

## *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.

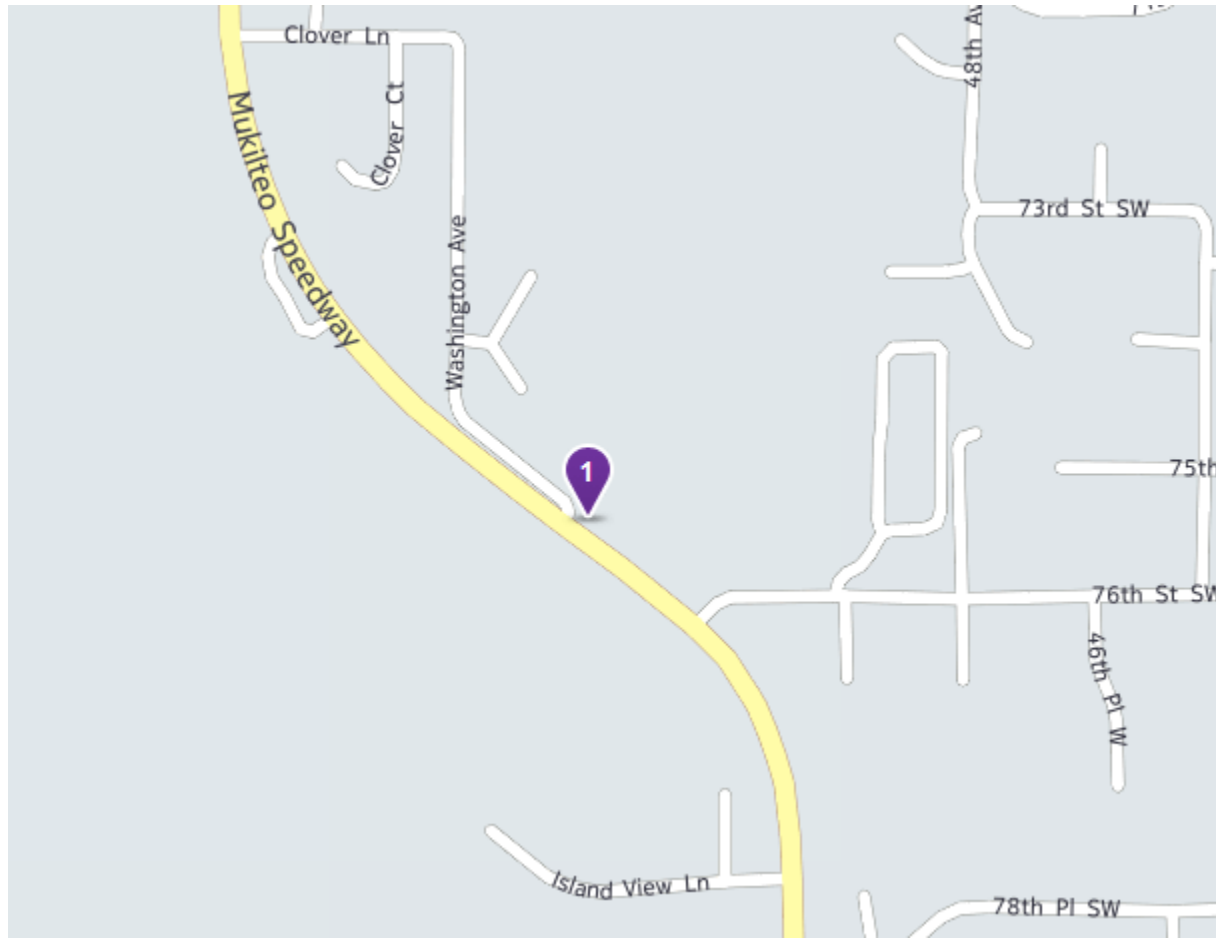
## **Community Resources:**

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:	<a href="http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes">http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes</a>

## 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	<p>Mukilteo Speedway is a very fast moving, congested highway. There are shoulders, but no sidewalks on either side of the street.</p> <p>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.</p>	Improve visibility of crosswalk.	

<p>Washington Ave</p>	<p>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.</p> <p>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.</p>	<p>Refresh paint on crossing (almost completely gone).</p> <p>Enforce parking regulations, especially to the north of school.</p>	
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<p>70<sup>th</sup> Place SW &amp; Goat Trail Road</p>	<p>Sidewalks present on 70<sup>th</sup> Pl SW and on the east side of Goat Trail Rd.</p> <p>This intersection has an unmanned crosswalk. It is a low-traffic road.</p>	<p>Refresh paint on crosswalk.</p>	
<p>70<sup>th</sup> Street SW</p>	<p>Flashing “school zone” sign.</p> <p>70<sup>th</sup> becomes 48<sup>th</sup> Ave W, after this there is no sidewalk and a narrow shoulder.</p>	<p>Install sidewalk on 48<sup>th</sup> Ave W.</p>	

<p>49<sup>th</sup> Avenue W &amp; 70<sup>th</sup> Street SW</p>	<p>Crosswalk and “Stop for pedestrians” sign at this intersection. Low traffic road but speeding was observed during audit.</p>	<p>Refresh paint on crosswalk.</p>	
<p>71<sup>st</sup> Place SW &amp; 48<sup>th</sup> Avenue W</p>	<p>Unmanned crosswalk with worn paint. Speeding traffic observed during audit.</p>	<p>Refresh paint on crosswalk.</p>	
<p>School Driveway (Approach from Mukilteo Speedway)</p>	<p>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).</p>		

<p>School access paths</p>	<p>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.</p>	<p>Continue to maintain access paths, and require new ones to be built with any new construction.</p>	   
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### **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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## **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.

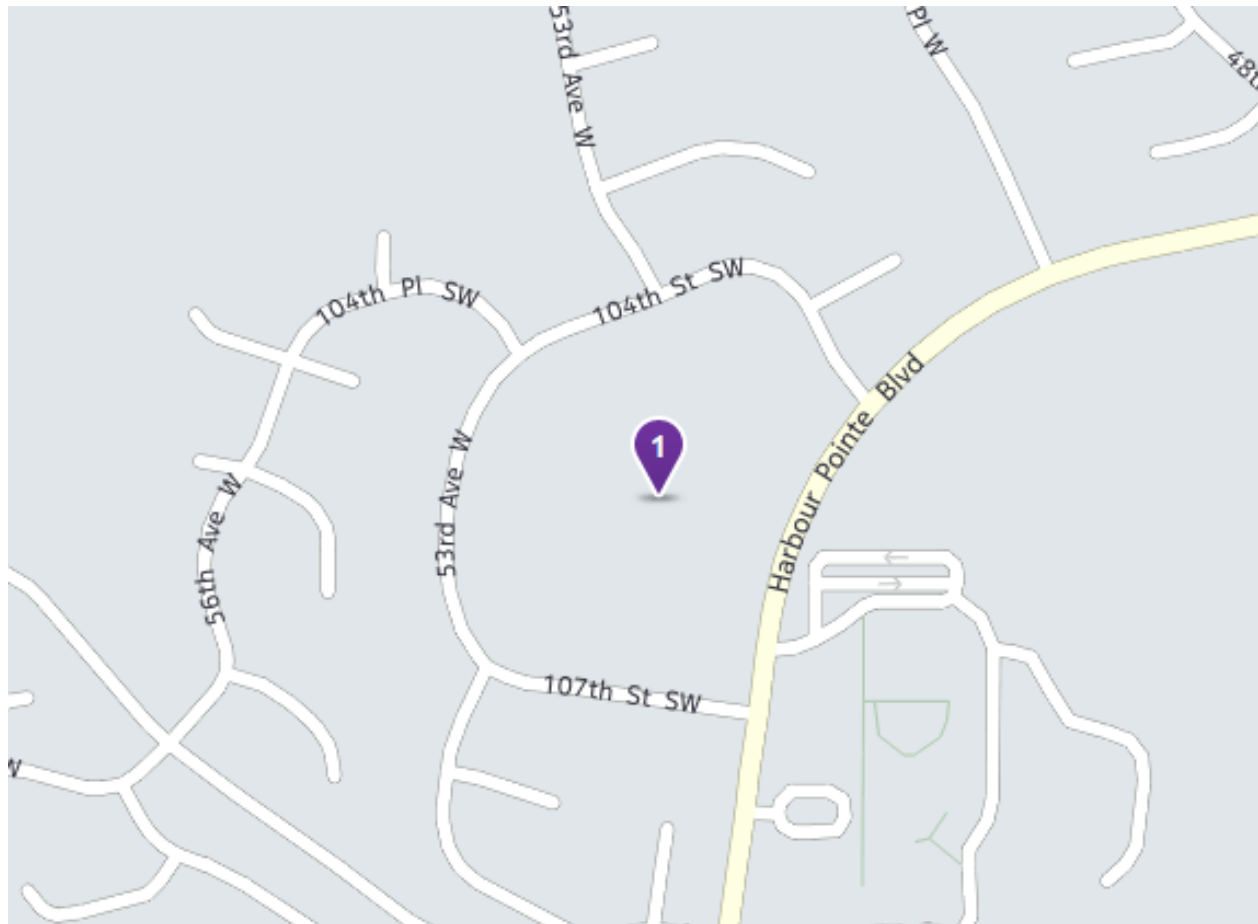
## **Community Resources:**

School Principal:	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
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Safe Routes to School Website:	<a href="http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes">http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes</a>

## 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).		
53 <sup>rd</sup> Avenue W & 104 <sup>th</sup> 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 & 107 <sup>th</sup> Street SW	Well marked, unmanned crossing. 3-way intersection (most walkers would be crossing 107 <sup>th</sup> Street SW, not Harbor Pointe Blvd). 107 <sup>th</sup> Street SW is a sidewalked, low traffic, residential street.		 

<p>Harbour Pointe Blvd &amp; 108<sup>th</sup> Street SW</p>	<p>Well marked, unmanned crossing. 3-way intersection (most walkers would be crossing 108<sup>th</sup> Street SW, not Harbor Pointe Blvd). 108<sup>th</sup> Street SW is a sidewalked, low traffic, residential street.</p>		
<p>Harbour Pointe Blvd &amp; Chennault Beach Drive</p>	<p>High traffic crossing. Well marked and staffed.</p>	<p>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.</p>	



**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.



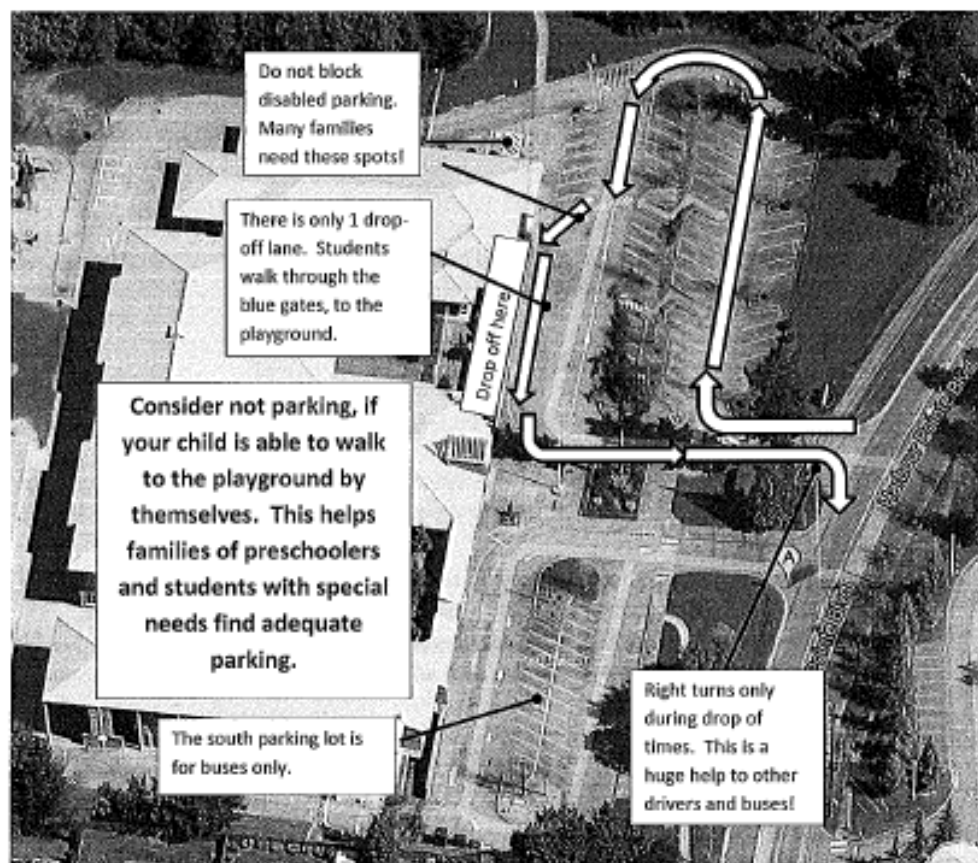
Parent drop off/pick up occurs in an identical circular lot off of Harbour Pointe Blvd to the west. Instructions for parent traffic and parking were available and visible in the main office (*see following page*). There are two lanes designated for drop off and one thru-lane. There was considerable parent 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?                | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Are they covered?                                  | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| Are they in good repair?                           | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Is capacity adequate?                              | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Are there designated bike lanes around the school? | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> 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 walkable 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 crossing*

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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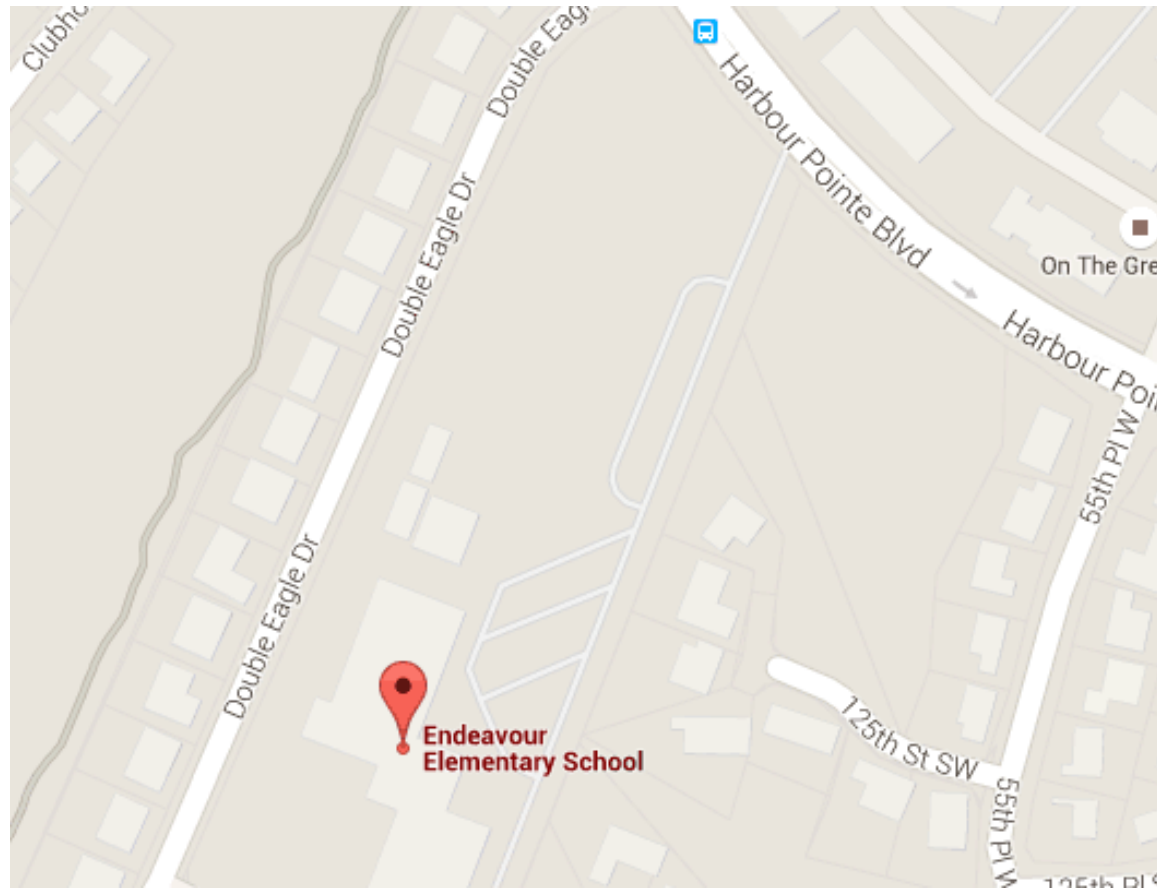
School Principal:	Steve Raymond, 425.366.2800
District Superintendant:	Marci Larsen, 425.356.1274
District Transportation Director:	Cindy Steigerwald, 425.356.1258
City Planning & Public Works Director:	Glen Pickus, 425.263.8042
Health District Staff:	Carrie Parker, 425.339.8634
Safe Routes to School Website:	<a href="http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes">http://www.wsdot.wa.gov/LocalPrograms/SafeRoutes</a>



## 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.		

<p>Harbour Pointe Blvd &amp; Double Eagle Drive</p>	<p>4 way intersection, 2 way stop. 2 way crossing. Well painted. Manned. Pedestrian activated flashers. High traffic and pedestrian use.</p>		
<p>West School Access Trail</p>	<p>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.</p>		

55 <sup>th</sup> 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 & 55 <sup>th</sup> 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?                | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Are they covered?                                  | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No |
| Are they in good repair?                           | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Is capacity adequate?                              | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            |
| Are there designated bike lanes around the school? | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> 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 & 55<sup>th</sup> Place W.

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

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

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, 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](http://www.mukilteo.wa.us)

POSSESSION SOUND

City of Everett

Boeing Everett Facility

Snohomish County Paine Field Airport

Snohomish County

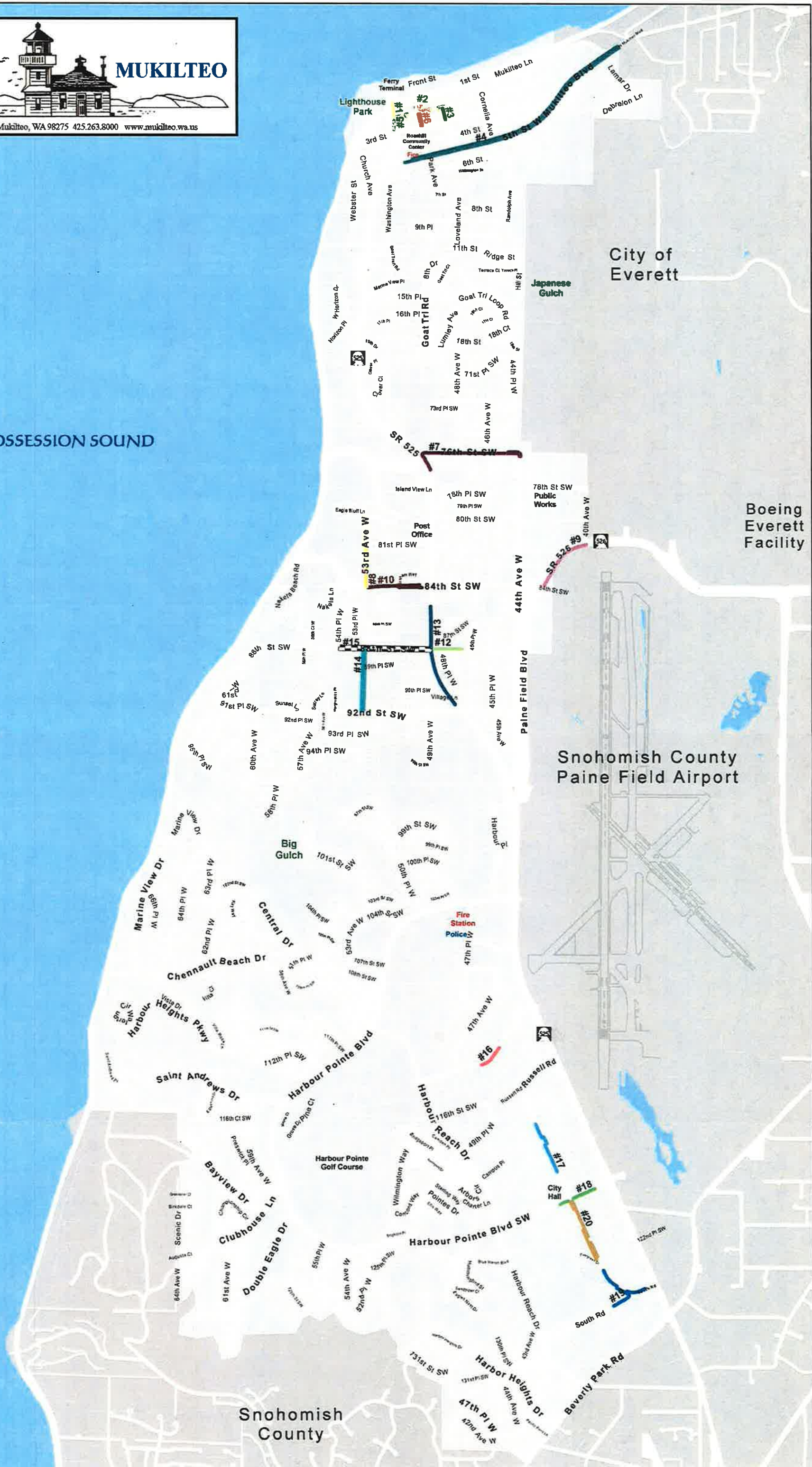
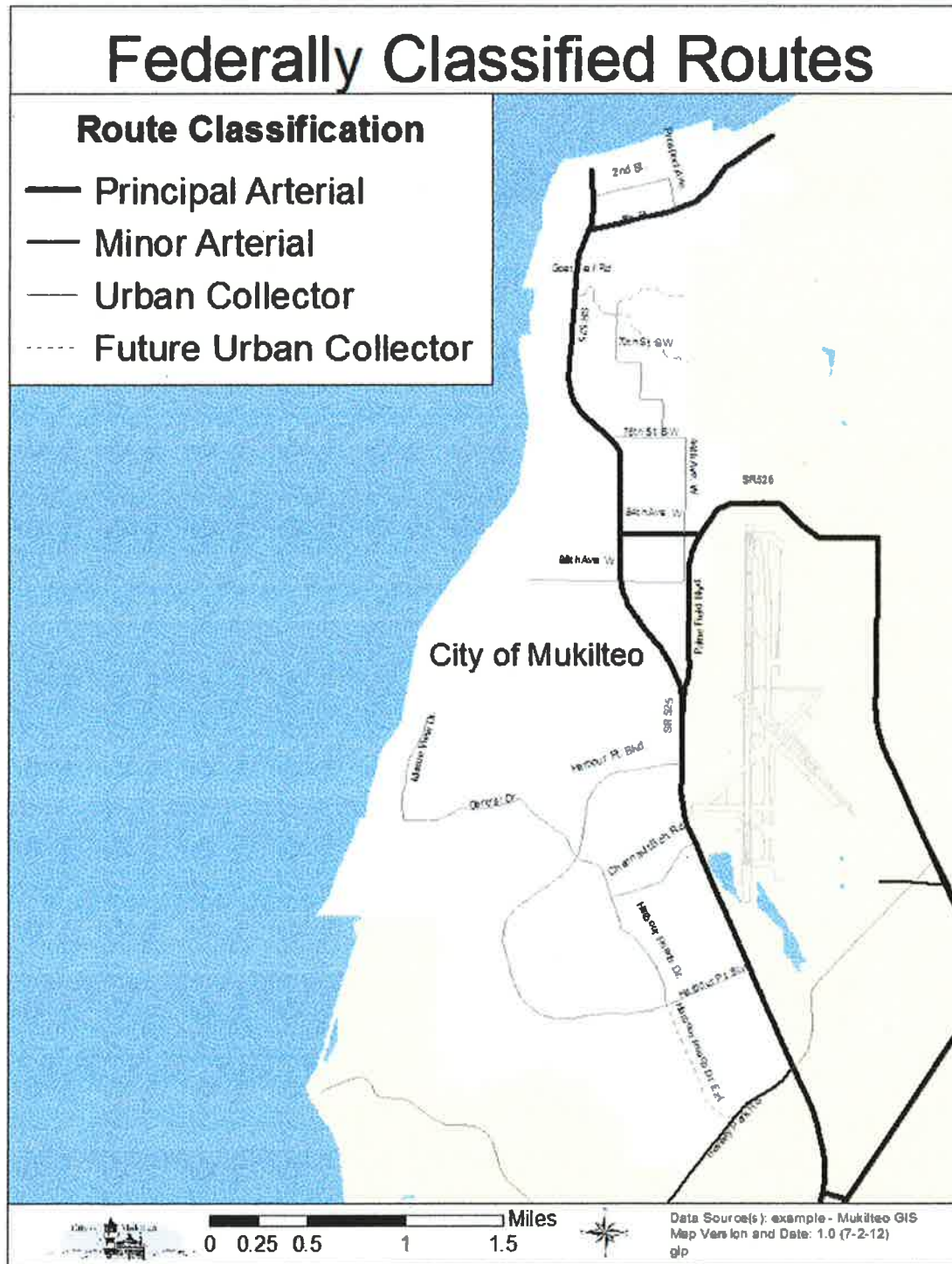


Figure 6

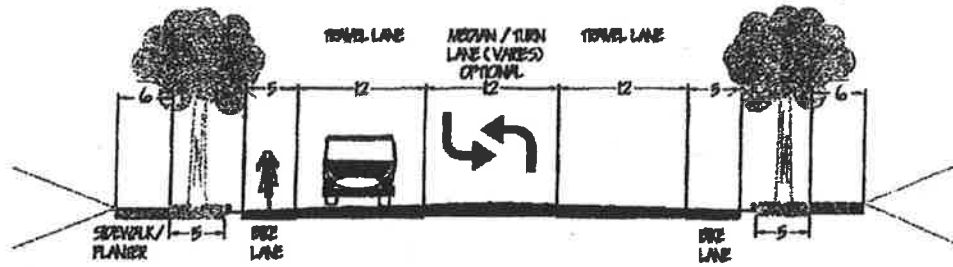




**FIGURE 1**

MINIMUM STANDARD

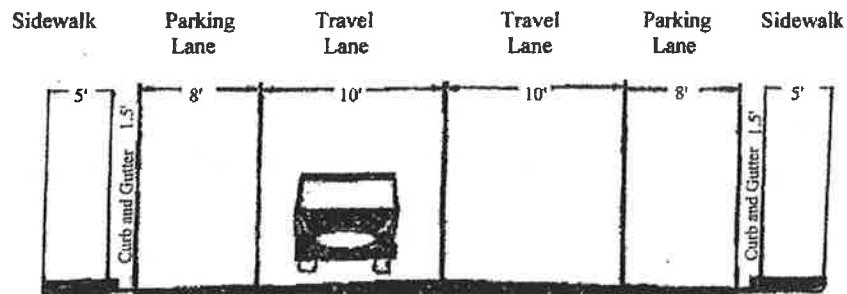
PRINCIPAL ARTERIAL  
MINOR ARTERIAL  
URBAN COLLECTOR



**FIGURE 2**

MINIMUM STANDARD

LOCAL ACCESS



## SITE #2

### 2<sup>ND</sup> 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. 2<sup>nd</sup> 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 2<sup>nd</sup> Street and will look to match as closely as possible the roadway section one block south on 3<sup>rd</sup> Street.

#### **PROJECT COST ESTIMATE**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$587,017.69</b>
	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
	<b>Schedule Total</b>	<b>\$798,344.06</b>



## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #2: 2nd Street Sidewalks - SR 525 to Park Avenue</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	510 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Subtotal Work Done Contractor</b>	<b>\$465,554.52</b>
	Planning Level Design Contingency - 20%	\$93,110.90
	Inflation (3% per year for 2 Years - 2017 Ad Date)	\$28,352.27
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$587,017.69</b>
	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
	<b>Schedule Total</b>	<b>\$798,344.06</b>

**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		
No.	Description	Quantity	Unit	Unit Price	Estimated Amount
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$30,020.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$14,850.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	0	CY	\$50.00	\$0.00
				<b>Drainage Total:</b>	<b>\$0.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$42,600.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	1,300	TN	\$9.00	\$11,700.00
18	Crushed Surfacing Top Course	350	TN	\$21.00	\$7,350.00
				<b>Surfacing Total:</b>	<b>\$19,050.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$51,530.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$2,500.00	\$2,500.00
22	Landscaping	1	LS	\$25,000.00	\$25,000.00
				<b>Erosion Control Total:</b>	<b>\$27,500.00</b>
<b>Section 10: Traffic</b>					
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
				<b>Traffic Total:</b>	<b>\$92,694.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$152,825.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$465,554.52</b>

## SITE #3

### LOVELAND AVENUE SIDEWALKS - 2<sup>ND</sup> STREET TO 3<sup>RD</sup> 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**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$147,180.32</b>
	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
	<b>Schedule Total</b>	<b>\$200,165.23</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #3: Loveland Avenue Sidewalks - Second Street to Third Street</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	275 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, Modular Block Gravity Wall, Etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Subtotal Work Done Contractor</b>	<b>\$116,726.40</b>
	Planning Level Design Contingency - 20%	\$23,345.28
	Inflation (3% per year for 2 Years - 2017 Ad Date)	\$7,108.64
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$147,180.32</b>
	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
	<b>Schedule Total</b>	<b>\$200,165.23</b>

**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		
No.	Description	Quantity	Unit	Unit Price	Estimated Amount
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$8,585.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$14,512.50</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	0	CY	\$50.00	\$0.00
				<b>Drainage Total:</b>	<b>\$0.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$11,850.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	400	TN	\$9.00	\$3,600.00
18	Crushed Surfacing Top Course	100	TN	\$21.00	\$2,100.00
				<b>Surfacing Total:</b>	<b>\$5,700.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$10,825.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$1,000.00	\$1,000.00
22	Landscaping	0	LS	\$0.00	\$0.00
				<b>Erosion Control Total:</b>	<b>\$1,000.00</b>
<b>Section 10: Traffic</b>					
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
				<b>Traffic Total:</b>	<b>\$22,382.50</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$33,225.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$116,726.40</b>



## SITE #6

### PARK AVENUE SIDEWALKS - 2<sup>ND</sup> STREET TO 3<sup>RD</sup> 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
	<b>Schedule Total</b>	<b>\$530,980.50</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #6: Park Avenue Sidewalks - 2nd Street to 3rd Street</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	275 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, Modular Gravity Block Retaining walls, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$390,426.84</b>
	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
	<b>Schedule Total</b>	<b>\$530,980.50</b>

**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		
No.	Description	Quantity	Unit	Unit Price	Estimated Amount
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$35,500.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$10,475.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	20	CY	\$50.00	\$1,000.00
				<b>Drainage Total:</b>	<b>\$1,000.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$22,200.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	800	TN	\$9.00	\$7,200.00
18	Crushed Surfacing Top Course	200	TN	\$21.00	\$4,200.00
				<b>Surfacing Total:</b>	<b>\$11,400.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$3,750.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$2,500.00	\$2,500.00
22	Landscaping	0	LS	\$0.00	\$0.00
				<b>Erosion Control Total:</b>	<b>\$2,500.00</b>
<b>Section 10: Traffic</b>					
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 Signage	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
				<b>Traffic Total:</b>	<b>\$22,430.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$177,450.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$309,641.40</b>



# SITE #7

## 76<sup>TH</sup> STREET SIDEWALKS - SR 525 TO 44<sup>TH</sup> AVENUE

### CURRENT CONDITIONS

The study area is located primarily in a residential district in central Mukilteo. 76<sup>th</sup> 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 76<sup>th</sup> 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

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$868,313.49</b>
	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
	<b>Schedule Total</b>	<b>\$1,180,906.35</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #7: 76th Street Sidewalks - SR 525 to 44th Avenue</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	2,340 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$868,313.49</b>
	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
	<b>Schedule Total</b>	<b>\$1,180,906.35</b>

**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
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$41,050.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$39,525.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	0	CY	\$50.00	\$0.00
				<b>Drainage Total:</b>	<b>\$0.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$82,800.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	3,450	TN	\$9.00	\$31,050.00
18	Crushed Surfacing Top Course	850	TN	\$21.00	\$17,850.00
				<b>Surfacing Total:</b>	<b>\$48,900.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$68,510.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$5,000.00	\$5,000.00
22	Landscaping	1	LS	\$20,000.00	\$20,000.00
				<b>Erosion Control Total:</b>	<b>\$25,000.00</b>
<b>Section 10: Traffic</b>					
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
				<b>Traffic Total:</b>	<b>\$92,550.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$239,300.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$688,645.80</b>

## SITE #8

### 53<sup>RD</sup> AVENUE SIDEWALKS - 84<sup>TH</sup> STREET TO 81<sup>ST</sup> PLACE

#### **CURRENT CONDITIONS**

The study area is located in a residential district in central Mukilteo. 53<sup>rd</sup> 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 53<sup>rd</sup> Avenue and will match the roadway configuration of the City's local access classification.

#### **PROJECT COST ESTIMATE**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$381,670.65</b>
	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
	<b>Schedule Total</b>	<b>\$519,072.08</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #8: 53rd Avenue Sidewalks - 88th Street to 92nd Street</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	800 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, Modular Block Retaining Wall, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$381,670.65</b>
	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
	<b>Schedule Total</b>	<b>\$519,072.08</b>

**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
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$10,525.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$11,500.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	0	CY	\$50.00	\$0.00
				<b>Drainage Total:</b>	<b>\$0.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$24,600.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	950	TN	\$9.00	\$8,550.00
18	Crushed Surfacing Top Course	250	TN	\$21.00	\$5,250.00
				<b>Surfacing Total:</b>	<b>\$13,800.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$31,200.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$2,500.00	\$2,500.00
22	Landscaping	1	LS	\$1,000.00	\$1,000.00
				<b>Erosion Control Total:</b>	<b>\$3,500.00</b>
<b>Section 10: Traffic</b>					
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
				<b>Traffic Total:</b>	<b>\$41,400.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$143,750.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$302,697.00</b>

## SITE #9

### SR 526 SIDEWALKS - 84<sup>th</sup> STREET TO 40<sup>th</sup> 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 to be 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
	<b>Schedule Total</b>	<b>\$227,519.42</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #9: SR 526 - 84th Street to Airport Road</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	1,310 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$167,293.69</b>
	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
	<b>Schedule Total</b>	<b>\$227,519.42</b>

**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

## 84<sup>TH</sup> STREET SIDEWALKS - SR 525 TO 53<sup>RD</sup> 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. 84<sup>th</sup> 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 53<sup>rd</sup> 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
	<b>Schedule Total</b>	<b>\$683,725.02</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #10: 84th Street Sidewalks - SR 525 to 53rd Avenue</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	1,460 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$502,738.99</b>
	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
	<b>Schedule Total</b>	<b>\$683,725.02</b>

**Limitations:**

- 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.
- Tuttle Engineering and Management makes no warranty, either expressed or implied, as to the accuracy of this estimate.
- This estimate is based on data found within the Washington State Department of Transportation Unit Bid Analysis.
- Costs presented herein represent an opinion based on historical information.
- This estimate does not consider the following:
  - Cost associated with biological surveys, environmental (wetland) mitigations, modeled traffic analysis, land-use planning, geotechnical assessments, surveying, cultural resources, and environmental site assessments.
  - Phased construction or out of regular sequence construction.
  - Costs associated with groundwater or inclement weather conditions.
  - Financial charges.
  - Land costs, acquisition of right-of-way, easements, and/or rights of entry.
  - Assessments from traffic, parks, or schools.
- 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**

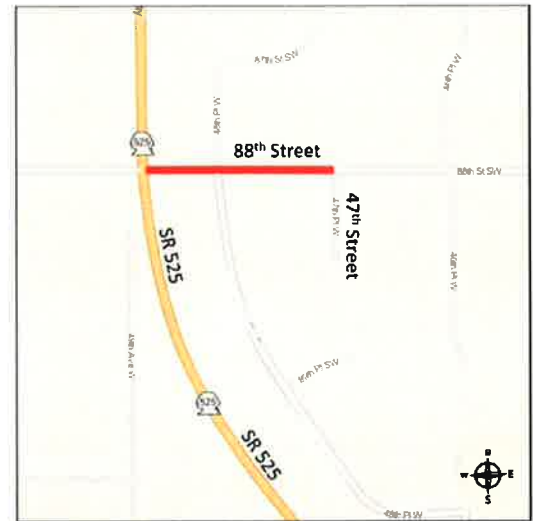
Approximate Length of Section		1,460	LF		
No.	Description	Quantity	Unit	Unit Price	Estimated Amount
<b>Section 1: Preparation</b>					
1	Mobilization (8% of WDC Subtotal)	1.0	LS	\$29,534.40	\$29,534.40
2	Clearing and Grubbing	0.1	AC	\$3,500.00	\$350.00
3	Sawcutting	1,460	LF	\$2.50	\$3,650.00
4	Removal 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
				<b>Preparation Total:</b>	<b>\$7,000.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$25,875.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	0	CY	\$50.00	\$0.00
				<b>Drainage Total:</b>	<b>\$0.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$58,200.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	1,225	TN	\$9.00	\$11,025.00
18	Crushed Surfacing Top Course	325	TN	\$21.00	\$6,825.00
				<b>Surfacing Total:</b>	<b>\$17,850.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$37,190.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$5,000.00	\$5,000.00
22	Landscaping	1	LS	\$2,500.00	\$2,500.00
				<b>Erosion Control Total:</b>	<b>\$7,500.00</b>
<b>Section 10: Traffic</b>					
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
				<b>Traffic Total:</b>	<b>\$53,490.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$162,075.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$398,714.40</b>

## SITE #12

### 88<sup>TH</sup> STREET SIDEWALKS - SR 525 TO 47<sup>TH</sup> STREET

#### **CURRENT CONDITIONS**

The study area is located in a residential district adjacent to State Route 525 in central Mukilteo. 88<sup>th</sup> 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 88<sup>th</sup> 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
	<b>Schedule Total</b>	<b>\$195,021.27</b>



## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #12: 88th Street Sidewalks - SR 525 to 47th Street</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	405 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$143,398.00</b>
	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
	<b>Schedule Total</b>	<b>\$195,021.27</b>

**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**

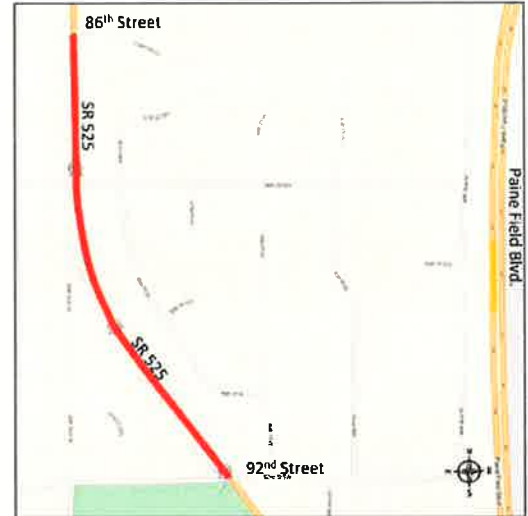
		Approximate Length of Section		405	LF		
	Description	Quantity	Unit		Unit Price	Estimated Amount	
No.	Section 1: Preparation						
1	Mobilization (8% of WDC Subtotal)	1	LS		\$8,424.20	\$8,424.20	
2	Clearing and Grubbing	0.2	AC		\$3,500.00	\$700.00	
3	Sawcutting	405	LF		\$2.50	\$1,012.50	
4	Removal of 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 - 92<sup>nd</sup> STREET TO 86<sup>th</sup> 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**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$1,272,446.57</b>
	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
	<b>Schedule Total</b>	<b>\$1,730,527.33</b>



## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #13: SR 525 Sidewalks - 92nd Street to 86th Street</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	2,230 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$1,272,446.57</b>
	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
	<b>Schedule Total</b>	<b>\$1,730,527.33</b>

**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		
No.	Description	Quantity	Unit	Unit Price	Estimated Amount
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$24,955.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$159,850.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	50	CY	\$50.00	\$2,500.00
				<b>Drainage Total:</b>	<b>\$2,500.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$88,400.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	2,400	TN	\$9.00	\$21,600.00
18	Crushed Surfacing Top Course	650	TN	\$21.00	\$13,650.00
				<b>Surfacing Total:</b>	<b>\$35,250.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$38,345.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$35,000.00	\$35,000.00
22	Landscaping	1	LS	\$10,000.00	\$10,000.00
				<b>Erosion Control Total:</b>	<b>\$45,000.00</b>
<b>Section 10: Traffic</b>					
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
				<b>Traffic Total:</b>	<b>\$107,205.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$432,900.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$1,009,157.40</b>

## SITE #14

### 53<sup>RD</sup> AVENUE SIDEWALKS - 88<sup>TH</sup> STREET TO 92<sup>ND</sup> STREET

#### **CURRENT CONDITIONS**

The study area is located in a residential district in central Mukilteo west of State Route 525. 53<sup>rd</sup> 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 88<sup>th</sup> 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**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$893,925.02</b>
	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
	<b>Schedule Total</b>	<b>\$1,215,738.02</b>



## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	Site #14: 53rd Avenue Sidewalks - 88th Street to 92nd Street	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	1,250 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$893,925.02</b>
	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
	<b>Schedule Total</b>	<b>\$1,215,738.02</b>

**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		
No.	Description	Quantity	Unit	Unit Price	Estimated Amount
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$15,935.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$42,137.50</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	50	CY	\$50.00	\$2,500.00
				<b>Drainage Total:</b>	<b>\$2,500.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$94,200.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	3,175	TN	\$9.00	\$28,575.00
18	Crushed Surfacing Top Course	800	TN	\$21.00	\$16,800.00
				<b>Surfacing Total:</b>	<b>\$45,375.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$46,250.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$2,500.00	\$2,500.00
22	Landscaping	1	LS	\$3,000.00	\$3,000.00
				<b>Erosion Control Total:</b>	<b>\$5,500.00</b>
<b>Section 10: Traffic</b>					
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 Signage	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
				<b>Traffic Total:</b>	<b>\$77,470.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$327,075.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$708,957.90</b>



## 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**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$157,836.18</b>
	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
	<b>Schedule Total</b>	<b>\$214,657.21</b>



## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #16: Chennault Beach Road Sidewalks - 4400 Block</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	500 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$157,836.18</b>
	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
	<b>Schedule Total</b>	<b>\$214,657.21</b>

**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		
Description		Quantity	Unit	Unit Price	Estimated Amount		
<b>No.</b>	<b>Section 1: Preparation</b>						
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		
				<b>Preparation Total:</b>	<b>\$2,690.00</b>		
<b>No.</b>	<b>Section 2: Grading</b>						
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		
				<b>Grading Total:</b>	<b>\$16,600.00</b>		
<b>No.</b>	<b>Section 3: Drainage</b>						
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00		
12	Quarry Spalls	0	CY	\$50.00	\$0.00		
				<b>Drainage Total:</b>	<b>\$0.00</b>		
<b>No.</b>	<b>Section 4: Storm Sewer</b>						
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		
				<b>Storm Sewer Total:</b>	<b>\$19,800.00</b>		
<b>No.</b>	<b>Section 5: Sanitary Sewer</b>						
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>		
<b>No.</b>	<b>Section 6: Water Lines</b>						
				<b>Water Lines Total:</b>	<b>\$0.00</b>		
<b>No.</b>	<b>Section 7: Surfacing</b>						
17	Gravel Base	725	TN	\$9.00	\$6,525.00		
18	Crushed Surfacing Top Course	175	TN	\$21.00	\$3,675.00		
				<b>Surfacing Total:</b>	<b>\$10,200.00</b>		
<b>No.</b>	<b>Section 8: Hot Mix Asphalt</b>						
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		
				<b>Hot Mix Asphalt Total:</b>	<b>\$13,250.00</b>		
<b>No.</b>	<b>Section 9: Erosion Control</b>						
21	Temporary Erosion/Water Pollution Control	1	EST.	\$2,000.00	\$2,000.00		
22	Landscaping	1	LS	\$2,500.00	\$2,500.00		
				<b>Erosion Control Total:</b>	<b>\$4,500.00</b>		
<b>No.</b>	<b>Section 10: Traffic</b>						
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		
				<b>Traffic Total:</b>	<b>\$25,250.00</b>		
<b>No.</b>	<b>Section 11: Other Items</b>						
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		
				<b>Other Items Total:</b>	<b>\$23,615.00</b>		
<b>Estimated Work Done Contractor Subtotal:</b>					<b>\$125,177.40</b>		

## 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**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$464,022.45</b>
	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
	<b>Schedule Total</b>	<b>\$631,070.53</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #17: Cyrus Way Sidewalks - Harbour Pointe Blvd to SR 525</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	1,400 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$464,022.45</b>
	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
	<b>Schedule Total</b>	<b>\$631,070.53</b>

**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
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$6,574.00</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$38,500.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	10	CY	\$50.00	\$500.00
				<b>Drainage Total:</b>	<b>\$500.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$54,000.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	2,250	TN	\$9.00	\$20,250.00
18	Crushed Surfacing Top Course	575	TN	\$21.00	\$12,075.00
				<b>Surfacing Total:</b>	<b>\$32,325.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$24,600.00</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$7,500.00	\$7,500.00
22	Landscaping	1	LS	\$25,000.00	\$25,000.00
				<b>Erosion Control Total:</b>	<b>\$32,500.00</b>
<b>Section 10: Traffic</b>					
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 Signage	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
				<b>Traffic Total:</b>	<b>\$51,900.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Miscellaneous Items Total:</b>	<b>\$99,850.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$368,008.92</b>



## 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**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$511,247.34</b>
	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
	<b>Schedule Total</b>	<b>\$695,296.38</b>



## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #19: Cyrus Way Sidewalks - Evergreen Drive to South Road</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	1,900 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$511,247.34</b>
	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
	<b>Schedule Total</b>	<b>\$695,296.38</b>

**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		
	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**

	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$563,290.18</b>
	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
	<b>Schedule Total</b>	<b>\$766,074.64</b>

## APPENDIX A - ENGINEER'S ESTIMATE

<b>Date of Scoping Review:</b>	December 10, 2014	
<b>Project:</b>	City of Mukilteo Sidewalk Planning Assessments	
<b>Location:</b>	<b>Site #20: Cyrus Way Sidewalks - Harbour Pointe Blvd to Evergreen Drive</b>	
<b>County:</b>	Snohomish	
<b>Total Approximate Length:</b>	1,945 LF	
<b>Type of Work:</b>	Site Preparation, Grading, Drainage, Surfacing, Paving with HMA, Delineation, Utilities, Signing, Illumination, Landscaping, and Stormwater Management, etc.	
<b>Total Estimated Costs Work Done Contractor (WDC)</b>	<b>Section</b>	<b>Estimated Cost</b>
	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
	<b>Total Estimated Cost Work Done Contractor</b>	<b>\$563,290.18</b>
	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
	<b>Schedule Total</b>	<b>\$766,074.64</b>

**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
<b>Section 1: Preparation</b>					
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
				<b>Preparation Total:</b>	<b>\$7,342.50</b>
<b>Section 2: Grading</b>					
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
				<b>Grading Total:</b>	<b>\$44,215.00</b>
<b>Section 3: Drainage</b>					
11	Ditch Excavation Incl. Haul	0	CY	\$14.00	\$0.00
12	Quarry Spalls	30	CY	\$50.00	\$1,500.00
				<b>Drainage Total:</b>	<b>\$1,500.00</b>
<b>Section 4: Storm Sewer</b>					
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
				<b>Storm Sewer Total:</b>	<b>\$59,900.00</b>
<b>Section 5: Sanitary Sewer</b>					
				<b>Sanitary Sewer Total:</b>	<b>\$0.00</b>
<b>Section 6: Water Lines</b>					
				<b>Water Lines Total:</b>	<b>\$0.00</b>
<b>Section 7: Surfacing</b>					
17	Gravel Base	2,650	TN	\$9.00	\$23,850.00
18	Crushed Surfacing Top Course	650	TN	\$21.00	\$13,650.00
				<b>Surfacing Total:</b>	<b>\$37,500.00</b>
<b>Section 8: Hot Mix Asphalt</b>					
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
				<b>Hot Mix Asphalt Total:</b>	<b>\$37,917.50</b>
<b>Section 9: Erosion Control</b>					
21	Temporary Erosion/Water Pollution Control	1	EST.	\$7,500.00	\$7,500.00
22	Landscaping	0	LS	\$0.00	\$0.00
				<b>Erosion Control Total:</b>	<b>\$7,500.00</b>
<b>Section 10: Traffic</b>					
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
				<b>Traffic Total:</b>	<b>\$71,620.00</b>
<b>Section 11: Other Items</b>					
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
				<b>Other Items Total:</b>	<b>\$146,150.00</b>
				<b>Estimated Work Done Contractor Subtotal:</b>	<b>\$446,736.60</b>

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

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

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



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

<b>5 53rd Avenue Sidewalks &amp; Bike Marking:</b> 84th Street to 81st Pl.			
Improvement Length	800	Capacity Project:	No
<b>Preliminary Hard Costs</b>	381670.65	Safe-Route-To-School:	No
<b>Reference:</b>	Tuttle	Greenway:	Yes
Additional Facilities	Per 100ft		
None	\$ -	\$ -	
None	\$ -	\$ -	
None	\$ -	\$ -	
<b>Total Hard Costs</b>	\$	381,670.65	
<b>Soft Costs</b>	36%	\$ 137,401.43	
<b>Sub-Total</b>		\$ 519,072.08	
<b>Sales Tax</b>	10%	\$ 51,907.21	
<b>Inflation at 3% Annual</b>	15.92%	\$ 90,899.90	
		<b>2021 Total</b>	\$ 661,879.19

<b>6 SR 526 Sidewalks</b> 84th St. to 40th Ave.			
Improvement Length	1310	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>	167293.69	Safe-Route-To-School:	No
<b>Reference:</b>	Tuttle	Greenway:	Yes
Additional Facilities	Per 100ft		
None	\$ -	\$ -	
None	\$ -	\$ -	
None	\$ -	\$ -	
<b>Total Hard Costs</b>	\$	167,293.69	
<b>Soft Costs</b>	36%	\$ 60,225.73	
<b>Sub-Total</b>		\$ 227,519.42	
<b>Sales Tax</b>	10%	\$ 22,751.94	
<b>Inflation at 3% Annual</b>	15.92%	\$ 39,843.20	
		<b>2021 Total</b>	\$ 290,114.56

<b>7</b>	<b>84th Street Sidewalks</b>	SR 525 to 53rd Ave.					
	Improvement Length			1920	Capacity Project:	No	
	<b>Preliminary Hard Costs</b>	\$	502,768.99		Safe-Route-To-School:	No	
	<b>Reference:</b>	Tuttle			Greenway:	Yes	
	Additional Facilities	Per 100ft					
	None	\$	-	\$		-	
	None	\$	-	\$		-	
	None	\$	-	\$		-	
	<b>Total Hard Costs</b>			\$		502,768.99	
	<b>Soft Costs</b>		36%	\$		180,996.84	
	<b>Sub-Total</b>			\$		683,765.83	
	<b>Sales Tax</b>		10%	\$		68,376.58	
	<b>Inflation at 3% Annual</b>		15.92%	\$		119,741.07	
					<b>2021 Total</b>	\$	871,883.49

<b>8</b>	<b>88th Street Sidewalks &amp; Bike Markings</b>	SR 525 to 47th St.					
	Improvement Length			405	Capacity Project:	No	
	<b>Preliminary Hard Costs</b>	\$	143,398.00		Safe-Route-To-School:	No	
	<b>Reference:</b>	Tuttle			Greenway:	Yes	
	Additional Facilities	Per 100ft					
	None	\$	-	\$		-	
	None	\$	-	\$		-	
	None	\$	-	\$		-	
	<b>Total Hard Costs</b>			\$		143,398.00	
	<b>Soft Costs</b>		36%	\$		51,623.28	
	<b>Sub-Total</b>			\$		195,021.28	
	<b>Sales Tax</b>		10%	\$		19,502.13	
	<b>Inflation at 3% Annual</b>		15.92%	\$		34,152.13	
					<b>2021 Total</b>	\$	248,675.53

<b>9</b>	<b>SR 525 Sidewalks</b>	92nd St. to 86th St.					
	Improvement Length			2230	Capacity Project:	Yes	
	<b>Preliminary Hard Costs</b>	\$	1,272,446.57		Safe-Route-To-School:	No	
	<b>Reference:</b>	Tuttle			Greenway:	Yes	
	Additional Facilities	Per 100ft					
	Bike Markings - Low	\$	539.00	\$		12,019.70	
	None	\$	-	\$		-	
	None	\$	-	\$		-	
	<b>Total Hard Costs</b>			\$		1,284,466.27	
	<b>Soft Costs</b>		36%	\$		462,407.86	
	<b>Sub-Total</b>			\$		1,746,874.13	
	<b>Sales Tax</b>		10%	\$		174,687.41	
	<b>Inflation at 3% Annual</b>		15.92%	\$		305,912.60	
					<b>2021 Total</b>	\$	2,227,474.14

**10 53rd Avenue Sidewalks & Bike Marking: 88th St. to 92nd St.**

Improvement Length	1250	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$ -	\$ -	
<b>Total Hard Costs</b>		\$ 472,158.50	
<b>Soft Costs</b>	36%	\$ 169,977.06	
<b>Sub-Total</b>		\$ 642,135.56	
<b>Sales Tax</b>	10%	\$ 64,213.56	
<b>Inflation at 3% Annual</b>	15.92%	\$ 112,450.78	
		<b>2021 Total</b>	<b>\$ 818,799.90</b>

**11 Chennault Beach Road Sidewalks**

4400 Block

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

**12 Cyrus Way Sidewalks**

HP Blvd. to SR 525

Improvement Length	2800	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>	464,022.45	Safe-Route-To-School:	No
<b>Reference:</b>	Tuttle	Greenway:	Yes
Additional Facilities	Per 100ft		
None	\$ -	\$ -	
None	\$ -	\$ -	
None	\$ -	\$ -	
<b>Total Hard Costs</b>		\$ 464,022.45	
<b>Soft Costs</b>	36%	\$ 167,048.08	
<b>Sub-Total</b>		\$ 631,070.53	
<b>Sales Tax</b>	10%	\$ 63,107.05	
<b>Inflation at 3% Annual</b>	15.92%	\$ 110,513.07	
		<b>2021 Total</b>	<b>\$ 804,690.65</b>

<b>13 Cyrus Way Sidewalks</b>	Evergreen Dr. to South RD.		
Improvement Length		3800	Capacity Project: Yes
<b>Preliminary Hard Costs</b>	\$	511,247.34	Safe-Route-To-School: No
<b>Reference:</b>	Tuttle		Greenway: Yes
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	511,247.34
<b>Soft Costs</b>		36%	\$ 184,049.04
<b>Sub-Total</b>		\$	695,296.38
<b>Sales Tax</b>		10%	\$ 69,529.64
<b>Inflation at 3% Annual</b>		15.92%	\$ 121,760.30
			<b>2021 Total \$ 886,586.32</b>

<b>14 Cyrus Way Sidewalks</b>	HP Blvd. to Evergreen Dr.		
Improvement Length		3890	Capacity Project: Yes
<b>Preliminary Hard Costs</b>	\$	563,290.18	Safe-Route-To-School: No
<b>Reference:</b>	Tuttle		Greenway: Yes
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	563,290.18
<b>Soft Costs</b>		36%	\$ 202,784.46
<b>Sub-Total</b>		\$	766,074.64
<b>Sales Tax</b>		10%	\$ 76,607.46
<b>Inflation at 3% Annual</b>		15.92%	\$ 134,154.99
			<b>2021 Total \$ 976,837.09</b>

<b>15 Waterfront Promenade</b>	Waterfront from Edgewater to LHP		
Improvement Length		3000	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	Waterfront Master Plan		Greenway: Yes
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	-
<b>Soft Costs</b>		36%	\$ -
<b>Sub-Total</b>		\$	-
<b>Sales Tax</b>		10%	\$ -
<b>Inflation at 3% Annual</b>		15.92%	\$ -
			<b>2019 Total \$ 319,309.00</b>

<b>16 Share Use Path Boeing Rec. Center</b>	Muk.Blvd. To 36th Ave West		
Improvement Length	3600	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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
<b>Total Hard Costs</b>			\$ 1,549,404.00
<b>Soft Costs</b>	36%		\$ 557,785.44
<b>Sub-Total</b>			\$ 2,107,189.44
<b>Additional Contingency</b>	20%		\$ 421,437.89
<b>Sales Tax</b>	10%		\$ 252,862.73
<b>Inflation at 3% Annual</b>	15.92%		\$ 442,813.22
<b>2021 Total</b>			\$ 3,224,303.28

<b>17 5th Street Bike &amp; Ped Improvements In SR 525 to City Limits</b>			
Improvement Length	10000	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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
<b>Total Hard Costs</b>			\$ 1,396,400.00
<b>Soft Costs</b>	36%		\$ 502,704.00
<b>Sub-Total</b>			\$ 1,899,104.00
<b>Additional Contingency</b>	20%		\$ 379,820.80
<b>Sales Tax</b>	10%		\$ 227,892.48
<b>Inflation at 3% Annual</b>	15.92%		\$ 399,085.31
<b>2021 Total</b>			\$ 2,905,902.59
*not all facilities run length of improvement area			

<b>19 Shared Use Path to Old Town</b>	Park Avenue to Sky-Hi-La		
Improvement Length	875	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 371,875.00
<b>Soft Costs</b>	36%		\$ 133,875.00
<b>Sub-Total</b>			\$ 505,750.00
<b>Additional Contingency</b>	20%		\$ 101,150.00
<b>Sales Tax</b>	10%		\$ 60,690.00
<b>Inflation at 3% Annual</b>	15.92%		\$ 106,280.33
<b>2021 Total</b>			\$ 773,870.33

<b>20 11th Street Sidewalk</b>	Loveland Ave to Campbell Ave		
Improvement Length		525	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: Yes
<b>Reference:</b>	City Staff		Greenway: No
Additional Facilities	Per 100ft		
Sidewalks & Paving - Median	\$	71,514.00	\$ 375,448.50
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 375,448.50
<b>Soft Costs</b>		36%	\$ 135,161.46
<b>Sub-Total</b>			<b>\$ 510,609.96</b>
<b>Sales Tax</b>		10%	\$ 51,061.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 89,418.02
<b>2021 Total</b>			<b>\$ 651,088.97</b>

<b>21 Sky Hila Pathway</b>	Goat Trail Rd to 11th Street		
Improvement Length		1550	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: Yes
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 1,657,652.46
<b>Soft Costs</b>		36%	\$ 596,754.89
<b>Sub-Total</b>			<b>\$ 2,254,407.35</b>
<b>Sales Tax</b>		10%	\$ 225,440.74
<b>Inflation at 3% Annual</b>		15.92%	\$ 394,791.82
<b>2021 Total</b>			<b>\$ 2,874,639.90</b>

<b>22 Goat Trail Path &amp; Bike Markings</b>	Goat Trail Loop Rd to Washington Ave		
Improvement Length		1220	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: Yes
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 1,304,732.90
<b>Soft Costs</b>		36%	\$ 469,703.84
<b>Sub-Total</b>			<b>\$ 1,774,436.74</b>
<b>Additional Contingency</b>		20%	\$ 354,887.35
<b>Sales Tax</b>		10%	\$ 177,443.67
<b>Inflation at 3% Annual</b>		15.92%	\$ 367,237.43
<b>2021 Total</b>			<b>\$ 2,674,005.19</b>



<b>23 SR 525 Corridor Study</b>	76th Street to Front Street			
Study Length		7300	Capacity Project:	No
<b>Preliminary Hard Costs</b>		100000	Safe-Route-To-School:	No
<b>Reference:</b>	City Staff		Greenway:	No
Additional Facilities	Per 100ft			
None	\$	-	\$	-
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total Hard Costs</b>			\$	100,000.00
<b>Soft Costs</b>			\$	-
<b>Sub-Total</b>			\$	<b>100,000.00</b>
<b>Additional Contingency</b>		20%	\$	20,000.00
<b>Sales Tax</b>		10%		
<b>Inflation at 3% Annual</b>		15.92%	\$	19,104.00
			<b>2021 Total</b>	<b>\$ 139,104.00</b>

<b>24 Stairstep Path &amp; Bike Markings</b>	76th Street SW to 8th Drive			
Improvement Length		4475	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	Yes
<b>Reference:</b>	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	\$	-	\$	-
<b>Total Hard Costs</b>			\$	3,224,371.75
<b>Soft Costs</b>		36%	\$	1,160,773.83
<b>Sub-Total</b>			\$	<b>4,385,145.58</b>
<b>Additional Contingency</b>		20%	\$	877,029.12
<b>Sales Tax</b>		10%	\$	526,217.47
<b>Inflation at 3% Annual</b>		15.92%	\$	921,512.03
			<b>2021 Total</b>	<b>\$ 6,709,904.20</b>

<b>25 44th Shared-Use Path</b>	84th Street to 76th Street SW			
Improvement Length		2550	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	Yes
<b>Reference:</b>	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	\$	-	\$	-
<b>Total Hard Costs</b>			\$	1,083,750.00
<b>Soft Costs</b>		36%	\$	390,150.00
<b>Sub-Total</b>			\$	<b>1,473,900.00</b>
<b>Additional Contingency</b>		20%	\$	294,780.00
<b>Sales Tax</b>		10%	\$	176,868.00
<b>Inflation at 3% Annual</b>		15.92%	\$	309,731.24
			<b>2021 Total</b>	<b>\$ 2,255,279.24</b>

<b>26 SR 525 Sidewalks</b>	81st Place to 76th Street		
Improvement Length		1875	Capacity Project: Yes
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: Yes
<b>Reference:</b>	City Staff		Greenway: Yes
Additional Facilities	Per 100ft		
Sidewalks & Paving - Low	\$	37,233.68	\$ 698,131.50
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 698,131.50
<b>Soft Costs</b>		36%	\$ 251,327.34
<b>Sub-Total</b>			\$ 949,458.84
<b>Sales Tax</b>		10%	\$ 94,945.88
<b>Inflation at 3% Annual</b>		15.92%	\$ 166,269.23
<b>2021 Total</b>			\$ 1,210,673.96

<b>27 88th Street Sidewalks &amp; Bike Markings</b>	SR 525 to 56th Pl West		
Improvement Length		5050	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 3,638,676.50
<b>Soft Costs</b>		36%	\$ 1,309,923.54
<b>Sub-Total</b>			\$ 4,948,600.04
<b>Additional Contingency</b>		20%	\$ 989,720.01
<b>Sales Tax</b>		10%	\$ 593,832.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 1,039,918.61
<b>2021 Total</b>			\$ 7,572,070.66

<b>28 54th Avenue Sidewalks &amp; Bike Markings</b>	84th Street to 88th Street		
Improvement Length		2500	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 1,801,325.00
<b>Soft Costs</b>		36%	\$ 648,477.00
<b>Sub-Total</b>			\$ 2,449,802.00
<b>Sales Tax</b>		10%	\$ 244,980.20
<b>Inflation at 3% Annual</b>		15.92%	\$ 429,009.33
<b>2021 Total</b>			\$ 3,123,791.53

<b>29 84th Street Sidewalks</b>	Nakeeta Lane to 53rd Ave West			
Improvement Length		660	Capacity Project:	No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	No
<b>Reference:</b>	City Staff		Greenway:	Yes
Additional Facilities	Per 100ft			
Sidewalks & Paving - High	\$	105,794.32	\$	698,242.51
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total Hard Costs</b>			\$	698,242.51
<b>Soft Costs</b>		36%	\$	251,367.30
<b>Sub-Total</b>			\$	949,609.81
<b>Sales Tax</b>		10%	\$	94,960.98
<b>Inflation at 3% Annual</b>		15.92%	\$	166,295.67
<b>2021 Total</b>				<b>\$ 1,210,866.46</b>

<b>30 49th Place Transit Connection</b>	49th Ave to SR 525			
Improvement Length		400	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	No
<b>Reference:</b>	City Staff		Greenway:	No
Additional Facilities	Per 100ft			
Sidewalks & Paving - Low	\$	37,233.68	\$	148,934.72
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total Hard Costs</b>			\$	148,934.72
<b>Soft Costs</b>		36%	\$	53,616.50
<b>Sub-Total</b>			\$	202,551.22
<b>Sales Tax</b>		10%	\$	20,255.12
<b>Inflation at 3% Annual</b>		15.92%	\$	35,470.77
<b>2021 Total</b>				<b>\$ 258,277.11</b>

<b>31 92nd Street Sidewalk &amp; Bike Markings</b>	SR 525 to 91st Pl SW			
Improvement Length		4100	Capacity Project:	No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$	-
<b>Total Hard Costs</b>			\$	2,954,173.00
<b>Soft Costs</b>		36%	\$	1,063,502.28
<b>Sub-Total</b>			\$	4,017,675.28
<b>Sales Tax</b>		10%	\$	401,767.53
<b>Inflation at 3% Annual</b>		15.92%	\$	703,575.30
<b>2021 Total</b>				<b>\$ 5,123,018.10</b>

<b>32 81st Place SW SRTS</b>	SR 525 to 53rd Ave West		
Improvement Length	2700	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	Yes
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 1,945,431.00
<b>Soft Costs</b>		36%	\$ 700,355.16
<b>Sub-Total</b>			\$ 2,645,786.16
<b>Sales Tax</b>		10%	\$ 264,578.62
<b>Inflation at 3% Annual</b>		15.92%	\$ 463,330.07
<b>2021 Total</b>			<b>\$ 3,373,694.85</b>

<b>33 53rd Avenue Sidewalks &amp; Bike Marking: 80th to 81st</b>			
Improvement Length	1100	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 792,583.00
<b>Soft Costs</b>		36%	\$ 285,329.88
<b>Sub-Total</b>			\$ 1,077,912.88
<b>Sales Tax</b>		10%	\$ 107,791.29
<b>Inflation at 3% Annual</b>		15.92%	\$ 188,764.10
<b>2021 Total</b>			<b>\$ 1,374,468.27</b>

<b>34 88th Sidewalks &amp; Bike Lanes</b>	48th Pl West to 44th Ave West		
Improvement Length	1200	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 453,272.16
<b>Soft Costs</b>		36%	\$ 163,177.98
<b>Sub-Total</b>			\$ 616,450.14
<b>Sales Tax</b>		10%	\$ 61,645.01
<b>Inflation at 3% Annual</b>		15.92%	\$ 107,952.75
<b>2021 Total</b>			<b>\$ 786,047.90</b>

<b>35 80th Sidewalks &amp; Sharrows</b>	SR 525 to 44th Ave West		
Improvement Length		2000 Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	Yes
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 1,441,060.00
<b>Soft Costs</b>		36%	\$ 518,781.60
<b>Sub-Total</b>			\$ 1,959,841.60
<b>Sales Tax</b>		10%	\$ 195,984.16
<b>Inflation at 3% Annual</b>		15.92%	\$ 343,207.46
<b>2021 Total</b>			\$ 2,499,033.22

<b>36 92nd Street Sidewalk &amp; Bike Markings</b>	SR 525 to 44th Ave West		
Improvement Length		1050 Capacity Project:	Yes
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 396,613.14
<b>Soft Costs</b>		36%	\$ 142,780.73
<b>Sub-Total</b>			\$ 539,393.87
<b>Sales Tax</b>		10%	\$ 53,939.39
<b>Inflation at 3% Annual</b>		15.92%	\$ 94,458.65
<b>2021 Total</b>			\$ 687,791.91

<b>37 SR 525 Bike Lane</b>	Paine Field Blvd to 92nd Street		
Improvement Length		2000 Capacity Project:	Yes
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	City Staff	Greenway:	Yes
Additional Facilities	Per 100ft		
Bike Markings - Medium	\$	1,151.00	\$ 23,020.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 23,020.00
<b>Soft Costs</b>		36%	\$ 8,287.20
<b>Sub-Total</b>			\$ 31,307.20
<b>Sales Tax</b>		10%	\$ 3,130.72
<b>Inflation at 3% Annual</b>		15.92%	\$ 5,482.52
<b>2021 Total</b>			\$ 39,920.44

<b>38 Harbour Place Shared Use Path</b>	Paine Field Blvd to Harbour Pointe Blvd.			
Improvement Length	2250	Capacity Project:	No	
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No	
<b>Reference:</b>	City Staff	Greenway:	Yes	
Additional Facilities	Per 100ft			
10' Asphalt Path - Medium Signage	\$	19,500.00	\$	438,750.00
Bike Markings - Low	\$	539.00	\$	12,127.50
ROW Purchase 12' Tract (Estimate)	\$	24,000.00	\$	540,000.00
<b>Total Hard Costs</b>			\$	990,877.50
<b>Soft Costs</b>		36%	\$	356,715.90
<b>Sub-Total</b>			\$	1,347,593.40
<b>Sales Tax</b>		10%	\$	134,759.34
<b>Inflation at 3% Annual</b>		15.92%	\$	235,990.56
			<b>2021 Total</b>	<b>\$ 1,718,343.30</b>

<b>39 Harbour Pointe Blvd. North Cycle Track</b>	48th to Harbour Place			
Improvement Length	790	Capacity Project:	No	
<b>Preliminary Hard Costs</b>	49100	Safe-Route-To-School:	No	
<b>Reference:</b>	CDC	Greenway:	Yes	
Additional Facilities	Per 100ft			
None	\$	-	\$	-
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total Hard Costs</b>			\$	49,100.00
<b>Soft Costs</b>		36%	\$	17,676.00
<b>Sub-Total</b>			\$	66,776.00
<b>Additional Contingency</b>		20%	\$	13,355.20
<b>Sales Tax</b>		10%	\$	8,013.12
<b>Inflation at 3% Annual</b>		15.92%	\$	14,032.58
			<b>2021 Total</b>	<b>\$ 102,176.90</b>

<b>40 Harbour Pointe Blvd. Bike Markings</b>	Harbour Pointe Blvd Loop			
Improvement Length	26960	Capacity Project:	No	
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No	
<b>Reference:</b>	City Staff	Greenway:	Yes	
Additional Facilities	Per 100ft			
Bike Markings - Low	\$	539.00	\$	145,314.40
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total Hard Costs</b>			\$	145,314.40
<b>Soft Costs</b>		36%	\$	52,313.18
<b>Sub-Total</b>			\$	197,627.58
<b>Sales Tax</b>		10%	\$	19,762.76
<b>Inflation at 3% Annual</b>		15.92%	\$	34,608.54
			<b>2021 Total</b>	<b>\$ 251,998.88</b>



<b>41 Harbour Reach Drive Bike Retrofit</b>	Harbour Pointe Blvd to Harbour Pointe Blvd.			
Improvement Length		10000	Capacity Project:	No
<b>Preliminary Costs</b>	\$	2,200,000.00	Safe-Route-To-School:	No
<b>Reference:</b>	City Staff		Greenway:	Yes
Additional Facilities	Per 100ft			
None	\$	-	\$	-
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total Costs</b>			\$	2,200,000.00
<b>2021 Total</b>				\$ 2,200,000.00

<b>42 Harbour Pointe Blvd. S. Widening</b>	Cyrus Way to SR 525			
Improvement Length		2200	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>	\$	1,929,850.00	Safe-Route-To-School:	No
<b>Reference:</b>	City Staff		Greenway:	Yes
Additional Facilities	Per 100ft			
None	\$	-	\$	-
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total 2016 Costs</b>			\$	1,929,850.00
				\$ -
				\$ 1,929,850.00
<b>2016 Costs</b>				\$ 1,929,850.00

<b>43 Cyrus Way Road Extension</b>	Russell Road to Chennault Beach Drive			
Improvement Length		900	Capacity Project:	Yes
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$	-
<b>Total Hard Costs</b>			\$	3,694,851.00
<b>Soft Costs</b>		36%	\$	1,330,146.36
<b>Sub-Total</b>			\$	5,024,997.36
<b>Sales Tax</b>		10%	\$	502,499.74
<b>Inflation at 3% Annual</b>		15.92%	\$	879,977.54
<b>2021 Total</b>				\$ 6,407,474.63

<b>44 Endeavor Elementary Shared Use Path</b>	Harbour Pointe Blvd to Beverly Park		
Improvement Length	3800	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	City Staff	Greenway:	Yes
Additional Facilities	Per 100ft		
10' Asphalt Path - Medium Signage	\$	19,500.00	\$ 741,000.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	741,000.00
<b>Soft Costs</b>		36% \$	266,760.00
<b>Sub-Total</b>		\$	1,007,760.00
<b>Sales Tax</b>		10% \$	100,776.00
<b>Inflation at 3% Annual</b>		15.92% \$	176,478.93
<b>2021 Total</b>			<b>\$ 1,285,014.93</b>

<b>45 South Gulch Shared Use Path</b>	Chennault Beach Road to Harbour Heights Parkway		
Improvement Length	550	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	City Staff	Greenway:	No
Additional Facilities	Per 100ft		
10' Asphalt Path - Low Signage	\$	18,500.00	\$ 101,750.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	101,750.00
<b>Soft Costs</b>		36% \$	36,630.00
<b>Sub-Total</b>		\$	138,380.00
<b>Wetland Mitigation</b>		25% \$	34,595.00
<b>Additional Contingency</b>		20% \$	27,676.00
<b>Sales Tax</b>		10% \$	20,065.10
<b>Inflation at 3% Annual</b>		15.92% \$	35,138.00
<b>2021 Total</b>			<b>\$ 255,854.10</b>

<b>46 Airport Road Shared Use Path</b>	Airport Road		
Improvement Length	12000	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>		\$	7,590,000.00
<b>Soft Costs</b>		36% \$	2,732,400.00
<b>Sub-Total</b>		\$	10,322,400.00
<b>Additional Contingency</b>		30% \$	3,096,720.00
<b>Sales Tax</b>		10% \$	1,341,912.00
<b>Inflation at 3% Annual</b>		15.92% \$	2,349,956.29
<b>2021 Total</b>			<b>\$ 17,110,988.29</b>

<b>47</b>	121st Bike Connection	121st to SR 525					
	Improvement Length		3000	Capacity Project:		No	
	<b>Preliminary Hard Costs</b>			Safe-Route-To-School:		No	
	<b>Reference:</b>	City Staff		Greenway:		No	
	Additional Facilities	Per 100ft					
	Bike Lane Marking - High	\$	7,075.00	\$	212,250.00		
	None	\$	-	\$	-		
	None	\$	-	\$	-		
	<b>Total Hard Costs</b>			\$	212,250.00		
	<b>Soft Costs</b>		36%	\$	76,410.00		
	<b>Sub-Total</b>			\$	288,660.00		
	<b>Additional Contingency</b>		20%	\$	57,732.00		
	<b>Sales Tax</b>		10%	\$	34,639.20		
	<b>Inflation at 3% Annual</b>		15.92%	\$	60,660.17		
				<b>2021 Total</b>	\$	441,691.37	

<b>48</b>	Mid-Town Mukilteo Sidewalk & Bike M	81st Place to 86th					
	Improvement Length		2800	Capacity Project:		Yes	
	<b>Preliminary Hard Costs</b>			Safe-Route-To-School:		No	
	<b>Reference:</b>	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	\$	-	\$	-		
	<b>Total Hard Costs</b>			\$	2,962,241.00		
	<b>Soft Costs</b>		36%	\$	1,066,407.00		
	<b>Sub-Total</b>			\$	4,028,648.00		
	<b>Additional Contingency</b>		20%	\$	805,730.00		
	<b>Sales Tax</b>		10%	\$	483,438.00		
	<b>Inflation at 3% Annual</b>		15.92%	\$	846,596.00		
				<b>2021 Total</b>	\$	6,164,412.00	

<b>49</b>	Harbour Reach Drive Extension	Harbour Pointe Blvd to Beverly Park Rd					
	Improvement Length		3700	Capacity Project:		Yes	
	<b>Preliminary Hard Costs</b>	\$	16,000,000.00	Safe-Route-To-School:		No	
	<b>Reference:</b>	City Staff		Greenway:		Yes	
	Additional Facilities	Per 100ft					
	None	\$	-	\$	-		
	None	\$	-	\$	-		
	None	\$	-	\$	-		
	<b>Total Hard Costs</b>			\$	16,000,000.00		
	<b>Soft Costs</b>			\$	-		
	<b>Sub-Total</b>						
	<b>Sales Tax</b>						
	<b>Inflation at 3% Annual</b>						
				<b>2021 Total</b>	\$	-	

<b>50 Harbour Reach Drive Connection</b>	130th Place SW to Harbour Reach Drive		
Improvement Length	250	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 108,750.00
<b>Soft Costs</b>		36%	\$ 39,150.00
<b>Sub-Total</b>			\$ 147,900.00
<b>Additional Contingency</b>		20%	\$ 29,580.00
<b>Sales Tax</b>		10%	\$ 17,748.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 31,080.30
<b>2021 Total</b>			<b>\$ 226,308.30</b>

<b>51 Washington Ave Sidewalks</b>	5th Street to Goat Trail Rd		
Improvement Length	2300	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 2,445,666.36
<b>Soft Costs</b>		36%	\$ 880,439.89
<b>Sub-Total</b>			\$ 3,326,106.25
<b>Sales Tax</b>		10%	\$ 332,610.63
<b>Inflation at 3% Annual</b>		15.92%	\$ 582,467.73
<b>2021 Total</b>			<b>\$ 4,241,184.60</b>

<b>52 47th Pedestrian &amp; Bike Improvements</b>	Harbour Pointe Blvd N. to Chennault Beach Drive		
Improvement Length	7400	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	City Staff	Greenway:	Yes
Additional Facilities	Per 100ft		
Bike Markings - Medium	\$	1,151.00	\$ 85,174.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 85,174.00
<b>Soft Costs</b>		36%	\$ 30,662.64
<b>Sub-Total</b>			\$ 115,836.64
<b>Additional Contingency</b>		20%	\$ 23,167.33
<b>Sales Tax</b>		10%	\$ 13,900.40
<b>Inflation at 3% Annual</b>		15.92%	\$ 24,342.37
<b>2021 Total</b>			<b>\$ 177,246.74</b>

<b>53 Chennault Beach Road Bike Markings</b>	Harbour Reach Drive to SR 525		
Improvement Length	4700	Capacity Project:	No
<b>Preliminary Hard Costs</b>		Safe-Route-To-School:	No
<b>Reference:</b>	City Staff	Greenway:	Yes
Additional Facilities	Per 100ft		
Bike Markings - Low	\$	539.00	\$ 25,333.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	25,333.00
<b>Soft Costs</b>		36%	\$ 9,119.88
<b>Sub-Total</b>		\$	34,452.88
<b>Sales Tax</b>		10%	\$ 3,445.29
<b>Inflation at 3% Annual</b>		15.92%	\$ 6,033.39
<b>2021 Total</b>			<b>\$ 43,931.56</b>

<b>54 Beverly Park Intersection Improvement:</b>	Beverly Park Intersection		
Improvement Length		0	Capacity Project: Yes
<b>Preliminary Hard Costs</b>	\$	159,600.00	Safe-Route-To-School: No
<b>Reference:</b>	CDC		Greenway: No
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	159,600.00
<b>Soft Costs</b>		36%	\$ 57,456.00
<b>Sub-Total</b>		\$	217,056.00
<b>Project Cost Adjustment (+)</b>		\$	44,100.00
<b>Sales Tax</b>		10%	\$ 26,116.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 45,734.00
<b>2021 Total</b>			<b>\$ 333,000.00</b>

<b>55 Beverly Park Intersection Improvement:</b>	Beverly Park Intersection		
Improvement Length		0	Capacity Project: Yes
<b>Preliminary Hard Costs</b>		786100	Safe-Route-To-School: No
<b>Reference:</b>	City Staff		Greenway: No
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	786,100.00
<b>Soft Costs</b>		36%	\$ 282,996.00
<b>Sub-Total</b>		\$	1,069,096.00
<b>Additional Contingency</b>		20%	\$ 213,819.00
<b>Sales Tax</b>		10%	\$ 128,292.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 224,664.15
<b>2021 Total</b>			<b>\$ 1,635,871.15</b>

**56 Chennault Beach Drive Sidewalk & Bike 60th to Marine View Drive**

Improvement Length		2275	Capacity Project:	No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$	-
<b>Total Hard Costs</b>			\$	2,419,083.03
<b>Soft Costs</b>		36%	\$	870,869.89
<b>Sub-Total</b>			\$	3,289,953.00
<b>Additional Contingency</b>		20%	\$	657,991.00
<b>Sales Tax</b>		10%	\$	394,794.00
<b>Inflation at 3% Annual</b>		15.92%	\$	691,363.89
<b>2021 Total</b>				<b>\$ 5,034,101.89</b>

**57 Central Drive Sidewalk & Bike Markings 103rd to 64th Pl West**

Improvement Length		2280	Capacity Project:	No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	No
<b>Reference:</b>	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	\$	-	\$	-
<b>Total Hard Costs</b>			\$	1,656,762.00
<b>Soft Costs</b>		36%	\$	596,434.32
<b>Sub-Total</b>			\$	2,253,196.00
<b>Additional Contingency</b>		20%	\$	450,639.00
<b>Sales Tax</b>		10%	\$	270,384.00
<b>Inflation at 3% Annual</b>		15.92%	\$	473,495.66
<b>2021 Total</b>				<b>\$ 3,447,714.66</b>

**58 64th Place West Central Drive to Chennault Beach Dr**

Improvement Length		1650	Capacity Project:	No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School:	No
<b>Reference:</b>	City Staff		Greenway:	No
Additional Facilities	Per 100ft			
Sidewalks & Paving - Median	\$	71,514.00	\$	1,179,981.00
None	\$	-	\$	-
None	\$	-	\$	-
<b>Total Hard Costs</b>			\$	1,179,981.00
<b>Soft Costs</b>		36%	\$	424,793.16
<b>Sub-Total</b>			\$	1,604,774.16
<b>Sales Tax</b>		10%	\$	160,477.42
<b>Inflation at 3% Annual</b>		15.92%	\$	281,028.05
<b>2021 Total</b>				<b>\$ 2,046,279.63</b>



<b>59 76th Street Crossing</b>	76th Street & SR 525		
Improvement Length		0 Capacity Project:	No
<b>Preliminary Hard Costs</b>	\$	67,200.00	Safe-Route-To-School: No
<b>Reference:</b>	CDC		Greenway: Yes
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	67,200.00
<b>Soft Costs</b>		36%	\$ 24,192.00
<b>Sub-Total</b>		\$	91,392.00
<b>Project Cost Adjustment (+)</b>		\$	18,559.00
<b>Sales Tax</b>		10%	\$ 10,995.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 19,255.00
<b>2021 Total</b>			<b>\$ 140,201.00</b>

<b>60 Goat Trail Pedestrian Bridge</b>	Washington Ave over SR 525		
Improvement Length		0 Capacity Project:	No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	City Staff		Greenway: Yes
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	-
<b>Soft Costs</b>		36%	\$ -
<b>Sub-Total</b>		\$	-
<b>Sales Tax</b>		10%	\$ -
<b>Inflation at 3% Annual</b>		15.92%	\$ -
<b>2021 Total</b>			<b>\$ -</b>

<b>61 80th/81st Crossing</b>	80th/81st & SR 525		
Improvement Length		0 Capacity Project:	No
<b>Preliminary Hard Costs</b>	\$	67,200.00	Safe-Route-To-School: No
<b>Reference:</b>	CDC		Greenway: Yes
Additional Facilities	Per 100ft		
None	\$	-	\$ -
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>		\$	67,200.00
<b>Soft Costs</b>		36%	\$ 24,192.00
<b>Sub-Total</b>		\$	91,392.00
<b>Project Cost Adjustment (+)</b>		\$	18,559.00
<b>Sales Tax</b>		10%	\$ 10,995.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 19,255.00
<b>2021 Total</b>			<b>\$ 140,201.00</b>

<b>62 86th Crossing</b>	86th & SR 525				
Improvement Length			0	Capacity Project:	No
<b>Preliminary Hard Costs</b>	\$	67,200.00		Safe-Route-To-School:	No
<b>Reference:</b>	City Staff			Greenway:	No
Additional Facilities	Per 100ft				
None	\$	-	\$	-	
None	\$	-	\$	-	
None	\$	-	\$	-	
<b>Total Hard Costs</b>			\$	67,200.00	
<b>Soft Costs</b>		36%	\$	24,192.00	
<b>Sub-Total</b>			\$	91,392.00	
<b>Project Cost Adjustment (+)</b>			\$	18,559.00	
<b>Sales Tax</b>		10%	\$	10,995.00	
<b>Inflation at 3% Annual</b>		15.92%	\$	19,255.00	
				<b>2021 Total</b>	<b>\$ 140,201.00</b>

<b>63 2nd Street Crosswalk</b>	2nd Street & SR 525				
Improvement Length			0	Capacity Project:	No
<b>Preliminary Hard Costs</b>	\$	67,200.00		Safe-Route-To-School:	No
<b>Reference:</b>	City Staff			Greenway:	No
Additional Facilities	Per 100ft				
None	\$	-	\$	-	
None	\$	-	\$	-	
None	\$	-	\$	-	
<b>Total Hard Costs</b>			\$	67,200.00	
<b>Soft Costs</b>		36%	\$	24,192.00	
<b>Sub-Total</b>			\$	91,392.00	
<b>Project Cost Adjustment (+)</b>			\$	18,559.00	
<b>Sales Tax</b>		10%	\$	10,995.00	
<b>Inflation at 3% Annual</b>		15.92%	\$	19,255.00	
				<b>2021 Total</b>	<b>\$ 140,201.00</b>

<b>64 South Road Markings</b>	SR 525 to Harbour Reach Drive			Project List:	#REF!
Improvement Length			5000	Capacity Project:	No
<b>Preliminary Hard Costs</b>				Safe-Route-To-School:	No
<b>Reference:</b>	City Staff			Greenway:	Yes
Additional Facilities	Per 100ft				
Bike Markings - Medium	\$	1,151.00	\$	57,550.00	
None	\$	-	\$	-	
None	\$	-	\$	-	
<b>Total Hard Costs</b>			\$	57,550.00	
<b>Soft Costs</b>		36%	\$	20,718.00	
<b>Sub-Total</b>			\$	78,268.00	
<b>Sales Tax</b>		10%	\$	7,826.80	
<b>Inflation at 3% Annual</b>		15.92%	\$	13,706.29	
				<b>2021 Total</b>	<b>\$ 99,801.09</b>

<b>65 Possession Way Bike Markings</b>	HP Blvd to Harbour Reach Drive		
Improvement Length		4400	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	City Staff		Greenway: Yes
Additional Facilities	Per 100ft		
Bike Markings - Medium	\$	1,151.00	\$ 50,644.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 50,644.00
<b>Soft Costs</b>		36%	\$ 18,231.84
<b>Sub-Total</b>			\$ 68,875.84
<b>Sales Tax</b>		10%	\$ 6,887.58
<b>Inflation at 3% Annual</b>		15.92%	\$ 12,061.54
<b>2021 Total</b>			\$ 87,824.96

<b>66 Blue Heron Drive Bike Markings</b>	HP Blvd to Harbour Reach Drive.		
Improvement Length		3400	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	City Staff		Greenway: Yes
Additional Facilities	Per 100ft		
Bike Markings - Low	\$	539.00	\$ 18,326.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 18,326.00
<b>Soft Costs</b>		36%	\$ 6,597.36
<b>Sub-Total</b>			\$ 24,923.36
<b>Sales Tax</b>		10%	\$ 2,492.34
<b>Inflation at 3% Annual</b>		15.92%	\$ 4,364.58
<b>2021 Total</b>			\$ 31,780.27

<b>67 526 Shared Use Path</b>	84th Street to Boeing		
Improvement Length		6300	Capacity Project: Yes
<b>Preliminary Hard Costs</b>	\$	3,351,000.00	Safe-Route-To-School: No
<b>Reference:</b>	City Staff		Greenway: Yes
Additional Facilities	Per 100ft		
ROW Purchase			\$ 70,000.00
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 3,421,000.00
<b>Soft Costs</b>		36%	\$ 1,231,560.00
<b>Sub-Total</b>			\$ 4,652,560.00
<b>Additional Contingency</b>		30%	\$ 1,395,768.00
<b>Sales Tax</b>		10%	\$ 604,833.00
<b>Inflation at 3% Annual</b>		15.92%	\$ 1,059,183.23
<b>2021 Total</b>			\$ 7,712,344.23

<b>68 Possession View Lane Sidewalks</b>	Washington Ave to Goat Trial Rd		
Improvement Length		834	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: Yes
<b>Reference:</b>	City Staff		Greenway: No
Additional Facilities	Per 100ft		
Sidewalks & Paving - Median	\$	71,514.00	\$ 596,426.76
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 596,426.76
<b>Soft Costs</b>		36%	\$ 214,713.63
<b>Sub-Total</b>			\$ 811,140.39
<b>Sales Tax</b>		10%	\$ 81,114.04
<b>Inflation at 3% Annual</b>		15.92%	\$ 142,046.91
<b>2021 Total</b>			\$ 1,034,301.33

<b>69 Chennault Beach Road Bike Markings</b>	Harbour Pointe Blvd to Project 56 & 57		
Improvement Length		3700	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	City Staff		Greenway: No
Additional Facilities	Per 100ft		
Bike Lane Marking - Low	\$	2,467.00	\$ 20,574.78
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 20,574.78
<b>Soft Costs</b>		36%	\$ 7,406.92
<b>Sub-Total</b>			\$ 27,981.70
<b>Sales Tax</b>		10%	\$ 2,798.17
<b>Inflation at 3% Annual</b>		15.92%	\$ 4,900.16
<b>2021 Total</b>			\$ 35,680.03

<b>70 62nd Street &amp; Canyon Road</b>	62nd Street & Canyon Road		
Improvement Length		2150	Capacity Project: No
<b>Preliminary Hard Costs</b>			Safe-Route-To-School: No
<b>Reference:</b>	City Staff		Greenway: No
Additional Facilities	Per 100ft		
Sidewalks & Paving - Median	\$	71,514.00	\$ 596,426.76
None	\$	-	\$ -
None	\$	-	\$ -
<b>Total Hard Costs</b>			\$ 596,426.76
<b>Soft Costs</b>		36%	\$ 214,713.63
<b>Sub-Total</b>			\$ 811,140.39
<b>Sales Tax</b>		10%	\$ 81,114.04
<b>Inflation at 3% Annual</b>		15.92%	\$ 142,046.91
<b>2021 Total</b>			\$ 1,034,301.33