

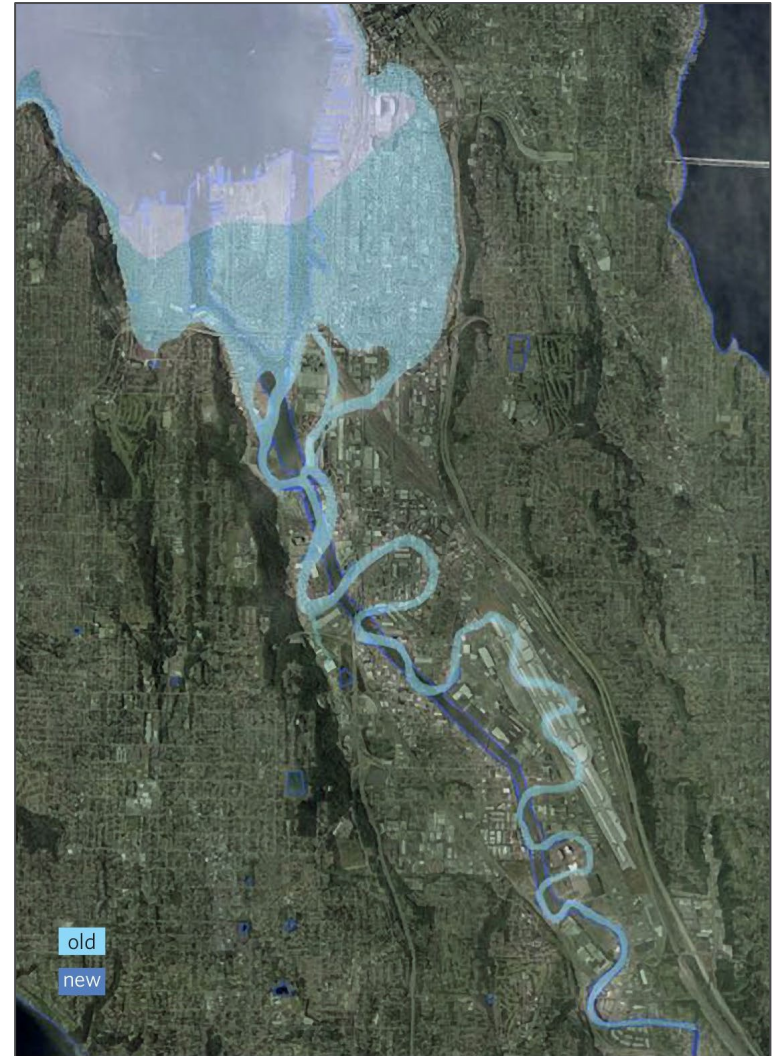
# Port of Seattle, September 2023 For Department of Ecology Information Boeing Isaacson-Thompson Port of Seattle Sliver Property

Site History and Aerial Photographs



# Presentation Summary

- Site vicinity and Port Sliver Location
- Historical Duwamish Shoreline
- History of Boeing-Isaacson Property
- Former Slip 5 Fill and Pier History
- Aerials and Shoreline Obliques (1936 – Current)



Source: City of Seattle

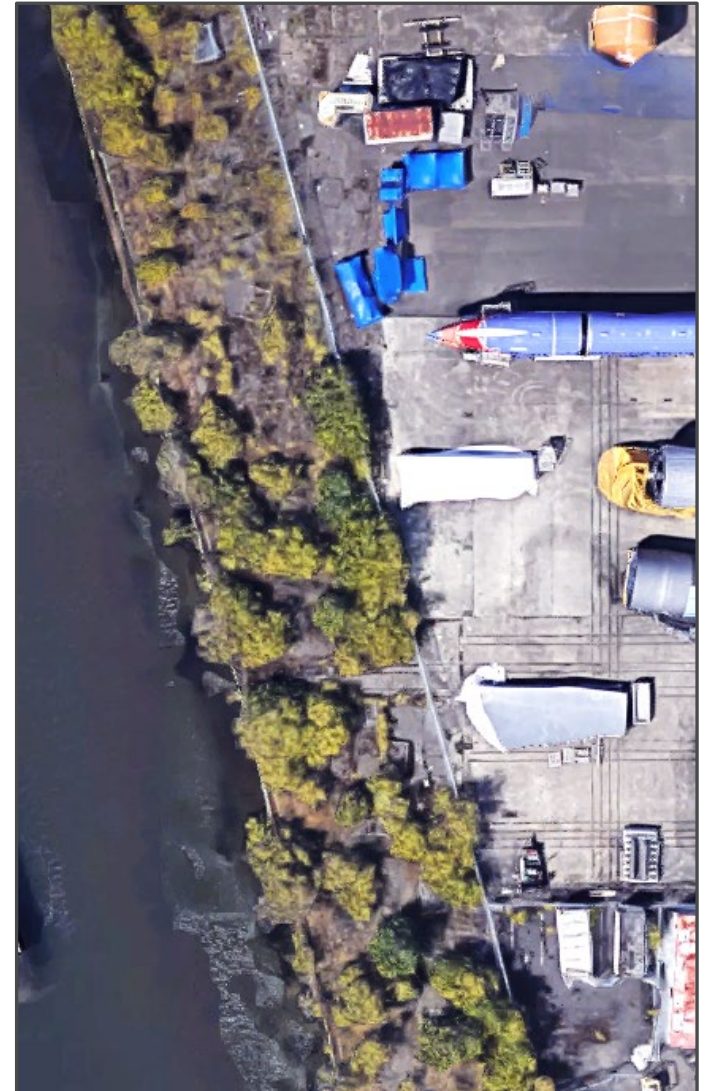


# Current Site Vicinity (2023)



# Site Information

- Port of Seattle Sliver inherited from former Commercial Waterway District No. 1 of King County (“CWD”) upon its dissolution in 1963.
- 0.5 acre (400 feet by 60 feet).
- Unpaved, but records indicate previously covered with asphalt (1966).
- Wooden bulkhead constructed by 1966, with a section constructed as early as 1932.
- Currently fenced off from LDW and Boeing.

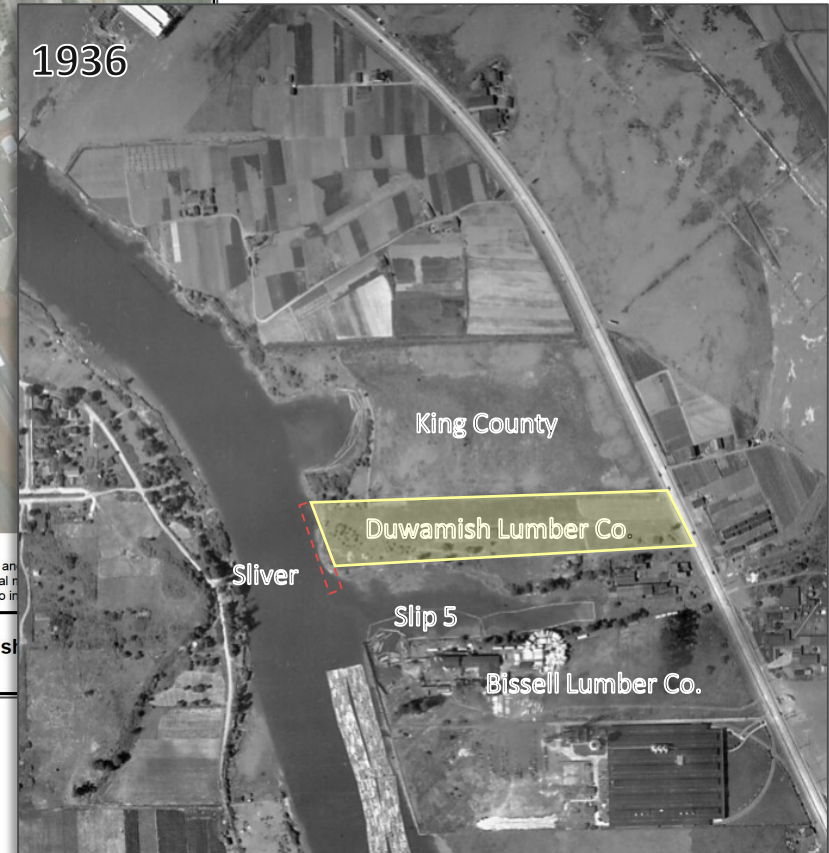
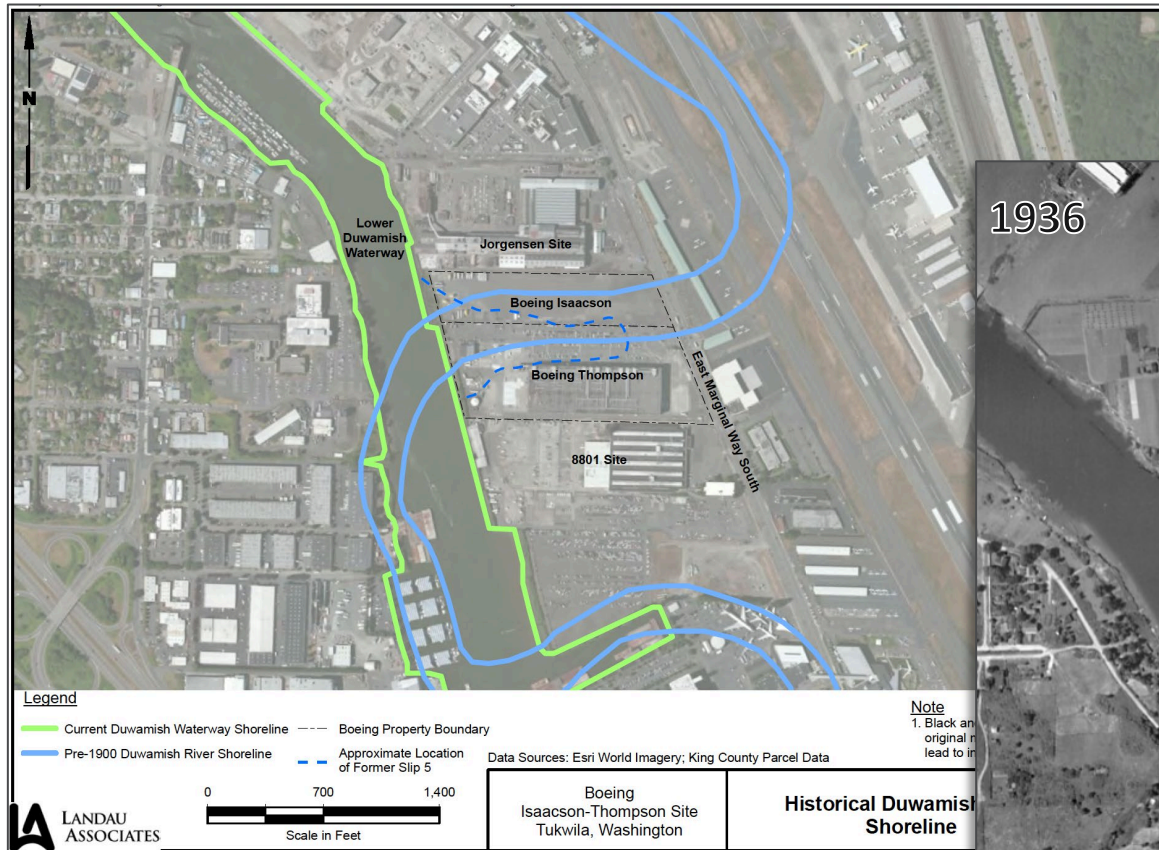




# View of Bulkhead at Former Jorgensen Forge Site and Boeing Isaacson



# Historical Duwamish Shoreline and Former Slip 5



Property boundaries for Duwamish Lumber Co. and Sliver are approximate.



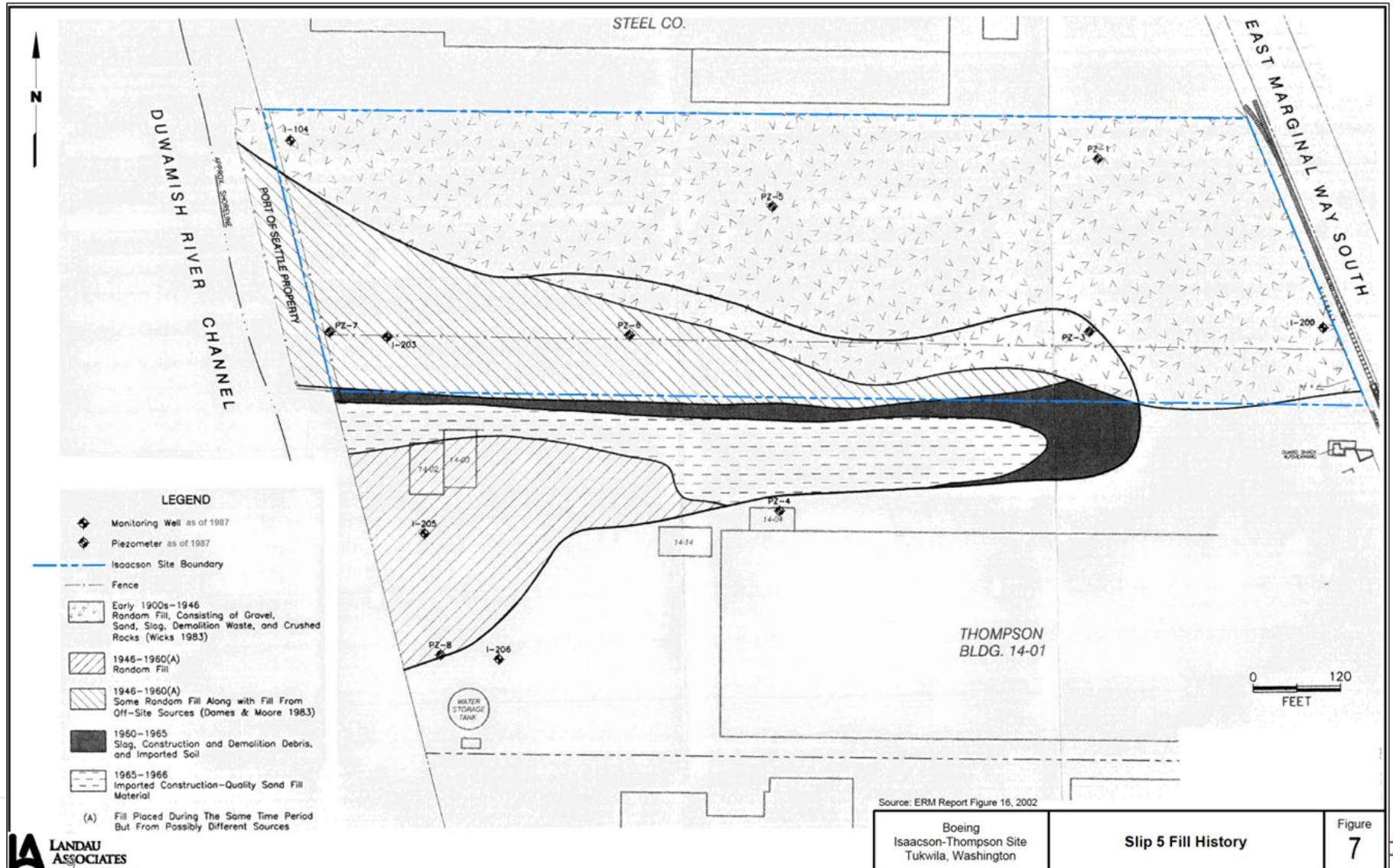


# Boeing-Isaacson Property History

- Duwamish Lumber Company sawmill operated on the western portion of Boeing-Isaacson, north of former Slip 5 area from 1920 to 1946.
- Mineralized Cell Wood Preserving Company treated logs with heated solutions of arsenic and sulfate salts of copper and zinc on the northern side of Slip 5 before 1945. Storage tanks chemicals and sludge were reportedly drained onto the ground daily.
- Isaacson purchased the property in 1943 and developed it between 1943 and 1966.
- Isaacson facility was used for various purposes associated with the Isaacson Iron Works (later known as Jorgenson Forge) steel plant to the north [then operated by Isaacson], including the storage of scrap metal before melting.
- In the 1950s, expanded facilities east to west, covering almost the entire property north of the former Slip 5 area.
- In 1984, Boeing purchased the Isaacson property and repurposed the steel fabrication building for storage. The Isaacson building was dismantled prior to 1990.

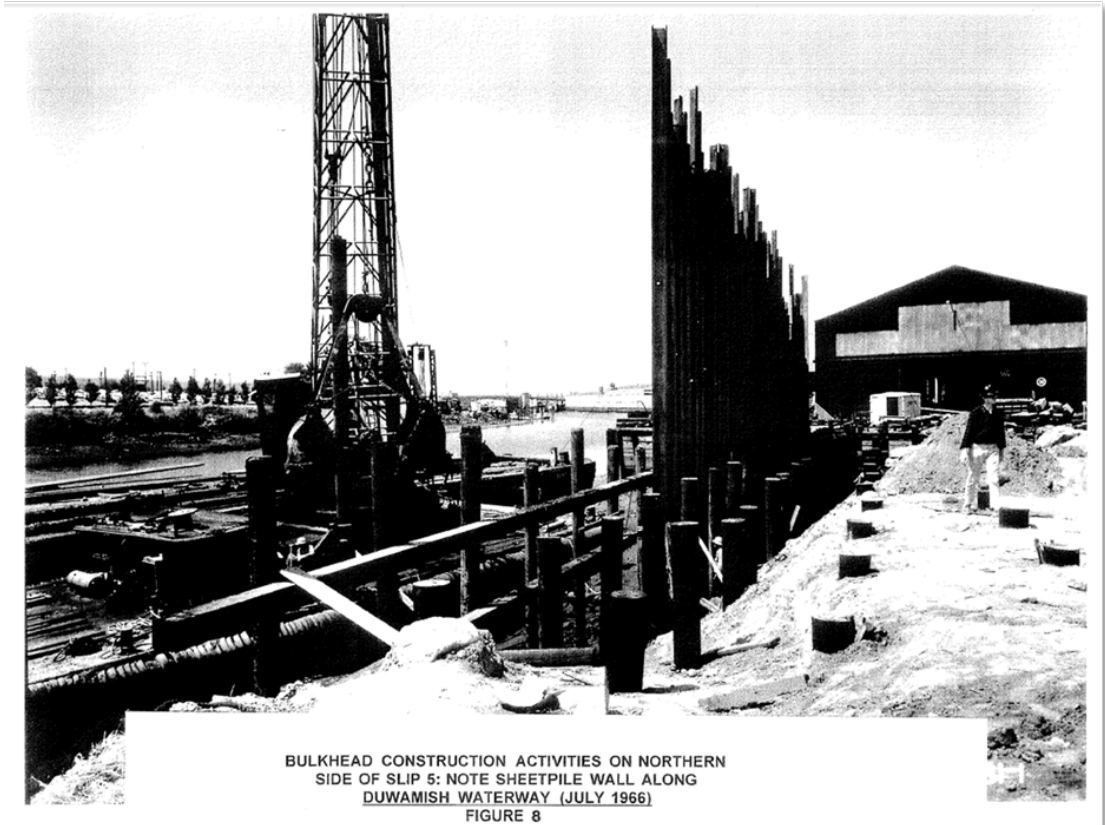


# Former Slip 5 and Sliver Fill History



# Sliver History (1932 to 1966)

- A section of wooden bulkhead appears to have been constructed (not by Port or CWD) as early as 1932.
- Sheetpile may have been installed behind upland of current dilapidated bulkhead.
- Slip 5 filling completed by 1966.
- Sliver filling appears to be completed by 1969.





# 1932 USACE Survey Wooden Bulkhead and Slip 5



# 1936 Aerial Photograph





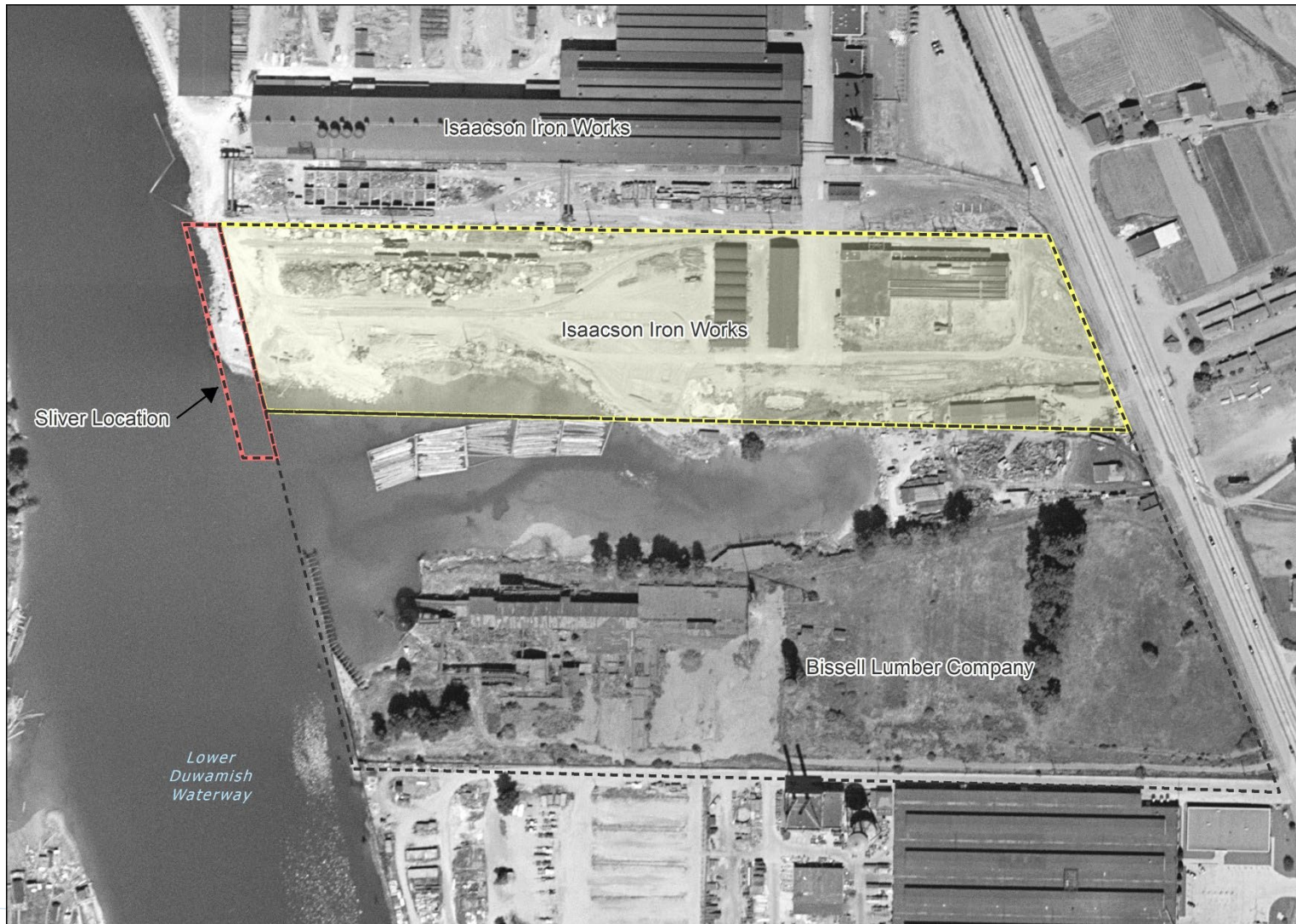
# 1944 Aerial Photograph



Property boundaries for Duwamish Lumber Co. and the Sliver are approximate.



# 1948 Aerial Photograph

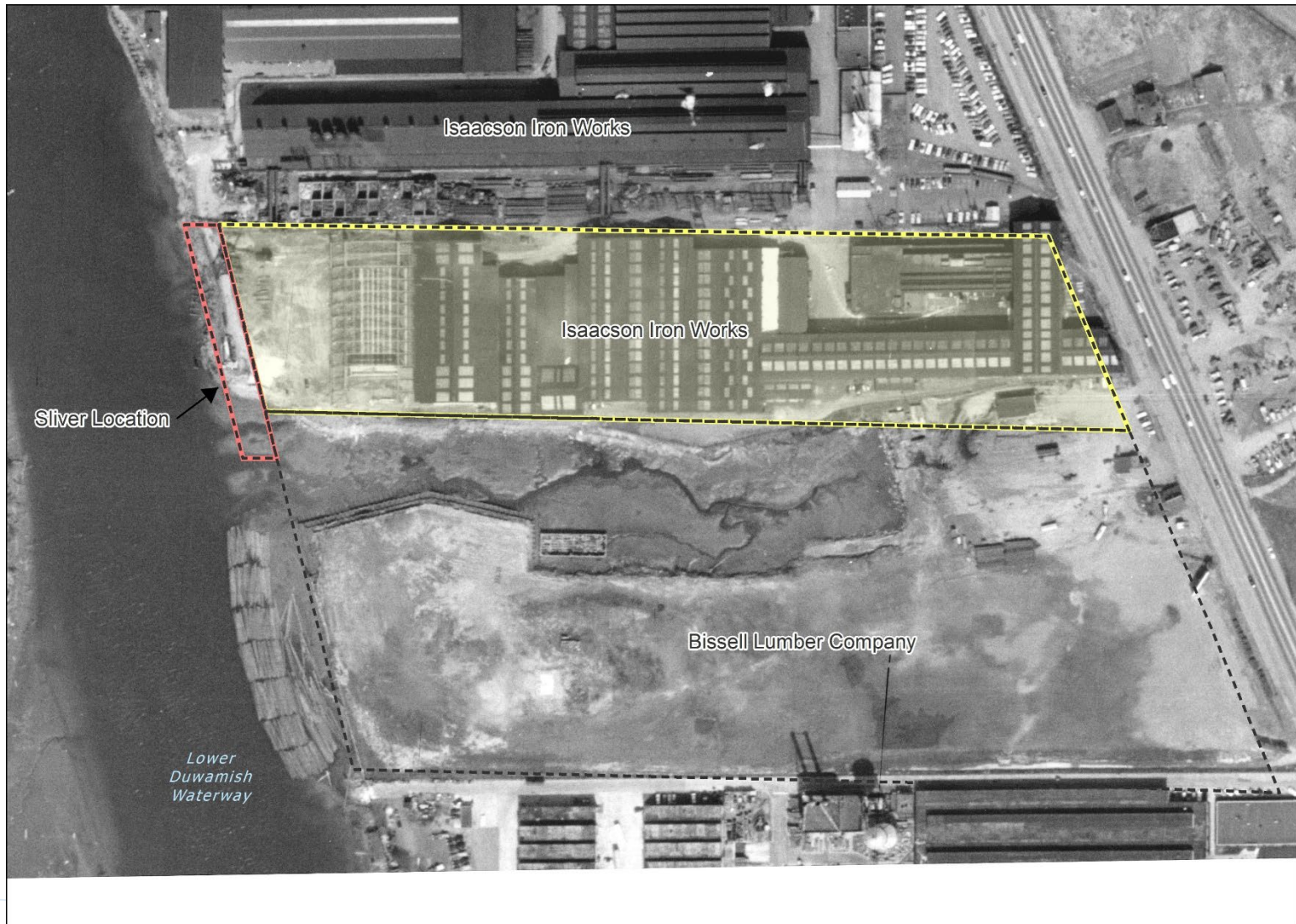


# 1951 Aerial Photograph





# 1956 Aerial Photograph



# 1960 Aerial Photograph



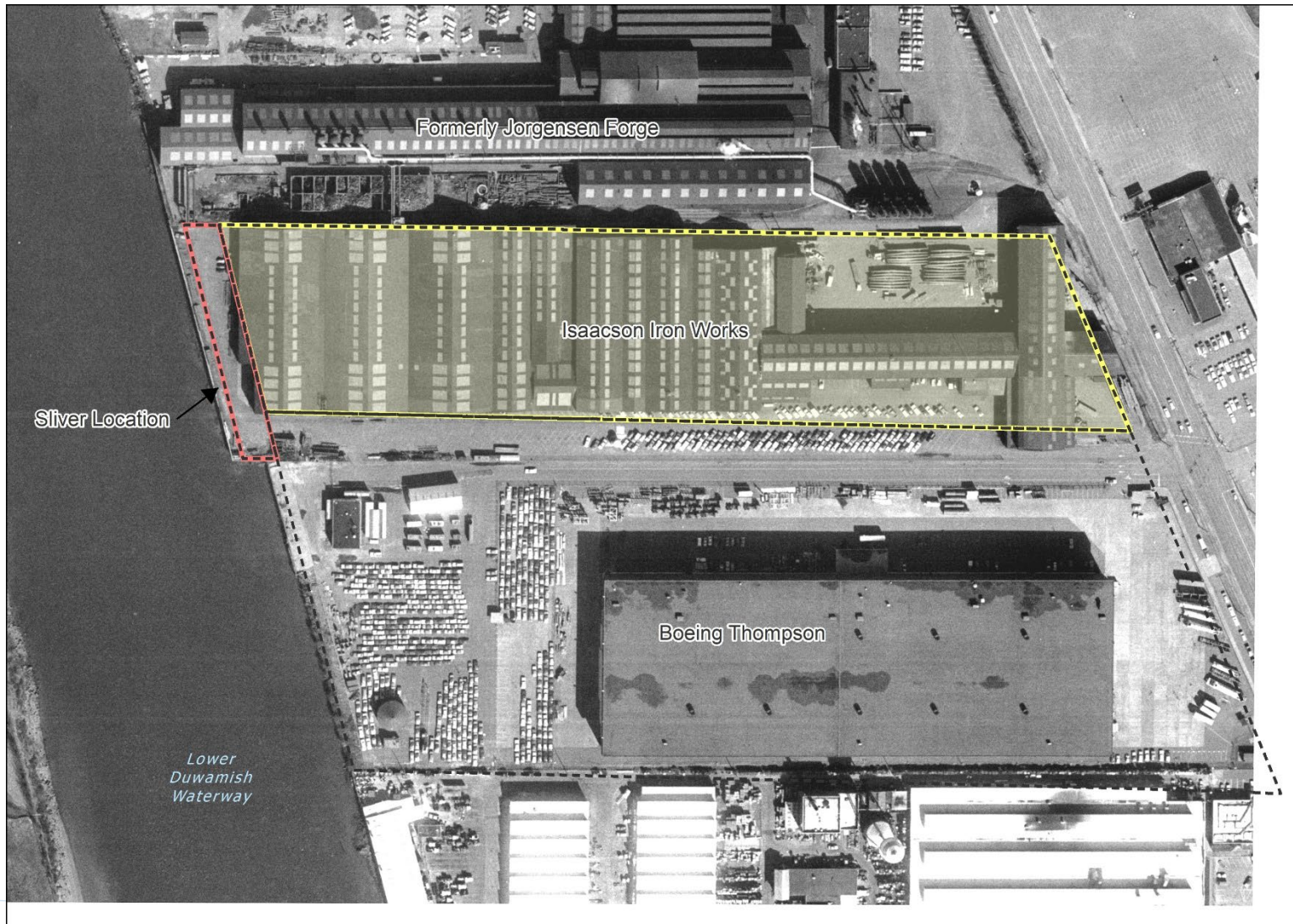


# 1969 Aerial Photograph



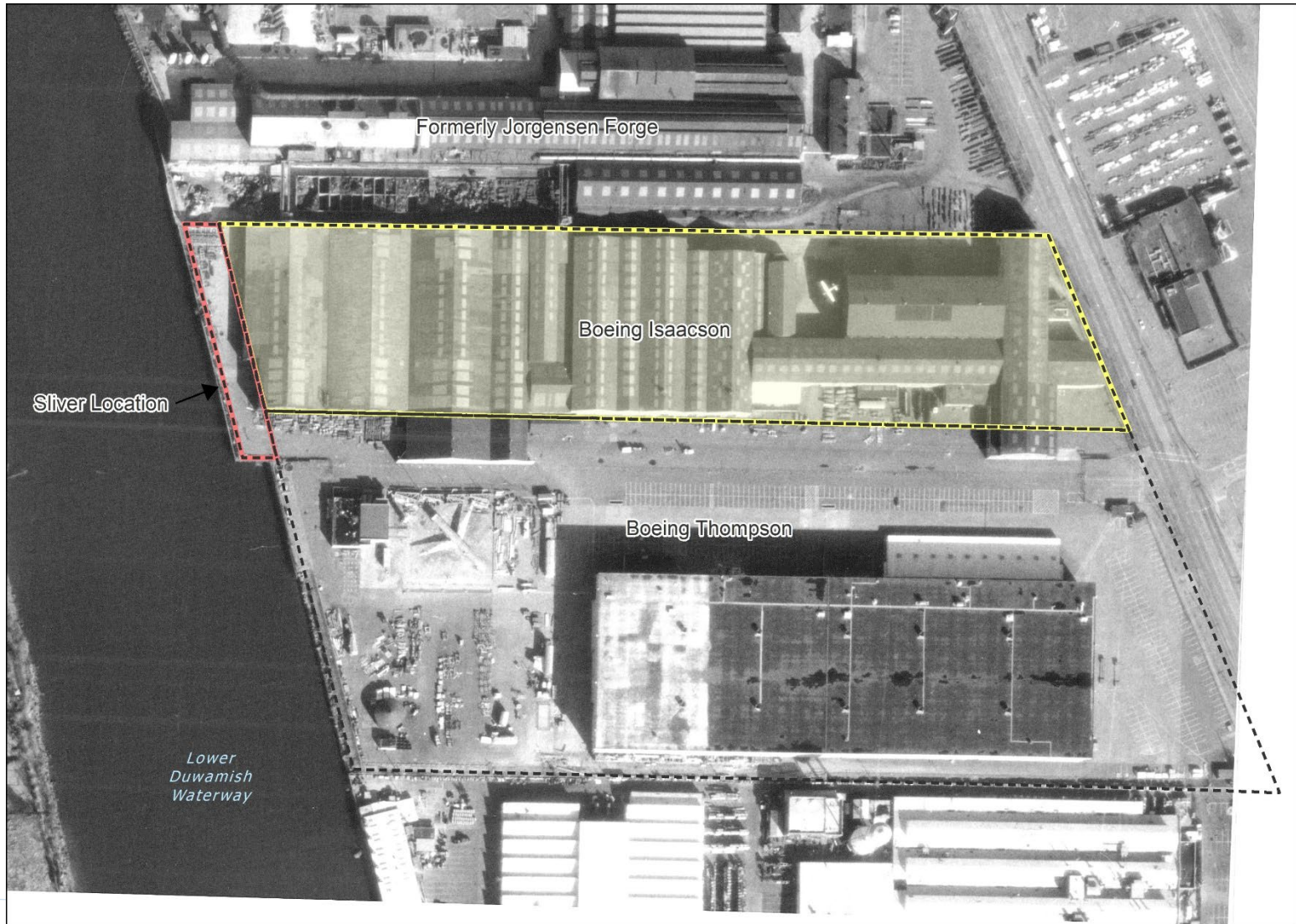


# 1974 Aerial Photograph





# 1985 Aerial Photograph





# 2002 Aerial Photograph





# 2011 Aerial Photograph



# Ecology Shoreline Obliques of Sliver Location



Property boundaries for Boeing Isaacson and Sliver are approximate.



# Ecology Shoreline Oblique of Sliver Location



Property boundaries for Boeing Isaacson and Sliver are approximate. **FLOYD | SNIDER**  
strategy ■ science ■ engineering

# Context and Considerations

- The Port of Seattle and CWD had nothing to do with the construction or use of the Sliver property.
- Adjacent property owners and operators constructed the Sliver and (including Boeing) used it as their own.
- The CWD (in the mid- to late-1950s) tried to place such upland slivers under leases. The Washington Supreme Court rejected that in 1963, holding that the CWD had no authority to lease or sell any portion of the 500-foot-wide LDW right-of-way, and no authority to exclude third parties unless they were interfering with navigation or other rights of the public.
  - *Commercial Waterway Dist. No 1 of King Cty. v. Permanente Cement Co.*, 61 Wn.2d 509, 379, P.2d 178 (1963)
- Port agreed in 1963 to inherit the assets of the then-dissolving CWD, knowing of the *Permanente* case and the above restrictions.
- The Port has no interest in post-remediation reconstruction of the Sliver (e.g., *do not replace it*).



# Supplemental Images from EPA

- Supplemental images (1936, 1942, and 1946) from EPA Freedom of Information Act evaluating historical fill and operations at the former Jorgenson Forge Site.

# 1936 EPA Evaluation of Fill/Operations



Figure 3. Jorgensen Forge Corporation/Duwamish River, 1936.  
Approximate scale 1:3,055.





# 1946 EPA Evaluation of Fill/Operations

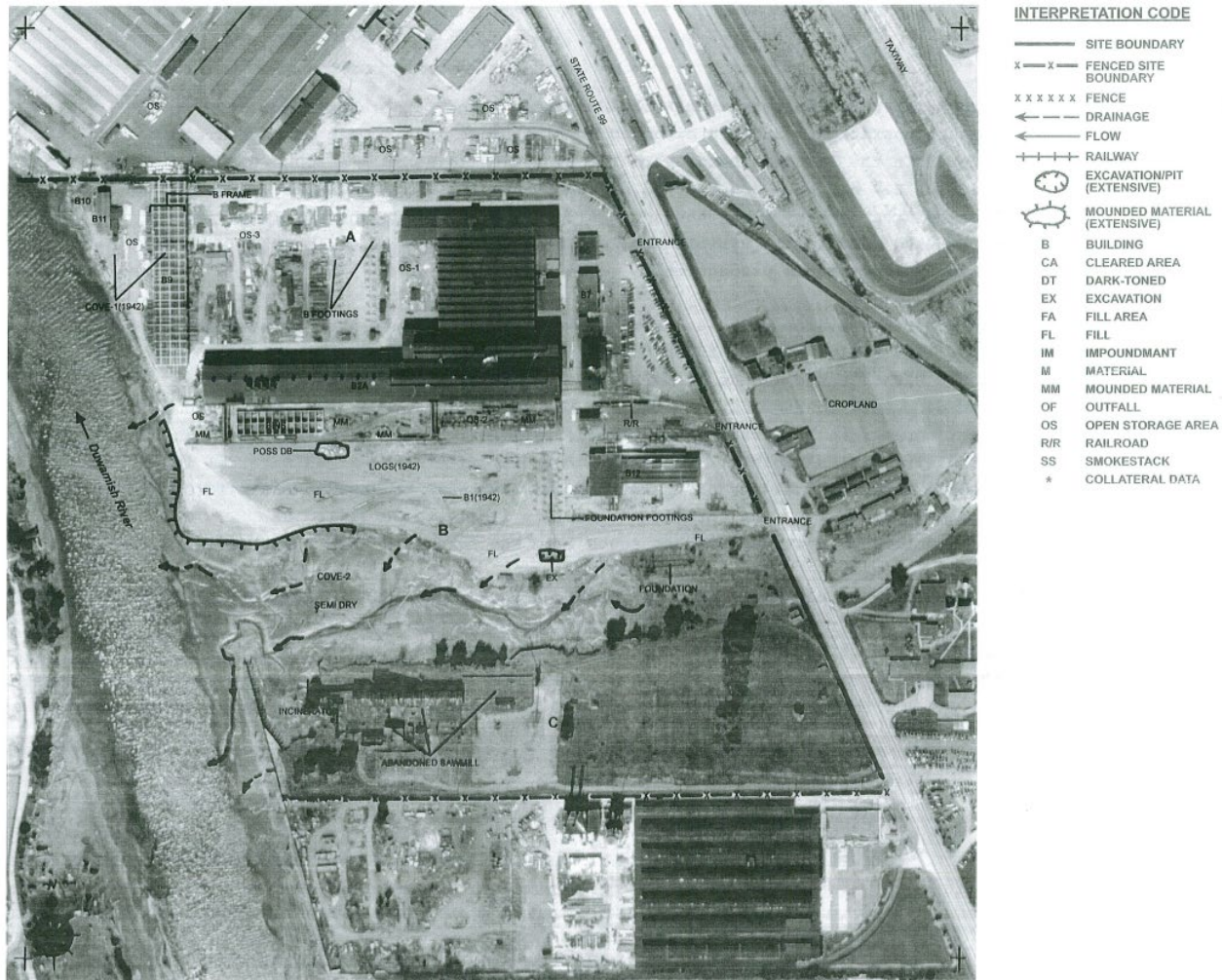


Figure 6. Jorgensen Forge Corporation/Duwamish River, 1946.  
Approximate scale 1:3,400.



January 11, 2024

Please see below for comments from the Port of Seattle (“Port”) on the Boeing Isaacson-Thompson Site (“Site”) Remedial Investigation (“RI”) and Feasibility Study (“FS”) draft documents out for public comment. First, we provide general comments regarding the Site and the draft documents. Following that is a table providing specific comments, identified by sections within the documents. Above all, the Port emphasizes (1) that the Port Sliver need not be reconstructed following remediation, and (2) that the Port’s permission or authorization is not needed for sampling, remediation, or other remedial actions.

## **I. General Comments**

### **A. Use Consistent Phrasing for the Port Sliver**

The Site, located along the eastern shoreline of the Lower Duwamish Waterway (“LDW” or “Waterway”), includes a sliver of uplands in which the Port holds limited property rights, inherited in 1963 from the former Commercial Waterway District No. 1 of King County (“CWD”), which dissolved at the time. The RI and FS draft documents use a variety of terms to refer to this area. The Port recommends consistently referring to this area as the “Port Sliver,” coining that as a defined term at the start of each document, and removing all other names and references.

### **B. The Port Sliver at the Boeing Isaacson-Thompson Site—Historical Context**

Understanding the historical development and unusual legal status of the Port Sliver is important for Ecology decision-making regarding remedy planning for the Sliver and the broader Site. The draft FS’s remedial action alternatives all assume that the Port Sliver must be reconstructed following remediation. As discussed below, that assumption is unfounded, as the Port cannot and would not require its reconstruction.

The Port has had no material involvement with the small and legally unusual area referred to as the Port Sliver. Neither the Port nor the CWD constructed or operated on the Port Sliver, and neither entity contributed contamination to the Port Sliver. The history of the

CWD and upland “slivers” along the LDW begins with construction of the Waterway in the early 20th century.<sup>1</sup>

In 1889, by virtue of becoming a state, Washington received ownership over the bed and banks of all navigable waters in the state under the equal footing doctrine. Beginning in 1909, the Washington Legislature passed a series of laws that enabled local governments to create “waterway districts” for the economic development of the state.<sup>2</sup> These districts were intended to promote the public purposes of commerce and navigation, create access to and use of commercial waterways, and widen and straighten water bodies as needed to achieve these goals. See Laws of 1909, Ex. Sess., ch. 8. The districts were “given the right, power and authority by purchase or the exercise of the power and authority of eminent domain, or otherwise, to acquire all necessary and needed rights of way” to straighten, deepen, and widen rivers and streams. Laws of 1917, ch. 152, § 2.

In 1911, the King County Board of Commissioners created the CWD and approved a plan to acquire a 500-foot right-of-way for straightening, widening, and deepening the lower 5 miles of the Duwamish River. The CWD began acquiring upland property within the designated area in 1913. Construction was largely completed in 1915. The river was diverted into the new, straightened channel, and former meanders were filled in. Only the center 250 -foot-wide channel has since been dredged and maintained as a federal navigable waterway, which generally left an area of about 125 feet on either side of the center channel subject to sedimentation. There are also many “slivers” of dry land that were either filled in intentionally by adjoining landowners or were for some reason never excavated out to the full 500-foot width of the Waterway.

The U.S. Army Corps of Engineers (“Corps”) took over dredging and maintenance of the center channel in 1924. In 1963, the Washington Supreme Court held that the CWD lacked authority to lease, alienate, or otherwise profit from any area within the 500-foot-wide LDW right-of-way. *Commercial Waterway Dist. No. 1 v. Permanente Cement Co.*, 61 Wn.2d 509, 513 (1963). Soon after, in 1963, the CWD was dissolved, and its assets and obligations were transferred to the Port pursuant to RCW Chapter 91.07. The Port, like the CWD before it, holds

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<sup>1</sup>See also Leidos. 2018. *Lower Duwamish Waterway, Inventory of Lower Duwamish Waterway Slivers*. Prepared for the Washington Department of Ecology. May.

<sup>2</sup>The 1909 legislation was found unconstitutional, and its defects were cured by 1911 legislation. See Laws of 1911, chs. 10, 11. Further amendments were made in 1913 and 1917. See Laws of 1913, ch. 46, Laws of 1917, ch. 152.



“the land acquired by purchase and condemnation within the 500-foot right of way for the construction of the waterway . . . in trust for the public.” *Id.* at 513. The Corps continues to issue permits to adjoining landowners for activities such as dredging and construction of docks or bulkheads.

With respect to the Port Sliver specifically, based on aerial photographs, it appears that the origin of the sliver can be divided into approximate thirds: the northern section was a portion of the CWD-dredged channel that was later filled by Isaacson; the middle section was within the CWD right-of-way and either filled before the 1930s or never dredged; and the southern section was part of the original meander of the Duwamish River and was historically the mouth of Slip 5 before it was filled (Floyd | Snider 2023). Neither the CWD nor the Port constructed or ever used the sliver. A small central portion of the sliver is visible in aerial photographs from the 1930s, during which time the Duwamish Lumber Company (operating on what is today the Boeing Isaacson property) appears to have used the area as part of its operations. This portion of the sliver appears to be within the 500-foot right-of-way granted to the CWD. It is unclear whether Duwamish Lumber Company or another entity created this area with fill, or if it instead represents an area that was never dredged as part of the LDW construction. Aerial photos from the 1940s to 1950s show that the northern portion of the sliver was beginning to be filled, presumably by Isaacson Iron Works, then operator of the Site. By 1960, the southern portion of the sliver had been filled as well, connecting by 1969 with the Boeing Thompson property to the south, which had been constructed on fill replacing Slip 5 (one of the former Duwamish River meanders).

### **C. Access to the Port Sliver is Unimpeded**

No Port permission is required in order to conduct sampling or remedial actions on the Port Sliver. The Washington Supreme Court has explicitly confirmed the extremely limited rights held by the CWD (and by extension the Port) in such areas. Specifically, the Port “has no power to lease [or alienate] any area within the 500-foot right of way,” and adjacent landowners have “a right of access to the extent that neither navigation nor any other right of the general public is interfered with.” *Id.* at 525. Thus, to the extent that remediation of the sliver—or even the removal of the sliver in its entirety—is required, no Port permission is required.

### **D. Reconstruction of the Port Sliver is Not Necessary**

As noted, the Port did not construct the Port Sliver, nor has it ever conducted operations on, or contributed contamination to, the property. And insofar as the Port Sliver will

be excavated as part of Site remediation, from the Port’s perspective, the property need not be reconstructed to its present state following remediation. If Boeing or another party wishes to utilize the area for habitat restoration, public Waterway access, or other usage that does not interfere with navigation or other public rights, the Port cannot and would not oppose such efforts. The Port has communicated this position to Boeing via email on November 10, 2022.

## II. Specific Comments

| Comment | Section   | Comment  |
|---------|---|--|
| 1       | RI and FS – throughout                                | Use “Port Sliver” throughout the document. Currently, various terms are used, including “Port parcel” or “Port-owned parcel” which are incorrect (the area in question is not a discrete parcel). Recommend also referring (at first use of the term) to the Leidos 2018 LDW sliver inventory prepared for Ecology, wherein this sliver is identified as “Sliver 35E.”   |
| 2       | RI (multiple references)                              | “... owned by the Port”<br><br>“...owned and/or controlled by the Port”  |
| 3       | RI Executive Summary (CSM)<br><br>RI Section 10.4.2.3 | “Concentrations in soil behind the Port bulkhead have not been determined”<br><br>Please revise “Port bulkhead” to “Port Sliver bulkhead.”   |
| 4       | FS Section 1.0  | FS Section 1.0. Recommend defining here (at first use): “Port Sliver” not just as “also known as,” but as how it will be referred to in the FS.  |
| 5       | FS Section 1.1  | The reference to parcel/property is confusing to readers. When all properties/parcels at the site have been established “for the purposes of this FS, these three parcels are referred to collectively as the Isaacson-Thompson Site.” Once defined, then refer to a collective “Site” moving forward in the document rather than naming specific properties repeatedly. |



| Comment | Section                              | Comment   |
|---------|--------------------------------------|---|
| 6       | FS Section 1.2<br><br>RI Section 2.1 | <p>The summary of site background makes no mention of the history of the Port Sliver and its relationship to historical operations at the Site. Suggest additional context to be added such as the following:</p> <p>“The Port Sliver falls within the 500-foot LDW right-of-way granted to the CWD in 1911 in the effort to straighten, widen, and deepen the lower 5 miles of the Duwamish River. Based on aerial photographs, it appears that the origin of the sliver can be divided into approximate thirds: the northern section was a portion of the CWD-dredged channel that was later filled by Isaacson; the middle section was within the CWD right-of-way and either filled before the 1930s or never dredged; and the southern section was part of the original meander of the Duwamish River and was historically the mouth of Slip 5 before it was filled. A small central portion of the sliver is visible in aerial photographs from the 1930s, during which time the Duwamish Lumber Company (operating on what is today the Boeing Isaacson property) appears to have used the area as part of its operations. This portion of the sliver appears to be within the 500-foot right-of-way granted to the CWD. It is unclear whether Duwamish Lumber Company or another entity created this area with fill, or if it instead represents an area that was never dredged as part of the LDW construction. Aerial photos from the 1940s to 1950s show that the northern portion of the sliver was beginning to be filled, presumably by Isaacson Iron Works, then operator of the Site. By 1960, the southern portion of the sliver had been filled, connecting by 1969 with the Boeing Thompson property to the south, which had been constructed on fill replacing Slip 5 (one of the former Duwamish River meanders). With respect to the Port Sliver specifically, neither the CWD nor the Port constructed or ever used the sliver. The Port inherited the sliver from the former CWD upon its dissolution in 1963.”</p> |

| Comment | Section  | Comment   |
|---------|--|---|
|         |  | <p><u>Citations for Fill History and Historical Use of the Sliver:</u></p> <ul style="list-style-type: none"> <li>• Dames &amp; Moore. 1983. <i>Report of Evaluation of Site Contamination Isaacson Steel Property for the Boeing Aerospace Company</i>. 4 October.</li> <li>• Floyd Snider. 2023. <i>Isaacson-Thompson Port of Seattle Sliver Property Site History and Aerial Photographs</i>. September. (Provided as an attachment to comment submission.)</li> <li>• Foster, Richard F. 1945. <i>Sources of Pollution in the Duwamish-Green River Drainage Area</i>. Pollution Control Commission Survey. 6 December.</li> <li>• Landau Associates. 2009. <i>Data Summary Report Thompson-Isaacson Property, Tukwila, Washington</i>. Prepared for The Boeing Company. 2 September.</li> <li>• Leidos. 2018. <i>Lower Duwamish Waterway, Inventory of Lower Duwamish Waterway Slivers</i>. Prepared for the Washington State Department of Ecology. May.</li> <li>• Wicks and Sweet, Edwards &amp; Associates, Inc. 1983. <i>Evaluation of Potential Soil and Ground Water Contamination at the Isaacson Corporation Property, Seattle, Washington</i>. Submitted to Isaacson Corporation and Graham &amp; Dunn. 21 December.</li> </ul> |
| 7       | FS Section 1.5, first paragraph, last sentence | <p>With respect to the sentence “Future uses of the Port’s Sliver Property are unknown.”</p> <p>Recommend amending to the following: “Future uses of the Port Sliver are unknown. The Port inherited the sliver from the former Commercial Waterway District No. 1 of King County when it dissolved in 1963. The Port cannot lease or sell the sliver or exclude parties from it (unless they impede navigation or other rights of the public). The Port has no objection if this upland area is not reconstructed after remediation, and the Port has no objection if the area is utilized by any party for habitat restoration or public access purposes.”</p>  |



| Comment | Section                           | Comment  |
|---------|-----------------------------------|--|
| 8       | Section 5.2                       | <p>All proposed remedial alternatives involve excavating the Port Sliver, filling the excavated area with clean fill to an elevation above the high-water line, and replacing the existing bulkhead. However, the Port does not request or recommend that the Port Sliver be returned to grade or that the existing bulkhead is replaced. The Port has no objection if this upland area is not reconstructed after remediation, and the Port has no objection if the area is utilized by any party for habitat restoration or public access purposes (See comment 7).”</p> <p>If the Port Sliver is not reconstructed, the dilapidated bulkhead would not need to be replaced. For shoreline stability purposes, consider extending the wooden/steel bulkhead that exists along the Boeing Thompson shoreline northward along the Boeing Isaacson property and Port Sliver boundary.</p> |
| 9       | Section 5.2.3, page 5-9           | <p>Regarding the remedial excavation statement that “The Port property excavation will include soil removal between the proposed PRB location and the Port property shoreline.”</p> <p>This is incorrectly described. The extent of excavation extends from the shoreline into the Boeing Isaacson parcel. The Port Sliver encompasses only half the excavation area that is colored green. Suggest revising to “The planned soil removal excavation is shown in green on Figure 5-3 and includes the area between the proposed PRB location and existing shoreline.”</p>  |
| 10      | Figures 3-2 through 3-8, and 3-25 | <p>The groundwater IDW interpolations should extend westward onto the Port Sliver similar to the soil concentration figures and not stop at the property line (Figures 3-2 to 3-8). This would help to inform the extent of metals contamination in groundwater as depicted in Figure 3-25.</p> <p>Is the extent of arsenic groundwater contamination north of the Site bounded by Jorgensen Site wells, which are not shown in the RI? Should the groundwater contour line for arsenic along this northern boundary be shown with question marks,</p>   |

| Comment | Section                   | Comment   |
|---------|---------------------------|---|
|         |                           | and how does the FS address groundwater contamination migration north (and off) of the Site?  |
| 11      | Figures 5-5, 5-7, and 5-9 | <p>Existing and/or proposed bulkhead replacements should be added to cross sections.</p> <p>A reference or depiction of the range of anticipated LDW surface water levels would be helpful to assess remedial features relative to the adjacent surface water elevation. Surface water levels during a specific survey is provided in 3-1c, but these are not in a comparable datum and do not represent the range of anticipated surface water levels.</p> |
| 12      | Figure 5-3                | Clarify that the Port Sliver is upland only (above mean higher high water) and waterward of the Boeing property line. From this figure, it appears as if the green-colored area is all Port Sliver.   |