

APPENDIX C

Greenhouse Gas Emissions Worksheet Supplemental Information for SEPA Environmental Checklist

GHG Emission Sources (CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆) ¹	What sources are likely from the proposal? <i>List specific type of activities, and duration of emissions</i>	What is the quantitative or qualitative assessment of those emissions?	What available mitigation will avoid or reduce those emissions?
On-Road Mobile Sources	Not Applicable	Not Applicable	
Non-Road Mobile Sources	Not Applicable	Not Applicable	
Stationary Combustion	Not Applicable	Not Applicable	
Industrial Processes	Not Applicable	Not Applicable	
Fugitive Emissions	Not Applicable	Not Applicable	
Agricultural Emissions	Not Applicable	Not Applicable	
Land Disturbance	Phase 1 will remove 1,167 trees on 27 acres.	Removal of existing trees will cause a temporary release of sequestered carbon, but this carbon will be sequestered again by re-planting more than double the number of removed trees plus additional shrubs. Therefore a lifecycle net reduction in carbon emissions is expected from this project	After the removal of obstructions, approximately 2,400 trees will be replanted - 2,492 trees. Shrubs and hydro seeding are intended to revegetate areas where ground vegetation or understory impacts occur during removal activity in densely treed areas.
Purchased Electricity and Steam	Not Applicable	Not Applicable	
Construction	Phase 1 will remove 1,167 trees on 27 acres. After the removal of obstructions, new trees and vegetation will be replanted - 2,492 trees and 6,379 shrubs.	Temporary/short-term use associated with construction related emissions is not expected to be significant.	Contractor performing construction/demolition would be required to maintain and repair all equipment in a manner that reasonably minimizes emissions.
Extraction of Purchased Materials	Not Applicable	Not Applicable	

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Processing of Purchased Materials	Not Applicable	Not Applicable	
Transportation of Purchased Materials	Not Applicable	Not Applicable	
Employee Commute	Not Applicable	Not Applicable	
Other Mobile Emissions	Not Applicable	Not Applicable	
Water Use and Wastewater Disposal	Not Applicable	Not Applicable	
Waste Management	Not Applicable	Not Applicable	
Product Use	Not Applicable	Not Applicable	

**Calculated via City of Seattle Department of Planning and Development SEPA GHG Emissions Worksheet.*

CH₄	Methane	Landfills, production and distribution of natural gas & petroleum, fermentation from the digestive system of livestock, rice cultivation, fossil fuel combustion, etc.
N₂O	Nitrous Oxide	Fossil fuel combustion, fertilizers, nylon production, manure, etc.
HFC's	Hydrofluorocarbons	Refrigeration gases, aluminum smelting, semiconductor manufacturing, etc.
PFC's	Perfluorocarbons	Aluminum production, semiconductor industry, etc.
SF₆	Sulfur Hexafluoride	Electrical transmissions and distribution systems, circuit breakers, magnesium production, etc.