BUSINESS OF THE CITY COUNCIL
CITY OF MERCER ISLAND

AB 5871
May 18, 2021
Consent Calendar

AGENDA BILL INFORMATION

TITLE:	AB 5871: 2021 East Mercer Way Emergency Roadway Repair	☐ Discussion Only ☒ Action Needed:
RECOMMENDED ACTION:	Appropriate funds from the Street Fund Balance and Award the construction project to address Emergency Roadway Repairs.	☒ Motion ☐ Ordinance ☐ Resolution

DEPARTMENT:	Public Works
STAFF:	Jason Kintner, Chief of Operations Clint Morris, Street Engineer
COUNCIL LIAISON:	n/a
EXHIBITS:	1. Project Location Map
CITY COUNCIL PRIORITY:	n/a

AMOUNT OF EXPENDITURE	$ 337,872
AMOUNT BUDGETED	$ n/a
APPROPRIATION REQUIRED	$ 337,872

SUMMARY

This is a bid award and funding authorization for an emergency roadway repair on East Mercer Way, which includes construction of a soldier pile wall, repairing damaged guardrail, and removing the temporary traffic controls.

BACKGROUND

In early December 2020, a landslide occurred in the 5600 block of East Mercer Way (Exhibit 1) within the public right-of-way, threatening the stability of the northbound travel lane. Slide debris was carried downslope onto two private properties. Public Works crews responded, covering exposed soils with plastic sheeting, and closing the northbound lane to keep traffic away from the slide area. In the days following the slide event, a geotechnical engineer evaluated the site and recommended that the lane remain closed until an engineered repair was designed and constructed. Public Works crews installed portable traffic signals to regulate one-way traffic through the area 24-hours a day. The signals remain in operation.

Given the timing of the slide (occurring just after the City adopted the 2021-2022 budget), funding for this repair work has not yet been appropriated.

Engineering proceeded in early February, with soil borings and site surveying. The preferred repair solution was determined to be a soldier pile retaining wall. Design work on the retaining wall occurred in late February and March, and a construction bid package was advertised in early April. Five bids were received, and staff is ready to award the contract and proceed with the repair work.

Timing is of the essence to complete this project, as repaving of East Mercer Way from SE 53rd Street to the 6600 block is planned for this summer.

PROJECT DESCRIPTION

A soldier pile retaining wall consists of drilling shafts into the soil at the base of a slope. Steel H-beam piles are placed in the shafts and then backfilled with lean concrete. Roughly two thirds of the H-beam is buried in the ground and one third is exposed above ground, creating a cantilevered support. The length, size, and embedment of the H-piles are determined by soil conditions, soil loads, and the surrounding terrain. The space between the H-beams is filled with treated wooden timbers (lagging), which are supported by the flanges of the H-beams. The void behind the lagging is then filled with structural backfill material and compacted.

For the 5600-block repair site, a 75-foot-long soldier pile wall will be constructed. A partially damaged existing roadside guardrail at the site will be removed and replaced. After completion of the wall, the temporary traffic signals will be removed. The construction cost of the wall and other site restoration is estimated to be $204,835.

BID RESULTS AND AWARD RECOMMENDATION

Five bids for the 2021 East Mercer Way Landslide Repair project were received and opened on April 27, 2021. The results are shown in the following Bid Summary table.

2021 EAST MERCER WAY LANDSLIDE REPAIR
BID SUMMARY

	Contractor	Bid Amount
Lowest	Neptune General Contractors	$233,266.50
2	B & B Utilities and Excavating	$233,725.00
3	Kamins Construction, Inc	$243,904.00
4	Road Construction Northwest	$267,721.00
5	GEC NW	$285,910.64
	Engineer's Estimate	**$204,835.00**

All bids were over the engineer's estimate; however, the pricing difference between the three lowest bids was only $10,000. Staff believes the excavation and backfill components of the project were underestimated. The lowest bid was received from Neptune General Contractors, from Anacortes, for $233,266, which is $28,431 (14%) over the engineer's construction cost estimate.

Neptune General Contractors is a relatively new company; however, the owner has significant work experience with previous construction firms installing sheet pile walls, docks, bulkheads, and pilings, both in water and out of water for numerous public agencies in Puget Sound, including the Cities of Oak Harbor, Kirkland, Maple Valley, Kent, and Tacoma, Port of Everett, Tulalip Tribes, and the Lummi Nation. DMI Drilling, a subcontractor to this project, has substantial experience in drilling pilings for numerous Puget Sound public agency projects.

Staff's review of the Labor and Industries (L&I) website confirms that Neptune General Contractors is a contractor in good standing, with no license violations, outstanding lawsuits, or L&I tax. Staff has confirmed Neptune General Contractors is the lowest responsible bidder and recommends awarding the 2021 East Mercer Way Landslide Repair contract.

PROJECT BUDGET AND FUNDING

The total estimated project cost is $337,872 and the table below summarizes the project costs. Design work for this project, including surveying, geotechnical, and structural engineering, is $46,616. Inspection services and project management are estimated at $15,000 and $8,000, respectively. The project budget also includes a 15% construction contingency in the amount of $34,990.

2021 EAST MERCER WAY LANDSLIDE REPAIR PROJECT BUDGET	
Description	**Amount**
	Award to **Neptune General Contractors**
Construction Contract	**$233,266**
Construction Contingency @ 15%	$34,990
Project Design - civil engineering	$18,690
Project Design - surveying	$3,045
Project Design - geotechnical engineering	$17,218
Project Design - structural engineering	$7,663
Total Project Design	**$46,616**
Inspection Services	$15,000
Contract Administration/Project Management	$8,000
Total Estimated Project Cost	**$337,872**

Funding for this emergency project will be appropriated from the existing fund balance within the Street Fund. The 2020 Year-End Balance in the Street Fund is $4.45 M.

NEXT STEPS

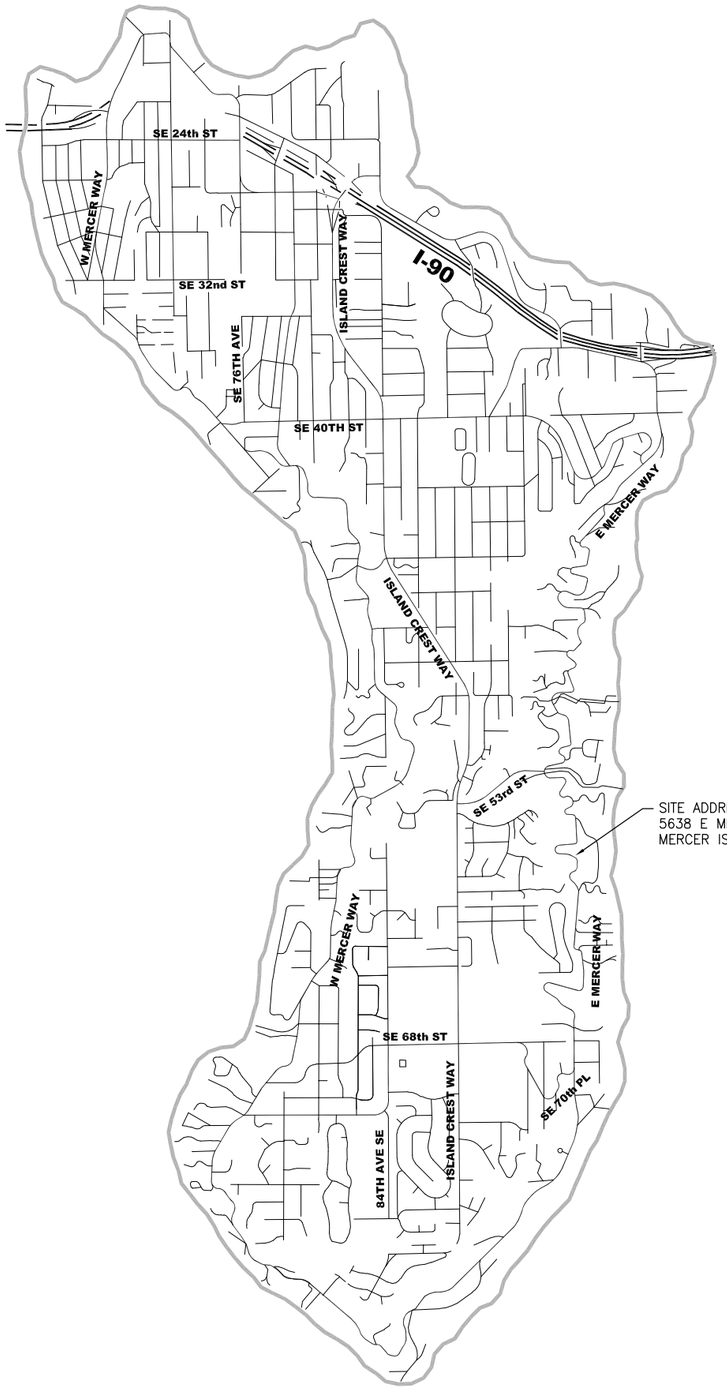
Construction on the landslide repair is estimated to begin in early June and should be substantially complete by July 1, 2021. Staff anticipates the need for several daytime road closures at the 5600 block of East Mercer Way during pile drilling operations. Staff will coordinate these dates and times with the affected residents, Mercer Island Police and Fire, the school district, and other service providers. Allowing daytime road closures will reduce the number of days needed for construction.

RECOMMENDATION

1. Appropriate $337,872 from the existing Street Fund balance to complete the emergency roadway repair.
2. Award the 2021 East Mercer Way Landslide Repair contract to Neptune General Contractors in the amount of $233,266.50. Set the total project budget to $337,872 and direct the City Manager to execute the construction contract.

CITY OF MERCER ISLAND

KING COUNTY WASHINGTON



SITE ADDRESS:
5638 E MERCER WAY
MERCER ISLAND, WA 98040

2021
EAST MERCER WAY LANDSLIDE REPAIR
5600 BLOCK

PROJECT NUMBER: 21-21

APRIL 2021

BID DOCUMENT

SHEET INDEX

GENERAL NOTES

1. TRAFFIC CONTROL SIGNS SHALL CONFORM TO M.U.T.C.D.
2. UTILITIES THAT ARE NOT ABANDONED SHALL BE SUPPORTED AND MAINTAINED DURING CONSTRUCTION.
3. EXISTING UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY ELEVATIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
4. DRIVEWAY ACCESS/EGRESS MUST BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE AGREED TO BY THE PROPERTY OWNER.
5. CALL ONE CALL 48 HOURS BEFORE YOU DIG FOR UTILITY LOCATES: 1-800-424-5555 OR 811
6. REMOVAL LIMITS ARE APPROXIMATE. LIMITS SHALL BE STAKED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. TREES WITHIN THE CLEARING LIMITS SHALL BE REMOVED AFTER APPROVAL BY THE ENGINEER.
7. PROTECT ALL PLANT MATERIAL OUTSIDE OF SURFACE REMOVAL LIMITS.

GENERAL TESC NOTES

1. THE TESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
2. THE TESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE TESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.).
3. CONTRACTOR SHALL INSTALL INLET PROTECTION PER DTL 2/15 AT ALL EXISTING AND NEW CATCH BASINS WITHIN THE PROJECT LIMITS AS WELL AS DOWNSTREAM OF THE WORK AREA, AS DIRECTED BY THE ENGINEER.

SURVEY INFORMATION

HORIZONTAL DATUM: NAD '83-'91, WASHINGTON COORDINATE SYSTEM NORTH ZONE. BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE HIGH ACCURACY REFERENCE NETWORK

VERTICAL DATUM: NAVD 88 BASED ON RTK GPS MEASUREMENTS CONSTRAINED TO THE WASHINGTON STATE REFERENCE NETWORK

ALL DISTANCES SHOWN ARE GROUND DISTANCES UNLESS OTHERWISE NOTED.

THE LOCATION AND DESCRIPTION OF ALL SURVEY MARKERS SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS TAKEN ON FEBRUARY, 2021, UNLESS OTHERWISE INDICATED.

WORK PERFORMED IN CONJUNCTION WITH THIS SURVEY UTILIZED THE FOLLOWING EQUIPMENT AND PROCEDURES: (A) 2" GEODIMETER 600 SERIES ELECTRONIC TOTAL STATION, MAINTAINED TO THE MANUFACTURER'S SPECIFICATIONS PER W.A.C. 332-130-100. (B) FIELD TRAVERSE, EXCEEDING REQUIREMENTS SET FORTH IN W.A.C. 332-130-090.

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND DOES NOT PURPORT TO SHOW ALL EASEMENTS.

RIGHT-OF-WAY LINES AND ROADWAY CENTERLINES ARE FROM GIS DATA PROVIDED BY OTHERS.

THIS TOPOGRAPHIC SURVEY DRAWING ACCURATELY PRESENTS SURFACE FEATURES LOCATED DURING THE COURSE OF THIS SURVEY. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED SOLELY UPON INFORMATION PROVIDED BY OTHERS AND PACE ENGINEERS, INC. DOES NOT ACCEPT RESPONSIBILITY OR ASSUME LIABILITY FOR THEIR ACCURACY OR COMPLETENESS. CONTRACTOR/ENGINEERS SHALL VERIFY EXACT SIZE AND LOCATION PRIOR TO CONSTRUCTION. CALL FOR LOCATE: UTILITY LOCATION SERVICE: 1-800-424-5555.

ALL MONUMENTS INDICATED AS FOUND WERE RECOVERED DURING THE COURSE OF THIS SURVEY AT THE DATE SHOWN IN THE SURVEYOR'S CERTIFICATE, UNLESS OTHERWISE NOTED.