



MEDINA, WASHINGTON

AGENDA BILL

September 13, 2021

Subject: 520 Expansion Joint Sound Mitigation Study Progress Report

Category: City Council Business

Staff Contact: City Manager Michael Sauerwein

Summary

2021 City Manager Goals, Projects, and Objectives includes:

- SR 520 Expansion-Joint (on-going) – Continue to aggressively manage SR 520 expansion-joint noise issue to achieve an agreeable resolution.
 - Maintain regular and consistent communication with Washington State Legislators, WSDOT, and consultants.
 - Continue to work with Legislators, WSDOT, and consultants to include Phase 2 of the University of Washington Engineering Department’s Sound Mitigation Study in the State’s Supplemental Budget. (*Funding for Phase 2 has been included in the State’s 2021-2022 Budget.*)
 - Have the University of Washington Engineering Department to present the results of Phase 2 of their Sound Mitigation Study to the City Council. (2022).

Sound Mitigation Study

The Sound Mitigation Study Progress Report is attached. As the report outlines, Per Reinhall and his team from the University of Washington Department of Mechanical Engineering have made good progress on designing a solution for reducing expansion joint noise (**Task #1**) and modeling/laboratory testing of their proposed solution (**Task #2**). They will soon be moving on to field testing of noise mitigation solutions to assess noise reduction and durability (**Task #3**).

Please Note...**Task 3** of the Progress Report, *Field testing of noise mitigation solutions to assess noise reduction and durability*. States:

“We are soon ready to field test our most promising noise attenuation designs for effectiveness and durability. WSDOT is currently trying to find a suitable bridge with an expansion joint with a single gap or with multiple gaps. The bridge needs to have significantly less traffic than the SR520 bridge so we can install our treatments without causing traffic congestion. The site should

also allow us to conduct periodic evaluation of noise attenuation and durability for about a period of four months.” *(Scheduled for September 2021 – March 2022)*

When last I spoke with Mark Gaines, WSDOT Bridge and Structures Engineer, he and Per Reinhall, University of Washington Department of Mechanical Engineering, were still in the process of finding a suitable bridge that would allow them to conduct periodic evaluation of noise attenuation and durability over a 4-month period.

I will provide the City Council with additional information as it becomes available.

Attachment

Sound Mitigation Study: WSDOT Modular Bridge Expansion Joints – Phase 2. Progress Report.

Budget/Fiscal Impact: NA

Recommendation: Discussion

City Manager Approval: 

Proposed Council Motion: NA

Time Estimate: 30 minutes