Re-Construction of the North Recycling and Disposal Station (NRDS)

SEPA Environmental Checklist

Seattle Public Utilities
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April 9, 2008

Note:
Some pages in this document have been purposefully skipped or blank pages inserted so that this document will copy correctly when duplexed.

SEATTLE PUBLIC UTILITIES

ENVIRONMENTAL CHECKLIST

A. BACKGROUND

A1. Name of proposed project, if applicable:

Re-Construction of the North Recycling and Disposal Station (NRDS)

A2. Name of applicant:

Seattle Public Utilities

A3. Address and phone number of applicant and contact person:

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Seattle Municipal Tower, Suite 4900
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Seattle, WA 98124-4018
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A4. Date checklist prepared:

April 9, 2008

A5. Agency requesting checklist:

Seattle Public Utilities

A6. Proposed timing or schedule (including phasing, if applicable):

The project site consists of four properties. The west property is the existing 4.27-acre North Recycling and Disposal Station (NRDS) located at 1350 North 34th Street. The second property is to the east of the NRDS is a 0.94-acre property, located at 1550 North 34th Street (the 1550 building site). The third property is the road (Carr Place North) between the existing station and the property to the east. The fourth property is located to the northeast of the existing station is a 0.31-acre parking lot at the northwest corner of the North 35th Street and Woodlawn Avenue North intersection (Figures 1 and 2).

The project is expected to be constructed in three stages: demolition, site preparation, and building construction. The project is expected to last 20 to 28 months. During that period, transfer operations would shift to the South Recycling and Disposal Station (SRDS). Construction staging would occur on the NRDS project site.

Demolition would require approximately 2 to 4 months. During demolition, all onsite structures and non-reusable materials would be removed, and debris would be hauled off site to a suitable demolition disposal or recycling site. Site preparation would require approximately 6 months. During site preparation, the site topography would be adjusted to meet new site requirements. Any excavated material either would be used on site to prepare the grade, or hauled off site. During site preparation, utility lines also would be installed. Building construction is expected to require about 12 to 18 months; however, building construction may take longer due to weather and other types of delays. During that period, driveway and exterior work areas would be paved and building foundations and superstructure would be constructed. Before the upgraded facility starts operating, final inspection and testing of all equipment and procedures would take place.

Construction of the new NRDS would be coordinated with the rebuilding of the SRDS to avoid any interruption in service. During construction of the NRDS, solid waste, recyclables, yardwaste, and other materials that would normally be handled at NRDS would be temporarily redirected to the SRDS.

A7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal?

No further additions or expansions are currently planned. Seattle Public Utilities (SPU) may propose further activity in the future in order to continue to provide a safe, efficient solid waste transfer station, and to adapt to increased recycling or changing waste management practices.

A8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Previous Documents

Air Quality Technical Report for the North Recycling and Disposal Station (NRDS) (March 2008). This report characterizes existing air quality; assesses the impacts of the NRDS on air quality from construction, customer self-haul traffic, commercial and residential garbage collection trucks, machinery emissions, and odor; and analyzes the station's compliance with National Ambient Air Quality Standards. The report also provides a discussion of common measures to mitigate potential air quality impacts.

Noise Technical Report for the North Recycling and Disposal Station (NRDS) (March 2008). This report uses the results of onsite noise monitoring to characterize the existing noise environment in the vicinity of the NRDS and to assess the noise impacts of future traffic and machinery noise. The report also provides a discussion of common measures to mitigate potential noise impacts.

Transportation Technical Report for the North Recycling and Disposal Station (NRDS) (March 2008). This report presents a traffic analysis, including estimates of truck and car traffic associated with waste and recycling collection and self-haul drop off at the NRDS.

Visual Technical Report for the North Recycling and Disposal Station (NRDS) (March 2008). This report addresses visual impacts of and mitigation for the proposed reconstruction of the NRDS, including shadow impacts on the residential area north of the station site.

The technical reports listed above have been prepared for this proposal and may be requested from the project manager.

Final Supplemental EIS for the City of Seattle Solid Waste Intermodal Transfer Facility – 2005. This document identifies impacts resulting from the construction and operation of the proposed solid waste intermodal transfer facility at four alternative sites. It is available for public viewing at the Wallingford branch of the Seattle Public Library and online at www.seattle.gov/util.

Solid Waste Facilities Master Plan draft (November 2003). This report evaluates options for all solid waste management facilities to meet City objectives.

Programmatic Environmental Impact Statement (EIS) for the City of Seattle Solid Waste Management Plan – 1998. This document evaluates the impacts of the 1998 Seattle Solid Waste Management Plan. The EIS evaluated several alternatives, including a proposed action that involved limited changes to the existing transfer stations and continuing disposal at an arid-region landfill. The EIS is available on request from SPU.

1966 and 1977 subsurface investigations. These documents provides detailed soil logs from subsurface investigations conducted in 1966 (during facility construction) and1977.

Final Environmental Impact Statement for the Seattle Waste Transport and Disposal Project – 1990. This document evaluates the impacts of modifying the transfer stations to load intermodal containers and shipping solid waste out of the city by train and other modes of transportation.

A9. Do you know whether applications are pending for governmental approvals <u>of other proposals</u> directly affecting the property covered by your proposal? If yes, explain.

No other known applications are pending for government approval of other proposals directly affecting the property covered by this proposal.

A10. List any government approvals or permits that will be needed for your proposal, if known.

Master Use Permit (MUP) – Seattle Department of Planning and Development

Demolition Permit (may be a part of MUP or construction permit) – Seattle Department of Planning and Development

Side Sewer Permit – Seattle Department of Planning and Development

Side Sewer Permit for Temporary Dewatering of Construction Sites, if required – Seattle Department of Planning and Development

Street Use Permit(s) (i.e., for construction use, curb cuts, construction shoring, structural walls and rockeries, tree planting, and tree removal, among others) – Seattle Department of Transportation

Street Vacation Ordinance – Seattle City Council

Stormwater, Drainage, and Grading Approval – Seattle Department of Planning and Development

Construction Permit(s) and Approvals (including electrical, mechanical permits, fire approvals, energy code building commissioning, etc.) – Seattle Department of Planning and Development

Certificate of Occupancy – Seattle Department of Planning and Development

Solid Waste Operating Permit – Public Health – Seattle & King County

A11. Give brief, complete description of your proposal, including the proposed uses and the site of the project. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

Background Information

Seattle's North Recycling and Disposal Station (NRDS) is more than 40 years old, is subject to frequent breakdowns, and is becoming less reliable with age. In addition, the outdated design is inefficient and lacks the capacity to meet Seattle's future recycling and waste-handling needs.

Need for the Proposed Project

The following describes the existing conditions and summarizes the facility limitations of the NRDS as identified in the 2003 draft SWFMP.

Existing Conditions at the North Recycling and Disposal Station

The NRDS is an intermediate transfer station serving north Seattle, primarily the area north of the Lake Washington Ship Canal but service is not limited to that area. Solid waste is compacted into intermodal containers and trucked to an intermodal yard for transfer to trains. At one end of the existing NRDS station, organic materials (yard waste with food waste) are collected in open-top containers that are trucked to a composting facility. Clean wood waste, appliances, scrap metal, plastics, paper, aluminum, and other recyclable materials are collected and transported to recycling facilities. The NRDS also includes some intermodal and yard waste transfer container storage.

The primary limitations of the existing NRDS include:

- Inadequate throughput capacity (the number of vehicles that can be accommodated within a certain timeframe), which results in frequent lines that extend into the public roadway, thereby delaying customers and occasionally interfering with through-traffic on North 34th Street.
- Physical and environmental hazards requiring active management to keep employees and customers safe.
- The need for seismic upgrades to the main building, and replacement of temporary office and employee facilities.
- Limited space in which to enlarge the disposal building to be able to accommodate customers.
- Inadequate space for a new station office, employee facilities, and employee and visitor parking.
- The need for replacement of or significant upgrades to the scale house and scales
- Difficulties in controlling noise, odor and dust because the main building was designed as an open-air structure.
- An intermodal container loading facility installed in 1990 that has led

to operational and maintenance problems and is now inefficient.

- Insufficient space to improve recycling facilities and add a facility to collect reusable items.

Proposed Project

The proposed project would include demolishing the existing structures on both the existing NRDS property and the property located at 1550 North 34th Street, and building a transfer station, recycling facilities, employee facilities, office, parking, and other associated utility facilities on the same parcels. The project would include the existing NRDS property, the Carr Place North right-of-way between North 34th Street and North 35th Street, and the property located at 1550 North 34th Street. The parking lot north of North 35th Street between Carr Place North and Woodlawn Avenue North would continue to be used for parking (Figure 2).

The new transfer building would be located on the existing NRDS property. The building would be fully enclosed except for vehicle entrances on the sides. The building height and development setbacks would be consistent with applicable zoning requirements. The site would also contain a small fueling station for onsite equipment. Carr Place North between North 34th Street and North 35th Street would be vacated and incorporated into the site. The 1550 North 34th Street parcel would be used for a recycling drop-off area with recycling bins and an office, employee facilities, a meeting room, and other utility functions. An existing parking lot north of North 35th Street between Carr Place North and Woodlawn Avenue North would be used for vehicle parking**.** Proposed construction would adhere to applicable regulations and construction practices to reduce air and odor emissions and noise as described in sections B.2.c, and B.7.b.3, respectively. In addition, SPU would implement certain design standards and operational practices to minimize air and odor emissions and noise, as described in B.2.c and B.7.b.3, respectively. SPU would also implement certain design standards and/or operational practices to reduce the facility's aesthetics impacts, as described in B.10.c.

Primary access would be located off of North 34th Street. A secondary access for transfer trailers would be located off of North 35th Street. SPU would require a queuing analysis in conjunction with project design. The design standard would specify that vehicle queues from the NRDS site would not block traffic on adjacent roadways 95 percent of the time on the average day of the projected peak traffic month in 2030. In addition, certain other design standards and/or operational practices would be implemented by SPU to minimize impacts on traffic in the immediate vicinity of the project as described in section B.14.g.

A12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal

would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The proposed project is located between the Fremont and Wallingford neighborhoods in Seattle, north of Lake Union, approximately 2.5 miles north of the City's central business district (Figure 1). The address of the existing station is 1350 North 34th Street. Adjacent properties included in the proposal are located at 1550 North 34th Street and at the northeast corner of Carr Place North and North 35th Street (parcels 4083306055 and 4083306050). The project is located in Section 18, Township 25N, Range 4E.

B. ENVIRONMENTAL ELEMENTS

B1. Earth

a. General description of the site:

☐ **Flat** ☑ **Rolling** ☐ **Hilly** ☐ **Steep Slopes** ☐ **Mountains**
☐ **Other:**

b. What is the steepest slope on the site (approximate percent slope)?

There is an area mapped as a 40 percent steep slope on the southwest corner of the property. This is an engineered slope that is adjacent to the ramp leading into the transfer building and is not an unstable area.

c. What general types of soils are found on the site (for example, clay sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Based on the 1966 and 1977 subsurface investigations, the soils at the NRDS generally consist of glacial till material overlain with a surficial layer of fill. The fill material consists of loose brown silty sand with gravel extending to depths of seven to eleven feet thick below existing surface elevations. The glacial till generally consists of very dense gray silty sand with gravel, and is below the fill to depths ranging between twelve and twenty feet below existing surface elevations. Very dense gray fine to medium sand exists beneath the silty sand to approximately twenty-four feet below existing surface elevations. Detailed soil logs are available from the construction of the existing facility in 1966 (on file with SPU).

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:

There is no history of unstable soils in the project vicinity.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Design-level details regarding quantities of filling and grading have not been determined yet, and therefore quantities are not known. However, excavation or fill in the range of about 0 to 100,000 cubic yards may be necessary to adjust grades on the site to achieve proper drainage or establish ground elevations at the transfer building that would reduce noise and aesthetic impacts.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe:

Clearing and grading for construction of the proposed project could result in an increase in temporary erosion and sediment transport off site. However, an approved stormwater pollution prevention plan (SWPPP) would be implemented as a condition of the project NPDES construction general permit, thereby minimizing risks of erosion during construction. The project would also be required to comply with the temporary erosion and sedimentation control (TESC) requirements of the City of Seattle's Stormwater, Grading, and Drainage Control Code.

The approximate area of the existing NRDS site is 4.27 acres; the 1550 building site is approximately 0.94 acres and the parking lot north of North 35th Street is approximately 0.31 acres. The entire area, including Carr Place North between North 34th and North 35th streets (the street vacation area), would likely be disturbed during construction.

After completion of the NRDS construction, all unpaved disturbed areas would be landscaped/revegetated. Standard erosion control best management practices (BMPs) would be employed to control erosion during construction and use of the NRDS.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 90 percent of the site would be covered with impervious surface with limited landscaping internal to the project site. Landscaping would be installed at various locations around the site perimeter.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

BMPs for erosion and sedimentation control would be implemented in accordance with Seattle's Stormwater, Grading, and Drainage Code (Seattle Municipal Code [SMC], Chapters 22.800–22.808) and Construction Stormwater Control Technical Requirements Manual (Director's Rule 16-2000).

B2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

The construction phases of the proposed project would include numerous activities, each generating a variety of pollutants. Construction activities include demolishing existing buildings, removing concrete, regrading the site, trenching for new utilities, and constructing new buildings, and would result in emissions of carbon monoxide (CO), fine particulate matter (PM_{10}), very fine particulate matter ($PM_{2.5}$), oxides of Nitrogen (NOx), sulfur (SO), fugitive dust, and mobile source air toxics (MSATs). Repaving roads and work surfaces would result in emissions of all of the above as well as odorous compounds. Striping of new roadways would result in emissions of odorous compounds and MSATs. Landscaping would involve adding topsoil and mulch, which could result in emission of fugitive dust. Table 1 summarizes these construction tasks and emissions (as presented in the Air Quality Technical Report [2008] identified in A.8). The pollutants with the most emissions or greatest potential health effects are shown in bold.

Table 1. Pollutants Generated by Construction Activities

Construction Tasks	Sources of Emissions	Emissions
Demolish existing buildings	Backhoe, excavator, track/wheel loaders, cranes, bulldozer, haul trucks	CO, PM10, PM2.5, NOx, SO, **fugitive dust**, **MSATs**
Remove concrete and paved surfaces	Track /wheel loaders, excavator, bulldozer, haul trucks	Same as above
Recycle concrete debris	Haul trucks, excavator, primary crusher, aggregate screens	Same as above
Regrade sites	Track /wheel loaders, bulldozer, grader	Same as above
Trench new utilities	Backhoe, excavator, gravel trucks	Same as above
Construct new tipping and other buildings	Concrete trucks, vehicles of construction workers	Same as above
Pave roads and work surfaces	Concrete trucks, asphalt trucks, asphalt rollers	CO, PM10, PM2.5, NOx, SO**, fugitive dust,** odorous compounds, **MSATs**
Stripe roadways, paint buildings	Paint spray equipment	odorous compounds, **MSATs**

During operations, the primary pollutants emitted by the redesigned NRDS would be CO, PM_{10}, $PM_{2.5}$, NOx, SO, MSATs, and carbon dioxide (CO_2) from self-haul vehicles, commercial haulers, solid waste handling equipment (excavators, yard tractors, front-end loaders), and transfer trucks. In addition, fugitive dust and odorous compounds would be produced when loading solid waste into trailers and compacting solid waste. Trailers waiting to be hauled to the intermodal site may emit odorous compounds.

The expected changes in emissions from the various sources once the project is operational are summarized and compared to existing conditions in Table 2.

Table 2. Relative Change in Emissions as a Result of Implementing the Proposal (Post-Construction)

Type of Emission Source	Facility Location NRDS
Sources of Emissions at the Stations	**Relative Change at NRDS Compared to Existing Conditions**
Emissions from self- haul vehicles	Decrease due to reduced time in queues
Emissions from commercial haulers	Decrease due to reduced time in queues
Emissions from vehicles using the recycle/appliance drop-off facilities	Little change from current system (decrease due to reduced time in queues, with increases due to greater levels of recycling)
Emissions from waste handling machinery	Decrease due to use of wheeled front loaders and electric compactors in place of diesel bulldozers that are currently used to crush waste
Odors from decaying garbage	Decrease due to ventilation/filtration of air in transfer building
Fugitive dust	Decrease due to ventilation/filtration of air in transfer building
Regional Sources of Emissions Generated within Seattle Service Area	**Relative Change In the Area Served by Seattle Public Utilities**
Emissions from self- haul vehicles	No change from current system
Emissions from commercial haulers	Little change from current system
Odors from decaying garbage	Decrease from current system
Fugitive dust	Little change from current system

Greenhouse gases

In response to concerns about global warming, the Seattle Department of Planning and Development's (DPD) has developed a Greenhouse Gas (GHG) emissions worksheet that can be used to provide an estimate of potential GHG "emissions" from individual

"$MTCO_2e$" (Metric Tons of equivalent carbon dioxide). Using the worksheet, project emissions related to construction of the proposed project are estimated at 16,206 $MTCO_2e$. . This figure represents an estimate of GHG emissions associated with manufacturing construction materials and fuel used during construction. Although the worksheet provides a rough measure of potential emissions due to construction, the worksheet estimate is likely overestimated, since the project is expected to meet LEED Silver requirements, or more. This would result in lower emissions (from recycled content and/or locally sourced construction and building materials). Additionally, if all customer trips are diverted to the SRDS during the 28 month construction period, using trip generation figures from the project transportation analysis peak day (Heffron 2008), an estimated additional 13,873 $MTCO_2e$ would be produced, for a total of 30,079 $MTCO_2e$ (using the unmodified construction emissions).

During operations, greenhouse gas emissions are associated with energy consumed during facility operation; and transportation by customers and employees, and for transfer of solid waste and recyclables. Using the GHG worksheet, project emissions related to facility operation are estimated at 2,764 $MTCO_2e$ per year compared to 1,172 $MTCO_2e$ annually for the existing facility. The worksheet uses a standard project lifespan of 62.5 years. GHG emissions caused by customers traveling to the NRDS, and GHG emissions caused by the transfer of solid waste and recyclables away from the NRDS, would occur with or without the project. However, using trip generation figures from the project transportation analysis (Heffron 2008) with the standard emissions values in the GHG worksheet, emissions related to transportation by customers and employees, and transfer of solid waste and recyclables, are estimated at 1,404 $MTCO_2e$ in 2030 compared to 1,402 $MTCO_2e$ in 2030 for the existing facility. Therefore, the total emissions due to operations is estimated at 4,168 $MTCO_2e$ in 2030 compared to 2,574 $MTCO_2e$ in 2030 for the existing facility.

Although the worksheet provides a rough measure of potential emissions due to operations, it does not take into account several factors that may limit its application to this project. These include:

1. The worksheet estimate for facility operations is likely overestimated, since the project is expected to meet LEED Silver requirements, or more, which would result in lower emissions due to higher building energy efficiency.

2. The average values for energy emissions include those associated with space heating, cooling, ventilation, and water heating; none of which apply to the transfer building and covered recycling collection portions of the existing facility and/or proposed project. As a result, these emissions for operation of the existing facility, and particularly for the proposed facility, are likely overestimated.

3. The updated design is anticipated to result in some GHG emissions reductions

due to reduced customer vehicle idling time. These reductions are not quantified in the worksheet, but could total a net reduction of 20 $MTCO_2e$ per year (1,250 $MTCO_2e$ over the project lifespan) after consideration of anticipated increases of transfer truck emissions to accommodate increased recycling.

4. It is anticipated that the design of the proposed project will provide substantial opportunity to customers to increase recycling. Increases in recycling help avoid lifecycle emissions of GHG. These GHG emission reductions are also not quantified in the GHG worksheet, and as a result, emissions reductions due to the project are not captured.

The increase in GHG emissions estimated by the worksheet for the proposed project over the existing project are likely overestimated, when the above considerations are taken into effect. Given that the estimated GHG emissions generated throughout the City of Seattle from all sources is approximately 11.6 million $MTCO_2e$ per year (USEPA 2008) (725 million $MTCO_2e$ over the project lifespan), the increased GHG emissions potentially due to the project based upon the unmodified worksheet, and additional estimates, represent a very minor increase (0.25% for construction; 0.014% for operation in 2030), and is not considered likely to result in a significant, adverse impact.

Determining whether "greenhouse gas" emissions associated with the project are likely to have a significant adverse impact upon the maintenance of a healthy, global atmosphere is problematic because there is scientific uncertainty regarding appropriate methodologies to make such a determination. For that reason, information and analysis necessary to make that determination cannot reasonably be developed in the context of this project.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions or odor that may affect this proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The Puget Sound Clean Air Agency has specific regulations pertaining to fugitive dust (contained in sections 9.11, 9.15 and 9.20 of their Regulation 1) which require the use of best available control technology to manage fugitive dust emissions. Construction would adhere to applicable regulations and construction practices to reduce air quality impacts. Because these practices would be adopted by SPU as part of the project, construction of the proposed project would not result in significant adverse impacts to air quality. These techniques include:

- Spraying water over debris during demolition of buildings as

necessary to minimize dust.

- Keeping soil damp during excavation and grading operations as necessary to minimize dust.
- Providing paved or rip-rap exit aprons for haul trucks.
- Cleaning vehicle undercarriages and tires before they exit onto public streets if necessary to minimize the tracking of mud off site.
- Covering truck loads of soil, or spraying them with water if necessary to prevent wind-blown dust.
- Maintaining all construction machinery in good working order and operating equipment within load limits and engine RPM levels to minimize exhaust smoke.
- Sweeping adjacent streets whenever soil from excavation and grading is visible.

Final design details have not been developed, but the design would be required to incorporate features to reduce air quality impacts from operation, including measures that include:

- Replacing the open-sided tipping building with a solid-walled structure that has an engineered ventilation system to improve air quality and control odor.
- Expediting the entrance process to reduce the time that vehicles spend idling in a queue before reaching the tipping building (e.g., multiple entry lanes, separate entry line for contracted collection trucks, use of radio frequency identification sensors for contracted collection trucks to speed access).

Operational best practices would also assist in reducing emissions, including:

- Minimizing dust by frequently washing down and/or sweeping the operations yard.
- Helping control odors by minimizing the amount of time that organic materials are kept on site before being hauled to an off-site organics processing facility.

Because these practices would be adopted by SPU as part of the project, operation of the proposed project would not result in significant adverse impacts to air quality.

B3. Water

a. Surface:

(1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If so, describe type and provide names. If appropriate, state what stream or river or water body it flows into.

There are no streams or wetlands on the site or in the immediate vicinity. Lake Union is approximately 400 feet south of the south boundary of the site.

(**2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If so, please describe and attach available plans.**

No work would be done within 200 feet of Lake Union.

(3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No material would be placed in, or removed from, surface water or wetlands.

(4) Will the proposal require surface water withdrawals or diversions? If so, give general description, purpose, and approximate quantities if known.

No, the project would not require surface water withdrawals or diversions.

(5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

The proposal does not lie within a 100-year floodplain.

(6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The project would not produce or discharge waste materials to surface waters.

b. Ground:

(1) Will ground water be withdrawn, or will water be discharged to ground water? If so, give general description, purpose, and approximate quantities if known.

Reconstruction of the NRDS would require some excavation that could encounter perched ground water at the site, depending on precipitation and subsurface conditions at the time of construction. Even if ground water is not encountered, dewatering may be necessary to prevent stormwater from ponding in excavated areas, or if vaults or pump stations are constructed that require temporary dewatering. Water quality impacts associated with excavating and dewatering may include an increase in the transport of suspended solids offsite as well as an increase in turbidity of runoff entering receiving waters.

(2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, agricultural, etc.). Describe the general size of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste materials would be discharged into the ground from septic tanks or other sources.

c. Water Runoff (including storm water):

(1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include <u>quantities</u>, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The source of water to the project site is rainfall occurring as stormwater runoff. Stormwater runoff from the NRDS drains to a combined sanitary sewer/stormwater collection system. Currently, surface runoff from the NRDS facility drains to several catch-basins located on-site and is not treated before flowing to the combined sanitary sewer/stormwater system.

The design of the new facility would incorporate a stormwater drainage system (described in section B.3.d below). Stormwater runoff from any areas where garbage, yard waste, recyclables, appliances, or any other waste are handled or stored in containers would drain to catch-basins located on-site, be treated, and then flow to the combined sanitary sewer/stormwater system. Runoff from the roof of the main building and the remainder of the site may be reused on site or would be treated, if necessary, on the site and then conveyed to the combined sanitary sewer/stormwater system. Stormwater BMPs would be used to avoid impacts on the receiving waters, as described in section B.3.d below.

(2) Could waste materials enter ground or surface waters? If so, generally describe.

Waste material could enter surface water due to operation of heavy equipment during construction which would require fueling and engine maintenance activities that involve oil, grease, solvents, and other toxic engine fluids. These materials could be entrained in stormwater runoff from leaks in material storage areas, spills resulting from improper handling of liquids, miscellaneous accidents, drips from the undercarriages of vehicles, water used to clean equipment and control dust, and improper disposal of waste liquids. Soils that become contaminated by spills, drips, leaks, equipment washwater, and miscellaneous accidents could carry the adsorbed contaminants offsite if eroded by wind or runoff or transported by vehicles.

Removal of existing structures and pavement could result in short-term impacts from dust and debris associated with demolition activities. Water quality impacts typically associated with demolition activities include increased debris loadings to stormwater conveyance systems and increased particulate loadings in runoff entering receiving waters. Excessive debris loadings to offsite drainage systems may clog drainpipes and decrease the flow conveyance capacity, and may also reduce the ability of catch basins to trap other pollutants.

During operation of the facility, stormwater would be treated as described in section B.3.d below to minimize the potential for pollutants to enter surface waters.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

An approved temporary erosion and sediment control (TESC) plan would be in place before construction begins, to minimize impacts from surface water runoff during construction. An approved Spill Prevention Plan would also be in place prior to the start of construction.

To reduce stormwater impacts during operation of the new facility, a storm drainage system would be designed in accordance with the City of Seattle's Stormwater, Grading, and Drainage Control Code and associated Director's Rules (Seattle 2000). This includes installation of stormwater treatment facilities for any pollution generating areas such as site driveways and parking lots. Stormwater treatment facilities would likely include a water quality treatment vault as well as an oil/water separator, media filter, or similar technology for "high-use" sites (Seattle 2000). Any material handling, transfer, or storage facilities at the sites would either be covered (protected from precipitation) or would drain to stormwater treatment facilities, and then to the combined sanitary sewer/stormwater system, thereby avoiding impacts on water resources. All combined sanitary sewer/stormwater discharges would meet King County Metro pretreatment requirements prior to discharge.

Because the new station would have an updated stormwater treatment system, the proposed redevelopment (and associated stormwater facility upgrade) would improve the quality of stormwater leaving the site compared to existing conditions. Specifically, pollutant loading in runoff from roadway and parking areas would be reduced due to improved stormwater treatment facilities. Likewise, areas currently used for material handling, transfer, or storage would be treated, and then drain to the combined sanitary sewer/stormwater system. Thus, the operation of the reconstructed NRDS would reduce potential adverse impacts on surface waters compared to existing conditions.

B4. Plants

a. Check types of vegetation found on the site:

☐ Deciduous trees (check types): ☐ alder ☑ maple ☐ aspen ☑ other: ash, honey locust
☐ Evergreen trees (check types): ☐ fir ☐ cedar ☑ pine ☐ other:
☐ Shrubs
☑ Grass
☐ Pasture
☐ Crop or grain
☐ Wet soil plants (check types): ☐ cattail ☐ buttercup ☐ bulrush ☐ skunk cabbage ☐ Other: *(NOTE: wet soil plants are located in ditches).*
☐ Water plants (check types): ☐ water lily ☐ eelgrass ☐ milfoil ☐ Other:
☐ Other types of vegetation:

b. What kind and amount of vegetation will be removed or altered?

All trees within the existing cyclone fencing at the existing NRDS property would be removed. The trees and grass between the North 35th Street sidewalk and existing station would be removed, as would the trees along the west side of Carr Place North. The trees along North 35th Street between the street and sidewalk would remain. Along North 34th Street, the vegetation between the existing NRDS facility and the sidewalk would be removed, including pine trees inside and outside of the fence, grass, and a hedge of Himalayan blackberry. However, the urban wildlife species in the area are adaptable to other locations, so removal of this vegetation would not affect wildlife beyond the immediate site.

c. List threatened or endangered species known to be on or near the site.

According to a communication from the Washington Natural Heritage Program, dated December 10, 2007, there are no records of rare plants or high-quality native ecosystems in the vicinity of the project.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

A 5-foot wide landscaped setback from the street property line is required around the perimeter of the site. Exposed soils would be revegetated with drought-tolerant grasses, forbs, and shrubs. The site would be landscaped to enhance the aesthetics of the facility, and to minimize the attraction of wildlife to the facility.

B5. Animals

a. Checkmark any birds and animals that have been observed on or near the site or are known to be on or near the site:

Birds:	☑ hawk ☐ heron ☑ eagle ☑ songbirds ☐ other: pigeons
Mammals:	☐ deer ☐ bear ☐ elk ☐ beaver ☐ other:
Fish:	☐ bass ☑ salmon ☑ trout ☐ herring ☐ shellfish ☐ other:

b. List any threatened or endangered species known to be on or near the site:

There are no threatened or endangered species known to be on the site. However, in a communication on December 3, 2007, the WDFW Habitat Biologist, Laura Arber, stated that fall Chinook salmon, bull trout, and winter steelhead are present in Lake Union, which is approximately 400 feet south of the site. There are no streams near the site.

Impacts to aquatic life in Lake Union could occur if an uncontrolled spill of fuel or other toxic material occurs during construction, if soil erosion results in elevated turbidity in stormwater runoff, or if dewatering water carries the material offsite. However, as described in sections B.1.h and B.3, a TESC plan would be developed prior to construction to minimize the potential for water quality impacts.

During long-term operation of the facility, pollutant loading in runoff from roadways and parking areas would be reduced due to improved stormwater treatment facilities. Likewise, areas currently used for material handling, transfer, or storage would continue to either drain to stormwater treatment systems, or to the sanitary sewer system. Thus, the operation of the reconstructed NRDS is expected to decrease adverse impacts on surface waters used by endangered species compared to existing conditions.

c. Is the site part of a migration route? If so, explain.

Lake Union is a migration route for fish to Puget Sound and several species of salmon use the lake to travel to and from upstream rivers. Various waterfowl and birds migrate through the Puget Sound basin, which is part of the Pacific Flyway.

d. Proposed measures to preserve or enhance wildlife, if any:

In accordance with City of Seattle requirements, and as described in earlier sections,

measures would be included to minimize erosion and offsite sediment transport and to reduce potential water quality impacts in storm drainage systems and receiving waters used by wildlife, especially fish species.

The TESC plan and stormwater BMPs described above and spill control and countermeasures (SPCC) plan described below would reduce adverse impacts on water quality in receiving waters during construction. The improved stormwater treatment described above would improve water quality discharging to Lake Union.

B6 Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The primary energy source for the NRDS would be electricity and diesel fuel. The proposed facility would have intermodal container loading equipment powered by electricity. The offices and other buildings also would use electricity for lighting, heat, and ventilation. The new offices may be larger than the current offices; however, upgraded facilities would likely incorporate more energy-efficient systems that would reduce total energy use.

Diesel fuel would be used for motorized equipment such as bulldozers, excavators, wheeled loaders, yard goats, and container tractors.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The proposed structures, facilities, and vegetation could reduce solar access to some properties located north of North 35th Street. Because the rebuilt and new facilities would comply with zoning setbacks and building height restrictions, the net change from existing conditions on solar access at nearby properties is expected to be minor.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Buildings would include energy conservation features and are planned to achieve a U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) rating of at least silver (33-38 points).

B7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe:

The Environmental Data Resources (EDR) Radius Map for the NRDS property identified soil and ground water contamination from former diesel underground storage tanks at the existing NRDS site. Potential impacts associated with existing contamination would be largely short-term (during construction).

Also, subsurface soils at 1550 North 34th Street are known to be contaminated with petroleum products. During construction, it may be necessary to excavate these soils to remove soils with contaminant concentrations above the state defined cleanup standards.

During construction, small amounts of materials may be stored onsite for construction purposes including gasoline and diesel fuels, hydraulic fluids, oils, lubricants, solvents, paints, and other chemical products. A spill of one of these chemicals could occur during construction as a result of either equipment failure or worker error. Contaminated soils, sediments, or groundwater could also be exposed during excavation. If disturbed, contaminated substances could expose construction workers and other individuals in the vicinity through blowing dust, stormwater runoff, or vapors.

During operation of the NRDS, there is the potential for workers to be exposed to hazardous materials inadvertently brought to the site for disposal. NRDS customers would have a similar potential to be exposed to hazardous materials inadvertently brought to the sight for disposal, but the potential exposure associated with the project is the same as with the existing NRDS facility. There is a minimal risk of exposure to hazardous materials at the NRDS facility for the surrounding neighborhoods.

(1) Describe special emergency services that might be required.

Fire or medic services could be required during construction and during operation of the facilities at the completed project site.

(2) Proposed measures to reduce or control environmental health hazards, if any:

A spill control and countermeasures (SPCC) plan would be developed to control spills on site during construction and/or operation. Any contaminated soils encountered during construction would be excavated and disposed of in a manner consistent with the level of contamination and in accordance with state regulatory requirements by a qualified contractor(s) and/or City staff. State regulations concerning contaminated soil include the Model Toxics Control Act (Chapter 173-

340 Washington Administrative Code [WAC]) and the Dangerous Waste Regulations (Chapter 173-303 WAC).

A detailed site map of historic and current site conditions would be created for use during construction to delineate areas of residual soil and ground water contamination. Proposed construction plans would be compared to these maps and site remediation would be performed prior to construction, if necessary. In addition, prior to construction a formalized plan for removal, treatment, or other management of contaminated soil and ground water would be developed in accordance with Dangerous Waste Regulations. Public health and safety measures would be implemented to minimize exposure through both airborne and direct contact. Increased setbacks, additional barriers to public access, and expeditious removal of contaminated materials may be required to limit contact by the public during construction. The health and safety plan would also identify measures to ensure construction worker safety, outline emergency medical procedures, and specify reporting requirements.

The contaminated soil and water management plan required for construction would specify methods and procedures for stockpiling, transporting, disposing, and treating contaminated soil. It would also include ground water removal, storage, treatment, discharge (to sewer), transportation, and disposal. Most encounters with hazardous materials are expected to involve petroleum products that can be managed using relatively standardized approaches.

The design documents would include specifications for control of contractor activities associated with use of hazardous materials, such as fuels, lubricants, and solvents that may be used on the site. Management of these items, and the activities associated with them, would be prescribed in required plans and actions reviewed by inspectors in the field.

Throughout the construction process, encounters with hazardous materials would be documented and reported appropriately in accordance with the state Dangerous Waste Regulations. Project planning would accommodate regulatory agency requirements as well as disposal or treatment facility requirements.

A Health and Safety Plan would be submitted by the contractor before work commences as required by Washington Department of Labor and Industries (Chapter 296-843 WAC). Construction workers would have 40-hour Occupational Safety and Health Administration Health and Safety Training for working in potentially contaminated areas.

During operation, the disposal facility would comply with the provisions of SMC Chapter 21.36 - Solid Waste Collection to control potential environmental health hazards.

b. Noise

(1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Existing noise levels in the vicinity of the NRDS are due to a mixture of traffic on local streets, arterials and freeways, and local construction activities.

(2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The construction phases would generate a wide range of noise levels, depending upon the specific activities, with the demolition of the existing concrete transfer building being the loudest activity. Short-term noise from construction equipment would be limited to the allowable maximum levels set forth in the City of Seattle's Noise Control Ordinance (SMC Chapter 25.08). During construction, noise from construction equipment may occur between the hours of 7 a.m. and 9 p.m. weekdays, and 9 a.m. and 9 p.m. weekends.

Currently, the intermittent pattern of equipment operation results in a noise level of 75-85 $dBA_{LEQ30minute}$ at a distance of 50 feet from the tipping area (but inside the main transfer building) with momentary maximum noise levels of over 100 dBA. A measurement of 75-85 $dBA_{LEQ30minute}$ is the equivalent average sound level or LEQ of 30 minutes, measured in decibels on sounds between a frequency of 1kHz and 4 kHz – a typical range for measuring traffic and environmental noises. The existing noise level of 75-85 dBA is comparable to a busy street, which generates noise levels of approximately 80 dBA.

At sites adjacent to the NRDS in the surrounding neighborhood, the current operations of the NRDS generates sustained (dBA LEQ) noise levels close to, but not exceeding, the City of Seattle's Maximum Permissible Sound Level of 60 dBA during daytime hours. Currently, the nighttime noise standard of 50 dBA is likely exceeded on weekends during the 8 a.m. to 9 a.m. period. The City's Environmental Designation for Noise Abatement (EDNA) standards allow higher short-term noise levels for a few minutes per hour (see Noise Technical Report). However the net NRDS noise impact (when extrapolated from the 15-minute measurement) appears to exceed the noise standard more times than is permitted hourly.

After completion of the project, the NRDS would generate noise from a combination of sources, primarily automobile and truck traffic using the stations, unloading and consolidating recyclable materials such as glass and metals, and the machinery used to process the solid waste for transfer to the intermodal facility. Front-end loaders

and yard trucks would be used outside. The other machines would operate inside the tipping building, but rarely all at the same time. Some of the loudest momentary noises would be produced by commercial haulers when unloading (the slamming of steel doors and backup alarms). The project would add a new noise source to NRDS: exhaust fans for dust and odor control in the transfer building. The noise generated by these fans cannot be precisely determined until later in the design process but would not be a significant noise source.

The building would be designed to reduce existing maximum noise levels immediately outside its walls by an amount conservatively estimated at 10 dBA. This estimate is based on actual noise measurements at the NRDS compared to more recently constructed transfer stations of similar size and operation. A reduction of 10 dBA is perceived as reducing noise by one-half. With this reduction, the proposed reconstruction of the NRDS would meet the City's EDNA standards for momentary noises. There would continue to be momentary "spikes" of noise greater than 60 dBA as there are now. Despite such spikes, the facility's noise levels at adjacent residential properties would be within the City's limits. This does not mean the new facility would be inaudible. At times individual sounds of a particular volume or frequency would be heard. However, noise from the new facility would be less apparent than today.

(3) Proposed measures to reduce or control noise impacts, if any:

Construction equipment would be muffled in accordance with all applicable noise regulations. SMC Chapter 25.08, which prescribes limits to noise and construction activities, would be fully enforced while the project is under construction. In addition, the following practices would be employed:

- Maintaining heavy equipment and their mufflers in good condition.
- Buffering stationary generators or compressors (if used) with portable sound barriers if necessary to keep noise levels within regulatory limits.

The design would be required to achieve performance objectives and incorporate measures to reduce operational noise impacts of the NRDS on residential areas by:

- Replacing the open-sided tipping buildings with solid walled structures with greater noise reduction qualities, so that noise passing through the sides of the tipping building is reduced by approximately 10 dBA.
- Buffering the noise from ventilation fans with a three-sided

enclosure (open to the south).

- Preparing the site plan to minimize the noise from backup alarms when trucks and loaders are moving in reverse.

SPU's plans to implement these measures would reduce the sound levels generated at the NRDS, and would minimize noise impacts in residential neighborhoods close to the facilities, resulting in no significant adverse impacts. Current and future noise levels are, and would remain, less than the City of Seattle's Maximum Permissible Sound Level of 60 dBA at residential receivers during the day.

B8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The existing NRDS site provides transfer services for contractor-collected solid waste and yard waste/food waste, and drop-off services for self-haul customers. The NRDS is an intermediate transfer station serving Seattle primarily in the area north of the Lake Washington Ship Canal, but service is not limited to that area. Solid waste is compacted into intermodal containers and trucked south to the Argo Rail Yard for transfer to trains. The NRDS is the only transfer station in Seattle's north end.

At one end of the NRDS tipping building, yard waste/food waste is collected in open-top containers that are trucked to the Cedar Grove Composting Facilities in Everett and Maple Valley. Appliance and tire drop-off areas are located along the entrance road at the northeast corner of the site. Along with tires and appliances, clean wood waste, other scrap metal, plastics, paper, aluminum, and other recyclable materials are collected and transported to recycling facilities. There is limited parking for 12 to 18 trailers or rail container chassis on site.

The 1550 North 34th Street building to the east is vacant. The 30,000-square-foot building abuts a small parking lot at the south side of the building along North 34th Street. The south side of the 1550 building site is used as a parking lot for SPU employee vehicles.

Land use adjacent to the site includes a vacant City of Seattle parcel approximately 100 feet to the north (zoned C2-30) and single family residences (zoned SF 5000), one duplex, and one triplex to the north, northeast, and east. The Essential Bakery, a light industrial use (zoned C2-40), is located across Woodlawn Avenue North from the southeast corner of the site. Land use immediately south of the site (across North Northlake Place and North 34th Street) includes two office buildings, two commercial warehouses, and a small amount of vacant land (zoned IC-45). Immediately west of the site are two retail stores and two warehouses (also zoned IC-45) (Figure 3).

The parking lot in the northeast corner of the proposed project site is permitted in the SF 5000 zone as a conditional use (SMC 23.44), and is an accessory use to the building to its immediate south, located in the C2-40 zone. Half of the parking lot is currently leased to Essential Baking for employee and delivery truck parking. The other half of the lot is used for SPU employee parking. SPU would continue to use the parking lot for employee parking and utility vehicle parking, but would not use it for garbage trucks or tractor-trailer parking.

b. Has the site been used for agriculture? If so, describe.

The site has not been used for agriculture in recent history.

c. Describe any structures on the site.

The 4.3-acre site contains the 29,402-square-foot tipping building, a 1,200-square-foot office building, scales, and a small scale house. The 0.94-acre 1550 North 34th Street site contains a 30,000-square-foot commercial warehouse and retail building. The 0.31-acre parking lot located north of North 35th Street has no building structures on it.

d. Will any structures be demolished? If so, what?

All of the existing buildings would be demolished.

e. What is the current zoning classification of the site?

The existing NRDS site is zoned Industrial Commercial (IC-45) except for an area approximately 110 feet by 360 feet in the northeast corner, which is zoned Industrial Buffer (IB U/30).

The two northeastern parcels currently used for parking are zoned Single Family Residential (SF 5000), while the parcel to the east of the existing NRDS facility is zoned Commercial 2 (C2-40) (Seattle 2007).

f. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation for the existing NRDS site is industrial. The current comprehensive plan designation for the 1550 building site is commercial and mixed use. The current comprehensive plan designation for the parking lot parking lot located north of North 35th Street is residential. The properties in the Proposed Action are located outside the boundaries of any Comprehensive Plan designated urban village area. The site of the Proposed Action is located immediately adjacent to the Fremont Hub Urban Village (an area designated in the Comprehensive Plan as a growth center) and near the Wallingford Residential Urban Village designated in the Wallingford Neighborhood Plan.

g. If applicable, what is the current shoreline master program designation of the site?

The site is not within a shoreline master program designated area. Property south of North 34th Street is designated Urban Maritime under Seattle's Shoreline Management Program.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The NRDS site has no environmentally sensitive areas.

i. Approximately how many people would reside or work in the completed project?

Currently there are approximately 20 employees on the NRDS site at any one time. With the project, the number of employees at NRDS is expected to increase by 2030 to approximately 27 employees on site at one time on an average weekday and 29 employees during peak design weekdays. In addition, there would be office space provided at NRDS that could be used by up to 10 additional City employees or City contractors.

j. Approximately how many people would the completed project displace?

No people would be displaced by the project.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Since no people would be displaced, no measures are warranted.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The projected land uses are compatible with the City's Comprehensive Plan designations for the affected properties.

The existing NRDS parcel is zoned IC-45 except for a small area zoned IB U/30 (see B8.e). Solid waste transfer is an administrative conditional use and recycling is a permitted use in this zone. The existing transfer building, which operates as a conditional use on the IC-45 zoned parcel, would be demolished and replaced with a new transfer building. The new building would comply with the structure height allowed by the zoning code.

The IB U/30 zoning designation prohibits solid waste transfer; however, because the use was established before the zoning restriction was adopted, the use is allowed to continue.

The 1550 parcel, located to the east of the existing NRDS facilities, is zoned C2-45 and includes an existing warehouse building which would be remodeled or replaced for use as an office, employee facilities, meeting/education room, and recycling and reuse drop-off facility. These utility, recycling, and office uses are permitted in the C2-45 zone. Buildings would comply with the 5-foot landscape setback requirement on all sides of the existing NRDS properties that are adjacent to City streets (SMC 23.47A.016). Uses and facilities on this parcel would also comply with other IC-45 zone specifications that establish size limitations for office uses, maximum floor area ratios, setback requirements, venting, and transportation concurrency level-of-service standards (SMC 23.50).

Two SF 5000 zoned properties (in the northeast quadrant of the Carr Place North and North 35th Street intersection) also would be used for employee parking, thereby maintaining the existing legal, nonconforming use as accessory to the 1550 building site in the C2 zone to the immediate south.

The Carr Place North street and street right-of-way, between North 34th and North 35th streets would be vacated and incorporated into the proposed project. Any outdoor recycling collection activities would be located more than 50 feet from residentially-zoned lots and would include screening and landscaping as described in SMC 23.47.016.

B9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

This project does not involve the construction of any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

This project does not involve the elimination of any housing units.

c. Describe proposed measures to reduce or control housing impacts, if any:

This project does not have any housing impacts and, therefore, measures to reduce housing impacts are not warranted.

B10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

The maximum height of structures at the transfer facility would comply with the zoning requirements, currently established at 45 feet for the IC-45 zone, and 40 feet for the C2-40 zone. Although the proposed transfer building may be taller from base to rooftop than the existing structure, it might be constructed further below grade. The above-ground height of the building would conform to existing height restrictions in the IC-45 zone.

The exterior building materials would be required to be compatible with the surrounding setting.

b. What views in the immediate vicinity would be altered or obstructed?

The general visual context of the South Wallingford neighborhood consists of rolling hills, urban trees, single-and multi-family residences, office buildings, marine light industrial, and small business with visually striking distant views of Lake Union and the downtown Seattle skyline. The area in the vicinity of the NRDS is characterized by narrow streets, sidewalks, and roundabouts serving modest-sized residences and small businesses.

The NRDS may be viewed from the local street network, including from Interlake Avenue North, Ashworth Avenue North, Woodlawn Avenue North, Carr Place North, North 34th Street, and North 35th Street, among others (Figure 3). The NRDS site may also be viewed from the elevated roadway of Aurora Avenue, Queen Anne Hill, and from the great mound at Gas Works Park.

On the existing NRDS site, the large concrete structure of the NRDS facility is the dominant feature, surrounded by driveways, parking areas, stands of mature trees, and ancillary buildings. Views of the property are currently partially occluded by a cyclone fence with brown plastic slats and mature trees. A large, nearly solid façade, light yellowish brown industrial and office building (the 1550 building site) occupies the block east of Carr Place North.

The proposed project would change views from adjacent locations but would not be a dominant visual feature in views from more distant locations. The visually dominant elements of the reconstructed NRDS site would be the new transfer building, new office building, site entrances and exits, scale facilities, ramps and access roads, and the enhanced recycling area.

The project could affect public or private views toward Lake Union and the downtown Seattle skyline from surrounding streets including North 35th Street, Ashworth Avenue North, Interlake Avenue North, and Carr Place North.

Figure 3 shows several numbered viewpoints (indicated below) that were considered during evaluation of the views that could potentially be altered by the project.

The ground level view looking south from the intersection of Carr Place North and North 35th Street (viewpoint 1) would be similar to the existing view if the grade of the Carr Place North right-of-way and the 1550 building site is lowered. If recycling containers occupy the current Carr Place North right-of-way at its existing grade, the primary contrasts would include an increase in activity and customer traffic in the vicinity of the recycling containers. If structures are placed in the current Carr Place North right-of-way at its existing grade, views would include higher visibility of the new recycling facilities and lower visibility of the office building located at 1441 North 34th Street; distant views of the tops of downtown buildings may be obscured. In any case, the sidewalk and vegetation along the western edge of Carr Place North would be removed. Views of Lake Union from this viewpoint are currently obscured by the building located on the south side of North 34th Street and, thus, would remain unchanged.

The ground level view on Carr Place North looking south from street center at the midway point between North 36th Street and North 37th Street (viewpoint 2) would be similar to the existing view. The primary contrast would include increased activity and customer traffic in the vicinity of the recycling area. If structures are placed in the current Carr Place North right-of-way, views would include higher visibility of the new recycling facilities and lower visibility of the office building located at 1441 North 34th Street. With any configuration of recycling facilities, distant views of the downtown skyline would remain from this viewpoint.

The ground level view looking south from west of the roundabout at the intersection of Ashworth Avenue North and North 36th Street (viewpoint 3) would include higher visibility of the transfer building, if the building footprint is reconstructed further east and/or to a greater height but in compliance with the zoning code. This viewpoint would likely retain views of the distant downtown skyline and the upper portions of buildings (to the east), but views of shorter buildings to the west would likely be obscured.

The ground level view looking south from south of the intersection of Interlake Avenue North and North 36th Street (viewpoint 4) would include higher visibility of the transfer building and the loss of a mature stand of trees, if the building is reconstructed further west and/or to a greater height but in compliance with the zoning code. This viewpoint would likely retain views of the distant downtown skyline and the upper portions of buildings (to the east), but views of shorter buildings to the west would likely be obscured. The view of Queen Anne Hill would likely remain.

The transfer building would be more visible from ground level looking south from the sidewalk fifteen feet west of the northwest corner of North 35th Street and Interlake Avenue North (viewpoint 5). Views of a mature stand of trees also would be lost if the building were reconstructed further west.

The second-story view looking south from in front of the residential property on the northwest corner of Ashworth Avenue North and North 35th Street (viewpoint 6) would remain intact if the reconstruction of the transfer building were not taller. Distant views of the downtown skyline, Lake Union, Queen Anne Hill, and the Aurora bridge would likely remain.

The NRDS transfer building would be more visible from the first story view looking south from in front of the residential property on the northeast corner of Ashworth Avenue North and North 35th Street (viewpoint 7). Views from this location would no longer include the downtown skyline if the building were reconstructed further east. The transfer building would likely dominate the view toward the NRDS site from this viewpoint.

The NRDS transfer building would be more visible from the first story view looking south from in front of the residential property at 1506 North 35th Street between Ashworth Avenue North and Carr Place North (viewpoint 8) and views from this location would no longer include Lake Union and lower Queen Anne Hill if the transfer building is reconstructed further east. Views of the tops of downtown skyscrapers, the upper elevations of Queen Anne Hill, and the space needle would likely remain.

None of the public views described above are "designated" views that are subject to protection under the City's substantive SEPA policies, SMC 25.05.675 (P), and the City does not prohibit or restrict development that might change private views.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Full project designs are not finalized. However, the project design would undergo mandatory review by the Seattle Design Commission. The facility design would incorporate features to improve the aesthetics of the project, potentially including those that:

- Treat the surfaces of the structures with consistent architectural styling that minimizes the appearance of the transfer building as a solid waste management facility.
- Include aesthetically benign architectural features within the NRDS site to decrease the visual prominence of the NRDS facilities.
- Provide for a tidier facility that would reduce the visibility of unsightly waste or recyclables storage.
- Provide for a more efficient facility that would reduce the number of cars waiting in queues.
- Provide landscaping that would enhance the outward appearance

of the NRDS site and the proposed employee parking area north of the site.

- Provide lighting, lighting supports, and fixtures that are both functional and non-intrusive to residents living north of the site and near the proposed employee parking area.

Appropriate operational practices (with consideration of functionality) would be implemented to reduce those activities that could contribute negative visual characteristics to the site, with special attention to surrounding at-grade pedestrian activities and residents living north of the site. These could include:

- Maintenance of an organized and clean site.
- Control of queuing to prevent vehicles from lining up along adjacent streets.

In addition, construction practices would be deployed that minimize negative aesthetics during the construction phases, including:

- Maintenance of an organized and clean construction site.
- Efficient construction schedule to reduce the duration of impacts.
- Use of attractive signs to inform the public of construction activities including displays to provide public notification of detours, area closures, and a public access plan with graphics.

B11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Light and glare at the NRDS facility could affect nearby residences in the evenings after sunset. Glare from reflective surfaces is not currently an issue at the site. The site is illuminated for security with a combination of approximately seven double-headed, tall light poles, ten single-headed, tall light poles and eight wall-mounted light fixtures. The luminares cast light primarily down onto the site, reducing light trespass onto the adjacent streets and structures. The wall mounted fixtures on the south face of the building cast light outward from the structure, contributing to glare along North 34th Street. Additional light from inside the main structure is visible through the architectural fenestration (window openings). However, the light is subdued and does not contribute to light pollution or glare.

Lighting on the reconstructed NRDS site would be similar to the existing lighting. Light fixtures would illuminate the site for security reasons. Luminares that cast light downward toward the ground would be selected rather than luminares that cast light outward toward the surrounding residential properties. Non-reflective materials would be used for the construction of the new facilities to reduce glare toward adjacent properties. The transfer building would be a solid-walled structure, and would be less visually porous than the existing building. As a result, less light would be emitted from the building toward adjacent properties.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Light and glare from the completed project would not affect safety or interfere with views.

c. What existing off-site sources of light or glare may affect your proposal?

There are no off-site sources of light or glare that would affect this proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

Exterior lighting would be shielded and directed away from adjacent properties and roadways.

B12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The Burke-Gilman Trail for bicycles and pedestrians is located approximately 300 feet south of the south boundary of the project site (Figure 2). This 27-mile, multi-use recreational trail is part of the King County Regional Trail System and occupies an abandoned rail line south of North 34th Street. It follows North 34th Street into Gas Works Park, then northeast along North Pacific Street and eventually to King County's Tracy Owen Station in Kenmore.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No, the project would not displace any existing recreational use.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures are warranted or proposed.

B13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

Using the Washington Department of Archaeology and Historical Preservation website (DAHP 2007), the project location was checked on December 10, 2007, for properties listed on the Washington Heritage Register and the National Register of Historic Places. The project location was also checked using the Seattle Department of Planning and Development website (Seattle 2007) for City of Seattle landmarks on December 10, 2007. No listed or known eligible historic resources are present on the project site.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

The location was checked using the King County Historic Preservation archaeological and ethnographic database on January 10, 2008. No landmarks or evidence of historic, archaeological, scientific, or cultural importance are known to be on the project site (Ruby 2008).

c. Proposed measures to reduce or control impacts, if any:

The proximity of the site to the historic Lake Union shoreline, as well as geographic locations with ethnographically recorded native place names, indicates the need for on-site construction supervisor(s) to relay to all workers the importance of paying close attention during excavation work, with the need to suspend work immediately in an area if evidence of cultural remains is encountered, until the remains can be assessed by a professional archaeologist (Ruby 2008).

If utility trenches are to be constructed to depths beyond those that have been historically disturbed, an archaeologist should be on-site to monitor the excavation. An archaeologist should also review the raw data from any geotechnical studies done in areas where underground structures would be placed.

Should evidence of cultural remains, either historic or prehistoric, be encountered during excavation, work in the immediate area would be suspended, and the find would be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action would be made at that time.

B14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show onsite plans, if any.

The existing NRDS is located in the Wallingford area of Seattle, north of Lake Union. The existing site is bounded by North 35th Street to the north, North 34th Street to the south, Woodlawn Avenue North to the west, and several businesses to the west. The main access to the NRDS, located on North 34th Street, provides access for contractor and self-haul customers. A secondary driveway exists on North 35th Street that provides access for transfer trucks. The proposed locations of the site driveways are planned to be approximately the same as the existing condition. .

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The site is accessible by public transit. The site is directly served by King County Metro Routes 26, 31 and 74. Route 26 provides service along North 35th Street with a transit stop for the eastbound service located at Carr Place North. The transit stop for westbound service is located on North 35th Street at Woodlawn Avenue North. There is a bus shelter at that location. Service along Stone Way North is provided by Routes 31 and 74. Use of the transit stops would not be adversely affected by this project during construction or following completion of the project. However, the bus shelter located on the north side of North 35th Street between Carr Place North and Woodlawn Avenue North may need to be temporarily relocated one block east or west during construction. Also, the bus stop at the southwest corner of North 35th Street and Carr Place North may also need to be temporarily relocated one block east or west during construction.

c. How many parking spaces would the completed project have? How many would the project eliminate?

The completed project would use the existing 46-stall, SPU-owned parking lot located north of North 35th Street between Carr Place North and Woodlawn Avenue North to accommodate all of the necessary NRDS employee parking. The existing 15-stall parking lot on the south side of the existing 1550 Building adjacent to the NRDS may be removed as part of the project.

All parking for contractors and construction trucks would be required to occur on site or in the SPU-owned parking lot during construction of NRDS.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

The project includes vacating Carr Place North between North 34th and 35th streets. Please see the project transportation analysis for more details (*Transportation Technical*

Report for the SPU Transfer Station Improvement Project North Recycling and Disposal Station, Heffron Transportation, Inc., March 3, 2008). There are no other changes currently proposed that would affect the street system in the project vicinity.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project would not use water, rail, or air transportation. Lake Union is used as a shipping route and for commercial float plane operations.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The Proposed Action at NRDS would reconstruct the existing facilities to include a larger tipping building, additional scales, and enhanced recycling facilities. The following changes in trips at NRDS in 2030 with the Proposed Action are projected:

- Self-haul trips would be slightly reduced because there would be increased (curbside) recycling opportunities, which would reduce the number of self-haul refuse trips.
- Refuse transfer truck trips would be reduced since more recyclables would be removed from the waste stream.
- Additional transfer truck trips for recyclables and reuse materials would be generated due to the enhanced recycling and reuse facilities on site.
- Employee trips would increase due to increased staffing needs associated with new waste streams.

Tables 3 and 4 present year 2030 trips for both the No-Action and Proposed Action conditions for an average day and a peak design day, respectively. A trip is defined as the passage of a vehicle in or out of the site; therefore, one vehicle entering and exiting the site would count as two trips. As shown, by the year 2030, the Proposed Action would increase daily trips, compared to No Action, by 14 to 40 trips, depending on the traffic scenario and analysis day. This increase is primarily due to additional employee trips.

Table 3. Daily Trip Summary at NRDS – Average Day

	2030 No Action Condition			2030 with Proposed Action			Net Change		
Trip Type	Low Traffic	Med. Traffic	High Traffic	Low Traffic	Med. Traffic	High Traffic	Low Traffic	Med. Traffic	High Traffic
Collection Trucks	108	124	136	108	124	136	0	0	0
Self-Haul	1,042	1,146	1,166	1,036	1,140	1,142	-6	-6	-24
Refuse Transfer Truck	30	36	44	30	34	44	0	-2	0
Other Transfer Trucks	26	28	16	28	32	20	2	4	4
Employee	50	50	50	68	80	92	18	30	42
Total	1,254	1,384	1,412	1,268	1,410	1,434	14	26	22

Source: Heffron Transportation, Inc. using information provided by Seattle Public Utilities and trip models provided by Herrera Environmental Consultants, Inc., November 2007.

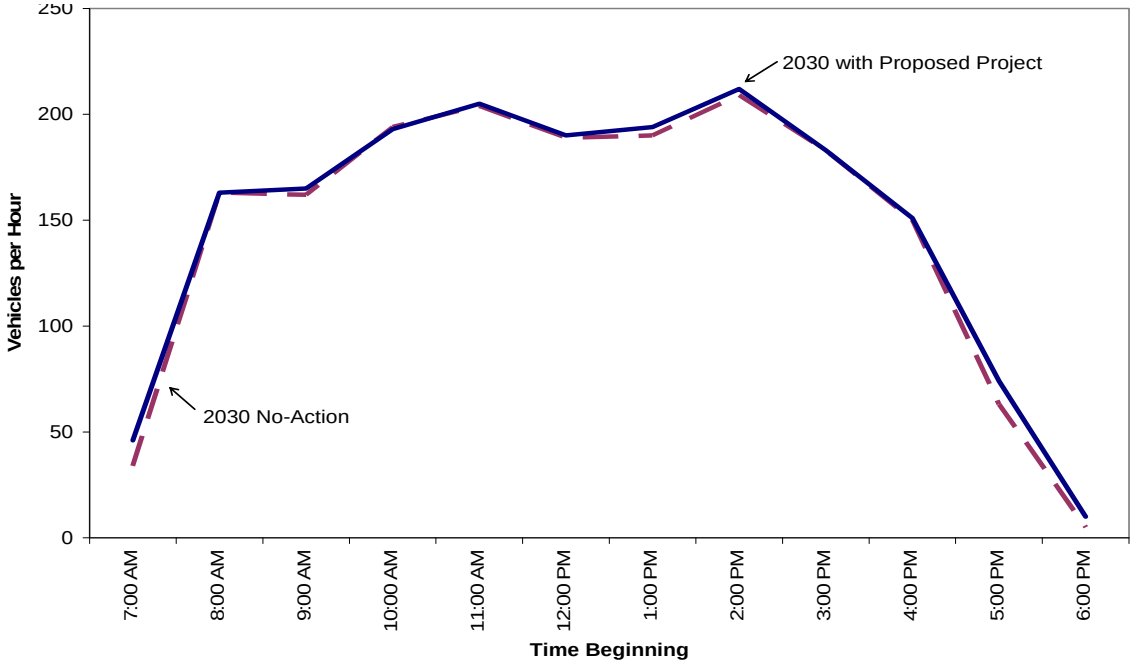
Table 4. Daily Trip Summary at NRDS – Peak Design Day

	2030 No Action Condition			2030 with Proposed Action			Net Change		
Trip Type	Low Traffic	Med. Traffic	High Traffic	Low Traffic	Med. Traffic	High Traffic	Low Traffic	Med. Traffic	High Traffic
Collection Trucks	142	150	156	142	150	156	0	0	0
Self-Haul	1,308	1,436	1,462	1,302	1,428	1,454	-6	-8	-8
Refuse Transfer Truck	36	42	50	36	40	50	0	-2	0
Other Transfer Trucks	38	38	22	42	42	28	4	4	6
Employee	56	56	56	74	86	98	18	30	42
Total	1,580	1,722	1,746	1,596	1,746	1,786	16	24	40

Source: Heffron Transportation, Inc. using information provided by Seattle Public Utilities and trip models provided by Herrera Environmental Consultants, Inc., November 2007.

Figure 10 from the *Transportation Technical Report for the SPU Transfer Station Improvement Project North Recycling and Disposal Station* shows that the hourly trips generated by NRDS with the Proposed Action would be similar to the No-Action condition.

NRDS Hourly Trip Distribution in 2030 – Peak Design Day – High-Traffic Scenario



Source: Heffron Transportation, Inc. 2007

Detailed information about the methodology used to estimate the project's trip generation can be found in the transportation report prepared for this analysis (Transportation Technical Report for the SPU Transfer Station Improvement Project North Recycling and Disposal Station).

Reconstruction of the NRDS site is currently estimated to occur in 2011 and part of 2012, and the NRDS would be closed during construction. Therefore, trips to and from the NRDS would be much lower during construction compared to average day operations at the NRDS.

g. Proposed measures to reduce or control transportation impacts, if any:

No adverse transportation impacts were identified for constructing or operating the Proposed Action. Therefore, no transportation mitigation would be required to re-construct the NRDS.

g. Proposed measures to reduce or control transportation impacts, if any:

No adverse transportation impacts were identified for constructing or operating the Proposed Action. Therefore, no transportation mitigation would be required to re-construct the NRDS.

B15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The project would have no impact on the need for public services within the City of Seattle.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Since there are no impacts to public services, no measures are warranted or applicable (see B15a. above).

B16. Utilities

a. Check utilities currently available at the site, if any: ☐ **None**
☑ **electricity** ☐ **natural gas** ☑ **water** ☑ **refuse service**
☑ **telephone** ☑ **sanitary sewer** ☐ **septic system**
☑ **other:** high speed internet

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. ☐ **None**

The project would continue to use electricity (Seattle City Light), telephone (contractor), high-speed internet (contractor), water and storm sewer (SPU), and sanitary sewer (King County Metro). Phone and electricity lines may need to be relocated due to vacating Carr Place North. The rebuilt station would improve solid waste services within the City of Seattle.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Henry Friedman Date: April 14, 2008

Henry Friedman, Project Manager

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Noise Technical Report for the North Recycling and Disposal Station (NRDS). Prepared by Environalysis, LLC for Seattle Public Utilities. March 2008.

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Figures

1. Vicinity Map for the North Recycling and Disposal Station
2. Site Map for the North Recycling and Disposal Station
3. Viewpoints in the area of the North Recycling and Disposal Station
4. Land Use Zoning in the Area of the North Recycling and Disposal Station

Attachments

1. Climate Change Impacts Worksheet – NRDS (Existing)
2. Climate Change Impacts Worksheet – NRDS (Proposed)

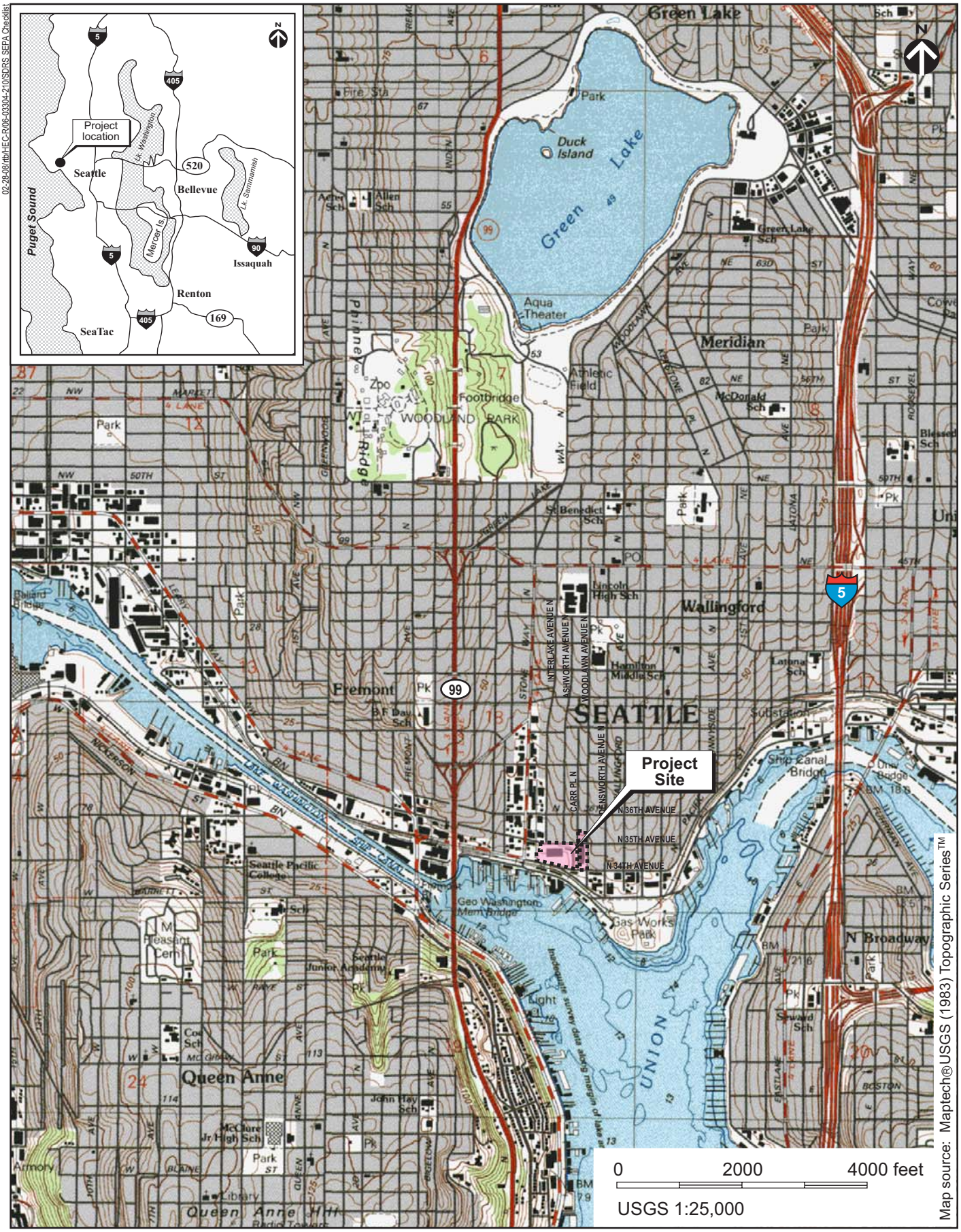
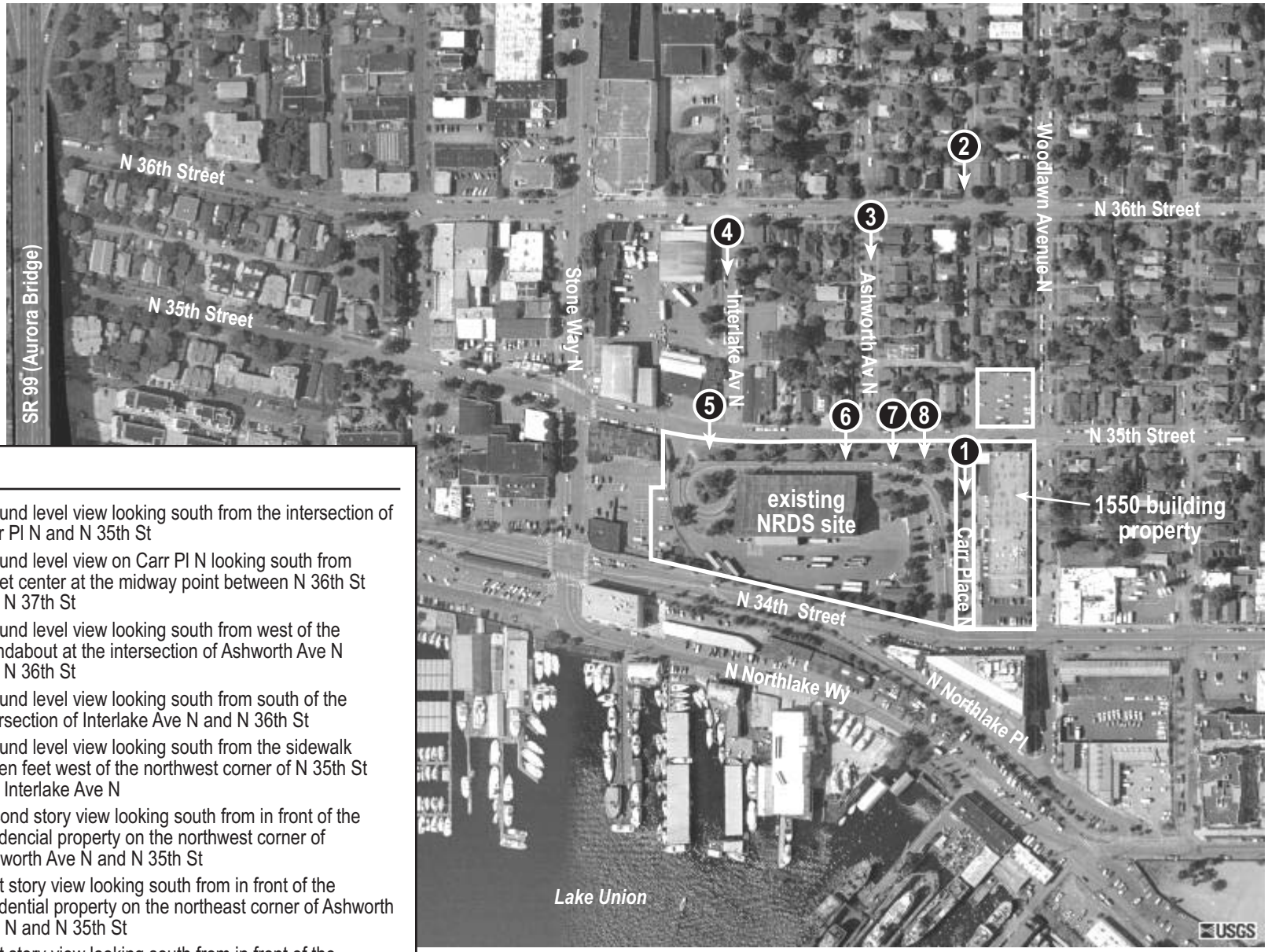


Figure 1. Vicinity map for the North Recycling and Disposal Station (NRDS), 1350 North 34th Street, Seattle, Washington.

Not to scale

Aerial source: USGS 2002 obtained from TerraServer USA at http://www.terraserver-usa.com

Figure 2. Site map for the North Recycling and Disposal Station (NRDS), 1350 North 34th Street, Seattle, Washington.



KEY

1. Ground level view looking south from the intersection of Carr Pl N and N 35th St
2. Ground level view on Carr Pl N looking south from street center at the midway point between N 36th St and N 37th St
3. Ground level view looking south from west of the roundabout at the intersection of Ashworth Ave N and N 36th St
4. Ground level view looking south from south of the intersection of Interlake Ave N and N 36th St
5. Ground level view looking south from the sidewalk fifteen feet west of the northwest corner of N 35th St and Interlake Ave N
6. Second story view looking south from in front of the residencial property on the northwest corner of Ashworth Ave N and N 35th St
7. First story view looking south from in front of the residential property on the northeast corner of Ashworth Ave N and N 35th St
8. First story view looking south from in front of the residential property (1506 N 35th St) on N 35th St between Ashworth Ave N and Carr Pl N

Not to scale

Aerial source: USGS 2002 obtained from TerraServer USA at http://www.terraserver-usa.com

Figure 3. Viewpoints.

Figure 4. Land use zoning in the area of the North Recycling and Disposal Station (NRDS), 1350 North 34th Street, Seattle, Washington.

EXISTING NRDS

Section I: Buildings

Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Emissions Per Unit or Per Thousand Square Feet (MTCO2e) Embodied	Energy	Transportation	**Lifespan Emissions (MTCO2e)**
Single-Family Home	0		98	672	792	**0**
Multi-Family Unit in Large Building	0		33	357	766	**0**
Multi-Family Unit in Small Building	0		54	681	766	**0**
Mobile Home	0		41	475	709	**0**
Education		0.0	39	646	361	**0**
Food Sales		0.0	39	1,541	282	**0**
Food Service		0.0	39	1,994	561	**0**
Health Care Inpatient		0.0	39	1,938	582	**0**
Health Care Outpatient		0.0	39	737	571	**0**
Lodging		0.0	39	777	117	**0**
Retail (Other Than Mall)		0.0	39	577	247	**0**
Office		12.0	39	723	588	**16192**
Public Assembly		0.0	39	733	150	**0**
Public Order and Safety		0.0	39	899	374	**0**
Religious Worship		0.0	39	339	129	**0**
Service		0.0	39	599	266	**0**
Warehouse and Storage		20.0	39	352	181	**11435**
Other		45.0	39	1,278	257	**70838**
Vacant		0.0	39	162	47	**0**

Section II: Pavement

Pavement		204.00				**10200**

Total Project Emissions: **108665**

PROPOSED NRDS

Section I: Buildings

Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet (in thousands of square feet)	Emissions Per Unit or Per Thousand Square Feet (MTCO2e) Embodied	Energy	Transportation	**Lifespan Emissions (MTCO2e)**
Single-Family Home	0		98	672	792	**0**
Multi-Family Unit in Large Building	0		33	357	766	**0**
Multi-Family Unit in Small Building	0		54	681	766	**0**
Mobile Home	0		41	475	709	**0**
Education		0.0	39	646	361	**0**
Food Sales		0.0	39	1,541	282	**0**
Food Service		0.0	39	1,994	561	**0**
Health Care Inpatient		0.0	39	1,938	582	**0**
Health Care Outpatient		0.0	39	737	571	**0**
Lodging		0.0	39	777	117	**0**
Retail (Other Than Mall)		0.0	39	577	247	**0**
Office		10.0	39	723	588	**13493**
Public Assembly		0.0	39	733	150	**0**
Public Order and Safety		0.0	39	899	374	**0**
Religious Worship		0.0	39	339	129	**0**
Service		0.0	39	599	266	**0**
Warehouse and Storage		20.0	39	352	181	**11435**
Other		124.0	39	1,278	257	**195198**
Vacant		0.0	39	162	47	**0**

Section II: Pavement

Pavement		204.00				**10200**

Total Project Emissions: **230326**