

SWIFT Center

Capacity Study

Planner: Ryan Fish, PE

Project Overview:

The SWIFT Center is an innovation hub located on the previous Northern State Hospital campus in Sedro Wooley and is operated by the Port of Skagit in coordination with the City of Sedro Wooley, Skagit County, and other partners. This report is intended to give the SWIFT Center and interested parties a brief overview of the available electrical capacity in the area based on current loads and system configuration. If specific loads are requested for the site a more in depth analysis on feasibility will be required.



Figure 1: Aerial View

Substation Level Capacity:

The SWIFT Center is fed off of the Norlum substation in Sedro Woolley along with roughly 3,800 other customers. Current substation loading peaks at around 15.4MVA in the winter months with an overall substation capacity of 25.60MVA in the same season, leaving about 10MVA of available capacity on the substation as a whole. This is a winter peaking substation, and as such the current available capacity during the summer peak load is about 10.5MVA. The Norlum substation transformer may be replaced in the next 5-7 years, increasing the capacity by about 6.4MVA in the winter and 4.4MVA in the summer, but is subject to prioritization.

Feeder Level Capacity:

The SWIFT Center is fed from the Norlum-15 (NLM-15) feeder that runs north along Fruitdale Rd. NLM-15 currently has about 3MVA of load on the total feeder, with an overall feeder capacity of 10MVA. This leaves an excess available capacity of about 7MVA before operational considerations and power quality are considered. The full size feeder does not run all the way to the SWIFT center, there is a fused lateral that extends from Fruitdale Rd about a half mile to the SWIFT Center that has a lower carrying capacity than the main feeder. Investment would be required to access the full available capacity of the feeder and substation, and would be subject to operational considerations.

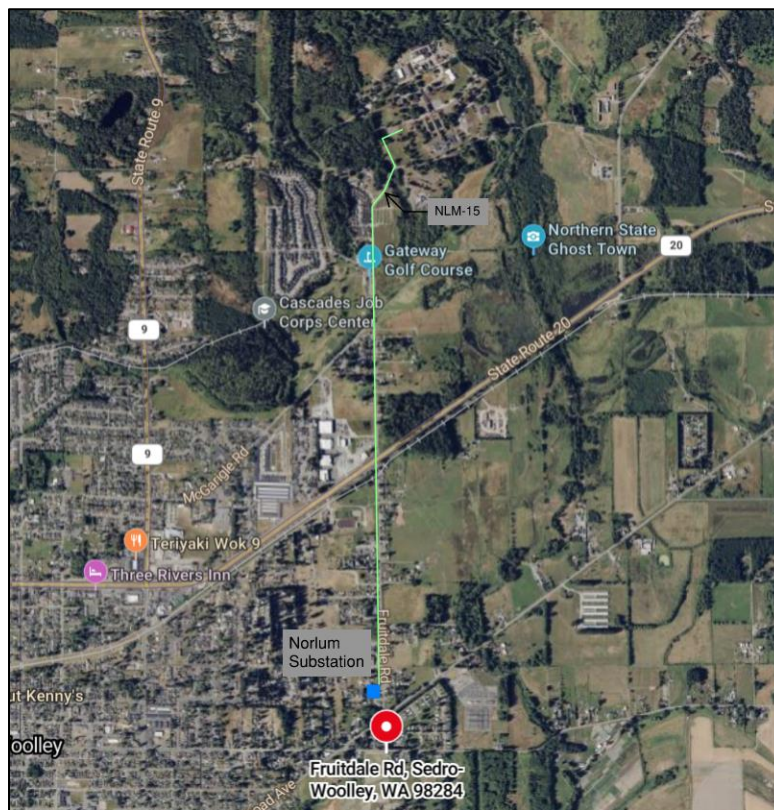


Figure 2: SWIFT Center Distribution Map