054.78
	CE (Construction Contract Administration/Construction Management) - 12%	$60,328.68
	City of Mukilteo Management of Design and Construction Effort - 5%	$25,136.95
	City of Mukilteo Owner's Reserve or Contingency - 5%	$25,136.95
	Schedule Total	**$683,725.02**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
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3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
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   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #10: 84th Street Sidewalks - SR 525 to 53rd Avenue

Approximate Length of Section: 1,460 LF

	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$29,534.40	$29,534.40
2	Clearing and Grubbing	0.1	AC	$3,500.00	$350.00
3	Sawcutting	1,460	LF	$2.50	$3,650.00
4	Removal of Structure and Obstruction	0	LS	$20,000.00	$0.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	750	SY	$4.00	$3,000.00
				Preparation Total:	**$7,000.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	2,250	CY	$11.50	$25,875.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	0	TN	$16.00	$0.00
10	Embankment Compaction	0	CY	$1.50	$0.00
				Grading Total:	**$25,875.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	12	EA	$1,200.00	$14,400.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	1,460	LF	$30.00	$43,800.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$58,200.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	1,225	TN	$9.00	$11,025.00
18	Crushed Surfacing Top Course	325	TN	$21.00	$6,825.00
				Surfacing Total:	**$17,850.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	350	TN	$100.00	$35,000.00
20	Longitudinal Joint Seal	1,460	LF	$1.50	$2,190.00
				Hot Mix Asphalt Total:	**$37,190.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$5,000.00	$5,000.00
22	Landscaping	1	LS	$2,500.00	$2,500.00
				Erosion Control Total:	**$7,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	1,460	LF	$18.00	$26,280.00
24	Cement Conc. Pedestrian Curb	30	LF	$16.00	$480.00
25	Paint Line	1,460	LF	$0.50	$730.00
26	Plastic Crosswalk Line	0	SF	$5.00	$0.00
27	Plastic Stop Line	0	LF	$15.00	$0.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$10,000.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$25,000.00	$25,000.00
				Traffic Total:	**$53,490.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	600	CY	$9.00	$5,400.00
36	Contractor Provided Construction Surveying	1	LS	$6,000.00	$6,000.00
37	Cement Conc. Sidewalk	825	SY	$33.00	$27,225.00
38	Cement Conc. Driveway	150	SY	$60.00	$9,000.00
39	Cement Conc. Curb Ramp	2	EA	$1,200.00	$2,400.00
40	Modular Gravity Block Wall	2,000	SF	$35.00	$70,000.00
41	Adjust Utility Structures	11	EA	$300.00	$3,300.00
42	Relocate Existing Fire Hydrant	1	EA	$2,000.00	$2,000.00
43	Force Account Potholing Utilities	1	EST.	$1,000.00	$1,000.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$12,000.00	$12,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	225	LF	$90.00	$20,250.00
				Other Items Total:	**$162,075.00**
				Estimated Work Done Contractor Subtotal:	**$398,714.40**

SITE #12
88TH STREET SIDEWALKS - SR 525 TO 47TH STREET

CURRENT CONDITIONS

The study area is located in a residential district adjacent to State Route 525 in central Mukilteo. 88th Street is classified as an urban collector. The existing two-lane roadway is paved with a south side pavement width of 21 feet that accommodates both lane travel and on-street parking. The north side pavement is wide enough for vehicular travel only. Existing gravel and paved shoulder widths vary from one to four feet. Open ditches and cross street culverts collect and convey existing roadway runoff. Pedestrian input to the study area is generated by local residents with facilities restricted to only the south side of the roadway. Field evaluations assessed 405 feet of roadway and identified disconnected pedestrian routes that require non-motorized traffic to use narrow shoulders.

SITE CHALLENGES

Existing utility poles and structures will need relocation, signs of erosion will mandate upsizing the existing storm network, coordination will be required to reconcile private use of the public right-of-way, street conditions at the east end of the study area satisfy the needs of pedestrians, but do not meet the standard required by the City's functional classification.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and on-street parking issues by the widening the existing roadway, installing a new storm conveyance system, and by installing pedestrian sidewalk improvements. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to improve pedestrian accessibility, small-scale retaining walls, and adjustments to street signage and utility features. Proposed improvements will be confined to the westbound lane of 88th Street and will match the roadway configuration of the eastbound lane of the roadway.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$143,398.00**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$17,207.76
PE (Prelim. Engineering for Environmental and Permits) - 2%	$2,867.96
CE (Construction Contract Administration/Construction Management) - 12%	$17,207.76
City of Mukilteo Management of Design and Construction Effort - 5%	$7,169.90
City of Mukilteo Owner's Reserve or Contingency - 5%	$7,169.90
Schedule Total	**$195,021.27**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #12: 88th Street Sidewalks - SR 525 to 47th Street**	
County:	Snohomish	
Total Approximate Length:	405 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$12,936.70
	Grading	$8,015.00
	Drainage	$0.00
	Storm Sewer	$18,150.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$7,230.00
	Hot Mix Asphalt	$9,607.50
	Erosion Control	$6,000.00
	Traffic	$18,412.50
	Other Items	$33,375.00
	Subtotal Work Done Contractor	$113,726.70
	Planning Level Design Contingency - 20%	$22,745.34
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$6,925.96
	Total Estimated Cost Work Done Contractor	**$143,398.00**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$17,207.76
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$2,867.96
	CE (Construction Contract Administration/Construction Management) - 12%	$17,207.76
	City of Mukilteo Management of Design and Construction Effort - 5%	$7,169.90
	City of Mukilteo Owner's Reserve or Contingency - 5%	$7,169.90
	Schedule Total	**$195,021.27**

Disclaimers:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #12: 88th Street Sidewalks - SR 525 to 47th Street

	Approximate Length of Section	405	LF		
	Description	**Quantity**	**Unit**	**Unit Price**	**Estimated Amount**
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1	LS	$8,424.20	$8,424.20
2	Clearing and Grubbing	0.2	AC	$3,500.00	$700.00
3	Sawcutting	405	LF	$2.50	$1,012.50
4	Removal of Structure and Obstruction	1	LS	$2,000.00	$2,000.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	200	SY	$4.00	$800.00
				Preparation Total:	**$4,512.50**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	350	CY	$11.50	$4,025.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	240	TN	$16.00	$3,840.00
10	Embankment Compaction	100	CY	$1.50	$150.00
				Grading Total:	**$8,015.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	5	EA	$1,200.00	$6,000.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	405	LF	$30.00	$12,150.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$18,150.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	500	TN	$9.00	$4,500.00
18	Crushed Surfacing Top Course	130	TN	$21.00	$2,730.00
				Surfacing Total:	**$7,230.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	90	TN	$100.00	$9,000.00
20	Longitudinal Joint Seal	405	LF	$1.50	$607.50
				Hot Mix Asphalt Total:	**$9,607.50**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$4,000.00	$4,000.00
22	Landscaping	1	LS	$2,000.00	$2,000.00
				Erosion Control Total:	**$6,000.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	405	LF	$18.00	$7,290.00
24	Cement Conc. Pedestrian Curb	45	LF	$16.00	$720.00
25	Paint Line	405	LF	$0.50	$202.50
26	Plastic Crosswalk Line	30	SF	$5.00	$150.00
27	Plastic Stop Line	70	LF	$15.00	$1,050.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$10,000.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	0	LS	$30,000.00	$0.00
34	Temporary Project Traffic Control	1	LS	$8,000.00	$8,000.00
				Traffic Total:	**$18,412.50**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	150	CY	$9.00	$1,350.00
36	Contractor Provided Construction Surveying	1	LS	$3,000.00	$3,000.00
37	Cement Conc. Sidewalk	225	SY	$33.00	$7,425.00
38	Cement Conc. Driveway	30	SY	$60.00	$1,800.00
39	Cement Conc. Curb Ramp	3	EA	$1,200.00	$3,600.00
40	Modular Gravity Block Wall	160	SF	$35.00	$5,600.00
41	Adjust Utility Structures	2	EA	$300.00	$600.00
42	Relocate Existing Fire Hydrant	1	EA	$2,000.00	$2,000.00
43	Force Account Potholing Utilities	1	EST.	$500.00	$500.00
44	Roadside Cleanup	1	EST.	$1,500.00	$1,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$5,000.00	$5,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	0	LF	$90.00	$0.00
				Other Items Total:	**$33,375.00**
				Estimated Work Done Contractor Subtotal:	**$113,726.70**

SITE #13
SR 525 SIDEWALKS - 92nd STREET TO 86th STREET

CURRENT CONDITIONS

The study area is located along State Route (SR) 525 in central Mukilteo. SR 525 is classified as an principal arterial. The existing two-lane roadway is paved with an east side pavement width of 16 feet that accommodates a travel lane and a bicycle lane. The west side pavement has an 11-foot lane and a paved shoulder varying from four to eight feet. Shoulder treatments outside existing southbound shoulders include a paved sidewalk and vegetated fill slopes with and without guardrail protection. Runoff sheet flows from the existing roadway onto fill slopes or along the paved sidewalk edge until it reaches the fill slopes. No stormwater collection structures or conveyance piping was observed. Pedestrian input to the study area is generated by local residents or pass-through users and is restricted to only the east side of the roadway. Field evaluations assessed 2,230 feet of roadway and identified pedestrian routes not separated from vehicular travel ways and stormwater that is not adequately controlled.

SITE CHALLENGES

Existing utility poles will need relocation, construction will occur along a very busy corridor, very large retaining walls will be required to support proposed improvements, existing sensitive areas lie immediately adjacent to expected construction limits and will require mitigation if impacted, existing utility pipelines will need to be crossed, and street conditions along the northbound lane of SR 525 satisfy motorized and non-motorized uses, but exclude the landscaping standard required by the City's arterial roadway classification.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and drainage issues by the widening the existing roadway, installing an enclosed storm conveyance system, and by installing pedestrian sidewalk and bicycle improvements. Construction elements include site preparation, roadway excavation, large-scale retaining walls, stormwater piping and structures, new paved shoulders for bicycle use, new curb and gutter to manage runoff, new sidewalks and curb ramps to improve pedestrian accessibility, and adjustments to street signage and utility features. Proposed improvements will be confined to only the west (southbound) side of SR 525 and will match roadway conditions found along the east (northbound) side of this state route.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$1,272,446.57**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$152,693.59
PE (Prelim. Engineering for Environmental and Permits) - 2%	$25,448.93
CE (Construction Contract Administration/Construction Management) - 12%	$152,693.59
City of Mukilteo Management of Design and Construction Effort - 5%	$63,622.33
City of Mukilteo Owner's Reserve or Contingency - 5%	$63,622.33
Schedule Total	**$1,730,527.33**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #13: SR 525 Sidewalks - 92nd Street to 86th Street**	
County:	Snohomish	
Total Approximate Length:	2,230 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$99,707.40
	Grading	$159,850.00
	Drainage	$2,500.00
	Storm Sewer	$88,400.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$35,250.00
	Hot Mix Asphalt	$38,345.00
	Erosion Control	$45,000.00
	Traffic	$107,205.00
	Other Items	$432,900.00
	Subtotal Work Done Contractor	$1,009,157.40
	Planning Level Design Contingency - 20%	$201,831.48
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$61,457.69
	Total Estimated Cost Work Done Contractor	**$1,272,446.57**
Additional R/W		$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%		$152,693.59
PE (Prelim. Engineering for Environmental and Permits) - 2%		$25,448.93
CE (Construction Contract Administration/Construction Management) - 12%		$152,693.59
City of Mukilteo Management of Design and Construction Effort - 5%		$63,622.33
City of Mukilteo Owner's Reserve or Contingency - 5%		$63,622.33
Schedule Total		**$1,730,527.33**

Disclaimers:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #13: SR 525 Sidewalks - 92nd Street to 86th Street

Approximate Length of Section: 2,230 LF

	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1	LS	$74,752.40	$74,752.40
2	Clearing and Grubbing	1.0	AC	$3,500.00	$3,500.00
3	Sawcutting	2,230	LF	$2.50	$5,575.00
4	Removal of Structure and Obstruction	1	LS	$8,000.00	$8,000.00
5	Removing Cement Conc. Sidewalk	60	SY	$8.00	$480.00
6	Removing Cement Conc. Curb and Gutter	100	LF	$4.00	$400.00
7	Removing Asphalt Conc. Pavement	1,750	SY	$4.00	$7,000.00
				Preparation Total:	**$24,955.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	1,500	CY	$11.50	$17,250.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	8,500	TN	$16.00	$136,000.00
10	Embankment Compaction	4,400	CY	$1.50	$6,600.00
				Grading Total:	**$159,850.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	50	CY	$50.00	$2,500.00
				Drainage Total:	**$2,500.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	15	EA	$1,200.00	$18,000.00
14	Catch Basin Type 2 - 48 In. Diam.	4	EA	$2,300.00	$9,200.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	1,350	LF	$30.00	$40,500.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	450	LF	$46.00	$20,700.00
				Storm Sewer Total:	**$88,400.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	2,400	TN	$9.00	$21,600.00
18	Crushed Surfacing Top Course	650	TN	$21.00	$13,650.00
				Surfacing Total:	**$35,250.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	350	TN	$100.00	$35,000.00
20	Longitudinal Joint Seal	2,230	LF	$1.50	$3,345.00
				Hot Mix Asphalt Total:	**$38,345.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$35,000.00	$35,000.00
22	Landscaping	1	LS	$10,000.00	$10,000.00
				Erosion Control Total:	**$45,000.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	2,260	LF	$18.00	$40,680.00
24	Cement Conc. Pedestrian Curb	30	LF	$16.00	$480.00
25	Paint Line	2,230	LF	$0.50	$1,115.00
26	Plastic Crosswalk Line	126	SF	$5.00	$630.00
27	Plastic Stop Line	20	LF	$15.00	$300.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$10,000.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$4,000.00	$4,000.00
33	Illumination System	0	LS	$30,000.00	$0.00
34	Temporary Project Traffic Control	1	LS	$60,000.00	$60,000.00
				Traffic Total:	**$107,205.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	700	CY	$9.00	$6,300.00
36	Contractor Provided Construction Surveying	1	LS	$15,000.00	$15,000.00
37	Cement Conc. Sidewalk	1,500	SY	$33.00	$49,500.00
38	Cement Conc. Driveway	80	SY	$60.00	$4,800.00
39	Cement Conc. Curb Ramp	2	EA	$1,200.00	$2,400.00
40	Modular Gravity Block Wall	6,200	SF	$40.00	$248,000.00
41	Adjust Utility Structures	4	EA	$300.00	$1,200.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	1	EST.	$3,500.00	$3,500.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$30,000.00	$30,000.00
47	Wetland Mitigation	0.3	AC	$40,000.00	$12,000.00
48	Pedestrian Handrail	630	LF	$90.00	$56,700.00
				Other Items Total:	**$432,900.00**
				Estimated Work Done Contractor Subtotal:	**$1,009,157.40**

SITE #14
53RD AVENUE SIDEWALKS - 88TH STREET TO 92ND STREET

CURRENT CONDITIONS

The study area is located in a residential district in central Mukilteo west of State Route 525. 53rd Avenue is classified as local access. The existing roadway has two nine-foot paved lanes lined with asphalt and gravel shoulders ranging in width from zero to two feet. Open ditches and driveway culverts collect and convey existing roadway runoff. Pedestrian input to the study area is generated by local residents. Field evaluations assessed 1,250 feet of roadway and identified no pedestrian routes to separate non-motorized traffic from existing travel lanes and areas of unmanaged drainage.

SITE CHALLENGES

Existing utility poles and structures will need relocation, mature trees will need removal, coordination will be required to reconcile private use of the public right-of-way, very large retaining walls will be required to widen the road for on-street parking, a stream crosses perpendicular to the roadway and will require mitigation for work within its limits to install culvert pipe extensions, large existing ditches at the end of improvements on 88th Street will create a pedestrian accessibility issue, street conditions at the south end of the study area satisfy the needs of pedestrians, but do not meet ADA standards.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian and drainage issues by the widening the existing roadway, installing a new storm conveyance system, and by installing pedestrian improvements. Construction work elements include site preparation, roadway excavation, large-scale retaining walls, stream culvert extensions, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to improve pedestrian accessibility, and adjustments to street signage and utility features. Proposed improvements will be installed on both sides of the roadway and will match the roadway section defined by the City's local access functional classification.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$893,925.02**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$107,271.00
PE (Prelim. Engineering for Environmental and Permits) - 2%	$17,878.50
CE (Construction Contract Administration/Construction Management) - 12%	$107,271.00
City of Mukilteo Management of Design and Construction Effort - 5%	$44,696.25
City of Mukilteo Owner's Reserve or Contingency - 5%	$44,696.25
Schedule Total	**$1,215,738.02**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #14: 53rd Avenue Sidewalks - 88th Street to 92nd Street**	
County:	Snohomish	
Total Approximate Length:	1,250 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$68,450.40
	Grading	$42,137.50
	Drainage	$2,500.00
	Storm Sewer	$94,200.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$45,375.00
	Hot Mix Asphalt	$46,250.00
	Erosion Control	$5,500.00
	Traffic	$77,470.00
	Other Items	$327,075.00
	Subtotal Work Done Contractor	$708,957.90
	Planning Level Design Contingency - 20%	$141,791.58
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$43,175.54
	Total Estimated Cost Work Done Contractor	**$893,925.02**
Additional R/W		$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%		$107,271.00
PE (Prelim. Engineering for Environmental and Permits) - 2%		$17,878.50
CE (Construction Contract Administration/Construction Management) - 12%		$107,271.00
City of Mukilteo Management of Design and Construction Effort - 5%		$44,696.25
City of Mukilteo Owner's Reserve or Contingency - 5%		$44,696.25
Schedule Total		**$1,215,738.02**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #14: 53rd Avenue Sidewalks - 88th Street to 92nd Street

Approximate Length of Section 1,250 LF

	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$52,515.40	$52,515.40
2	Clearing and Grubbing	0.9	AC	$3,500.00	$3,185.00
3	Sawcutting	2,500	LF	$2.50	$6,250.00
4	Removal of Structure and Obstruction	1	LS	$5,000.00	$5,000.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	375	SY	$4.00	$1,500.00
				Preparation Total:	**$15,935.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	3,300	CY	$11.50	$37,950.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	250	TN	$16.00	$4,000.00
10	Embankment Compaction	125	CY	$1.50	$187.50
				Grading Total:	**$42,137.50**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	50	CY	$50.00	$2,500.00
				Drainage Total:	**$2,500.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	16	EA	$1,200.00	$19,200.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	2,500	LF	$30.00	$75,000.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$94,200.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	3,175	TN	$9.00	$28,575.00
18	Crushed Surfacing Top Course	800	TN	$21.00	$16,800.00
				Surfacing Total:	**$45,375.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	425	TN	$100.00	$42,500.00
20	Longitudinal Joint Seal	2,500	LF	$1.50	$3,750.00
				Hot Mix Asphalt Total:	**$46,250.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$2,500.00	$2,500.00
22	Landscaping	1	LS	$3,000.00	$3,000.00
				Erosion Control Total:	**$5,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	2,500	LF	$18.00	$45,000.00
24	Cement Conc. Pedestrian Curb	60	LF	$16.00	$960.00
25	Paint Line	3,750	LF	$0.50	$1,875.00
26	Plastic Crosswalk Line	432	SF	$5.00	$2,160.00
27	Plastic Stop Line	65	LF	$15.00	$975.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$10,000.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,500.00	$1,500.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$25,000.00	$25,000.00
				Traffic Total:	**$77,470.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	925	CY	$9.00	$8,325.00
36	Contractor Provided Construction Surveying	1	LS	$7,500.00	$7,500.00
37	Cement Conc. Sidewalk	1,400	SY	$33.00	$46,200.00
38	Cement Conc. Driveway	225	SY	$60.00	$13,500.00
39	Cement Conc. Curb Ramp	4	EA	$1,200.00	$4,800.00
40	Modular Gravity Block Wall	5,150	SF	$35.00	$180,250.00
41	Adjust Utility Structures	0	EA	$300.00	$0.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	0	EST.	$0.00	$0.00
44	Roadside Cleanup	1	EST.	$5,000.00	$5,000.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$20,000.00	$20,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	450	LF	$90.00	$40,500.00
				Other Items Total:	**$327,075.00**
				Estimated Work Done Contractor Subtotal:	**$708,957.90**

SITE #16
CHENNAULT BEACH ROAD SIDEWALKS - 4400 BLOCK

CURRENT CONDITIONS

The study area is located in a commercial district within central Mukilteo and is classified as an urban collector. The existing two-lane roadway is paved and has both gravel and paved shoulders ranging from one to eight feet wide. Areas of existing shoulder are currently being used for parking. Open ditches and cross culverts collect and convey roadway runoff in front of businesses. Pedestrian input is comprised of local business patrons and employees and focus in areas on the north side of the corridor. Field evaluations assessed 500 feet of roadway and identified disconnected pedestrian routes and many existing utilities within expected work limits.

SITE CHALLENGES

Existing utility structures will need relocation, coordination will be required to reconcile private use of the public right-of-way, construction will affect daily high-use of the roadway and commercial accesses, and the proposed arterial design standard should be reconciled against roadway standards already constructed within the corridor.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access by widening existing roadway sections, installing drainage system upgrades, and by connecting existing pedestrian routes. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to expand pedestrian accessibility, and adjustments to street signage and minor utility features. Only the south side of the street will be improved with the proposed roadway section matching that of the existing section on each end of the study area.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$157,836.18**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$18,940.34
PE (Prelim. Engineering for Environmental and Permits) - 2%	$3,156.72
CE (Construction Contract Administration/Construction Management) - 12%	$18,940.34
City of Mukilteo Management of Design and Construction Effort - 5%	$7,891.81
City of Mukilteo Owner's Reserve or Contingency - 5%	$7,891.81
Schedule Total	**$214,657.21**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #16: Chennault Beach Road Sidewalks - 4400 Block**	
County:	Snohomish	
Total Approximate Length:	500 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$11,962.40
	Grading	$16,600.00
	Drainage	$0.00
	Storm Sewer	$19,800.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$10,200.00
	Hot Mix Asphalt	$13,250.00
	Erosion Control	$4,500.00
	Traffic	$25,250.00
	Other Items	$23,615.00
	Subtotal Work Done Contractor	$125,177.40
	Planning Level Design Contingency - 20%	$25,035.48
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$7,623.30
	Total Estimated Cost Work Done Contractor	**$157,836.18**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$18,940.34
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$3,156.72
	CE (Construction Contract Administration/Construction Management) - 12%	$18,940.34
	City of Mukilteo Management of Design and Construction Effort - 5%	$7,891.81
	City of Mukilteo Owner's Reserve or Contingency - 5%	$7,891.81
	Schedule Total	**$214,657.21**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #16: Chennault Beach Road Sidewalks - 4400 Block

Approximate Length of Section: 500 LF

No.	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$9,272.40	$9,272.40
2	Clearing and Grubbing	0.1	AC	$3,500.00	$420.00
3	Sawcutting	500	LF	$2.50	$1,250.00
4	Removal of Structure and Obstruction	0	LS	$0.00	$0.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	255	SY	$4.00	$1,020.00
				Preparation Total:	**$2,690.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	500	CY	$11.50	$5,750.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	650	TN	$16.00	$10,400.00
10	Embankment Compaction	300	CY	$1.50	$450.00
				Grading Total:	**$16,600.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	4	EA	$1,200.00	$4,800.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	500	LF	$30.00	$15,000.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$19,800.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	725	TN	$9.00	$6,525.00
18	Crushed Surfacing Top Course	175	TN	$21.00	$3,675.00
				Surfacing Total:	**$10,200.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	125	TN	$100.00	$12,500.00
20	Longitudinal Joint Seal	500	LF	$1.50	$750.00
				Hot Mix Asphalt Total:	**$13,250.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$2,000.00	$2,000.00
22	Landscaping	1	LS	$2,500.00	$2,500.00
				Erosion Control Total:	**$4,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	500	LF	$18.00	$9,000.00
24	Cement Conc. Pedestrian Curb	0	LF	$16.00	$0.00
25	Paint Line	500	LF	$0.50	$250.00
26	Plastic Crosswalk Line	0	SF	$5.00	$0.00
27	Plastic Stop Line	0	LF	$15.00	$0.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$0.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$15,000.00	$15,000.00
				Traffic Total:	**$25,250.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	185	CY	$9.00	$1,665.00
36	Contractor Provided Construction Surveying	1	LS	$3,000.00	$3,000.00
37	Cement Conc. Sidewalk	250	SY	$33.00	$8,250.00
38	Cement Conc. Driveway	100	SY	$60.00	$6,000.00
39	Cement Conc. Curb Ramp	0	EA	$1,200.00	$0.00
40	Modular Gravity Block Wall	0	SF	$35.00	$0.00
41	Adjust Utility Structures	4	EA	$300.00	$1,200.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	0	EST.	$0.00	$0.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	0	LS	$0.00	$0.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	0	LF	$90.00	$0.00
				Other Items Total:	**$23,615.00**
				Estimated Work Done Contractor Subtotal:	**$125,177.40**

SITE #17
CYRUS WAY SIDEWALKS - HARBOUR POINTE BOULEVARD TO SR 525

CURRENT CONDITIONS

The study area is located in a commercial district within central Mukilteo and is classified as an urban collector. The existing two-lane roadway is paved and has both gravel and paved shoulders. Existing shoulder widths vary from six inches at undeveloped parcels to eight feet in areas with designated paved parking. In many areas, the existing pavement is just wide enough for vehicular travel. Developed parcels along the corridor provide stormwater management through a combination of concrete curbing and catch basins. Undeveloped parcels offer open ditches and cross street culverts along their street frontage. Pedestrian input is comprised of local business patrons and employees and focus at segmented sidewalks on both sides of the roadway. Field evaluations assessed 1,400 feet of roadway and identified disconnected pedestrian routes, sensitive areas, and many areas of unmanaged drainage.

SITE CHALLENGES

Existing utility structures will need relocation, construction will occur near an existing ponding area with mitigation being required if this area is delineated as a sensitive area and is impacted, multiple drainage basins will create the need for multiple stormwater management facilities, construction will affect daily high-use of the roadway and commercial accesses, and the proposed arterial design standard should be reconciled against varying roadway standards already constructed within the corridor.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and drainage issues by widening existing roadway sections, installing drainage system upgrades, and by connecting existing pedestrian routes. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to expand pedestrian accessibility, small-scale retaining walls to minimize environmental impacts, and adjustments to street signage and minor utility features. Both sides of the street will be improved with the proposed roadway section matching that of the existing arterial roadway section.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$464,022.45**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$55,682.69
PE (Prelim. Engineering for Environmental and Permits) - 2%	$9,280.45
CE (Construction Contract Administration/Construction Management) - 12%	$55,682.69
City of Mukilteo Management of Design and Construction Effort - 5%	$23,201.12
City of Mukilteo Owner's Reserve or Contingency - 5%	$23,201.12
Schedule Total	**$631,070.53**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #17: Cyrus Way Sidewalks - Harbour Pointe Blvd to SR 525**	
County:	Snohomish	
Total Approximate Length:	1,400 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$33,833.92
	Grading	$38,500.00
	Drainage	$500.00
	Storm Sewer	$54,000.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$32,325.00
	Hot Mix Asphalt	$24,600.00
	Erosion Control	$32,500.00
	Traffic	$51,900.00
	Other Items	$99,850.00
	Subtotal Work Done Contractor	$368,008.92
	Planning Level Design Contingency - 20%	$73,601.78
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$22,411.74
	Total Estimated Cost Work Done Contractor	**$464,022.45**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$55,682.69
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$9,280.45
	CE (Construction Contract Administration/Construction Management) - 12%	$55,682.69
	City of Mukilteo Management of Design and Construction Effort - 5%	$23,201.12
	City of Mukilteo Owner's Reserve or Contingency - 5%	$23,201.12
	Schedule Total	**$631,070.53**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #17: Cyrus Way Sidewalks - Harbour Pointe Blvd to SR 525

Approximate Length of Section: 1,400 LF

No.	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$27,259.92	$27,259.92
2	Clearing and Grubbing	0.7	AC	$3,500.00	$2,450.00
3	Sawcutting	1,400	LF	$2.50	$3,500.00
4	Removal of Structure and Obstruction	0	LS	$20,000.00	$0.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	156	SY	$4.00	$624.00
				Preparation Total:	**$6,574.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	1,600	CY	$11.50	$18,400.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	1,200	TN	$16.00	$19,200.00
10	Embankment Compaction	600	CY	$1.50	$900.00
				Grading Total:	**$38,500.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	10	CY	$50.00	$500.00
				Drainage Total:	**$500.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	10	EA	$1,200.00	$12,000.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	1,400	LF	$30.00	$42,000.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$54,000.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	2,250	TN	$9.00	$20,250.00
18	Crushed Surfacing Top Course	575	TN	$21.00	$12,075.00
				Surfacing Total:	**$32,325.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	225	TN	$100.00	$22,500.00
20	Longitudinal Joint Seal	1,400	LF	$1.50	$2,100.00
				Hot Mix Asphalt Total:	**$24,600.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$7,500.00	$7,500.00
22	Landscaping	1	LS	$25,000.00	$25,000.00
				Erosion Control Total:	**$32,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	1,400	LF	$18.00	$25,200.00
24	Cement Conc. Pedestrian Curb	0	LF	$16.00	$0.00
25	Paint Line	1,400	LF	$0.50	$700.00
26	Plastic Crosswalk Line	0	SF	$5.00	$0.00
27	Plastic Stop Line	0	LF	$15.00	$0.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$10,000.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,000.00	$1,000.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$25,000.00	$25,000.00
				Traffic Total:	**$51,900.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	520	CY	$9.00	$4,680.00
36	Contractor Provided Construction Surveying	1	LS	$4,500.00	$4,500.00
37	Cement Conc. Sidewalk	950	SY	$33.00	$31,350.00
38	Cement Conc. Driveway	32	SY	$60.00	$1,920.00
39	Cement Conc. Curb Ramp	0	EA	$1,200.00	$0.00
40	Modular Gravity Block Wall	600	SF	$35.00	$21,000.00
41	Adjust Utility Structures	3	EA	$300.00	$900.00
42	Relocate Existing Fire Hydrant	1	EA	$2,000.00	$2,000.00
43	Force Account Potholing Utilities	0	EST.	$0.00	$0.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$10,000.00	$10,000.00
47	Wetland Mitigation	0.05	AC	$40,000.00	$2,000.00
48	Pedestrian Handrail	200	LF	$90.00	$18,000.00
				Miscellaneous Items Total:	**$99,850.00**
				Estimated Work Done Contractor Subtotal:	**$368,008.92**

SITE #19
CYRUS WAY SIDEWALKS - EVERGREEN DRIVE TO SOUTH ROAD

CURRENT CONDITIONS

The study area is located in a commercial district within south Mukilteo and consists of two intersecting roadway segments. Cyrus Way has two 11-foot paved lanes and is classified as an urban collector. South Road has two 10-foot paved lanes and is classified as local access. Existing gravel and paved shoulder widths vary from one to two feet. Open ditches and segmented storm networks serve to manage roadway runoff. Pedestrian input to the study area is generated by local businesses and retail centers. Field evaluations assessed 1,900 feet of roadway and identified sections of disconnected pedestrian routes and areas of unmanaged drainage.

SITE CHALLENGES

Existing utility structures will need relocation, existing ditching may be considered sensitive and may require mitigation if impacted, construction will affect daily high-use of the roadways and commercial accesses, existing soils may prevent effective use of low-impact development measures, and multiple drainage basins will create multiple stormwater management facilities.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and drainage issues by widening existing roadway sections, installing drainage system upgrades, and by installing pedestrian access improvements. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to expand pedestrian accessibility, and adjustments to street signage and minor utility features. The horizontal and vertical components of the existing roadway will be maintained with all improvements matching current roadway conditions. Improvements are confined to the northbound lane of Evergreen Drive and the westbound lane of South Road.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$511,247.34**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$61,349.68
PE (Prelim. Engineering for Environmental and Permits) - 2%	$10,224.95
CE (Construction Contract Administration/Construction Management) - 12%	$61,349.68
City of Mukilteo Management of Design and Construction Effort - 5%	$25,562.37
City of Mukilteo Owner's Reserve or Contingency - 5%	$25,562.37
Schedule Total	**$695,296.38**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #19: Cyrus Way Sidewalks - Evergreen Drive to South Road**	
County:	Snohomish	
Total Approximate Length:	1,900 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$39,857.24
	Grading	$48,125.00
	Drainage	$0.00
	Storm Sewer	$72,600.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$42,750.00
	Hot Mix Asphalt	$42,850.00
	Erosion Control	$7,500.00
	Traffic	$64,530.00
	Other Items	$87,250.00
	Subtotal Work Done Contractor	$405,462.24
	Planning Level Design Contingency - 20%	$81,092.45
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$24,692.65
	Total Estimated Cost Work Done Contractor	**$511,247.34**
Additional R/W		$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%		$61,349.68
PE (Prelim. Engineering for Environmental and Permits) - 2%		$10,224.95
CE (Construction Contract Administration/Construction Management) - 12%		$61,349.68
City of Mukilteo Management of Design and Construction Effort - 5%		$25,562.37
City of Mukilteo Owner's Reserve or Contingency - 5%		$25,562.37
Schedule Total		**$695,296.38**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #19: Cyrus Way Sidewalks - Evergreen Drive to South Road

Approximate Length of Section: 1,900 LF

No.	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$30,034.24	$30,034.24
2	Clearing and Grubbing	0.9	AC	$3,500.00	$3,045.00
3	Sawcutting	1,900	LF	$2.50	$4,750.00
4	Removal of Structure and Obstruction	0	LS	$0.00	$0.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	507	SY	$4.00	$2,028.00
				Preparation Total:	**$9,823.00**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	2,000	CY	$11.50	$23,000.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	1,500	TN	$16.00	$24,000.00
10	Embankment Compaction	750	CY	$1.50	$1,125.00
				Grading Total:	**$48,125.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	0	CY	$50.00	$0.00
				Drainage Total:	**$0.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	13	EA	$1,200.00	$15,600.00
14	Catch Basin Type 2 - 48 In. Diam.	0	EA	$2,300.00	$0.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	1,900	LF	$30.00	$57,000.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$72,600.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	3,000	TN	$9.00	$27,000.00
18	Crushed Surfacing Top Course	750	TN	$21.00	$15,750.00
				Surfacing Total:	**$42,750.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	400	TN	$100.00	$40,000.00
20	Longitudinal Joint Seal	1,900	LF	$1.50	$2,850.00
				Hot Mix Asphalt Total:	**$42,850.00**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$7,500.00	$7,500.00
22	Landscaping	0	LS	$0.00	$0.00
				Erosion Control Total:	**$7,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	1,900	LF	$18.00	$34,200.00
24	Cement Conc. Pedestrian Curb	45	LF	$16.00	$720.00
25	Paint Line	3,400	LF	$0.50	$1,700.00
26	Plastic Crosswalk Line	162	SF	$5.00	$810.00
27	Plastic Stop Line	40	LF	$15.00	$600.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$0.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$1,500.00	$1,500.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$25,000.00	$25,000.00
				Traffic Total:	**$64,530.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	750	CY	$9.00	$6,750.00
36	Contractor Provided Construction Surveying	1	LS	$4,500.00	$4,500.00
37	Cement Conc. Sidewalk	1,500	SY	$33.00	$49,500.00
38	Cement Conc. Driveway	105	SY	$60.00	$6,300.00
39	Cement Conc. Curb Ramp	3	EA	$1,200.00	$3,600.00
40	Modular Gravity Block Wall	0	SF	$35.00	$0.00
41	Adjust Utility Structures	7	EA	$300.00	$2,100.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	1	EST.	$1,000.00	$1,000.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$10,000.00	$10,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	0	LF	$90.00	$0.00
				Other Items Total:	**$87,250.00**
				Estimated Work Done Contractor Subtotal:	**$405,462.24**

SITE #20
CYRUS WAY SIDEWALKS - HARBOUR PT. BLVD. TO EVERGREEN DRIVE

CURRENT CONDITIONS

The study area is located in a commercial district within south Mukilteo and is classified as an urban collector. The existing two-lane roadway is paved with pavement widths on both sides of the street accommodating lane travel and segmented on-street parking. In many areas, the pavement is just wide enough for vehicular travel. Existing shoulder widths vary from six inches at undeveloped parcels to eight feet in areas with designated paved parking. Developed parcels along the corridor provide stormwater management through a combination of concrete curbing and catch basins. Undeveloped parcels offer open ditches and cross street culverts along their street frontage. Pedestrian input is comprised of local business patrons and employees. Field evaluations assessed 1,945 feet of roadway and identified disconnected pedestrian routes, obstructed vertical sight lines, and areas of unmanaged drainage.

SITE CHALLENGES

Existing utility structures will need relocation, retaining walls will be constructed near an existing stream with mitigation being required if the stream or its buffer is impacted, multiple drainage basins will create the need for multiple stormwater management facilities, and construction will affect daily high-use of the roadway and commercial accesses.

PROPOSED IMPROVEMENTS

Proposed improvements will resolve existing pedestrian access and drainage issues by widening existing roadway sections, installing drainage system upgrades, and by connecting existing pedestrian routes. Construction elements include site preparation, roadway excavation, stormwater structures and piping, new paved shoulders for parking, new curb and gutter to manage runoff, new sidewalks and curb ramps to expand pedestrian accessibility, retaining wall structures, and adjustments to street signage and minor utility features. Both sides of the street will be improved with the proposed roadway section matching that of the existing roadway section.

PROJECT COST ESTIMATE

Total Estimated Cost Work Done Contractor	**$563,290.18**
Additional R/W	$0.00
PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$67,594.82
PE (Prelim. Engineering for Environmental and Permits) - 2%	$11,265.80
CE (Construction Contract Administration/Construction Management) - 12%	$67,594.82
City of Mukilteo Management of Design and Construction Effort - 5%	$28,164.51
City of Mukilteo Owner's Reserve or Contingency - 5%	$28,164.51
Schedule Total	**$766,074.64**

APPENDIX A - ENGINEER'S ESTIMATE

Date of Scoping Review:	December 10, 2014	
Project:	City of Mukilteo Sidewalk Planning Assessments	
Location:	**Site #20: Cyrus Way Sidewalks - Harbour Pointe Blvd to Evergreen Drive**	
County:	Snohomish	
Total Approximate Length:	1,945 LF	
Type of Work:	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation,	
	Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
Total Estimated Costs Work Done Contractor (WDC)	**Section**	**Estimated Cost**
	Preparation	$40,434.10
	Grading	$44,215.00
	Drainage	$1,500.00
	Storm Sewer	$59,900.00
	Sanitary Sewer	$0.00
	Water Lines	$0.00
	Surfacing	$37,500.00
	Hot Mix Asphalt	$37,917.50
	Erosion Control	$7,500.00
	Traffic	$71,620.00
	Other Items	$146,150.00
	Subtotal Work Done Contractor	$446,736.60
	Planning Level Design Contingency - 20%	$89,347.32
	Inflation (3% per year for 2 Years - 2017 Ad Date)	$27,206.26
	Total Estimated Cost Work Done Contractor	**$563,290.18**
	Additional R/W	$0.00
	PE (Prelim. Engr. for Grantsmanship, Design, Utility, PS&E, Ad & Award) - 12%	$67,594.82
	PE (Prelim. Engineering for Environmental and Permits) - 2%	$11,265.80
	CE (Construction Contract Administration/Construction Management) - 12%	$67,594.82
	City of Mukilteo Management of Design and Construction Effort - 5%	$28,164.51
	City of Mukilteo Owner's Reserve or Contingency - 5%	$28,164.51
	Schedule Total	**$766,074.64**

Limitations:

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy which, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate.
2. Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
3. This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
4. Costs presented herein represent an opinion based on historical information.
5. This estimate does not consider the following:
   a. Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
   b. Phased construction or out of regular sequence construction.
   c. Costs associated with groundwater or inclement weather conditions.
   d. Financial charges.
   e. Land costs, acquisition of right-of-way, easements, and/or rights of entry.
   f. Assessments from traffic, parks, or schools.
6. This cost estimate is based on the site location shown in exhibits provided by the City of Mukilteo on December 5, 2014.

CITY OF MUKILTEO - SIDEWALK PLANNING ASSESSMENTS
(Planning-Level Cost Estimate)

Site #20: Cyrus Way Sidewalks - Harbour Pointe Blvd to Evergreen Drive

Approximate Length of Section: 1,945 LF

No.	Description	Quantity	Unit	Unit Price	Estimated Amount
No.	**Section 1: Preparation**				
1	Mobilization (8% of WDC Subtotal)	1.0	LS	$33,091.60	$33,091.60
2	Clearing and Grubbing	0.4	AC	$3,500.00	$1,400.00
3	Sawcutting	1,945	LF	$2.50	$4,862.50
4	Removal of Structure and Obstruction	0	LS	$20,000.00	$0.00
5	Removing Cement Conc. Sidewalk	0	SY	$8.00	$0.00
6	Removing Cement Conc. Curb and Gutter	0	LF	$4.00	$0.00
7	Removing Asphalt Conc. Pavement	270	SY	$4.00	$1,080.00
				Preparation Total:	**$7,342.50**
No.	**Section 2: Grading**				
8	Roadway Excavation Incl. Haul	1,660	CY	$11.50	$19,090.00
9	Gravel Borrow Incl. Haul (Roadway Embankment & Misc Uses - Depth Varies)	1,500	TN	$16.00	$24,000.00
10	Embankment Compaction	750	CY	$1.50	$1,125.00
				Grading Total:	**$44,215.00**
No.	**Section 3: Drainage**				
11	Ditch Excavation Incl. Haul	0	CY	$14.00	$0.00
12	Quarry Spalls	30	CY	$50.00	$1,500.00
				Drainage Total:	**$1,500.00**
No.	**Section 4: Storm Sewer**				
13	Catch Basin Type 1L	13	EA	$1,200.00	$15,600.00
14	Catch Basin Type 2 - 48 In. Diam.	4	EA	$2,300.00	$9,200.00
15	Sched. A Storm Sewer Pipe 12 In. Diam.	1,170	LF	$30.00	$35,100.00
16	Sched. A Storm Sewer Pipe 18 In. Diam.	0	LF	$46.00	$0.00
				Storm Sewer Total:	**$59,900.00**
No.	**Section 5: Sanitary Sewer**				
				Sanitary Sewer Total:	**$0.00**
No.	**Section 6: Water Lines**				
				Water Lines Total:	**$0.00**
No.	**Section 7: Surfacing**				
17	Gravel Base	2,650	TN	$9.00	$23,850.00
18	Crushed Surfacing Top Course	650	TN	$21.00	$13,650.00
				Surfacing Total:	**$37,500.00**
No.	**Section 8: Hot Mix Asphalt**				
19	HMA CL. 1/2 In. PG 64-22	350	TN	$100.00	$35,000.00
20	Longitudinal Joint Seal	1,945	LF	$1.50	$2,917.50
				Hot Mix Asphalt Total:	**$37,917.50**
No.	**Section 9: Erosion Control**				
21	Temporary Erosion/Water Pollution Control	1	EST.	$7,500.00	$7,500.00
22	Landscaping	0	LS	$0.00	$0.00
				Erosion Control Total:	**$7,500.00**
No.	**Section 10: Traffic**				
23	Cement Conc. Traffic Curb and Gutter	1,945	LF	$18.00	$35,010.00
24	Cement Conc. Pedestrian Curb	30	LF	$16.00	$480.00
25	Paint Line	3,900	LF	$0.50	$1,950.00
26	Plastic Crosswalk Line	216	SF	$5.00	$1,080.00
27	Plastic Stop Line	40	LF	$15.00	$600.00
28	Plastic Bicycle Lane Symbol	0	EA	$68.00	$0.00
29	Pedestrian Traffic Control	0	LS	$10,000.00	$0.00
30	Plastic Traffic Letter/Arrows	0	EA	$68.00	$0.00
31	Raised Pavement Marker - Type 1 and 2	0	HUND	$290.00	$0.00
32	Permanent Signing	1	LS	$2,500.00	$2,500.00
33	Illumination System	0	LS	$0.00	$0.00
34	Temporary Project Traffic Control	1	LS	$30,000.00	$30,000.00
				Traffic Total:	**$71,620.00**
No.	**Section 11: Other Items**				
35	Structure Excavation Class B Incl. Haul	900	CY	$9.00	$8,100.00
36	Contractor Provided Construction Surveying	1	LS	$7,500.00	$7,500.00
37	Cement Conc. Sidewalk	1,525	SY	$33.00	$50,325.00
38	Cement Conc. Driveway	135	SY	$60.00	$8,100.00
39	Cement Conc. Curb Ramp	2	EA	$1,200.00	$2,400.00
40	Modular Gravity Block Wall	1,245	SF	$35.00	$43,575.00
41	Adjust Utility Structures	13	EA	$300.00	$3,900.00
42	Relocate Existing Fire Hydrant	0	EA	$2,000.00	$0.00
43	Force Account Potholing Utilities	1	EST.	$2,000.00	$2,000.00
44	Roadside Cleanup	1	EST.	$2,500.00	$2,500.00
45	SPCC Plan	1	LS	$1,000.00	$1,000.00
46	Stormwater Management (Biofiltration Swales, Raingardens, WQ Basins, etc.)	1	LS	$10,000.00	$10,000.00
47	Wetland Mitigation	0	AC	$40,000.00	$0.00
48	Pedestrian Handrail	75	LF	$90.00	$6,750.00
				Other Items Total:	**$146,150.00**
				Estimated Work Done Contractor Subtotal:	**$446,736.60**

BTW Plan: Project Cost Rates

Hard Costs of Improvements	Costs	Column1
No Improvements	0	per 100 LF
Bike Markings - Low	$ 539.00	per 100 LF
Bike Markings - Medium	$ 1,151.00	per 100 LF
Bike Markings - Hard	$ 1,809.00	per 100 LF
Bike Lane Marking - Low	$ 2,467.00	per 100 LF
Bike Lane & Sharrows - Low	$ 3,006.00	per 100 LF
Bike Lane Marking - Med.	$ 3,619.00	per 100 LF
Bike Lane & Sharrows - Med.	$ 4,770.00	per 100 LF
Bike Lane Marking - High	$ 7,075.00	per 100 LF
Bike Lane & Sharrows - High	$ 8,884.00	per 100 LF
10' Asphalt Path - Low Signage	$ 18,500.00	per 100 LF
10' Asphalt Path - Medium Signage	$ 19,500.00	per 100 LF
10' Asphalt Path - Heavily Signage	$ 23,700.00	per 100 LF
15' Asphalt Path - Typical	$ 29,250.00	per 100 LF
Sidewalks & Paving - Low	$ 37,233.68	per 100 LF
Sidewalks & Paving - Median	$ 71,514.00	per 100 LF
Sidewalks & Paving - High	$ 105,794.32	per 100 LF
Sidewalks & Paving - Extremely High	$ 140,074.64	per 100 LF
New Road	$ 410,000.00	per 100 LF
ROW Purchase 12' Tract (Estimate)	$ 24,000.00	per 100 LF of 10' Path
ROW Purchase 17' Tract (Estimate)	$ 34,000.00	per 100 LF of 15' Path
2 Lane Resurfacing	$ 8,000.00	per 100 LF
Landscaping	$ 800.00	per 100 LF

Rates - 2016 Dollars	Rate Used	Notes
Sales Tax	10%	Total
Inflation Rate Over 5 Years at 3% Annual	15.92%	Per 5 Years
Soft Costs	36%	Total
Additional Contingency	20%	Estimate Varies Based on Project

1	**Harbour Pointe Blvd. Bike Markings**	Harbour Pointe Blvd Loop					
	Improvement Length		26960	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Low	$	539.00	$	145,314.40		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	145,314.40		
	Soft Costs		36%	$	52,313.18		
	Sub-Total			$	197,627.58		
	Sales Tax		10%	$	19,762.76		
	Inflation at 3% Annual		15.92%	$	34,608.54		
				2021 Total		$	251,998.88

2	**526 Shared Use Path**	84th Street to Boeing					
	Improvement Length		6300	Capacity Project:		Yes	
	Preliminary Hard Costs	$	3,351,000.00	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	ROW Purchase			$	70,000.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	3,421,000.00		
	Soft Costs		36%	$	1,231,560.00		
	Sub-Total			$	4,652,560.00		
	Additional Contingency		30%	$	1,395,768.00		
	Sales Tax		10%	$	604,833.00		
	Inflation at 3% Annual		15.92%	$	1,059,183.23		
				2021 Total		$	7,712,344.23

3	**SR 525 Sidewalks**	81st Place to 76th Street					
	Improvement Length		1875	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Low	$	37,233.68	$	698,131.50		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	698,131.50		
	Soft Costs		36%	$	251,327.34		
	Sub-Total			$	949,458.84		
	Sales Tax		10%	$	94,945.88		
	Inflation at 3% Annual		15.92%	$	166,269.23		
				2021 Total		$	1,210,673.96

4	**Harbour Reach Drive Bike Retrofit**	Harbour Pointe Blvd to Harbour Pointe Blvd.					
	Improvement Length		10000	Capacity Project:		No	
	Preliminary Costs	$	2,200,000.00	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Costs			$	2,200,000.00		
				2021 Total		$	2,200,000.00

5	**Waterfront Promenade**	Waterfront from Edgewater to LHP					
	Improvement Length		3000	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	Waterfront Master Plan		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	-		
	Soft Costs		36%	$	-		
	Sub-Total			$	-		
	Sales Tax		10%	$	-		
	Inflation at 3% Annual		15.92%	$	-		
				2019 Total		$	319,309.00

6	**76th Street Sidewalks & Bike Markings**	SR 525 to 44th Ave.					
	Improvement Length		4,680	Capacity Project:		No	
	Preliminary Hard Costs	$	868,313.49	Safe-Route-To-School:		Yes	
	Reference:	Tuttle		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Low	$	539.00	$	25,225.20		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	893,538.69		
	Soft Costs		36%	$	321,673.93		
	Sub-Total			$	1,215,212.62		
	Sales Tax		10%	$	121,521.26		
	Inflation at 3% Annual		15.92%	$	212,808.03		
				2021 Total		$	1,549,541.92

7	**Mid-Town Mukilteo Sidewalk & Bike M**	81st Place to 86th					
	Improvement Length		2800	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - High	$	105,794.32	$	2,962,241.00		
	Bike Lane & Sharrows - Med.	$	4,770.00	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	2,962,241.00		
	Soft Costs		36%	$	1,066,407.00		
	Sub-Total			$	4,028,648.00		
	Additional Contingency		20%	$	805,730.00		
	Sales Tax		10%	$	483,438.00		
	Inflation at 3% Annual		15.92%	$	846,596.00		
				2021 Total		$	6,164,412.00

8	**44th Shared-Use Path**	84th Street to 76th Street SW					
	Improvement Length		2550	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	10' Asphalt Path - Low Signage	$	18,500.00	$	471,750.00		
	ROW Purchase 12' Tract (Estimate)	$	24,000.00	$	612,000.00		
	None	$	-	$	-		
	Total Hard Costs			$	1,083,750.00		
	Soft Costs		36%	$	390,150.00		
	Sub-Total			$	1,473,900.00		
	Additional Contingency		20%	$	294,780.00		
	Sales Tax		10%	$	176,868.00		
	Inflation at 3% Annual		15.92%	$	309,731.24		
				2021 Total		$	2,255,279.24

9	**Harbour Pointe Blvd. S. Widening**	Cyrus Way to SR 525					
	Improvement Length		2200	Capacity Project:		Yes	
	Preliminary Hard Costs	$	1,929,850.00	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total 2016 Costs			$	1,929,850.00		
				$	-		
				$	1,929,850.00		
				2016 Costs		$	1,929,850.00

10	**SR 526 Sidewalks**	84th St. to 40th Ave.					
	Improvement Length		1310	Capacity Project:		Yes	
	Preliminary Hard Costs		167293.69	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	167,293.69		
	Soft Costs		36%	$	60,225.73		
	Sub-Total			$	227,519.42		
	Sales Tax		10%	$	22,751.94		
	Inflation at 3% Annual		15.92%	$	39,843.20		
				2021 Total		$	290,114.56

11	Harbour Reach Drive Extension	Harbour Pointe Blvd to Beverly Park Rd					
	Improvement Length		3700	Capacity Project:		Yes	
	Preliminary Hard Costs	$	16,000,000.00	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	16,000,000.00		
	Soft Costs			$	-		
	Sub-Total						
	Sales Tax						
	Inflation at 3% Annual						
				2021 Total		$	-

12	**SR 525 Bike Lane**	Paine Field Blvd to 92nd Street					
	Improvement Length		2000	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Medium	$	1,151.00	$	23,020.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	23,020.00		
	Soft Costs		36%	$	8,287.20		
	Sub-Total			$	31,307.20		
	Sales Tax		10%	$	3,130.72		
	Inflation at 3% Annual		15.92%	$	5,482.52		
				2021 Total		$	39,920.44

13	**SR 525 Sidewalks**	92nd St. to 86th St.					
	Improvement Length		2230	Capacity Project:		Yes	
	Preliminary Hard Costs	$	1,272,446.57	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Low	$	539.00	$	12,019.70		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	1,284,466.27		
	Soft Costs		36%	$	462,407.86		
	Sub-Total			$	1,746,874.13		
	Sales Tax		10%	$	174,687.41		
	Inflation at 3% Annual		15.92%	$	305,912.60		
				2021 Total		$	2,227,474.14

14	**84th Street Sidewalks**	SR 525 to 53rd Ave.					
	Improvement Length		1920	Capacity Project:		No	
	Preliminary Hard Costs	$	502,768.99	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	502,768.99		
	Soft Costs		36%	$	180,996.84		
	Sub-Total			$	683,765.83		
	Sales Tax		10%	$	68,376.58		
	Inflation at 3% Annual		15.92%	$	119,741.07		
				2021 Total		$	871,883.49

15	**Chennault Beach Road Sidewalks**	4400 Block					
	Improvement Length		500	Capacity Project:		Yes	
	Preliminary Hard Costs		157836.18	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	157,836.18		
	Soft Costs		36%	$	56,821.02		
	Sub-Total			$	214,657.20		
	Sales Tax		10%	$	21,465.72		
	Inflation at 3% Annual		15.92%	$	37,590.77		
				2021 Total		$	273,713.69

16	**2nd Street Sidewalks**	SR 525 to Park Ave					
	Improvement Length (ft)		1020	Capacity Project:			No
	Preliminary Hard Costs	$	587,017.69	Safe-Route-To-School:			No
	Reference:	Tuttle		Greenway:			No
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	587,017.69		
	Soft Costs		36%	$	211,326.37		
	Sub-Total			$	798,344.06		
	Sales Tax		10%	$	79,834.41		
	Inflation at 3% Annual		15.92%	$	139,806.01		
				2021 Total		$	1,017,984.48

17	**Harbour Reach Drive Connection**	130th Place SW to Harbour Reach Drive					
	Improvement Length		250	Capacity Project:			No
	Preliminary Hard Costs			Safe-Route-To-School:			No
	Reference:	City Staff		Greenway:			Yes
	Additional Facilities	Per 100ft					
	10' Asphalt Path - Medium Signage	$	19,500.00	$	48,750.00		
	ROW Purchase 12' Tract (Estimate)	$	24,000.00	$	60,000.00		
	None	$	-	$	-		
	Total Hard Costs			$	108,750.00		
	Soft Costs		36%	$	39,150.00		
	Sub-Total			$	147,900.00		
	Additional Contingency		20%	$	29,580.00		
	Sales Tax		10%	$	17,748.00		
	Inflation at 3% Annual		15.92%	$	31,080.30		
				2021 Total		$	226,308.30

18	**Cyrus Way Sidewalks**	Evergreen Dr. to South RD.					
	Improvement Length		3800	Capacity Project:			Yes
	Preliminary Hard Costs	$	511,247.34	Safe-Route-To-School:			No
	Reference:	Tuttle		Greenway:			Yes
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	511,247.34		
	Soft Costs		36%	$	184,049.04		
	Sub-Total			$	695,296.38		
	Sales Tax		10%	$	69,529.64		
	Inflation at 3% Annual		15.92%	$	121,760.30		
				2021 Total		$	886,586.32

19	**Chennault Beach Drive Sidewalk & Bike**	60th to Marine View Drive					
	Improvement Length		2275	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - High	$	105,794.32	$	2,406,820.78		
	Bike Markings - Low	$	539.00	$	12,262.25		
	None	$	-	$	-		
	Total Hard Costs			$	2,419,083.03		
	Soft Costs		36%	$	870,869.89		
	Sub-Total			$	3,289,953.00		
	Additional Contingency		20%	$	657,991.00		
	Sales Tax		10%	$	394,794.00		
	Inflation at 3% Annual		15.92%	$	691,363.89		
				2021 Total		$	5,034,101.89

20	**Central Drive Sidewalk & Bike Markings**	103rd to 64th Pl West					
	Improvement Length		2280	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	1,630,519.20		
	Bike Markings - Medium	$	1,151.00	$	26,242.80		
	None	$	-	$	-		
	Total Hard Costs			$	1,656,762.00		
	Soft Costs		36%	$	596,434.32		
	Sub-Total			$	2,253,196.00		
	Additional Contingency		20%	$	450,639.00		
	Sales Tax		10%	$	270,384.00		
	Inflation at 3% Annual		15.92%	$	473,495.66		
				2021 Total		$	3,447,714.66

21	**Possession Way Bike Markings**	HP Blvd to Harbour Reach Drive					
	Improvement Length		4400	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Medium	$	1,151.00	$	50,644.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	50,644.00		
	Soft Costs		36%	$	18,231.84		
	Sub-Total			$	68,875.84		
	Sales Tax		10%	$	6,887.58		
	Inflation at 3% Annual		15.92%	$	12,061.54		
				2021 Total		$	87,824.96

22	**64th Place West**	Central Drive to Chennault Beach Dr					
	Improvement Length		1650	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	1,179,981.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	1,179,981.00		
	Soft Costs		36%	$	424,793.16		
	Sub-Total			$	1,604,774.16		
	Sales Tax		10%	$	160,477.42		
	Inflation at 3% Annual		15.92%	$	281,028.05		
				2021 Total		$	2,046,279.63

23	**Blue Heron Drive Bike Markings**	HP Blvd to Harbour Reach Drive.					
	Improvement Length		3400	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Low	$	539.00	$	18,326.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	18,326.00		
	Soft Costs		36%	$	6,597.36		
	Sub-Total			$	24,923.36		
	Sales Tax		10%	$	2,492.34		
	Inflation at 3% Annual		15.92%	$	4,364.58		
				2021 Total		$	31,780.27

24	**South Road Markings**	SR 525 to Harbour Reach Drive					
	Improvement Length		5000	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Medium	$	1,151.00	$	57,550.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	57,550.00		
	Soft Costs		36%	$	20,718.00		
	Sub-Total			$	78,268.00		
	Sales Tax		10%	$	7,826.80		
	Inflation at 3% Annual		15.92%	$	13,706.29		
				2021 Total		$	99,801.09

25	**80th/81st Crossing**	80th/81st & SR 525					
	Improvement Length		0	Capacity Project:		No	
	Preliminary Hard Costs	$	67,200.00	Safe-Route-To-School:		No	
	Reference:	CDC		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	67,200.00		
	Soft Costs		36%	$	24,192.00		
	Sub-Total			$	91,392.00		
	Project Cost Adjustment (+)			$	18,559.00		
	Sales Tax		10%	$	10,995.00		
	Inflation at 3% Annual		15.92%	$	19,255.00		
				2021 Total		$	140,201.00

26	**SR 525 Corridor Study**	76th Street to Front Street					
	Study Length		7300	Capacity Project:		No	
	Preliminary Hard Costs		100000	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	100,000.00		
	Soft Costs			$	-		
	Sub-Total			**$**	**100,000.00**		
	Additional Contingency		20%	$	20,000.00		
	Sales Tax		10%				
	Inflation at 3% Annual		15.92%	$	19,104.00		
				2021 Total		$	139,104.00

27	**76th Street Crossing**	76th Street & SR 525					
	Improvement Length		0	Capacity Project:		No	
	Preliminary Hard Costs	$	67,200.00	Safe-Route-To-School:		No	
	Reference:	CDC		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	67,200.00		
	Soft Costs		36%	$	24,192.00		
	Sub-Total			$	91,392.00		
	Project Cost Adjustment (+)			$	18,559.00		
	Sales Tax		10%	$	10,995.00		
	Inflation at 3% Annual		15.92%	$	19,255.00		
				2021 Total		$	140,201.00

28	**Harbour Pointe Blvd. North Cycle Track**	48th to Harbour Place					
	Improvement Length		790	Capacity Project:		No	
	Preliminary Hard Costs		49100	Safe-Route-To-School:		No	
	Reference:	CDC		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	49,100.00		
	Soft Costs		36%	$	17,676.00		
	Sub-Total			$	66,776.00		
	Additional Contingency		20%	$	13,355.20		
	Sales Tax		10%	$	8,013.12		
	Inflation at 3% Annual		15.92%	$	14,032.58		
				2021 Total		$	102,176.90

29	**47th Pedestrain & Bike Improvements**	Harbour Pointe Blvd N. to Chennault Beach Drive					
	Improvement Length		7400	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Medium	$	1,151.00	$	85,174.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	85,174.00		
	Soft Costs		36%	$	30,662.64		
	Sub-Total			$	115,836.64		
	Additional Contingency		20%	$	23,167.33		
	Sales Tax		10%	$	13,900.40		
	Inflation at 3% Annual		15.92%	$	24,342.37		
				2021 Total		$	177,246.74

30	**Goat Trail Path & Bike Markings**	Goat Trail Loop Rd to Washington Ave					
	Improvement Length		1220	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - High	$	105,794.32	$	1,290,690.70		
	Bike Markings - Medium	$	1,151.00	$	14,042.20		
	None	$	-	$	-		
	Total Hard Costs			$	1,304,732.90		
	Soft Costs		36%	$	469,703.84		
	Sub-Total			$	1,774,436.74		
	Additional Contingency		20%	$	354,887.35		
	Sales Tax		10%	$	177,443.67		
	Inflation at 3% Annual		15.92%	$	367,237.43		
				2021 Total		$	2,674,005.19

31	**Endeavor Elementary Shared Use Path**	Harbour Pointe Blvd to Beverly Park					
	Improvement Length		3800	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	10' Asphalt Path - Medium Signage	$	19,500.00	$	741,000.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	741,000.00		
	Soft Costs		36%	$	266,760.00		
	Sub-Total			$	1,007,760.00		
	Sales Tax		10%	$	100,776.00		
	Inflation at 3% Annual		15.92%	$	176,478.93		
				2021 Total		$	1,285,014.93

32	**Stairstep Path & Bike Markings**	76th Street SW to 8th Drive					
	Improvement Length		4475	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	3,200,251.50		
	Bike Markings - Low	$	539.00	$	24,120.25		
	None	$	-	$	-		
	Total Hard Costs			$	3,224,371.75		
	Soft Costs		36%	$	1,160,773.83		
	Sub-Total			$	4,385,145.58		
	Additional Contingency		20%	$	877,029.12		
	Sales Tax		10%	$	526,217.47		
	Inflation at 3% Annual		15.92%	$	921,512.03		
				2021 Total		$	6,709,904.20

33	**86th Crossing**	86th & SR 525					
	Improvement Length		0	Capacity Project:		No	
	Preliminary Hard Costs	$	67,200.00	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	67,200.00		
	Soft Costs		36%	$	24,192.00		
	Sub-Total			$	91,392.00		
	Project Cost Adjustment (+)			$	18,559.00		
	Sales Tax		10%	$	10,995.00		
	Inflation at 3% Annual		15.92%	$	19,255.00		
				2021 Total		$	140,201.00

34	**5th Street Bike & Ped Improvements In**	SR 525 to City Limits					
	Improvement Length		10000	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Low	$	539.00	$	53,900.00		
	10' Asphalt Path - Low Signage	$	18,500.00	$	462,500.00		
	2 Lane Resurfacing	$	8,000.00	$	800,000.00		
	Landscaping	$	800.00	$	80,000.00		
	Total Hard Costs			$	1,396,400.00		
	Soft Costs		36%	$	502,704.00		
	Sub-Total			$	1,899,104.00		
	Additional Contingency		20%	$	379,820.80		
	Sales Tax		10%	$	227,892.48		
	Inflation at 3% Annual		15.92%	$	399,085.31		
	*not all facilities run length of improvement area			2021 Total		$	2,905,902.59

35	**88th Street Sidewalks & Bike Markings**	SR 525 to 56th Pl West					
	Improvement Length		5050	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	3,611,457.00		
	Bike Markings - Low	$	539.00	$	27,219.50		
	None	$	-	$	-		
	Total Hard Costs			$	3,638,676.50		
	Soft Costs		36%	$	1,309,923.54		
	Sub-Total			$	4,948,600.04		
	Additional Contingency		20%	$	989,720.01		
	Sales Tax		10%	$	593,832.00		
	Inflation at 3% Annual		15.92%	$	1,039,918.61		
				2021 Total		$	7,572,070.66

36	**80th Sidewalks & Sharrows**	SR 525 to 44th Ave West					
	Improvement Length		2000	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	1,430,280.00		
	Bike Markings - Low	$	539.00	$	10,780.00		
	None	$	-	$	-		
	Total Hard Costs			$	1,441,060.00		
	Soft Costs		36%	$	518,781.60		
	Sub-Total			$	1,959,841.60		
	Sales Tax		10%	$	195,984.16		
	Inflation at 3% Annual		15.92%	$	343,207.46		
				2021 Total		$	2,499,033.22

37	**88th Street Sidewalks & Bike Markings**	SR 525 to 47th St.				
	Improvement Length		405	Capacity Project:	No	
	Preliminary Hard Costs	$	143,398.00	Safe-Route-To-School:	No	
	Reference:	Tuttle		Greenway:	Yes	
	Additional Facilities	Per 100ft				
	None	$	-	$ -		
	None	$	-	$ -		
	None	$	-	$ -		
	Total Hard Costs			$ 143,398.00		
	Soft Costs		36%	$ 51,623.28		
	Sub-Total			$ 195,021.28		
	Sales Tax		10%	$ 19,502.13		
	Inflation at 3% Annual		15.92%	$ 34,152.13		
				2021 Total	$	248,675.53

38	**Beverly Park Intersection Improvement**	Beverly Park Intersection				
	Improvement Length		0	Capacity Project:	Yes	
	Preliminary Hard Costs	$	159,600.00	Safe-Route-To-School:	No	
	Reference:	CDC		Greenway:	No	
	Additional Facilities	Per 100ft				
	None	$	-	$ -		
	None	$	-	$ -		
	None	$	-	$ -		
	Total Hard Costs			$ 159,600.00		
	Soft Costs		36%	$ 57,456.00		
	Sub-Total			$ 217,056.00		
	Project Cost Adjustment (+)			$ 44,100.00		
	Sales Tax		10%	$ 26,116.00		
	Inflation at 3% Annual		15.92%	$ 45,734.00		
				2021 Total	$	333,000.00

39	**Sky Hila Pathway**	Goat Trail Rd to 11th Street				
	Improvement Length		1550	Capacity Project:	No	
	Preliminary Hard Costs			Safe-Route-To-School:	Yes	
	Reference:	City Staff		Greenway:	Yes	
	Additional Facilities	Per 100ft				
	Sidewalks & Paving - High	$	105,794.32	$ 1,639,811.96		
	Bike Markings - Medium	$	1,151.00	$ 17,840.50		
	None	$	-	$ -		
	Total Hard Costs			$ 1,657,652.46		
	Soft Costs		36%	$ 596,754.89		
	Sub-Total			$ 2,254,407.35		
	Sales Tax		10%	$ 225,440.74		
	Inflation at 3% Annual		15.92%	$ 394,791.82		
				2021 Total	$	2,874,639.90

40	**2nd Street Crosswalk**	2nd Street & SR 525					
	Improvement Length		0	Capacity Project:		No	
	Preliminary Hard Costs	$	67,200.00	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	67,200.00		
	Soft Costs		36%	$	24,192.00		
	Sub-Total			$	91,392.00		
	Project Cost Adjustment (+)			$	18,559.00		
	Sales Tax		10%	$	10,995.00		
	Inflation at 3% Annual		15.92%	$	19,255.00		
				2021 Total		$	140,201.00

41	**81st Place SW SRTS**	SR 525 to 53rd Ave West					
	Improvement Length		2700	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	1,930,878.00		
	Bike Markings - Low	$	539.00	$	14,553.00		
	None	$	-	$	-		
	Total Hard Costs			$	1,945,431.00		
	Soft Costs		36%	$	700,355.16		
	Sub-Total			$	2,645,786.16		
	Sales Tax		10%	$	264,578.62		
	Inflation at 3% Annual		15.92%	$	463,330.07		
				2021 Total		$	3,373,694.85

42	**53rd Avenue Sidewalks & Bike Marking**	84th Street to 81st Pl.					
	Improvement Length		800	Capacity Project:		No	
	Preliminary Hard Costs		381670.65	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	381,670.65		
	Soft Costs		36%	$	137,401.43		
	Sub-Total			$	519,072.08		
	Sales Tax		10%	$	51,907.21		
	Inflation at 3% Annual		15.92%	$	90,899.90		
				2021 Total		$	661,879.19

43	**49th Place Transit Connection**	49th Ave to SR 525					
	Improvement Length		400	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Low	$	37,233.68	$	148,934.72		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	148,934.72		
	Soft Costs		36%	$	53,616.50		
	Sub-Total			$	202,551.22		
	Sales Tax		10%	$	20,255.12		
	Inflation at 3% Annual		15.92%	$	35,470.77		
				2021 Total		$	258,277.11

44	**11th Street Sidewalk**	Loveland Ave to Campbell Ave					
	Improvement Length		525	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	375,448.50		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	375,448.50		
	Soft Costs		36%	$	135,161.46		
	Sub-Total			**$**	**510,609.96**		
	Sales Tax		10%	$	51,061.00		
	Inflation at 3% Annual		15.92%	$	89,418.02		
				2021 Total		$	651,088.97

45	**Washington Ave Sidewalks**	5th Street to Goat Trail Rd					
	Improvement Length		2300	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - High	$	105,794.32	$	2,433,269.36		
	Bike Markings - Low	$	539.00	$	12,397.00		
	None	$	-	$	-		
	Total Hard Costs			$	2,445,666.36		
	Soft Costs		36%	$	880,439.89		
	Sub-Total			$	3,326,106.25		
	Sales Tax		10%	$	332,610.63		
	Inflation at 3% Annual		15.92%	$	582,467.73		
				2021 Total		$	4,241,184.60

46	**Possesion View Lane Sidewalks**	Washington Ave to Goat Trial Rd					
	Improvement Length		834	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		Yes	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	596,426.76		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	596,426.76		
	Soft Costs		36%	$	214,713.63		
	Sub-Total			$	811,140.39		
	Sales Tax		10%	$	81,114.04		
	Inflation at 3% Annual		15.92%	$	142,046.91		
				2021 Total		$	1,034,301.33

47	**Chennault Beach Road Bike Markings**	Harbour Reach Drive to SR 525					
	Improvement Length		4700	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Low	$	539.00	$	25,333.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	25,333.00		
	Soft Costs		36%	$	9,119.88		
	Sub-Total			$	34,452.88		
	Sales Tax		10%	$	3,445.29		
	Inflation at 3% Annual		15.92%	$	6,033.39		
				2021 Total		$	43,931.56

48	**Park Ave Sidewalks**	2nd St. to 3rd St.					
	Improvement Length		550	Capacity Project:		No	
	Preliminary Hard Costs	$	390,426.84	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		No	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	390,426.84		
	Soft Costs		36%	$	140,553.66		
	Sub-Total			$	530,980.50		
	Sales Tax		10%	$	53,098.05		
	Inflation at 3% Annual		15.92%	$	92,985.31		
				2021 Total		$	677,063.86

49	**62nd Street & Canyon Road**	62nd Street & Canyon Road					
	Improvement Length		2150	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	596,426.76		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	596,426.76		
	Soft Costs		36%	$	214,713.63		
	Sub-Total			$	811,140.39		
	Sales Tax		10%	$	81,114.04		
	Inflation at 3% Annual		15.92%	$	142,046.91		
				2021 Total		$	1,034,301.33

50	**92nd Street Sidewalk & Bike Markings**	SR 525 to 91st Pl SW					
	Improvement Length		4100	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	2,932,074.00		
	Bike Markings - Low	$	539.00	$	22,099.00		
	None	$	-	$	-		
	Total Hard Costs			$	2,954,173.00		
	Soft Costs		36%	$	1,063,502.28		
	Sub-Total			$	4,017,675.28		
	Sales Tax		10%	$	401,767.53		
	Inflation at 3% Annual		15.92%	$	703,575.30		
				2021 Total		$	5,123,018.10

51	**Harbour Place Bike Markings**	Paine Field Blvd to Harbour Pointe Blvd.					
	Improvement Length		2250	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Medium	$	1,151.00	$	25,897.50		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	25,897.50		
	Soft Costs		36%	$	9,323.10		
	Sub-Total			$	35,220.60		
	Sales Tax		10%	$	3,522.06		
	Inflation at 3% Annual		15.92%	$	6,167.83		
				2021 Total		$	44,910.49

52	**Airport Road Shared Use Path**	Airport Road					
	Improvement Length		12000	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	15' Asphalt Path - Typical	$	29,250.00	$	3,510,000.00		
	ROW Purchase 17' Tract (Estimate)	$	34,000.00	$	4,080,000.00		
	None	$	-	$	-		
	Total Hard Costs			$	7,590,000.00		
	Soft Costs		36%	$	2,732,400.00		
	Sub-Total			$	10,322,400.00		
	Additional Contingency		30%	$	3,096,720.00		
	Sales Tax		10%	$	1,341,912.00		
	Inflation at 3% Annual		15.92%	$	2,349,956.29		
				2021 Total		$	17,110,988.29

53	**Beverly Park Intersection Improvement**	Beverly Park Intersection					
	Improvement Length		0	Capacity Project:		Yes	
	Preliminary Hard Costs		786100	Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	786,100.00		
	Soft Costs		36%	$	282,996.00		
	Sub-Total			$	1,069,096.00		
	Additional Contingency		20%	$	213,819.00		
	Sales Tax		10%	$	128,292.00		
	Inflation at 3% Annual		15.92%	$	224,664.15		
				2021 Total		$	1,635,871.15

54	**84th Street Sidewalks**	Nakeeta Lane to 53rd Ave West					
	Improvement Length		660	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - High	$	105,794.32	$	698,242.51		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	698,242.51		
	Soft Costs		36%	$	251,367.30		
	Sub-Total			$	949,609.81		
	Sales Tax		10%	$	94,960.98		
	Inflation at 3% Annual		15.92%	$	166,295.67		
				2021 Total		$	1,210,866.46

55	**92nd Street Sidewalk & Bike Markings**	SR 525 to 44th Ave West					
	Improvement Length		1050	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Low	$	37,233.68	$	390,953.64		
	Bike Markings - Low	$	539.00	$	5,659.50		
	None	$	-	$	-		
	Total Hard Costs			$	396,613.14		
	Soft Costs		36%	$	142,780.73		
	Sub-Total			$	539,393.87		
	Sales Tax		10%	$	53,939.39		
	Inflation at 3% Annual		15.92%	$	94,458.65		
				2021 Total		$	687,791.91

56	**88th Sidewalks & Bike Lanes**	48th Pl West to 44th Ave West					
	Improvement Length		1200	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Low	$	37,233.68	$	446,804.16		
	Bike Markings - Low	$	539.00	$	6,468.00		
	None	$	-	$	-		
	Total Hard Costs			$	453,272.16		
	Soft Costs		36%	$	163,177.98		
	Sub-Total			$	616,450.14		
	Sales Tax		10%	$	61,645.01		
	Inflation at 3% Annual		15.92%	$	107,952.75		
				2021 Total		$	786,047.90

57	**Goat Trail Pedestrain Bridge**	Washington Ave over SR 525					
	Improvement Length		0	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	-		
	Soft Costs		36%	$	2,540,937.32		
	Sub-Total			$	7,058,159.23		
	Sales Tax		10%	$	705,815.92		
	Inflation at 3% Annual		15.92%	$	7,763,975.15		
				2021 Total		$	9,000,000.00

58	**Cyrus Way Sidewalks**	HP Blvd. to Evergreen Dr.				
	Improvement Length		3890	Capacity Project:	Yes	
	Preliminary Hard Costs	$	563,290.18	Safe-Route-To-School:	No	
	Reference:	Tuttle		Greenway:	Yes	
	Additional Facilities	Per 100ft				
	None	$	-	$ -		
	None	$	-	$ -		
	None	$	-	$ -		
	Total Hard Costs			$ 563,290.18		
	Soft Costs		36%	$ 202,784.46		
	Sub-Total			$ 766,074.64		
	Sales Tax		10%	$ 76,607.46		
	Inflation at 3% Annual		15.92%	$ 134,154.99		
				2021 Total	$	976,837.09

59	121st Bike Connection	121st to SR 525				
	Improvement Length		3000	Capacity Project:	No	
	Preliminary Hard Costs			Safe-Route-To-School:	No	
	Reference:	City Staff		Greenway:	No	
	Additional Facilities	Per 100ft				
	Bike Lane Marking - High	$	7,075.00	$ 212,250.00		
	None	$	-	$ -		
	None	$	-	$ -		
	Total Hard Costs			$ 212,250.00		
	Soft Costs		36%	$ 76,410.00		
	Sub-Total			$ 288,660.00		
	Additional Contingency		20%	$ 57,732.00		
	Sales Tax		10%	$ 34,639.20		
	Inflation at 3% Annual		15.92%	$ 60,660.17		
				2021 Total	$	441,691.37

60	**53rd Avenue Sidewalks & Bike Marking**	88th St. to 92nd St.				
	Improvement Length		1250	Capacity Project:	No	
	Preliminary Hard Costs			Safe-Route-To-School:	No	
	Reference:	City Staff		Greenway:	Yes	
	Additional Facilities	Per 100ft				
	Sidewalks & Paving - Low	$	37,233.68	$ 465,421.00		
	Bike Markings - Low	$	539.00	$ 6,737.50		
	None	$	-	$ -		
	Total Hard Costs			$ 472,158.50		
	Soft Costs		36%	$ 169,977.06		
	Sub-Total			$ 642,135.56		
	Sales Tax		10%	$ 64,213.56		
	Inflation at 3% Annual		15.92%	$ 112,450.78		
				2021 Total	$	818,799.90

61	**Cyrus Way Sidewalks**	HP Blvd. to SR 525					
	Improvement Length		2800	Capacity Project:		Yes	
	Preliminary Hard Costs	$	464,022.45	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	464,022.45		
	Soft Costs		36%	$	167,048.08		
	Sub-Total			$	631,070.53		
	Sales Tax		10%	$	63,107.05		
	Inflation at 3% Annual		15.92%	$	110,513.07		
				2021 Total		$	804,690.65

62	**53rd Avenue Sidewalks & Bike Marking**	80th to 81st					
	Improvement Length		1100	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	786,654.00		
	Bike Markings - Low	$	539.00	$	5,929.00		
	None	$	-	$	-		
	Total Hard Costs			$	792,583.00		
	Soft Costs		36%	$	285,329.88		
	Sub-Total			$	1,077,912.88		
	Sales Tax		10%	$	107,791.29		
	Inflation at 3% Annual		15.92%	$	188,764.10		
				2021 Total		$	1,374,468.27

63	**Cyrus Way Road Extension**	Russell Road to Chennault Beach Drive					
	Improvement Length		900	Capacity Project:		Yes	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	New Road	$	410,000.00	$	3,690,000.00		
	Bike Markings - Low	$	539.00	$	4,851.00		
	None	$	-	$	-		
	Total Hard Costs			$	3,694,851.00		
	Soft Costs		36%	$	1,330,146.36		
	Sub-Total			$	5,024,997.36		
	Sales Tax		10%	$	502,499.74		
	Inflation at 3% Annual		15.92%	$	879,977.54		
				2021 Total		$	6,407,474.63

64	**Shared Use Path to Old Town**	Park Avenue to Sky-Hi-La					
	Improvement Length		875	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	10' Asphalt Path - Low Signage	$	18,500.00	$	161,875.00		
	ROW Purchase 12' Tract (Estimate)	$	24,000.00	$	210,000.00		
	None	$	-	$	-		
	Total Hard Costs			$	371,875.00		
	Soft Costs		36%	$	133,875.00		
	Sub-Total			**$**	**505,750.00**		
	Additional Contingency		20%	$	101,150.00		
	Sales Tax		10%	$	60,690.00		
	Inflation at 3% Annual		15.92%	$	106,280.33		
				2021 Total		$	773,870.33

65	**Share Use Path Boeing Rec. Center**	Muk.Blvd. To 36th Ave West					
	Improvement Length		3600	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	10' Asphalt Path - Low Signage	$	18,500.00	$	666,000.00		
	Bike Markings - Low	$	539.00	$	19,404.00		
	ROW Purchase 12' Tract (Estimate)	$	24,000.00	$	864,000.00		
	Total Hard Costs			$	1,549,404.00		
	Soft Costs		36%	$	557,785.44		
	Sub-Total			$	2,107,189.44		
	Additional Contingency		20%	$	421,437.89		
	Sales Tax		10%	$	252,862.73		
	Inflation at 3% Annual		15.92%	$	442,813.22		
				2021 Total		$	3,224,303.28

66	**54th Avenue Sidewalks & Bike Marking**	84th Street to 88th Street					
	Improvement Length		2500	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	Sidewalks & Paving - Median	$	71,514.00	$	1,787,850.00		
	Bike Markings - Low	$	539.00	$	13,475.00		
	None	$	-	$	-		
	Total Hard Costs			$	1,801,325.00		
	Soft Costs		36%	$	648,477.00		
	Sub-Total			$	2,449,802.00		
	Sales Tax		10%	$	244,980.20		
	Inflation at 3% Annual		15.92%	$	429,009.33		
				2021 Total		$	3,123,791.53

67	**South Gulch Shared Use Path**	Chennault Beach Road to Harbour Heights Parkway					
	Improvement Length		550	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	10' Asphalt Path - Low Signage	$	18,500.00	$	101,750.00		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	101,750.00		
	Soft Costs		36%	$	36,630.00		
	Sub-Total			$	138,380.00		
	Wetland Mitigation		25%	$	34,595.00		
	Additional Contingency		20%	$	27,676.00		
	Sales Tax		10%	$	20,065.10		
	Inflation at 3% Annual		15.92%	$	35,138.00		
				2021 Total		$	255,854.10

68	**Chennault Beach Road Bike Markings**	Harbour Pointe Blvd to Project 56 & 57					
	Improvement Length		3700	Capacity Project:		No	
	Preliminary Hard Costs			Safe-Route-To-School:		No	
	Reference:	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Bike Lane Marking - Low	$	2,467.00	$	20,574.78		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	20,574.78		
	Soft Costs		36%	$	7,406.92		
	Sub-Total			$	27,981.70		
	Sales Tax		10%	$	2,798.17		
	Inflation at 3% Annual		15.92%	$	4,900.16		
				2021 Total		$	35,680.03

69	**Loveland Avenue Sidewalks**	2nd Street to 3rd Street					
	Improvement Length		275	Capacity Project:		No	
	Preliminary Hard Costs	$	147,180.32	Safe-Route-To-School:		No	
	Reference:	Tuttle		Greenway:		No	
	Additional Facilities	Per 100ft					
	None	$	-	$	-		
	None	$	-	$	-		
	None	$	-	$	-		
	Total Hard Costs			$	147,180.32		
	Soft Costs		36%	$	52,984.92		
	Sub-Total			$	200,165.24		
	Sales Tax		10%	$	20,016.52		
	Inflation at 3% Annual		15.92%	$	35,052.94		
				2021 Total		$	255,234.70


CITY OF
MUKILTEO