

## Executive Summary

The Washington State Department of Ecology, Washington Department of Fish & Wildlife and Kitsap County are partnering in a new project to restore tidal processes in the Harper Estuary. The objective of the Harper Estuary Project is restoration of tidal processes and reclamation of estuary habitat. The Harper Estuary restoration project is expected to be completed by June 30, 2017.

The purpose of this traffic study is to document existing conditions and to evaluate the potential transportation related impacts associated with one option to reclaiming the estuary; the closing of SE Olympiad Drive east of SE Southworth Drive. SE Olympiad Drive provides an access from SE Southworth Drive to a residential neighborhood east of the Harper Estuary. The residential neighborhood is also accessed from Nokomis Road SE to the south; a more direct route to and from the Southworth ferry. The neighborhood is bordered by SE Southworth Drive to the west, SE Southworth Drive to the south, and the Puget Sound to the north and east. The neighborhood consists of approximately 200 single family residences. SE Olympiad Drive is one of four roads providing access to the residential neighborhood. This study analyzes existing roadway conditions in and around the neighborhood, identifies roadway deficiencies, recommends mitigation, and identifies potential impacts to emergency services, school transportation, and non-motorized activities.

Existing and future conditions were evaluated under a no-build option and under a road removal option. Under the road removal option, the majority of the neighborhood traffic currently using SE Olympiad Drive to access SE Southworth Drive is assumed to reroute onto Nokomis Drive SE. This assumption is made to analyze the worst potential effects of road closure. In the event of road closure, traffic could re-route through the various neighborhood access roads at varying density. Results of the operational analysis indicate that study area intersections will operate at acceptable levels of service in the future traffic under both options.

SE Olympiad Drive is local access road with a posted speed of 25 mph. SE Olympiad Drive from Nokomis Road SE to SE Southworth Drive consists of two 10-foot travel lanes and 0 to 1-foot gravel shoulders on both sides. Nokomis Road SE is local access road with a posted speed of 25 mph. It consists of two 9-foot travel lanes with no shoulders. SE Olympiad Drive serves as the most direct neighborhood access to Harper Park, the Harper Dock site, and a Kitsap Transit bus stop at the intersection of SE Southworth Drive and SE Olympiad Drive. In addition, because of its scenic vistas, SE Olympiad Drive is also a popular bike route for cyclists.

The closure of SE Olympiad Road at the Harper Estuary will have direct impacts to residents living on Nokomis Road SE, SE Olympiad Drive, Inlet Lane and Viewsound Lane. The following impacts were identified under the road removal option:

- Higher traffic volumes and increased noise levels on Nokomis Road SE. Average daily traffic volumes on Nokomis Road SE could increase from 120 vehicles per day to up to 520 vehicles per day. In a worse case scenario, approximately 400 vehicles per day could reroute from SE Olympiad Drive to Nokomis Road SE.
- Increased emergency response time. According to South Kitsap Fire and Rescue, Nokomis Road SE will go from being an alternate route to becoming a

primary route. SKFR expect response times to the neighborhood west of Nokomis Road SE could increase by up to 2:14 minutes.

- Additional travel distances for residents living on SE Olympiad Drive west of SE Nokomis Road, Viewsound Lane, and Inlet Lane. Neighborhood motorists currently using SE Olympiad Drive to access SE Southworth Drive will have to travel up to an additional 1.05 miles out of direction.
- The most direct neighborhood access to Harper Park, the Harper Dock site, and a Kitsap Transit bus stop is via SE Olympiad Drive. Closing SE Olympiad Drive at the Harper Estuary will result in an additional distance of 1.05 miles in out of direction travel for typical neighborhood pedestrians and cyclists.

Nokomis Road SE is currently a rural local road and does not meet County standards. In order to alleviate some of the impacts of increasing average daily traffic volumes on Nokomis Road SE, it is recommended that the road be brought up to current Kitsap County Standards. This will require widening the existing 9-foot travel lanes to 10-foot and installing 3-foot gravel shoulders on both sides of the road. In addition, per Kitsap County Standards, the SE Olympiad Drive road terminus on the east side of the Harper Estuary should be designed to accommodate turn around traffic. This could be achieved through a cul-de-sac, hammerhead turn around, or dedicated turn around area (e.g. access parking lot). Preliminary total costs of these improvements are estimated at \$441,000.