



INFORMATIONAL MEMORANDUM

TO: Transportation and Infrastructure Services Committee
FROM: Hari Ponnekanti, Public Works Director/City Engineer
BY: Adib Altallal, Utilities Engineer
CC: Mayor Allan Ekberg
DATE: August 12, 2022
SUBJECT: Macadam Rd S Water Upgrade & Sidewalk Improvements Project
Project No. 90440105
Construction Contract 22-015, Amendment 1

ISSUE

Approve Amendment No. 1 to Contract No. 22-015 with Laser Underground & Earthworks, Inc. for construction of the Macadam Rd S Water Upgrade and Sidewalk Improvements Project.

BACKGROUND

On January 24, 2022, Council approved the contract with Laser Underground & Earthworks, Inc to complete construction for the Macadam Rd S Water Upgrade and Sidewalk Improvements Project. The project implemented water, street, and sidewalk upgrades simultaneously, reducing construction time along Macadam Road South and providing a multitude of benefits to residents. Benefits of the project included 1) upsizing and looping the water main to provide cleaner and better tasting water; 2) repaving and filling potholes to improve safety, create a smoother ride, and extend the life of the street; 3) creating a seamless sidewalk network and upgrading crosswalks to create a safe and ADA accessible connection from Southcenter Boulevard to S 144th street; and 4) increased the number of fire hydrants along Macadam Road South to improve fire flow for potential emergencies. One resident has already reached out and said, “I’m a resident on Macadam Road S. and have been loving the sidewalk improvements happening south of 144th down to Southcenter.”

DISCUSSION

Project construction costs incurred in July have resulted in a shortfall up to \$300,000. The following items contributed to the overruns:

Flagging (Safety)

The project bid included costs for two flaggers, which was anticipated to total approximately 1,000 hours for the duration of the project. Due to the heavier-than-expected traffic flow from apartment driveways along Macadam Rd, additional flaggers were dispatched for safety reasons during July, resulting in an **additional 2,025 hours** and extra costs of **\$162,000**.

Alternate Schedule

Construction projects always include a base bid, and can include an alternative schedule, which is extra work that the City can elect to do on top of a base bid. Typically, both items are awarded together during the bid award phase. For this project, the Project Manager thought the contractor’s original cost estimate of \$1,984,474.81 included both the base bid and alternative schedule, however, it only included the base bid costs. As a result, the base bid and alternative schedule scope language was included in the contract without the additional budget needed for the alternative schedule. This mistake was not identified until mid-July, when then the alternative schedule work took place. At that time, staff became aware of the potential overruns, but didn’t know the extent of the situation until early August, when the pay estimate was received. Since the funds for the alternate schedule were never requested from or authorized by Council, the entire schedule is currently treated as an overrun of **\$67,166.15** in the project budget.

Out of Scope Work

The last main component that resulted in overruns was due to out of scope work completed by the contractor. The portion of Macadam Road between S 152nd Street and Southcenter Boulevard, under the Alternate Schedule mentioned above, included grinding and paving only the east side of Macadam Road (northbound lane). During the grinding process, which took place in

mid-July, the subcontractor misunderstood of the limits and grinded the full width of Macadam all the way to Southcenter Boulevard. At that point, not paving the portion of grinded road was not a feasible option.

The total cost was approximately \$90,000 for the extra grinding and paving that was done out of scope. After a few rounds of negotiation with the contractor, a potential resolution was reached; in which, the contractor will pay for the entire cost of the grinding, and the cost of paving will be split approximately evenly between the contractor and the City, the City's portion of pay will be **\$43,792.00** and benefit by newly paved road for a price well below market value.

FINANCIAL IMPACT

The construction associated with the Macadam Water Upgrade is funded through the Macadam Water Upgrade CIP, including savings from design and construction management. The construction bid award also included costs for the sidewalk improvements which were funded by a Transportation Improvement Board grant and general funds from the Macadam Rd Complete Streets project. An additional \$300,000 is needed to pay for the project overruns which can be funded from the water enterprise fund.

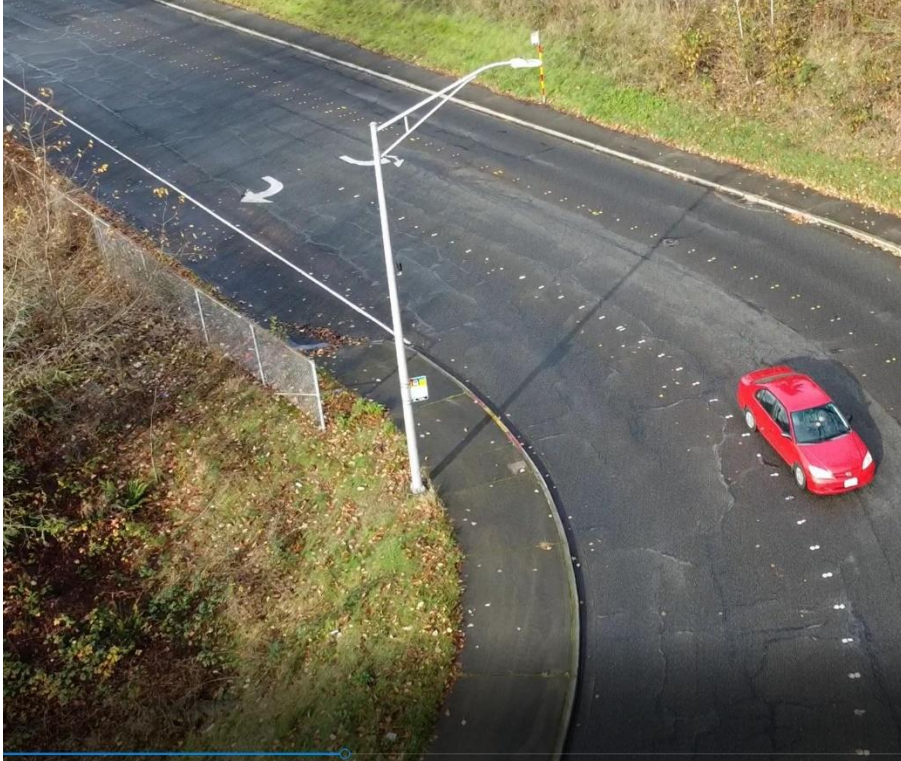
	<u>Cost Estimate</u>	<u>Fund Source</u>	<u>2021-2023 Construction Budget</u>
Original Contract	\$1,984,474.81	Macadam Road CIP	\$ 1,800,000.00
Contingency – 10%	198,447.49	TIB Grant	320,000.00
Overruns	<u>300,000.00</u>	General Fund	80,000.00
		Water Fund (for overruns)	<u>300,000.00</u>
Total	\$2,482,922.30		\$ 2,500,000.00

RECOMMENDATION

Council is being asked to approve Amendment No. 1 to Contract 22-015 with Laser Underground & Earthworks, Inc. in the amount of \$300,000.00 for the Macadam Rd S Water Upgrade and Sidewalk Improvements Project and consider this item on the Consent Agenda at the August 22, 2022 Special Meeting.

Attachments: Project Photos
2021 CIP, Pages 5 & 61

Project Photos



Macadam Road S./Southcenter Blvd. intersection before construction



Macadam Road S./Southcenter Blvd. intersection after construction



Macadam Road S. sidewalks during construction



Macadam Road S. looking south after construction



Macadam Road S. looking north after construction

CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2023 to 2028

PROJECT: **Macadam Rd South Complete Street** Project No. 91710302

DESCRIPTION: Construction of a complete street design for Macadam Rd South between South 144th St and S 150th St. The project will require roadway widening and re-channelization to add 5-foot bike lanes and 5-foot sidewalks on both sides of the roadway, and includes illumination, curb, and storm drainage.

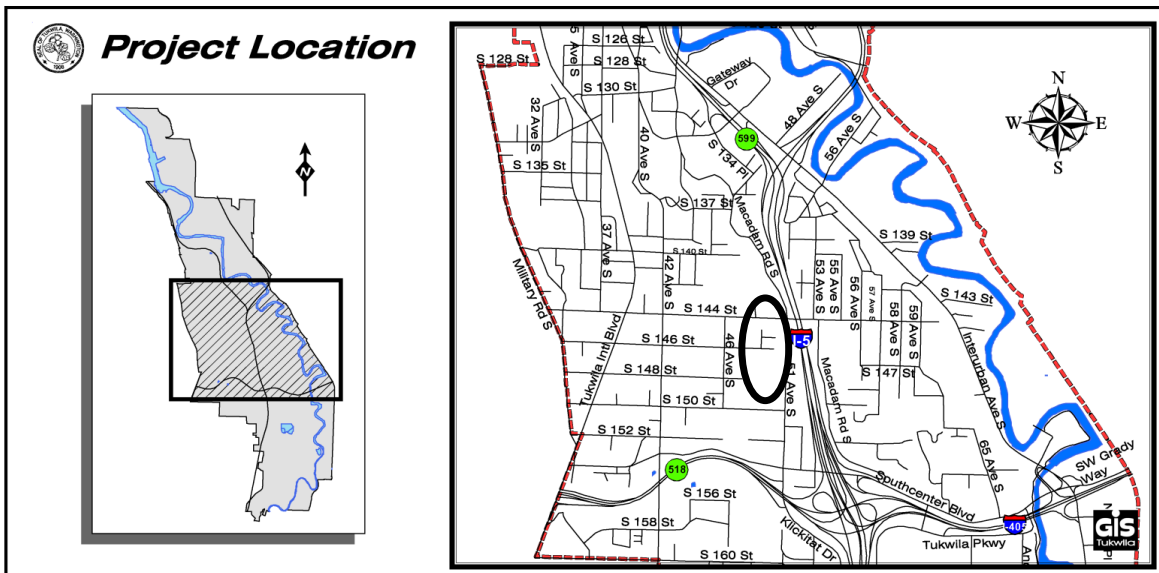
JUSTIFICATION: Enhance safety for students walking to Foster High School and Showalter Middle School and encourages transportation choices for the neighborhood.

STATUS:

MAINT. IMPACT: New sidewalk and pavement will need to be maintained.

COMMENT: WSDOT Pedestrian/Bicycle grant submitted in April 2018, but unsuccessful. Match will be the Water Improvements. Apply for same grant in 2020 for design and 2022 for construction.

FINANCIAL (in \$000's)	Through Estimated									TOTAL
	2021	2022	2023	2024	2025	2026	2027	2028	BEYOND	
EXPENSES										
Design				400						400
Land (R/W)				100						100
Const . Mgmt.					400					400
Construction					2,700					2,700
TOTAL EXPENSES	0	0	0	500	3,100	0	0	0	0	3,600
FUND SOURCES										
Awarded Grant										0
Proposed Grant				450	2,800					3,250
Mitigation Actual										0
Mitigation Expected										0
City Oper. Revenue	0	0	0	50	300	0	0	0	0	350
TOTAL SOURCES	0	0	0	500	3,100	0	0	0	0	3,600



CITY OF TUKWILA CAPITAL PROJECT SUMMARY

2021 to 2026

PROJECT: Macadam Rd S Water Upgrade

Project No. 90440105

DESCRIPTION: Design and construct 4,300 LF of 10" waterline in Macadam Rd S from S 144th St to Southcenter Blvd.

JUSTIFICATION: Improve fire flow water quality to the north side of Tukwila Hill.

STATUS: Project now scheduled for 2021/2022.

MAINT. IMPACT: The new waterline will eliminate maintenance time for flushing the dead end line while increasing service reliability.

COMMENT: Pedestrian/Bicycle Program grant for sidewalks unsuccessful in 2018, with water funds used as a match.

FINANCIAL (in \$000's)	Through Estimated									TOTAL
	2019	2020	2021	2022	2023	2024	2025	2026	BEYOND	
EXPENSES										
Design	68		100	50	50					268
Land (R/W)										0
Const. Mgmt.			250	50	300					600
Construction			300	300	950					1,550
TOTAL EXPENSES	68	0	650	400	1,300	0	0	0	0	2,418
FUND SOURCES										
Awarded Grant										0
Proposed Grant										0
Mitigation Actual										0
Mitigation Expected										0
Utility Revenue	68	0	650	400	1,300	0	0	0	0	2,418
TOTAL SOURCES	68	0	650	400	1,300	0	0	0	0	2,418

