Seattle Public Utilities

# Memorandum

**Date:** June 29, 2011

**To:** Stephanie Brown, SR 520 Project Manager, SDOT

**From:** Nancy Ahern, Deputy Director, Utility Systems Management Branch

**Re:** SR 520 Interests and Concerns

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Seattle Public Utilities (SPU) has reviewed the FEIS for the proposed SR 520 Project and per your request is summarizing its interests and concerns on this project. The purpose of this memorandum is to provide SPU's FEIS review for input into a combined City response. Our interests and concerns fall into several categories as presented in the following:

**Concerns for Existing Utilities:**
SPU owns several water and wastewater pipelines that cross SR 520, including:

- **The Maple Leaf Pipeline** – is a 54-inch water transmission pipeline that crosses SR 520 about 100 feet east of the existing Montlake Bridge and was relocated in the early 1960's to accommodate SR 520. Dependent upon the SR 520 project alternative that is selected for design and construction, portions of this pipeline may need to be lowered/relocated.
- **The 430 Pipeline** – a 42-inch water transmission pipeline that crosses under SR 520 between the 10th Ave. E. and Delmar Ave. E. overpasses and was also relocated and replaced in the early 1960's to accommodate SR 520. This pipeline may need to be relocated or lowered for SR 520 Project.
- **The Boylston Avenue Feeder** – a 20-inch pipeline located in Boylston Ave. E. west of I-5 and the SR 520 interchange area. Portions of this pipeline may need to be relocated (dependent upon the alternative selected) due to construction impacts and conflict with the new interchange lid.
- **The Roanoke Street Feeder** – a 12-inch water line located in E. Roanoke Street and extending from the Boylston Avenue Feeder (located west of I-5, see above) to 11th Ave. E. Portions of this water feeder main may need to be relocated due to potential impacts from construction and/or the new interchange lid at SR 520 and I-5.

- **The Boyer Avenue Feeder**- a 20-inch water main that crosses under SR 520 at the Boyer Avenue underpass and predates SR 520. This water main will need to be protected in place or replaced/relocated dependent upon the selected alternative and impacts that develop in the SR 520 design process.
- **The Montlake Boulevard Feeder** – a 12-inch water main that crosses SR 520 in the Montlake overpass and supplies the area between SR 520 and the Ship Canal. This water main may need to be replaced if SR 520 is expanded and may need replacement/relocation to near Pacific Street depending on the project alternative selected. Distribution mains in E. Shelby and E. Hamlin Streets crossing Montlake Boulevard may also be impacted.
- **A 24 –inch combined sewer** that carries flows under SR 520 in the vicinity of the Museum of History and Industry to a pump station for conveyance out of the Montlake area. This pipeline was installed in 1961 and may need to be lowered or relocated if SR 520 is lowered or expanded.
- **An 8-inch combined sewer** that carries flows under SR 520 in the vicinity of the Seattle Yacht Club to another pump station for conveyance out of the Montlake area. This pipeline may be impacted by the SR 520 projects if supports for the new freeway need to be placed on or near the pipeline.
- **A 24-inch combined sewer** that carries flows under I-5, north of the I-5/SR 520 interchange near Boylston Avenue. The portion of the pipeline under I-5 was constructed in 1959 and a small portion in the City right of way was constructed in 1906. This pipeline may be affected by the treatment facilities for managing stormwater from the proposed interchange lid.
- In the two proposed lid areas (Montlake and the I-5 interchange) there are water mains and sewer lines in addition to those described above that could be affected requiring either relocating or replacement depending on the extent of the project area in the lid areas.

SPU has several utilities across and along the SR 520 and I-5 corridors that pre-date these freeway and SPU's research of real property records for the Montlake area (the 54-inch water pipeline and the 24-inch combined sewer across SR 520) has indicated that SPU has property rights to require WSDOT to bear the costs for relocations of these facilities.

Other areas described above for possible impacts of SPU facilities continue to be researched. The real property in some areas is not clear or fully resolved and may come up again in resolving some utility conflicts that may arise.

Since the SPU facilities have existed before I-5 and SR 520 were constructed and parts of the SR 520 Project may affect utilities in Seattle streets right of ways, SPU requests that the City position would recognize that **WSDOT should bear the costs of any water and wastewater pipeline relocations that are needed.**

The estimated cost range of these impacts is anticipated to be $5-7M.

**Construction Concerns:**

- In the project area the construction tasks can have adverse impacts on existing utilities through activities such as dewatering, excavation, settlement and vibration impacts. These types of impacts may trigger protective measures for utilities or relocations. These impacts are often addressed in the design process.
- Certain portions of SPU's utilities will need to be accessible to SPU personnel at all times for emergency response or billing needs and not be blocked by construction activities or storage of materials.
- In the event of construction easements needed for the SR 520 Project, the protection or relocation of utilities may be needed if utilities are adversely impacted.

**Protection or Enhancement of Water Resources:**

SPU requests that the City express the following interests in the area of water resources and water quality:

1. The City expects that the SR 520 Project will have no impact on the routing or the amounts of stormwater between the City's combined and separated drainage systems, unless it is possible to reduce the amount of flow to the City's combined system through on-site infiltration of stormwater;
2. The City expects that WSDOT will be responsible for constructing, operating and maintaining any water quality or flow control facilities associated with the stormwater treatment requirements for the SR 520 project;
3. The City expects that the stormwater treatment for any SR 520 runoff entering the City's separated or combined drainage systems will meet the City's 2009 stormwater code requirements for water quality and flow;
4. Protecting the water quality of Lake Washington is a shared concern of many jurisdictions, including Seattle. Stormwater runoff from roadways is a major source of pollutants entering receiving water bodies, and the City supports the proposed use of street sweeping, if done frequently with high efficiency sweepers, as an appropriate method for decreasing pollutants discharged to Lake Washington from the SR 520 bridge deck.
5. The City is interested in working with WSDOT on site selection and design of aquatic and wetland mitigation associated with this Project; and
6. The SR 520 Project should be designed and constructed in a manner that avoids, minimizes or mitigates impacts to salmonids. Among the more important considerations include shielding the water surface from artificial lighting on overwater structures, avoiding impacts to adult migration through the SR 520 Project area and minimizing the number and size of pilings.

Thank you for requesting SPU's input. Please call Charlie Madden at (206) 684-5977 if you have any questions or comments about the interests and concerns described in this memorandum or require additional information.

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