



City of Seattle

Edward B. Murray, Mayor

Department of Planning and Development

Diane M. Sugimura, Director

CITY OF SEATTLE ANALYSIS AND RECOMMENDATION OF THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND DEVELOPMENT

Application Number: 3017918
Applicant Name: Clayton Antieau for Seattle Public Utilities (SPU)
Address of Proposal: 5301 R 24th Ave NW

SUMMARY OF PROPOSED ACTION

Shoreline Substantial Development Application to grade 1,500 cu. yds. of material in an environmentally critical area and to replace existing combined sewer overflow outfall by installing a 160 linear ft. by 30 in. outfall pipe and two support pilings (CSO outfall #150) in 24th Avenue NW right-of-way. Project includes installing new man holes and repaving the right-of-way and replacing a 2 ft. retaining wall and vegetation restoration at the shoreline. Determination of Non- Significance has been prepared by City of Seattle, Seattle Public Utilities.

- **Shoreline Substantial Development Permit (SSDP)** — to allow the replacement of a utility line in the Urban Industrial (UI) shoreline environment. Chapter 23.60
- **State Environmental Policy Act (SEPA)** Chapter 25.05 (substantive conditioning).

SEPA DETERMINATION: [] Exempt [] DNS [] MDNS [] EIS
[X] DNS with conditions

PROPOSAL and BACKGROUND

Location of the Proposal

The project is in the Ballard neighborhood, with the CSO Outfall 150 located south of the intersection of 24th Ave NW and NW Market Street in designated Shoreline Street End and right-of-way of 24th Ave NW. The project would be situated entirely within the improved street right-of-way for 24th Ave NW. There is no street address for this project. The project is located in the Cedar/Sammamish Water Resource Inventory Area (WRIA 8)

Background

The City of Seattle's (City's) wastewater collection system includes separate, partially separated, and combined systems. In the areas of the City where there are separate systems, stormwater runoff flows to a storm drainage system, while sewage and industrial wastewaters are conveyed through sewers to regional wastewater treatment facilities owned and operated by King County. In the partially separated areas of the City, storm drain separation projects were built during the 1960s and 1970s to divert street runoff to the storm drainage system while allowing rooftop and other private property drainage to flow into the sewers. In the combined areas of the City, sewage, industrial wastewater, and

stormwater runoff are conveyed in combined sewers to the King County wastewater treatment facilities.

During storm events, the quantity of stormwater runoff flowing into the collection system sometimes exceeds the capacities of the partially separated and combined sewer systems. When this happens, the system overflows at combined sewer overflow (CSO) outfall structures designed for this purpose. There are currently 87 outfalls in the City of Seattle where CSOs can occur.

SPU's CSO Outfall Rehabilitation Program was initiated to rehabilitate these outfalls as necessary. Subsequently, the State of Washington Department of Ecology included requirements to rehabilitate specific CSO outfalls in SPU's CSO System NPDES Permit (No. WA0031682) issued on October 27, 2010 and modified on September 13, 2012. Outfall Rehabilitation Program staff conducted condition assessments and analyzed options for rehabilitating seven outfalls, including three that must be rehabilitated by December 31, 2014 and four that must be rehabilitated by December 31, 2015. CSO Outfall 150 is among the outfalls that must be rehabilitated by December 31, 2014. The provided Environmental Checklist analyzed the environmental effects of the proposed rehabilitation project at CSO Outfall 150.

The tributary area to CSO Outfall 150 includes approximately 400 acres in the eastern portion of Ballard. The tributary area extends from Northwest 85th Street south to Northwest Market Street and from 16th Avenue Northwest west to 22nd Avenue Northwest.

Combined sewage from the tributary area flows to an overflow structure located in maintenance hole (MH) 011-184. When flows in that structure reach the top of the overflow weir, overflows start to occur. Downstream of the overflow structure, CSO flows are divided into two separate pipes that discharge to Salmon Bay in the Lake Washington Ship Canal in two adjacent but separate outfalls: CSO Outfall 150 and CSO Outfall 151. Both outfalls are located in the Ballard neighborhood at the south end of 24th Avenue Northwest, just south of its intersection with Northwest 54th Street and situated entirely within the improved right-of-way for 24th Avenue Northwest.

CSO Outfall 150 was originally designed and installed in 1935 as a submerged 30 inch diameter wood stave pipe emerging from the shoreline below the surface of the Ship Canal. The wood stave pipe was mounted on saddle-mount wooden braces affixed to the pilings of a public pier located at the south end of 24th Avenue Northwest. The outfall originally extended under that pier out into the water to a point approximately 63 feet from the Ship Canal's ordinary high water mark (OHWM) elevation of 18.60 feet above sea level (NAVD88).

Since 1935, approximately 53 feet of the original wood stave pipe has deteriorated and disarticulated, falling away from its mounts. Less than 10 feet of the original submerged portion of the wood stave pipe remains in place beneath the pier. The wooden pier was also installed in 1935 and is therefore of an age significantly beyond its assumed approximate 40 year design life. CSO Outfall 150 still functions to convey CSOs from the overflow structure located in MH 011-184 to the Ship Canal, but it now discharges at the shoreline in shallow water. CSO Outfall 150 is an active overflow location; during the years 2008 – 2012, the outfall overflowed an average of 22 times per year discharging an average of 2.7 million gallons of combined sewage per year.

The Proposal

The proposed project would rehabilitate CSO Outfall 150 by replacing the existing maintenance hole just upstream of the shoreline (MH 011-239) and then installing a replacement outfall comprised of approximately 50 feet of 30 inch diameter epoxy-coated ductile iron pipe and approximately 110 feet of 30 inch diameter high-density polyethylene (HDPE) outfall pipe. Construction would use open-trench methods on land and a piling-supported mounting system in the water. The new outfall would be installed along the west side of the pier's pile supports. As determined by geotechnical explorations, a loose, unconsolidated layer of sediment, greater than 7 feet thick, underlies the new pipeline's alignment within the Ship Canal. Approximately 70 feet of the 30 inch HDPE pipe would be supported just above this sediment layer by piling-pair mounts of concrete-filled, 8 inch rectangular, concrete-filled steel tubing driven to a depth sufficient to be bedded in competent sediment. The existing wood stave pipe would be capped and abandoned in place per City of Seattle standards.

The new outfall pipe would be aligned slightly to the west of the original wood stave pipe alignment and between the two piers that are currently located at the outfall site (Attachment C), one of which (the eastern pier) is owned by SDOT and the other of which is a privately owned pier east of the Pacific Fishermen Shipyard.

Construction staging would be located within approximately 3,000 square feet of an informal parking area within the right-of-way along 24th Avenue Northwest. The project would also replace an existing 2 foot tall concrete retaining wall at the Salmon Bay/Ship Canal shoreline with a new rock facing and crushed basalt revetment surface placed on a slope of approximately 1:7 (rise: run) to protect the new pipeline from the wave action of passing ship traffic.

Once constructed, the pipeline may need to be cleaned and inspected in the future. For purposes of evaluating environmental impacts of that activity, SPU estimates that inspection and cleaning would not occur more frequently than once every 5 years over the remaining lifespan of the pipe (estimated to be 60 years). Cleaning would be conducted by land-based "vactor" equipment using the nearest principal upstream structure accessible by land. Pipe contents would be jetted into the Ship Canal, with turbidity controls if required. Following cleaning, the pipe would be inspected by closed-circuit television camera (CCTV) to document its condition and serviceability. CCTV inspections would be conducted by land-based equipment using the nearest principal upstream maintenance hole structure accessible by land.

Public Notice and Comment Period

The public comment period for this project ended on July 25th 2014. The Land Use Application information is available at the Public Resource Center located at 700 Fifth Ave, Suite 2000¹.

ANALYSIS - SHORELINE SUBSTANTIAL DEVELOPMENT

The State Shoreline Management Act (SMA) and the City of Seattle's Shoreline Master Program (SMP) regulate activity within 200 feet of the ordinary high-water mark (OHWM) of shorelines of the state. Seattle Public Utilities (SPU) has applied to DPD for a Shoreline Permit to construct its proposed rehabilitation of the existing Combined Sewer Outfall 150 in Ship Canal, which is a Significant Shoreline of the state.

¹ <http://www.seattle.gov/dpd/toolsresources/default.htm>

The proposed project would rehabilitate CSO Outfall 150 by replacing the existing maintenance hole just upstream of the shoreline (MH 011-239) and then installing a replacement outfall comprised of approximately 50 feet of 30 inch diameter epoxy-coated ductile iron pipe and approximately 110 feet of 30 inch diameter high-density polyethylene (HDPE) outfall pipe. All work would be required to be performed with an approved construction erosion, sedimentation, and turbidity control plan, while also meeting National Pollutant Discharge Elimination System construction stormwater permit requirements. Disturbed shoreline areas would be revegetated with live stakes. All trash and derelict concrete/debris along the along the lakeshore found within the project area would be disposed of properly.

SMC 23.60.030 of the Seattle Municipal Code provides criteria for review of a Shoreline Substantial development permit and reads:

A substantial development permit shall be issued only when the development proposed is consistent with:

- A. The policies and procedures of Chapter 90.58 RCW;*
- B. The regulations of this Chapter; and*
- C. The provisions of Chapter 173-27 WAC*

Conditions may be attached to the approval of a permit as necessary to assure consistency of the proposed development with the Seattle Shoreline Master Program and Shoreline Management Act.

A. The Policies and Procedures of Chapter 90.58 RCW

Chapter 90.58 RCW is known as the Shoreline Management Act of 1971. It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary incidental rights. Permitted uses in the shorelines shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the shoreline area and any interference with the public's use of the water.

The Shoreline Management Act provides definitions and concepts, and gives primary responsibility for initiating and administering the regulatory program of the Act to local governments. The Department of Ecology is to primarily act in a supportive and review capacity, with primary emphasis on insuring compliance with the policy and provisions of the Act. As a result of this Act, the City of Seattle adopted a shoreline master program, codified in the Seattle Municipal Code at Chapter 23.60. Development on the shorelines of the state is not to be undertaken unless it is consistent with the policies and provisions of the Act, and with the local master program. The Act sets out procedures, such as public notice and appeal requirements, and penalties for violating its provisions. As the following analysis will demonstrate, the subject proposal is consistent with the procedures outlined in RCW 90.58.

B. The Regulation of Chapter 23.60

Chapter 23.60 of the Seattle Municipal Code is known as the "Seattle Shoreline Master Program." In evaluating requests for substantial development permits, the Director must determine that a proposed use meets the approval criteria set forth in SSMP 23.60.030. Development standards of the shoreline environment and underlying zone must be considered, and a determination made as to any special requirements (shoreline conditional use, shoreline variance, or shoreline special use permit) or conditioning that is necessary to protect and enhance the shorelines area (SSMP 23.60.064). In order to obtain a shoreline substantial development permit, the applicant must show that the proposal is

consistent with the shoreline policies established in SSMP 23.60.004, and meet development standards for all shoreline environments established in SMC 23.60.152 as well as the criteria and development standards for the shoreline environment in which the site is located, any applicable special approval criteria and the development standards for specific uses.

Each of these elements is evaluated below in the order they are listed in the Shoreline Master Program. The shoreline designation for the area of work is Urban Industrial (UI) shoreline environment.

SMC 23.60.004 – Shoreline goals and policies

The Shoreline Goals and Policies which are part of the Seattle Comprehensive Plan’s Land Use Element and the purpose and location criteria for each shoreline environment designation contained in SMC 23.60.220 must be considered in making all discretionary decisions in the shoreline district. The purpose of the Urban Industrial (UI) environment is stated in SMC 23.60.220C.11.a.:

The proposal is located within the Urban Industrial (UI) Shoreline Environment. The purpose of the Urban Industrial environment is to provide for efficient use of industrial shorelines by major cargo facilities and other water-dependent and water-related industrial uses. Views shall be secondary to industrial development and public access shall be provided mainly on public lands or in conformance with an area-wide Public Access Plan. Utility lines are a use permitted outright in the UI environment.

The overall project purpose is to prevent combined sewage overflows into Ship Canal and to fulfill requirements of the National Pollutant Discharge Elimination System. The project will enable SPU to reduce untreated flows into Ship Canal, which will improve water quality and shoreline habitat in this area and Ship Canal. Public access to the shoreline will remain unchanged following the project. Best management practices that will be employed during construction described above and/or in more detail in the application and serves the overall project purpose use as well as the purpose of the Urban Industrial (UI) Shoreline Environment.

SMC 23.60.064 - Procedures for Obtaining Shoreline Substantial Development Permits

This application has followed the procedural requirements for a Master Use Permit as specified in subsection A. SMC 23.60.064 also provides authority for conditioning of shoreline substantial development permits as necessary to carry out the spirit and purpose of and assure compliance with the Seattle Shoreline Code, Chapter 23.60, and with RCW 90.58.020 (State policy and legislative findings).

Per SMC 23.60.064 – C, in evaluating whether a development which requires a substantial development permit, conditional use permit, variance permit or special use authorization meets the applicable criteria, the Director shall determine that:

Development Standards for UI Shoreline Environment (SMC 23.60.870 – 880)

The development standards set forth in the Urban Industrial (UI) Shoreline Environment relate to height, lot coverage, view corridors, setbacks, water-related uses on waterfront lots and public access. The proposal conforms to all applicable development standards for the UI environment.

SMC 23.60.840 – Uses Permitted Outright in the UI Environment

The proposal does not change the current use of the property and is consistent with allowed uses in the Urban Industrial (UI) environment.

SMC 23.60.152 – Development Standards for all Environments

These general standards apply to all uses in the shoreline environment. They require that design and construction of all uses be conducted in an environmentally sound manner, consistent with the Shoreline Management Program and with best management practices for the specific use or activity. These general standards of the SMP state, in part, that all shoreline development and uses shall:

- Protect the quality and quantity of surface and ground water on and adjacent to the lot and shall adhere to the guidelines, policies, standards and regulations of applicable water quality management programs and regulatory agencies. Best management practices such as paving and berming of drum storage areas, fugitive dust controls and other good housekeeping measures to prevent contamination of land or water shall be required.*
- Not release oil, chemicals or other hazardous materials onto or into the water.*
- Be located, designed, constructed, and managed to avoid disturbance, minimize adverse impacts and protect fish and wildlife habitat conservation areas, including but not limited to, spawning, nesting, rearing and habitat areas, commercial and recreational shellfish areas, kelp and eel grass beds, and migratory routes. Where avoidance of adverse impacts is not practicable, project mitigation measures relating the type, quantity and extent of mitigation to the protection of species and habitat functions may be approved by the Director in consultation with state resource management agencies and federally recognized tribes;*
- Be located, designed, constructed and managed to minimize interference with, or adverse impacts to, beneficial natural shoreline processes such as water circulation, littoral drift, sand movement, erosion and accretion;*
- Be located, designed, constructed, and managed in a manner that minimizes adverse impacts on surrounding land and water uses and is compatible with the affected area; and*
- Be located, constructed, and operated so as not to be a hazard to public health and safety.*

The proposal, as designed and conditioned below, would not adversely affect the quality and quantity of surface and ground water on and adjacent to the site on a long-term basis. No planned discharge of solid wastes would occur. No intentional release of oil, chemicals, or other hazardous materials shall occur. Erosion would not result from the development. Impacts to fish and wildlife and shoreline processes are minimized. Long-term impacts to surrounding land and water uses are also minimized. Some vegetation will be cleared with this proposal, but a re-vegetation plan part of the project. No hazard to public safety or health is proposed by this development. Navigation channels will not be affected. The proposal would not affect existing shoreline stabilization. No submerged public right-of-way or view corridors would be significantly affected. The conditions noted at the end of this report, which are based on the criteria of SSMP 23.60.152, ensure that the project conforms to the goals and regulations of the Seattle Shoreline Master Program. The public interest suffers no substantial detrimental effect from the proposal.

C. The Provisions of Chapter 173-27 WAC

WAC 173-27 establishes basic rules for the permit system to be adopted by local governments, pursuant to the language of RCW 90.58. It provides the framework for permits to be administered by local governments, including time requirements of permits, revisions to permits, notice of application, formats for permits, and provisions for review by the state's Department of Ecology (DOE). Since DOE has approved the Seattle Shoreline Master Program, any project consistent with the criteria and procedures of SMC 23.60 is also consistent with WAC 173-14 and RCW 90.58.

CONCLUSION

Development requiring a Shoreline Substantial Development Permit can only be approved if it conforms to the policies and procedures of the WAC, RCW and with the regulations of SMC 23.60, Seattle Shoreline Master Program. The specific standards for development in the shoreline environment will be met by the proposed development.

Pursuant to the Director's authority under Seattle's Shoreline Master Program to ensure that development proposals are consistent with the policies and procedures, and conform to specific development standards of the underlying zone, and having established that the proposed use and development are consistent with the Seattle Shoreline Program, with the recommended conditions below the proposal is recommended for approval. Further DPD finds that the criteria found in WAC 173-27-160 are satisfied in order to allow the proposed Utility service use.

DECISION - SHORELINE

The Shoreline Substantial Development Permit is **CONDITIONALLY GRANTED**.

ANALYSIS - SEPA

Environmental review resulting in a Threshold Determination is required pursuant to the Seattle State Environmental Policy Act (SEPA), WAC 197-11, and Seattle's SEPA Ordinance (Seattle Municipal Code Chapter 25.05).

The SEPA Overview Policy (SMC 25.05.665) clarifies the relationship between codes, policies, and environmental review. Specific policies for each element of the environment, and certain neighborhood plans and other policies explicitly referenced, may serve as the basis for exercising substantive SEPA authority. The Overview Policy states, in part, "*Where City regulations have been adopted to address an environmental impact, it shall be presumed that such regulations are adequate to achieve sufficient mitigation*" subject to some limitations.

Disclosure of the potential impacts from this project is made in the submittal materials by the applicant. The Department of Planning and Development has analyzed the environmental information submitted by the project applicant; and reviewed the project plans and any additional information provided. As indicated in SPU's determination of non-significance, this action will result in adverse impacts to the environment. A discussion of these impacts, short and long term, is warranted.

Short - Term Impacts

Construction Impacts

Construction activities (grading, shoring, pipe installation, asphalt/concrete breaking paving, landscaping and associated electrical work) for project could result in the following adverse impacts: construction dust, emissions from construction machinery and vehicles, increased particulate levels, increased noise levels, occasional disruption of adjacent vehicular and pedestrian traffic, and a small increase in traffic and parking impacts due to construction workers' vehicles. Several construction related impacts are mitigated by existing City codes and ordinances applicable to the project, such as: Noise Ordinance; Street Use Ordinance; Stormwater Code; Grading Code; Noise Ordinance; Environmentally Critical Areas Ordinance; Tree Protection Ordinance, Land Use Code and Building Code. Following is an analysis of the applicable SEPA policies.

The Street Use Ordinance includes regulations that mitigate dust, mud, and circulation. Temporary closure of sidewalks and/or traffic lane(s) is adequately controlled with a street use permit through the Seattle Department of Transportation.

Construction activities including construction worker commutes, truck trips, the operation of construction equipment and machinery, and the manufacture of the construction materials themselves result in increases in carbon dioxide and other greenhouse gas emissions which adversely impact air quality and contribute to climate change and global warming. While these impacts are adverse, they are not expected to be significant.

Construction Vehicles and Grading

Construction is expected to temporarily add particulates to the air and will result in a slight increase in auto-generated air contaminants from construction worker vehicles; however, this increase is not anticipated to be significant. Federal auto emission controls are the primary means of mitigating air quality impacts from motor vehicles as stated in the Air Quality Policy (SMC 25.05.675).

Existing City code (SMC 11.62) requires truck activities to use arterial streets to every extent possible. City code (SMC 11.74) provides that material hauled in trucks not be spilled during transport. The City requires that a minimum of one foot of “freeboard” (area from level of material to the top of the truck container) be provided in loaded uncovered trucks, which minimizes the amount of spilled material and dust from the truck bed en route to or from a site. No additional mitigation is warranted.

Greenhouse Gas Emissions

Construction activities including construction worker commutes, truck trips, the operation of construction equipment and machinery, and the manufacture of the construction materials themselves result in increases in carbon dioxide and other greenhouse gas emissions which adversely impact air quality and contribute to climate change and global warming. While these impacts are adverse, they are not expected to be significant.

Long - Term Impacts

The following long-term or use-related impacts, slight increase in demand on public services and utilities; and increased energy consumption are not considered adverse; furthermore, other City Departments will review in detail the service requirements needed to meet the project impacts/demand.

Environmental Health

The goals of the proposed Project are to improve water quality in Ship Canal, protect the public health, improve the environment and meet State laws and regulations (RCW 90.48.480 and WAC 173-245-020(22)) that limit CSOs to a long-term average of no more than one untreated discharge per year per outfall .

Greenhouse Gas Emissions

Operational activities, primarily vehicular trips associated with the project construction and the project’s energy consumption, are expected to result in increases in carbon dioxide and other greenhouse gas emissions which adversely impact air quality and contribute to climate change and global warming. While these impacts are adverse, they are not expected to be significant, therefore, no further mitigation is warranted.

SEPA CONDITIONING SUMMARY

In conclusion, adverse effects on the environment resulting from the proposal are anticipated to be non-significant. Meeting the conditions stated below the project will be compliant with SEPA policies.

Existing codes and development regulations applicable to this proposed project will provide sufficient mitigation and no further conditioning or mitigation is warranted pursuant to specific environmental policies or the SEPA Overview Policy ([SMC 25.05.665](#)).

CONDITIONS – SHORELINE

During Construction

1. Any work water ward of ordinary high water shall be restricted to applicable work windows established by Washington Department of Fish and Wildlife.
2. Appropriate Best Management Practices (BMPs) shall be employed to prevent any debris or other deleterious material from entering Lake Washington, such as the use of a turbidity curtain and/or debris boom surrounding the project area during in-water and over-water work to contain any debris, suspended sediments, or spills caused by construction activities. Materials to be disposed of shall be contained on site and then discarded at an appropriate upland facility.
3. Any debris that enters the water during the proposed work shall be removed immediately and contained until it can be disposed of at an appropriate upland facility.

CONDITIONS – SEPA

During Construction

4. During grading activities, watering of the site and uncovered materials in trucks shall be required to reduce construction dust.
5. The contractor shall make provisions to wash vehicle tires, wheels and exteriors leaving the site in order to prevent spillover of particulates into the adjacent rights of way.
6. For the duration of grading activity, the contractor is required to cease weekday grading truck trips during weekdays from 4:00 pm and 6:00 pm.
7. Ensure the adequacy of sound-control devices that are at least as effective as those on the original equipment. No equipment would have un-muffled exhaust.
8. Minimize idling time of equipment and vehicle operation.
9. If resources of potential archaeological significance are encountered during construction or excavation, the owner and/or responsible parties shall:
 - Stop work immediately and notify DPD (Colin R. Vasquez, colin.vasquez@seattle.gov or 206-684-5639) and the Washington State Archaeologist at The Department of Archaeology and Historic Preservation. Follow procedures outlined in Appendix A of Director's Rule 2-98.

10. If human remains are encountered during construction or excavation, the owner and/or responsible parties shall:

- Stop work immediately and notify the Washington State Archaeologist at The Department of Archaeology and Historic Preservation. Course of action will be determined by the appropriate regulating agency.

Signature: _____ (signature on file) Date: August 14, 2014
Colin R. Vasquez, Senior Land Use Planner
Department of Planning and Development

CV:drm

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