Analysis of a Practicable Alternative to the Port of Newport (Newport, OR) for the National Oceanic and Atmospheric Administration's Marine Operations Center-Pacific Lease Award

March 22, 2010

EXECUTIVE SUMMARY

The National Oceanic and Atmospheric Administration (NOAA) conducted an analysis of whether there was a practicable alternative to the Port of Newport, Oregon, for NOAA's lease award for its Marine Operations Center—Pacific (MOC-P). Since the award involves a proposal in a base floodplain, NOAA's analysis was conducted pursuant to Executive Order (E.O.) 11988, and in response to a decision by the Government Accountability Office (GAO) concerning a protest against NOAA's lease award to the Port of Newport.

NOAA issued a solicitation for offers (SFO) in November 2008 for a lease acquisition to address the agency's MOC-P requirements. NOAA stated in the SFO that "An award or contract will not be made for a property located within a based flood plain[1] or wetland unless the Government has determined that there is no practicable alternative." In its *Environmental Management. Floodplain Management Desk Guide*, the General Services Administration (GSA) defines "practicable alternatives: as follows:

> "Practicable alternatives" are those that are available to GSA and capable of being implemented within existing constraints such as cost, existing technology, and logistics, considering pertinent natural (topography, habitat, hazards, etc.), social (aesthetics, historic and cultural values, land use patterns, etc.), economic (cost of space, construction, services, relocation, etc.), and legal (deeds, leases, etc.) factors.

The SFO also stated that NOAA would make the award based on a "best value" determination: the offer that represented the best value to the government, based on a consideration of both technical and price.

Four offers were submitted in response to the SFO and accepted for review:

- 1801 Fairview Ave East, Inc., Lake Union, Seattle, WA (existing MOC-P site);
- Port of Port Angeles, Port Angeles, WA (Terminal 3);
- Port of Bellingham, Bellingham, WA (Bellingham Shipping Terminal); and
- Port of Newport, Newport, OR (Dock 2).

NOAA's source evaluation board evaluated the four offers on six technical factors, and determined the proposal from the Port of Newport to be the highest technically-rated proposal. NOAA's contracting officer evaluated the price proposals, and determined the price offered by the Port of Newport to be the lowest-priced offer. The Port of Newport was awarded the lease because it was the highest technically-rated and lowest-priced offer; and, therefore, represented the best value to the government, under the evaluation criteria set forth in the solicitation.

NOAA's lease award decision was subsequently protested to the Government Accountability Office (GAO) by the Port of Bellingham and by the owners of 1801 Fairview Avenue. On November 19, 2009, GAO dismissed the Fairview protest. On December 2, 2009, GAO sustained the Port of Bellingham protest, stating the following:

[1] Various terms are used throughout this document to areas that are subject to a 1% or greater risk of flooding in any given year. These terms reflect the evolution over time of terminology on this issue. As used herein, "floodplain," "base floodplain," "100-year floodplain," and "Special Flood Hazard Area" all refer to an area subject to a 1% or greater chance of flooding in any given year.

> "... the contract award to Newport failed to comply with the solicitation requirements regarding lease of property within a base floodplain. Specifically, the agency should consider, and document, whether there was a practicable alternative to Newport's offer. In the event the agency's analysis identifies a practicable alternative, as contemplated by the solicitation, we recommend that the agency implement such alternative, if otherwise feasible. In the event the agency's analysis concludes there is no practicable alternative, it should comply with the procedural requirements established in EO No. 11988[2], as set out above."

NOAA's contracting officer had determined, during the lease acquisition process, that the Port of Newport's site was not located in a base floodplain, since the proposed deck of the pier (a functional necessity for operation of MOC-P), would be above the base floodplain level defined by the Federal Emergency Management Agency (FEMA) for that community. Therefore, NOAA did not proceed with an E.O. 11988 analysis. GAO rejected NOAA's assessment on this issue and concluded that portions of the Newport piers (the pilings) were in a base floodplain, and that NOAA was required to follow the E.O. 11988 process.

NOAA has conducted the analyses presented below to comply with the requirements under E.O 11988, and to comply with the recommended actions contained in GAO's decision. These analyses are not intended to re-open the competition or re-evaluate the basis for NOAA's best value determination; neither of these actions were recommended in the GAO decision.

Assessment of Practicable Alternative. Based on its analysis, NOAA has determined that there appears to be no practicable alternative to the Port of Newport offer, in a base floodplain, for the following reasons:

- The Port of Bellingham (WA) and the Port of Port Angeles (WA), each submitted a proposal in response to NOAA's solicitation for offers that is located in a base floodplain, as determined by the Federal Emergency Management Agency (FEMA), and, therefore, is not a practicable alternative. Bellingham's proposal also significantly exceeded the prospectus threshold, and also would have been determined to be a capital lease; two additional factors that preclude the Bellingham proposal being considered a practicable alternative.
- The proposal submitted by Fairview Avenue (WA) was a not practicable alternative because, like Bellingham, the Fairview proposal significantly exceeded the prospectus threshold, and also would have been determined to be a capital lease.

Assessment of Potential Floodplain Impact at Newport Site. In compliance with the requirements of E.O. 11988 and as outlined in GSA's Floodplain Management Desk Guide, since NOAA has concluded that there appears to be no practicable alternative to the Port of Newport offer, NOAA has

- Assessed the potential impacts of the actions proposed under the Newport lease award on the base floodplain and surrounding area; and

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[2] Executive Order 11988 (*Floodplain Management*; May 24, 1977) requires the following:

(2) If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the head of the agency finds that the only practicable alternative consistent with the law and with the policy set forth in this Order requires sitting in a floodplain, the agency shall, prior to taking action, (i) design or modify its action in order to minimize potential harm to or within the floodplain, consistent with regulations issued in accord with Section 2(d) of this Order, and (ii) prepare and circulate a notice containing an explanation of why the action is proposed to be located in the floodplain.

- Taken appropriate steps to ensure that Newport is (a) designing its actions in the base floodplain to reduce the risks of flooding and minimize adverse impacts on the base floodplain, and (b) including all practical flood protection techniques, locating structures that are not dependent on the base floodplain to other locations outside the base floodplain, and elevating structures above the 500-year base flood level (i.e., areas at a 0.2 percent annual chance of flooding) for critical actions in design considerations.

The proposed actions presented in Newport's final revised proposal (June 2009) and in interim design documents (February 2010) consist of: (1) a pile-supported berthing pier to be constructed in Yaquina Bay; and (2) a group of upland facilities, including buildings and site improvements, to be built on shore adjacent to the shoreline. In summary:

- *Berthing and Approach Piers:* Newport's piers will be constructed in Yaquina Bay and would, therefore, be located in the base floodplain. The interim pier design is likely to adequately resist damage from severe coastal flooding. This is achieved by the expected placement of the pier deck above the base flood elevation and the reduction in the number of piles (by increasing the size of the piles) to reduce the potential for trapping debris under the pier.
- *Upland Facilities.* Based on detailed topographic information for the current site obtained from Newport, on February 9, 2010, the location of the proposed office building at the northeast corner of the site would be in the base floodplain. Newport intends to construct the office building at an elevation at least 1 foot above base flood elevation using methods that comply with the standards of the floodplain management ordinance of the City of Newport to minimize the risk of flood damage. With respect to the hazardous materials building, according to a site plan for the upland facilities, the building will be located outside of the 0.2-percent annual chance floodplain.
- None of the facilities will be constructed on fill placed in bay waters.

In compliance with the public notice requirements under the Executive Order, following review of comments received during the public notice and comment period, NOAA will make determine whether additional mitigation steps are required to reduce the risks of flooding and minimize adverse impacts on the base floodplain.

[*NOTE: The National Oceanic and Atmospheric Administration (NOAA) has conducted the analysis of whether there was a practicable alternative to the Port of Newport, Oregon, for NOAA's lease award for its Marine Operations Center—Pacific (MOC-P) to comply with the requirements under E.O 11988, and to comply with the recommended actions contained in a decision by the Government Accountability Office (GAO) concerning a protest against NOAA's lease award to the Port of Newport. The analysis presented below is not intended to re-evaluate the basis for NOAA's best value determination; such a re-evaluation was not recommended in GAO's recommended corrective actions. The Newport lease award was the result of a competitive process, conducted pursuant to Federal lease acquisition regulations. As such, certain statutory and regulatory provisions restrict the release of source selection and contractor proposal information both during and after the completion of a competitive acquisition. These restrictions are intended to protect the confidential and proprietary information of those who elect to compete for Federal contracts. In addition, the regulations protect the integrity of the procurement process to ensure that source selection officials are able to carry out their duties without regard to political or personal interference. These standards are set out in the Procurement Integrity Act, 41 U.S.C. 423, and are implemented by Subpart 3.104 of the Federal Acquisition Regulation. Release of some information both before and after award may also be prohibited by the Privacy Act, 5 US.C. 552a; and the Trade Secrets Act, 18 U.S.C. 1905. The analysis presented below has been prepared within the context of these legal and regulatory restrictions.*]

I. BACKGROUND

NOAA's Marine Operations Center (MOC-P) provides centralized management of ten NOAA ships on the West Coast, including Alaska and Hawaii, and is the permanent homeport for four of these ships. Historically these vessels have been berthed and located at leased facilities at Lake Union in Seattle, Washington since the early 1960s. Over the years, succeeding leases have been executed to support continuing operations at MOC-P. The current lease expires June 30, 2011. A fire in 2006 destroyed the current leased pier facilities and two shop buildings, forcing NOAA to utilize temporary, alternative pier facilities to support NOAA's Pacific fleet operations.

A. **Solicitation for Offers**. In November 2008, NOAA issued a solicitation for offers (SFO) to all prospective, interested offerors, and published the SFO in Federal Business Opportunities (FedBizOpps). The SFO included the description of requirements, the schedule for submission of formal offers, the technical evaluation factors, and the source selection procedures. The SFO stated that the lease award will be made to the offeror "whose offer will be most advantageous to the Government;" i.e., using a "best value" process. The best value method allows the Government to conduct a comparative assessment of proposals against specific selection criteria. The method allows projects to be awarded to contractors that offer the best combination of price and technical qualifications. NOAA uses a "best value" source selection process (pursuant to GSA Acquisition Manual Section 570.304, and Federal Acquisition Regulations at 15.101) for major acquisitions. The SFO also set the lease term at 20 years and stated that it was NOAA's

intention to make an award based on an operating lease[3] (see SFO section 1.3). The SFO (as amended on May 4, 2009) identified six factors (Location of Site, Site Configuration and Management, Quality of Building and Pier, Availability, Past Performance and Project Financing, and Quality of Life) each with sub-factors; and stated that the "combination of factors . . . are significantly more important than price." [See Appendix A for a more comprehensive discussion and synopsis of NOAA's lease acquisition and evaluation process.]

NOAA also stated in the SFO (see section 1.7) that "An award or contract will not be made for a property located within a based flood plain[4] or wetland unless the Government has determined that there is no practicable alternative."[5]
Four offers were submitted in response to the SFO and accepted for review:

- 1801 Fairview Ave East, Inc., Lake Union, Seattle, WA (existing MOC-P site);
- Port of Port Angeles, Port Angeles, WA (Terminal 3);
- Port of Bellingham, Bellingham, WA (Bellingham Shipping Terminal); and
- Port of Newport, Newport, OR (Dock 2).

B. **Evaluation and Lease Award**. NOAA established a Source Evaluation Board (SEB), comprised of real property experts, engineers, and technical representatives from the Office of Marine and Aviation Operations at MOC-P to evaluate each of the four offers on the six technical factors, and determined the proposal from the Port of Newport to be the highest technically-rated proposal. NOAA's contracting officer evaluated the price proposals, and determined the price offered by the Port of Newport to be the lowest-priced offer. The Port of Newport was awarded the lease because it was the highest technically-rated and lowest-priced offer; and, therefore, represented the best value to the government.

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[3] Under Office of Management and Budget (OMB) Circular A-11, Appendix B (*Budgetary Treatment of Lease-Purchases and Leases of Capital Assets*), leases by the federal government are categorized into one of two types: capital and operating. A **capital lease** means any lease other than a lease-purchase that does not meet the criteria of an operating lease. For capital leases, budget authority must be available for the net present value of the total cost of the lease over the term of the lease before the lease can be signed. An **operating lease** means a lease that meets all the criteria listed below.

- Ownership of the asset remains with the lessor during the term of the lease and is not transferred to the Government at or shortly after the end of the lease term.
- The lease does not contain a bargain-price purchase option.
- The lease term does not exceed 75 percent of the estimated economic life of the asset.
- The present value of the minimum lease payments over the life of the lease does not exceed 90 percent of the fair market value of the asset at the beginning of the lease term.
- The asset is a general purpose asset rather than being for a special purpose of the Government and is not built to the unique specification of the Government as lessee.
- There is a private sector market for the asset.

[4] As noted previously, various terms are used throughout this document to areas that are subject to a 1% or greater risk of flooding in any given year. These terms reflect the evolution over time of terminology on this issue. As used herein, "floodplain," "base floodplain," "100-year floodplain," and "Special Flood Hazard Area" all refer to an area subject to a 1% or greater chance of flooding in any given year.

[5] In its *Environmental Management: Floodplain Management Desk Guide*, the General Services Administration (GSA) defines "practicable alternatives: as follows:

> "Practicable alternatives" are those that are available to GSA and capable of being implemented within existing constraints such as cost, existing technology, and logistics, considering pertinent natural (topography, habitat, hazards, etc.), social (aesthetics, historic and cultural values, land use patterns, etc.), economic (cost of space, construction, services, relocation, etc.), and legal (deeds, leases, etc.) factors.

C. **Protest and GAO Decision**. NOAA's lease award decision was subsequently protested to the Government Accountability Office (GAO) by the Port of Bellingham and by the owners of 1801 Fairview Avenue. On November 19, 2009, GAO dismissed the Fairview protest. On December 2, 2009, GAO sustained the Port of Bellingham protest, stating the following:

> "... the contract award to Newport failed to comply with the solicitation requirements regarding lease of property within a base floodplain. Specifically, the agency should consider, and document, whether there was a practicable alternative to Newport's offer. In the event the agency's analysis identifies a practicable alternative, as contemplated by the solicitation, we recommend that the agency implement such alternative, if otherwise feasible. In the event the agency's analysis concludes there is no practicable alternative, it should comply with the procedural requirements established in EO No. 11988[6], as set out above."

NOAA's contracting officer had determined, during the lease acquisition process, that the Port of Newport's site was not located in a base floodplain, since the proposed deck of the pier (a functional necessity for operation of MOC-P), would be above the base floodplain level defined by the Federal Emergency Management Agency (FEMA) for that community. Therefore, NOAA did not proceed with an E.O. 11988 analysis. GAO rejected NOAA's assessment on this issue and concluded that portions of the Newport piers (the pilings) were in a base floodplain, and that NOAA was required to follow the E.O. 11988 process.

On January 29, 2010, NOAA informed GAO (see Appendix B) of its intent to comply fully with GAO's recommended corrective actions, and provided a detailed plan of the actions it would take to comply with the GAO decision and the requirements of E.O. 11988.

D. **Executive Order 11988 (*Floodplain Management*)**. In order to avoid the direct or indirect support of floodplain development whenever there is a practicable alternative, Executive Order (E.O.) 11988 states:

> 2. (a)(1) Before taking an action, each agency shall determine whether the proposed action will occur in a floodplain....
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> 2.(a)(2) If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the head of the agency finds that the only practicable alternative consistent with the law and with the policy set forth in this Order requires sitting in a floodplain, the agency shall, prior to taking action, (i) design or modify its action in order to minimize potential harm to or within the floodplain, consistent with regulations issued in accord with Section 2(d) of this Order, and (ii) prepare and circulate a

[6] Executive Order 11988 (*Floodplain Management*; May 24, 1977) requires the following:

> (2) If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the head of the agency finds that the only practicable alternative consistent with the law and with the policy set forth in this Order requires sitting in a floodplain, the agency shall, prior to taking action, (i) design or modify its action in order to minimize potential harm to or within the floodplain, consistent with regulations issued in accord with Section 2(d) of this Order, and (ii) prepare and circulate a notice containing an explanation of why the action is proposed to be located in the floodplain.

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E. **Impact of GAO Decision**. NOAA's competitive lease acquisition process had resulted in the Port of Newport being awarded the lease because it was the highest technically-rated and lowest-priced offer, under the criteria set forth in the solicitation; and, therefore, represented the best value to the government. As stated in the GAO decision"... the contract award to Newport failed to comply with the solicitation requirements regarding lease of property within a base floodplain. Specifically, the agency should consider, and document, whether there was a practicable alternative to Newport's offer." Since the Port of Newport offer involved a site in a base floodplain, the GAO held that NOAA was required to conduct an analysis of whether there was a practicable alternative prior to the lease award to Newport.

The GAO decision did not overturn the lease award decision, or require re-evaluation of the offers. However, GAO recommended, as stated above, that "the agency should consider, and document, whether there was a practicable alternative to Newport's offer. In the event the agency's analysis identifies a practicable alternative, as contemplated by the solicitation, we recommend that the agency implement such alternative, if otherwise feasible. In the event the agency's analysis concludes there is no practicable alternative, it should comply with the procedural requirements established in EO No. 11988[7], as set out above."

In its decision, GAO noted NOAA's "...assertions that it was legally precluded from awarding the lease to Bellingham due to Bellingham's price and/or because Bellingham's proposal should be similarly viewed as offering a structure within a designated floodplain area." GAO did not rely on these assertions to dismiss the protest, but stated that these matters "...may be proper considerations by the agency in determining if there are practicable alternatives."

F. **NOAA's Plan for Compliance**. In NOAA's January 29, 2010, response to GAO, NOAA stated it was "proceeding with all appropriate actions and intends to fully comply with GAO's decision and recommended corrective actions with respect to the E.O. 11988 requirements. In complying with GAO's recommended corrective actions, NOAA is taking the following specific actions consistent with the steps required under E.O. 11988. NOAA expects to complete all actions no later than May 28, 2010."

In its January 29, 2010, response, NOAA identified the first action it would take as follows:

> "Assessment of Practicable Alternatives. NOAA will conduct an analysis of the offerors' previously submitted final revised proposals to determine if there is a practicable alternative that does not involve development in a base floodplain, and otherwise presents a

[7] Executive Order 11988 (*Floodplain Management*; May 24, 1977) requires the following:

(3) If an agency has determined to, or proposes to, conduct, support, or allow an action to be located in a floodplain, the agency shall consider alternatives to avoid adverse effects and incompatible development in the floodplains. If the head of the agency finds that the only practicable alternative consistent with the law and with the policy set forth in this Order requires sitting in a floodplain, the agency shall, prior to taking action, (i) design or modify its action in order to minimize potential harm to or within the floodplain, consistent with regulations issued in accord with Section 2(d) of this Order, and (ii) prepare and circulate a notice containing an explanation of why the action is proposed to be located in the floodplain.

feasible selection award under the solicitation for offers. In making this determination, NOAA will consider the final revised proposals submitted in response to the SFO.

NOAA has requested that the Federal Emergency Management Agency (FEMA) conduct an analysis of floodplain issues associated with the final revised proposals submitted by the four offerors in this acquisition. NOAA will use FEMA's analysis as the basis for determining whether a lease based on each of the offerors' final revised proposals would result in an action being taken in a base floodplain. NOAA will use the FEMA analysis as part of NOAA's overall analysis of whether there is a practicable alternative, and document the basis of its initial determination of whether there is a practicable alternative to development in a base floodplain.

If NOAA determines that a practicable alternative exists, and is otherwise feasible (e.g., within available resources and authorities) to implement, NOAA would take the necessary steps to implement the alternative. Pursuant to the GAO decision, NOAA would provide a copy of its decision and supporting analysis to all parties and to GAO."

III. OVERVIEW OF NOAA'S ASSESSMENT PROCESS

This section provides an overview of the process NOAA followed in conducting its assessment of whether there was a practicable alternative to the Port of Newport lease award, under the solicitation. NOAA has conducted these analyses to comply with the requirements under E.O 11988, and to comply with the recommended actions contained in GAO's decision. These analyses are not intended to re-open the competition or re-evaluate the basis for NOAA's best value determination; either of these actions would be beyond the scope of the GAO decision and recommended actions.

A. **Offerors' Final Revised Proposals as Basis of Analysis**. As discussed above and in NOAA's January 29, 2010, response to GAO, to comply with the GAO decision and the requirements of E.O. 11988 that NOAA conduct an analysis of and document whether there was a practicable alternative to Newport's offer, NOAA considered the final revised proposals of all offerors. GAO's decision is based on a determination that prior to proceeding with the award to the offeror whose proposal presented the highest technically-rated and lowest-priced offer (i.e., the Port of Newport), NOAA "was required to consider the environmental impact of Newport's proposed pier structure and to determine whether there was a practicable alternative to Newport's offer...."

B. **Analysis of Practicable Alternative: Process**. In determining whether there was a practicable alternative to the Port of Newport offer, NOAA considered relevant factors identified by the General Services Administration (GSA) in its *Environmental Management: Floodplain Management Desk Guide*, as set forth below:

> "Practicable alternatives" are those that are available to GSA and capable of being implemented within existing constraints such as cost, existing technology, and logistics, considering pertinent natural (topography, habitat, hazards, etc.), social (aesthetics,

historic and cultural values, land use patterns, etc.), economic (cost of space, construction, services, relocation, etc.), and legal (deeds, leases, etc.) factors.[8]

This analysis was conducted in two steps:

- Location of Other Offerors' Proposed Sites in a Base Floodplain. NOAA examined whether the facility site proposed in each of the other offerors' final revised proposals was in a base floodplain. If a site, or a portion of a site (e.g., piers, shore-side facilities, or any combination thereof), proposed under an offeror's final revised proposal was determined, through consultation with the Federal Emergency Management Agency (FEMA), to be in a base floodplain, that offer would be determined not to be a practicable alternative to Newport's offer, since (a) the Port of Newport offer had already been determined to be the highest technically-rated and lowest-priced offer, under the criteria set forth in the solicitation, and, therefore, represented the best value to the government; and (b) any other offer would similarly involve development in a base floodplain, but would be less highly rated technically, and more costly, under the evaluation criteria set forth in the solicitation.

- If a site was not located in a base floodplain, as determined by FEMA, NOAA examined whether the site was a practicable alternative considering other relevant factors identified by GSA above.

IV. ANALYSIS OF PRACTICABLE ALTERNATIVE

This section explains the specific findings and conclusions reached by NOAA in conducting its assessment of whether there was a practicable alternative to the Port of Newport offer.

A. **FEMA Assessment of Offerors' Final Revised Proposals: Location in a Base Floodplain**. To address the question of whether the facility site proposed in each of the other offerors' final revised proposals was located in a base floodplain, NOAA sought authoritative review on this issue from the Federal Emergency Management Agency (FEMA) – the Federal agency responsible for defining base floodplains. As it is likely that each of the offerors also have obtained interpretations by consultants of FEMA maps for their sites, NOAA went to the authoritative source. NOAA requested that FEMA review the final revised proposals from all four offerors.

On January 26, 2010, NOAA received FEMA's response. [See FEMA's January 22, 2010 letter attached, Appendix C; and the associated February 19, 2010, Note to the File, Appendix D.] FEMA concluded that:

[8] The definition of "practical or practicable" contained in Chapter 4.18(3)(.11) of the Department of Commerce Environmental Management Manual (2009) is captured in the GSA definition: "... constraints imposed by environmental, economic, legal and technological considerations." Moreover, NOAA cites the GSA guidance because the GSA Floodplain Management Desk Guide is geared specifically to Government actions in real property transactions.

> "Portions of three [Newport, Bellingham, and Port Angeles] of the four proposed facility sites are located within Special Flood Hazard Areas as delineated on the National Flood Insurance Program's (NFIP) Flood Insurance Rate Maps [FIRM[9]] for each of the affected communities. Development within Special Flood Hazard Areas requires obtaining local "flood hazard/protection" permits and development and construction in compliance with the local jurisdiction's floodplain management codes and ordinances."

[NOTE: FEMA uses the terminology of "Special Flood Hazard Area[10]" for the area subject to a 1% or greater chance of flooding in any given year. This terminology is equivalent to the older terminology of "100 year floodplain," and the more colloquial terminology of "base floodplain."]

Specifically, FEMA determined the following:

- Port of Newport, Newport, Oregon. The Newport, Oregon facility site is within the Special Flood Hazard Area as shown on the Lincoln County, Oregon and Incorporated Cities Flood Insurance Rate Map, Panels 368 and 506 (Effective date December 18, 2009). All new pier and dock facilities and improvements to the existing pier and dock facilities would be in a Zone AE. Some of the shore-side development may also fall within the Zone AE depending upon the distance from the water's edge.

- Port of Port Angeles, Washington: The Port Angeles facility site is within the Special Flood Hazard Area as shown on City of Port Angeles, Washington Flood Insurance Study and Flood Insurance Rate Map, Panel 3 (Effective date September 28, 1990). The new preliminary Flood Insurance Rate Maps for Clallam County reconfirm this designation. (This preliminary Flood Insurance Rate Map is presently scheduled for release within the next 60 days; it will be approximately 1 year before this new map will go into effect.) All new pier and dock facilities and improvements to the existing pier and dock facilities would be in a Zone VE[11] which is a velocity coastal zone. Some of the shore-side development may fall within the Special Flood Hazard Area as well, depending upon the distance from the water's edge and proximity to Tumwater Creek.

- Port of Bellingham, Washington: The Bellingham facility site is within the Special Flood Hazard Area as shown on the Whatcom County, Washington (All Jurisdictions) Flood Insurance Study and Flood Insurance Rate Map, Panel 1651 (Effective date January 16,2004). All of the improvements to the pier and dock facilities would be in a Zone A[12].

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[9] Flood Insurance Rate Maps (FIRM) are official maps developed and published by FEMA for communities delineating both the special flood hazard areas and flood insurance risk premium zones applicable to the community. FEMA conducts a Flood Insurance Study (FIS) to identify a community's flood risk. The study includes statistical data for river flow, storm tides, hydrological/hydraulic analyses, and rainfall and topographic surveys. FEMA uses these data to create the FIRMs.

[10] Special Flood Hazard Areas (SFHA) are FEMA-identified high-risk flood areas where flood insurance is mandatory for properties. Such areas have special flood, mudflow or flood-related erosion hazards.

[11] Zone VE is the flood insurance risk zone that corresponds to the 1-percent-annual-chance coastal floodplains that have additional hazards associated with storm waves.

[12] Zone A is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the Flood Insurance Study by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs or depths are shown within this zone.

> Some of the shore-side development activities and facilities may also fall within the Zone A depending upon the distance from the water's edge.

- Fairview Avenue, Seattle, Washington: The Lake Union facility site at 1801 Fairview Ave E, Seattle, Washington is not within a National Flood Insurance Program Special Flood Hazard Area, therefore not subject to E.O. 11988.

The FEMA letter goes on to state:

> "The information reviewed and analyzed for each of the four development proposals indicates that three of the four proposals [Newport, Bellingham, Port Angeles] are located within a National Flood Insurance Program Special Flood Hazard Area and subject to the E.O. 11988 process."

For each of these three sites (Port Angeles, Bellingham, and Newport), FEMA's assessment makes statements with respect to the shore-side buildings and facilities that indicate some of these facilities may also fall within the base floodplain, depending on the ultimate siting of these facilities and the distance of these facilities from the water's edge. In subsequent conversations with FEMA (see February 19, 2010, Note to the File; Appendix D), FEMA confirmed that it is not able to make conclusive statements with regard to the shore-side facilities proposed by these two offerors (and similarly for the Port of Newport offer) because the proposed site development plans for the shore-side facilities contained in the final revised proposals were not defined at a level of detail required to make a definitive determination due to scale and detailed construction plans. Since the proposed site development plans contained in the final revised proposals are primarily to provide a "test-fit" of NOAA's program of requirements at the proposed site, these plans are generally not developed at the time of final revised proposals to a level of detail to make conclusive determinations with respect to falling within the floodplain. More detailed site development plans would be developed by the site awarded the lease (i.e., Newport in this instance) as part of the design and permit approval process.

With respect to the Port of Newport site, FEMA noted that if NOAA were to conclude that there appears to be no practicable alternative, the draft assessment – that would be prepared to document this proposed determination – would need to clarify this point, and include this as part of the assessment of potential impact of the proposed development at the Newport site, pursuant to E.O. 11988.

B. **NOAA's Analysis of Practicable Alternative:** NOAA had determined the Port of Newport offer to be the highest technically-rated and lowest-priced offer, under the criteria set forth in the solicitation, and, therefore, represented the best value to the government. Because the Newport site is in a base floodplain, GAO sustained the MOC-P protest on the basis that NOAA had not complied with its solicitation requirement that NOAA would not make an award for a property in a base floodplain, unless it determined there was no practicable alternative. To determine the status of the other offerors' final revised proposal relative to the base floodplain issue, NOAA consulted with FEMA.

1. Port of Port Angeles Offer. FEMA's assessment of the final revised proposals submitted by the other offerors, as reflected in their January 22, 2010, letter to NOAA, determined that the Port Angeles proposal is located within a National Flood Insurance Program Special Flood Hazard Area ("base floodplain") and is, therefore, subject to the E.O. 11988 process. Since FEMA determined the Port Angeles site to be in a base floodplain, the Port Angeles offer was not a practicable alternative to Newport's offer, because (a) the Port of Newport offer had already been determined to be the highest technically-rated and lowest-priced offer, and, therefore, represented the best value to the government; and (b) the Port Angeles offer would similarly involve development in a base floodplain, but would be less highly rated technically, and more costly, under the evaluation criteria set forth in the solicitation.

2. Port of Bellingham Offer. FEMA's assessment of the final revised proposals submitted by the other offerors, as reflected in their January 22, 2010, letter to NOAA, determined that the Bellingham proposal is located within a National Flood Insurance Program Special Flood Hazard Area ("base floodplain") and is, therefore, subject to the E.O. 11988 process. Since FEMA determined the Bellingham site to be in a base floodplain, the Bellingham offer was not a practicable alternative to Newport's offer, because (a) the Port of Newport offer had already been determined to be the highest technically-rated and lowest-priced offer, and, therefore, represented the best value to the government; and (b) the Bellingham offer would similarly involve development in a base floodplain, but would be less highly rated technically, and more costly, under the evaluation criteria set forth in the solicitation.

   In addition, there are two other factors that preclude the Bellingham proposal from being considered a practicable alternative. In identifying relevant factors to determine whether an alternative is a "practicable alternative," GSA includes cost, economic and legal factors. Among the limitations GSA operates under is a limit on the maximum value of a lease that may be awarded without triggering the prospectus requirements of 40 U.S.C. §3307. The specific limitation is that no appropriation may be made for lease payments above a set threshold, without obtaining specific authority from GSA's authorizing committees in the House and Senate. The prospectus threshold at the time of the MOC-P lease award was $2.66 million average annual rent for the lease excluding services and utilities.

   In delegating leasing authority to other federal agencies, GSA does not delegate authority to award a lease above the prospectus level. Only GSA can award a lease above the prospectus level. NOAA had concluded, based on the market analysis conducted prior to the issuance of the solicitation for offers, that there was a reasonable expectation that the lease award for MOC-P could be made below the prospectus level, and that prospectus authority and associated appropriations were not required. NOAA requested and received from GSA a delegation (September 5, 2008) to conduct the MOC-P lease acquisition. Since GSA does not delegate authority to award a lease over the prospectus threshold, NOAA does not have authority to award a lease to an offeror whose final revised proposal came in above the prospectus level ($2.66 million). Bellingham's final revised proposal proposed an average annual lease amount significantly above the $2.66 million prospectus level. Therefore, the

Bellingham proposal was not a practicable alternative, because NOAA[13] did not have the legal authority to make an award above the prospectus level.

Furthermore, the Bellingham offer, in addition to being significantly above the prospectus level, when analyzed under the lease scoring rules in the Office of Management and Budget Circular A-11 (Preparation, Submission and Execution of the Budget) would have been determined to be a capital lease. This would require that the net present value of all rental payments be available to be obligated at the time of award. NOAA, in its September 24, 2008 SFO for the MOC-P lease acquisition, advised offerors that it was NOAA's intention to award an operating lease. Because of the significant budget implications associated with awarding a capital lease, NOAA does not generally award capital leases. Since the cost of the Bellingham proposal over the 20-year term of the lease would have resulted in the lease being a capital lease, NOAA would not have had the necessary funding available for obligation to make an award to Bellingham[14]. Therefore, for this reason, as well, the Bellingham proposal was not a practicable alternative.

3. Fairview Avenue Offer. As stated above, in identifying relevant factors to determine whether an alternative is a "practicable alternative," GSA includes cost, economic and legal factors. Among the limitations GSA operates under is a limit on the maximum value of a lease it may award without triggering the prospectus requirements of 40 U.S.C. § 3307.

   Since NOAA was not delegated authority to award a lease over the prospectus threshold, there was no authority to award a lease to an offeror whose final revised proposal came in above the prospectus level ($2.66 million). Fairview Avenue's final revised proposal proposed an average annual lease amount significantly above the $2.66 million prospectus level. Therefore, as with the Bellingham proposal discussed above, the Fairview Avenue proposal was not a practicable alternative, because NOAA did not have the authority to make an award above the prospectus level.

   Furthermore, the Fairview Avenue offer, in addition to being significantly above the prospectus level, when analyzed under the lease scoring rules in the Office of Management and Budget Circular A-11 (Preparation, Submission and Execution of the Budget) would have been determined to be a capital lease. This would require that the net present value of all rental payments be available to be obligated at the time of award. Since the cost of the Fairview Avenue proposal over the 20-year term of the lease would have resulted in the lease being a capital lease, NOAA would not have had the necessary funding available for

[13] For ease of reference throughout this document, when stating that NOAA did not have authority to make a lease award to an offeror whose offer exceeded the prospectus level, we are also stating that GSA did not request specific prospectus authority for the MOC-P lease, and NOAA lacked the authority to award a lease over the prospectus threshold.

[14] We are precluded from releasing the price proposed by Bellingham in its final revised proposal. However, to provide some context for the implications of awarding a capital lease in the case of the MOC-P lease, we can use the prospectus level as a point of reference. A capital lease award at the prospectus level would have required that NOAA had appropriations totaling $53.2 million (20 years time $2.66 million each year) at the time of award for the MOC-P lease award. Since Bellingham's price was significantly above the prospectus level, awarding a capital lease would have required funding substantially above $53.2 million at the time of lease award.

obligation to make an award to Fairview Avenue.[15] Therefore, for this reason, as well, the Fairview Avenue proposal was not a practicable alternative.

V. DETERMINATION OF PRACTICABLE ALTERNATIVE

Since NOAA had determined the Port of Newport offer to be the highest technically-rated and lowest-priced offer, under the criteria set forth in the solicitation, and, therefore, represented the best value to the government, other offers also determined to be in a base floodplain would not represent a practicable alternative, since they would similarly involve development in a base floodplain, and would be less highly-rated technically and more costly, under the evaluation criteria set forth in the solicitation.

NOAA consulted with FEMA to determine which offerors' final revised proposals involved sites in a base floodplain. FEMA's assessment of the final revised proposals submitted by the offerors, as reflected in their January 22, 2010, letter to NOAA, has determined that the Port Angeles and Bellingham's proposals are both located within a National Flood Insurance Program Special Flood Hazard Area ("base floodplain") and are, therefore, subject to the E.O. 11988 process. Based on FEMA's determination that the Port of Angeles and Bellingham proposals are both located in a base floodplain, NOAA has concluded that the Port Angeles and Bellingham proposals were not practicable alternatives to the Port of Newport's offer.

In addition, Bellingham's proposal suffers from two additional factors that preclude the Bellingham proposal being considered a practicable alternative. The Bellingham final revised proposal reflected a price significantly exceeding the prospectus level. Therefore, the Bellingham proposal was not a practicable alternative, since NOAA lacked authority to make a MOC-P lease award above the prospectus level. In addition, because the Bellingham proposal would have represented a capital lease, NOAA would have been required to have the net present value of all rental payments available for obligation at the time of award. NOAA stated in the SFO that it intended to award an operating lease; this was based on NOAA not having funding available for obligation to award a 20-year capital lease. Therefore, the Bellingham proposal was also not a practicable alternative because it would have been a capital lease.

The Fairview Avenue final revised proposal, like the Bellingham proposal, reflected a price significantly exceeding the prospectus level. Therefore, the Fairview Avenue proposal was not a practicable alternative, since NOAA lacked authority to make a MOC-P lease award above the prospectus level. In addition, because the Fairview Avenue proposal would have represented a capital lease, NOAA would have been required to have the net present value of all rental payments available for obligation at the time of award. NOAA stated in the SFO that it intended

[15] As noted above for the Bellingham proposal, we are precluded from releasing the price proposed by Fairview Avenue in its final revised proposal. However, to provide some context for the implications of awarding a capital lease in the case of the MOC-P lease, we can use the prospectus level as a point of reference. A capital lease award at the prospectus level would have required that NOAA had appropriations totaling $53.2 million (20 years time $2.66 million each year) at the time of award for the MOC-P lease award. Since Fairview Avenue's price was significantly above the prospectus level, awarding a capital lease would have required funding substantially above $53.2 million at the time of lease award.

to award an operating lease; this was based on NOAA not having funding available for obligation to award a 20-year capital lease. Therefore, the Fairview Avenue proposal was also not a practicable alternative because it would have been a capital lease.[16]

Therefore, NOAA has determined that there appears to be no practicable alternative to the Port of Newport offer.

Prior to making a final determination on this matter, NOAA will, as required under E.O. 11988, issue a public notice and provide an opportunity for comment. NOAA will give serious consideration to all comments, and then make a final determination regarding whether there was a practicable alternative to the Port of Newport.

[16] The Department of Commerce Environmental Management Manual provides that the practicable alternative analysis cannot reject an alternative as practicable "solely on the basis of a reasonable increase in cost." Given the base floodplain status of the Bellingham proposal, and the legal authority and scoring issues that constrain both the Bellingham and Fairview Avenue proposals, NOAA is not rejecting those proposals solely on the basis of a reasonable increase in cost.

VI. IMPACT OF NEWPORT DEVELOPMENT ON THE FLOODPLAIN

In accordance with the process established under E.O. 11988, if an agency determines that there appears to be no practicable alternative to development in a floodplain, the agency is required to design or modify its action in order to minimize potential harm to or within the floodplain, and prepare and circulate a notice containing an explanation of why the action is proposed to be located in the floodplain. Pursuant to these requirements, NOAA conducted an assessment of the potential impacts of Newport's proposed development in a floodplain, and the measures proposed to avoid or minimize adverse effects. This section documents this assessment including the following:

- Examines the proposed design reflected in Newport's final revised proposal, and interim design documents – as of February 16, 2010;
- Assesses flooding conditions at the Newport site (based on the 1982 Flood Insurance Rate Map (FIRM) and the recently issued 2009 FIRM);
- Assesses the impact of Newport's proposed actions on the floodplain; and
- Assesses the consistency of Newport's proposed development with the City of Newport's Comprehensive Plan requirements.

A. **Final Revised Proposal Design Description**. In its final revised proposal of June 2009, the Port of Newport indicated that all structures currently on the proposed MOC-P site would be demolished and the site would be leveled to an estimated elevation of approximately 17 feet. The two existing piers and four existing dolphins would be removed. A total of 194 piles would be removed, three of which are steel H-beams, and the remainder wooden elements.

In the final revised proposal, the Port of Newport provided a layout for upland facilities and several configurations for a pier structure. The upland facilities described in the final revised proposal consist of:

- Office building (two stories, 132 feet by 65 feet)
- Warehouse building (177 feet by 117 feet)
- Boat storage building (48 feet by 48 feet)
- Contractor building (25 feet by 20 feet)
- Hazardous materials building (17 feet by 17 feet).

All dimensions are approximate. The upland facilities would also include parking, vehicle circulation routes, and walkways.

The final revised proposal also included a pier constructed using piles driven into the bay floor. The pier design involved the following estimates regarding piles:

- 70 vertical pier piles (60 edge, 10 middle), which are 18 inch diameter, 0.375 inch;
- ASTM 500, filled with concrete to approximately 15 feet below the midline;
- 210 batter pier piles (60 edge, 150 middle), of same as the vertical pier piles;
- 20 vertical fender piles, which are 12.75 inch diameter, 0.5 inch wall; and
- 22 vertical small boat mooring piles 16 or 18 inches in diameter, 0.375 inch ASTM 500.

The pier design from the final revised proposal is identified in Figures 1a and 1b.

B. **Interim Design Description**. Newport summarized the general layout of facilities and pier design as of February 16, 2010, in Figures 2a and 2b. Additional information regarding current design elements to address actions within or adjacent to the base floodplain is contained in KPFF's[17] February 4, 2010, memorandum to the Port of Newport (included as Appendix E).

Based on information provided by Newport, the proposed grade elevations of the upland areas will range from approximately 14.00 feet North American Vertical Datum of 1988 (NAVD 88)[18] near the southern end of the site to 16.25 feet NAVD 88 near the waterfront at the connections to the access piers. The finished floor elevations of the proposed warehouse and office building will be 16.00 feet.

The height of the pier deck will be set at a minimum elevation of 16.25 feet NAVD 88. The supporting pier structure is comprised of a continuous reinforced cast-in-place topping slab over precast, pre-stressed planks spanning to precast bent pile caps all supported upon steel pipe piles and/or precast, pre-stressed concrete piles. There are three 36-inch diameter piles per bent. Bents are spaced between 35 and 40 feet on-center, orientated perpendicular to the length of the wharf. The fender system is comprised of a continuous camel, attached to steel pipe and/or precast, pre-stressed concrete piles connected back to the pier with rubber fenders. Fender piles are spaced at approximately 9 feet on center.

Newport's pier design reflects the following characteristics:

- The design incorporates relatively large-diameter piles with a smaller quantity of piles, in contrast to a greater number of smaller diameter piles – this design is intended to increase

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[17] KPFF and gLAs Architects are design consultants to the Port of Newport. Throughout this document, references to the Port of Newport's design and analyses include information provided by these two firms.

[18] Every FEMA Flood Insurance Rate Map (FIRM) that contains detailed flood hazard information is prepared based on hydraulic analyses that are referenced to a specific vertical datum. The two standard datums in use nationwide are NGVD29 and NAVD88.

- National Geodetic Vertical Datum of 1929 (NGVD29). Historically, the most common vertical datum used by FEMA has been NGVD29. NGVD29 assumed that 26 tide gages in the United States and Canada all represented the same zero elevation, which was mean sea level. As survey technologies became more accurate, it became increasingly apparent that NGVD29 constraints were incorrectly forcing surveys to fit different tide stations (all zero elevation or mean sea level) that actually had different elevations relative to each other. NGVD29 essentially warped the geoid, which represents an equipotential surface where gravity and elevations should be the same. Fortunately, the maximum warp anywhere in the United States, caused by forced constraints of NGVD29 at 26 tidal stations, is no more than 1.5 meters. Although there are exceptions, the warping found over smaller geographic areas, such as the area within a county, is small.
- North American Vertical Datum of 1988 (NAVD88). During the 1970s, the National Geodetic Survey (NGS), and counterpart agencies in Mexico and Canada, decided to adopt a vertical datum based on a surface that would closely approximate the Earth's geoid. The new adjustment, NAVD88, was completed in June 1991 and is now the only official vertical datum in the United States. NAVD88 was created by adding 625,000 kilometers of leveling, performed since NGVD29 was established, and performing a major least squares adjustment that constrained only a single tide station at zero elevation. The height of the primary tidal bench mark at Father Point/Rimouski in Quebec, Canada, was held fixed as the constraint, enabling NAVD88 and the International Great Lakes Datum of 1985 (IGLD85) to be one and the same.

Now, other tide stations may have elevations other than zero. Subsequent to the establishment of NAVD88, new flood hazard studies are preferably referenced to that datum.
[*Source: Guidelines and Specifications for Flood Hazard Mapping Partners - Appendix B - Guidance for Converting to the North American Vertical Datum of 1988*. April 2003]

clearance beneath the piers and minimize the likelihood that floating debris will be caught below the pier;
- Piles have been proof tested to ensure they will provide the actual capacities required;
- Bents are orientated normal to the projected mooring loads, which will result in a stronger and stiffer structure; and
- The structural system performs similar to a ductile moment frame, which has been proven to perform well in seismic events and under lateral loading.

Newport is currently having conducted, by a firm specializing in berthing loading and current force impacts on structures, an analysis modeling all applicable estuary forces, tidal currents, wind loads and flows in the bay on the piers; and intends to use the results to further refine the analysis and design of the structural system.

The fender system includes a continuous camel and vertical piles at an approximate 9-foot spacing. Newport indicates that the camel and relatively tightly spaced piles will help divert and minimize floating debris from being trapped below the pier. Additionally, fender buffer piles will be situated at the east and south east end of the wharf to reduce the potential that debris traveling downriver will be trapped in the structure. Additional information about the protection of pier coatings, the fender system, and other protection measures, is provided in Appendix E.

Newport intends to take additional measures to safeguard structures and services on the pier, including the potable water supply, from contamination during a flood event. The watertight domestic and fire protection lines with backflow protections located on the piers will be mounted along the land-side bull rail of the pier deck at or near its highest point. NOAA vessels will use their onboard sewer pumps to convey their waste through a force main installed on the pier to a gravity sewer system on the upland portion of the site. The watertight sanitary force main on the pier will be mounted along the landside bull rail of the pier deck. Electrical and communication conduits on the pier will be located along the underside of the pier deck, passing through the bents with sleeves as required. Protection of these conduits from floating debris will be achieved through the installation of the fender system described above.

With respect to potential hazardous materials to be stored on the site, Newport indicates that no underground storage tanks are being proposed. Fuel for a proposed emergency generator will be contained in an above-ground tank, installed above the 1-percent annual chance flood elevation. The location of the fuel tank is not identified in the materials provided. The proposed hazardous materials storage building is for the temporary placement of materials loaded from or to be loaded onto NOAA or other vessels. This building will be used to store paint containers, four 55-gallon drums of oil for crane and forklifts, a 55-gallon drum of antifreeze, and spare fire extinguishers.

Newport's pier design also includes the incorporation of a drainage system consisting of storm filter catch basins to treat run off from the pier. The site design includes shut-off valves located downstream of the catch basins to provide the ability to contain any spills that could occur.

C. **Flooding Conditions at the Proposed Site**. The 1982 FIRM, in effect at time of the MOC-P lease award, showing the area of the proposed facilities is provided in Figure 3a. The FIRM shows the following flood hazard information for the area of the proposed facilities:

- Areas subject to inundation during a flood having a 1-percent chance of being equaled or exceeded in any given year, designated as Zone A2.
- A Base Flood Elevation (BFE) for Yaquina Bay of 9 feet National Geodetic Vertical Datum of 1929 (NGVD 29).
- Areas subject to inundation during a flood having a 0.2 percent chance of occurrence in any given year. These areas are designated as Zone B on the FIRM.
- Areas that are considered non-floodprone. These areas are designated as Zone C on the FIRM.

D. **Updated Flood Insurance Study and Flood Insurance Rate Map**. Although the applicable FIRM against which the impact of development in a base floodplain at the Newport site is to be assessed is the 1982 FIRM in effect at the time of the MOC-P lease award, NOAA has examined the updated FIRM recently published by FEMA. On December 18, 2009, FEMA published a new FIRM for Lincoln County, Oregon, that includes the City of Newport. The 2009 FIRM is based on the same analysis of flood hazards in the vicinity of Newport that was used to prepare the 1982 FIRM. The 2009 FIRM is shown in Figure 3b. To prepare the 2009 FIRM, FEMA:

- Converted the FIRM to a digital product
- Presented the flood hazard information using a new base map
- Converted the zone designations and other map features to current standards. Zone A2 is now shown as Zone AE[19]; Zone B is shown as Zone X[20], with shading; and Zone C is now shown as Zone X, without shading
- Converted the BFE from NGVD 29 to NAVD 88. The BFE is now shown as 13 feet in the vicinity of the project site. The absolute elevation of the BFE, relative to the shoreline and features on shore, did not change. Similarly, the 0.2-percent annual chance flood elevation was converted to NAVD 88, but its absolute elevation was not changed.

Because the analysis of flooding in Yaquina Bay was not changed and the flood hazard data shown on the 2009 FIRM is the same as that shown on the 1982 FIRM, the conclusions discussed below are not affected by the publication of the new FIRM.

E. **Impact of Newport's Proposed Action on the Floodplain**. As described above, the proposed action presented in the final revised proposal of June 2009 and in the interim design documents of February 2010, consists of: (1) a pile-supported berthing pier to be constructed in Yaquina Bay; and (2) a group of upland facilities, including buildings and site improvements, to

[19] Zone AE is the flood insurance risk zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by detailed methods. In most instances, BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

[20] Zone X is the flood insurance risk zone that corresponds to areas outside the 1-percent-annual-chance floodplain, and areas of 1-percent-annual-chance sheet flow flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance stream flooding where the contributing drainage area is less than 1 square mile, or areas protected from the 1-percent-annual-chance flood by levees. No BFEs or depths are shown within this zone.

be built on shore adjacent to the shoreline. None of the facilities will be constructed on fill placed in bay waters.

1. Berthing and Approach Piers. The pier would be constructed in Yaquina Bay and would, therefore, be located in the floodplain. The flood hazards in Yaquina Bay are primarily the product of Pacific Ocean storms. Flooding is caused by a combination of astronomical tide, storm surge (caused by wind stress and low atmospheric pressure) and wave setup (resulting from shoreward mass transport of the water due to the wind). Unlike a riverine flooding situation, in which encroachment in a floodplain can reduce the flood-carrying capacity of the river and increase flood heights and velocities, physical modifications of the scale of the pier have no effect on the astronomical, meteorological, and bathymetric conditions that contribute to the flood elevation in a tidal situation. Consequently, the pier would have no impact on the floodplain, in terms of changes in flood elevations.

   The pier may have localized impacts on waves and currents during flooding conditions. These impacts may include minor changes in the direction of flow as the water moves around the piles and partial breakdown of waves as they pass through the piles. Based on the available data regarding flooding and the design of the pier, these impacts would be minor. The pier would not increase wave heights or re-direct wave energy in another direction. Consequently, the pier would have no impact, in terms of increasing the flood hazard to other nearby features or the shoreline.

   The 2009 Environmental Assessment characterizes the risks of flooding in the area at the Newport site to be "trapping debris against the piles…and/or altering the way in which floodwaters circulate/flow within the bay." As stated above, the currently proposed design of the piles would tend to reduce the potential for debris to be trapped by the structure. However, even if debris were trapped by the structure under either design scenario, the impacts would be similarly localized and would not increase the flood hazard to the shoreline, or other nearby features.

2. Upland Facilities. In its January 22, 2010, letter to NOAA, FEMA stated that "some of the shore-side development may also fall within [the 1-percent annual chance floodplain] depending on the distance from the water's edge" (see Appendix C). To obtain a more detailed determination of the extent of the floodplain and its relationship to the proposed upland facilities, NOAA's consultant[21] used the more detailed topographic information for the current site obtained from KPFF on February 9, 2010 to determine the 1-percent and 0.2 percent annual chance flood elevations for the Newport site. The flood elevation for the 1-percent chance flooding area is 12.7 feet NAVD88); the flood elevation for the 0.2-percent chance flooding area is 13.2 feet NAVD88). These elevations were then mapped using the topographic information obtained from KPFF and compared to the site plan for the upland facilities. The results of this comparison are shown as a red line in Figure 4.

[21] To assist NOAA in its assessment of the potential impacts of flooding at the Newport site, and the impact of mitigation measures being taken by Newport to minimize or avoid adverse impacts of flooding, NOAA contracted with URS, the contractor who prepared the environmental assessment prepared for the MOC-P project. As used throughout this document, references to NOAA's consultant or contractor are references to URS.

The floodplain boundaries shown in Figure 4 differ from those shown on the FIRM. This difference is due to the fact that the topographic information provided by KPFF is more detailed than that used to prepare the FIRM: the topographic information provided by KPFF has a contour interval of 1 foot; the topographic mapping used for the FIRM for Newport had a contour interval of 5 feet.

As shown in Figure 4, the location of the proposed office building at the northeast corner of the site would be in the 1-percent annual chance floodplain, based on the topographic information provided by KPFF. This result is consistent with the observation in FEMA's January 22, 2010, letter. This depression in the topography at the site appears to have been the result of road construction at the site.

According to a site plan for the upland facilities, the hazardous materials building would be located adjacent to the southern edge of the project site. Although the FIRM shows the 0.2 percent annual chance floodplain in the vicinity of the project site, it shows the location of the hazardous materials building to be in Zone C. Figure 4 shows the relationship of the location of the proposed hazardous materials building to the 0.2-percent annual chance floodplain, when mapped using the more detailed topographic information provided by KPFF. As shown in Figure 4, the building would be located outside of the 0.2-percent annual chance floodplain.

Therefore, with the exception of the location of the proposed office building, the locations of the proposed upland facilities are not located in either the 1-percent or 0.2-percent annual chance floodplains, as determined using the topographic mapping. Therefore, these facilities would have no impact on the floodplain. If fill is placed to elevate the proposed office building above the BFE, the fill would have no impact on the floodplain, in terms of changes in flood elevations. The risk of flooding to the building would be significantly reduced by raising the building on construction grade fill so that the lowest adjacent grade to the building is above the BFE. To comply with the City of Newport's floodplain management ordinance, the building's lowest floor must be 1 foot above the BFE.

F. **Land Use Planning and Floodplain Development**. The City of Newport Comprehensive Plan defines the area of the proposed action as "water dependent." The plan states, "Based on the nature of the resources present in this area and the level and intensity of existing development, continued development of water dependent uses and structural alterations such as pilings, piers, shoreline stabilization, bridge footings, and submerged crossings, are consistent with the purpose of this area." The proposed action is consistent with this description and does not alter the planned use of the area. Additionally, the site has been recently occupied by coastal-dependent facilities, as are sites to the east (the Oregon State University ship facilities and the Hatfield Marine Science Center) and west (an existing marina). Because the area is largely built out and devoted to maritime or other water-dependent uses, the proposed action will not support further development of, or impacts to, the floodplain.

G. **Summary: Impacts of the Proposed Facilities on the Floodplain**. None of the proposed facilities will have an impact on the floodplain, in terms of flood elevations. The pier may have minor, localized impacts on waves and currents in its immediate vicinity, such as a

tendency to cause waves to break down when striking the pier. However, these impacts will have no effect on the shoreline or other nearby features, and will require no mitigation.

The risk of flooding to the proposed office building will be significantly reduced by raising the building on construction grade fill so that the lowest adjacent grade to the building is above the BFE. To comply with the City of Newport's floodplain management ordinance, the building's lowest floor must be 1 foot above the BFE, discussed below.

Newport's proposed development is consistent with the City of Newport Comprehensive Plan, and therefore does not result in "incompatible development in the floodplains" (see E.O. 11988, section 2(a)(2)).

VII. EFFECT OF FLOODING ON THE PROPOSED FACILITIES

This section assesses the impact of potential flooding on the proposed facilities.

A. **Design Requirements of the City of Newport Floodplain Management Ordinance**. The City of Newport participates in the National Flood Insurance Program (NFIP). Participating communities must adopt a floodplain management ordinance defining standards for construction in floodplains that meet the minimum requirements of the program. The city's floodplain management requirements are contained in Section 2-4-6 of the Newport Zoning Ordinance.

In accordance with the NFIP regulations, the ordinance:[22]

- Defines a structure as a walled and roofed building, or a gas or liquid storage tank that is principally above ground.
- Requires new structures to be built so that the lowest floor is 1 foot above the BFE.
- Requires new construction and substantial improvements to be constructed with materials and utility equipment resistant to flood damage and by methods and practices that minimize flood damage.

Because the proposed pier is not considered a structure under the ordinance, it is not required to be elevated above the BFE. However, it must be constructed of materials and with methods that reduce the risk of flood damage.

The proposed office building is a structure. As described above, the FIRM does not show the location of the building to be in the floodplain, but the topographic information obtained for this analysis indicates that it is in the floodplain. Consequently, it should be elevated so that its lowest floor is at least 1 foot above the BFE.

B. **Impact of Flooding on Piers**. This section discusses the source of flood loads potentially impacting the proposed Newport pier, and the likely impact of flooding on the piers

[22] The ordinance also states that no construction is to be located landward of the reach of mean high tide in areas designated as Zone VE, defined as a 1-percent annual chance floodplain with the additional hazards posed by wave action. Because the proposed action is not located in Zone VE, his requirement does not apply.

(examining both the pier design as proposed in Newport's final revised proposal, and their interim design as of February 16, 2010).

1. Source of Flood Loads. As described above, the 1982 FIRM[23] prepared by FEMA for the area of the proposed project shows the proposed pier to be within the 1-percent annual chance floodplain. For this location, the governing influence is the Pacific Ocean, and flooding results from the combination of astronomical tide, storm surge, and wave setup, rather than river rise from precipitation. As such, the impact of flooding during a 1-percent annual chance flood event is primarily from wave action on piles, bents and pier surfaces. In addition, dynamic forces on the pier structure may be influenced by a flooding event via the forces of current, wind and waves on vessels berthed (or being berthed) as well as the potential for large floating debris often associated with flood events to be carried into or held against piles. Review of these considerations is provided below for the design documents and mitigation measures presented.

2. Review of Final Revised Proposal. This qualitative design review is based on the information in the final revised proposal prepared in June 2009. The final revised proposal design calls for many vertical and battered (angled) piles with small diameters spaced in a relatively dense configuration beneath the pier deck and bents (see Figure 1). Anticipated effects of flooding on the pier include forces against the piles from debris trapped under the pier within the battered piles and fendering (berthing) system. In addition, it is anticipated that additional loading from flooding will be imparted into the pier structure, but may not be the dominant load under consideration during full design. In addition, bottom scour may occur and, depending on anticipated intensity, may result in undermining and exposure of supporting piles. Over time this would result in a structure that is less stable unless addressed during the final design stage.

   As with any pier structure design, a coastal engineering report typically is prepared for the design to address flood loading on the structure from various forces, including floating debris in the water, and to identify if scour of the bottom sediment has the potential to undermine the pier structure. Measures to reduce effects of floating debris may include a fendering system designed to shield the underside of the pier from the accumulation of debris. This could take the form of a floating camel log – floating on top of the water and attached to the primary fendering system. A more robust alternative is to consider larger piles, and less of them, to reduce the potential for accumulation of debris under the pier. Larger piles would also tend to better protect the structure from increased hydrodynamic loading associated with flooding. Mitigation of scour may include the use of bottom protections under the pier, such as a removable concrete mat or deeper embedment of the piles.

3. Review of Interim Design. Based on information provided by Newport as of February 16, 2010, it appears that Newport has addressed the effects of flooding on the pier in its interim design. This is done primarily by placing the deck of the pier above the BFE, and by

[23] FEMA prepared the 2009 FIRM using the same analysis and flood hazard data that was used to prepare the 1982 FIRM. The 1982 FIRM was in effect at the time of the lease award; therefore, NOAA has prepared its analysis using the 1982 FIRM. As stated above, the 2009 FIRM does not change the flood hazard analysis and conclusions reached based on the 1982 FIRM.

reducing the number of piles and increasing the size of the piles to reduce the potential for trapping debris under the pier. In addition, it is their intention to use cathodic protections and epoxy coatings, and other protection systems. Newport has also indicated that it would perform regular inspections of the water assets after a high water event to look for damage.

NOAA has been advised by Newport that a coastal engineering analysis and report is currently being prepared – consistent with standard processes – and will address the scour and hydrodynamic loading on the pier structure and mitigation measures to be incorporated into the design of the pier. Newport indicates that the pile design currently presented would be revised, if necessary, based on recommendations forthcoming in the coastal engineering report regarding scour.

Finally, Newport's design firm, KPFF, indicated that they consider the governing load on the pier structure to be those from berthing and mooring, versus (in this case) less dominant loads from seismic, wind, scour or flood. While a quantitative analysis of the loads on the structure due to flooding is still ongoing, it appears that this is not the dominant force bearing on the structure as currently proposed. Hence, based on recent assessments conducted for NOAA by URS, the contractor that conducted the initial MOC-P environmental assessment for NOAA and retained by NOAA to conduct an analysis of the floodplain risks at the Newport site and actions being taken by Newport to mitigate or minimize the adverse impacts of the proposed Newport development, the effect of flooding is not expected to be significant.

C. **Impact of Flooding on Proposed Office Building**. As stated above, based on the topographic information provided by KPFF and the analysis conducted by URS, the location of the office building is in the base floodplain. Newport would be required to elevate the building so that its lowest floor is 1 foot above the BFE (13 feet NAVD 88). The February 4, 2010, memorandum from KPFF states that the finished floor of the office building will be at an elevation of 16.00 feet NAVD 88; which is three feet above the BFE. If the proposed building is constructed to this elevation using methods that comply with the standards of the City's floodplain management ordinance, it will be elevated above the BFE, and the risk of flood damage will be minimized.

D. **Summary: Effect of Flooding on the Proposed Facilities**. Newport's interim pier design is likely to adequately resist damage from severe coastal flooding, based on a recent assessment conducted by NOAA's contractor. This is achieved by the expected placement of the pier deck above the BFE and the reduction in the number of piles (by increasing the size of the piles) to reduce the potential for trapping debris under the pier. Measures planned by Newport to perform regular inspections of the water assets after a high water event to assess for damage are appropriate.

NOAA will continue to assess whether the code compliance requirements under the lease contract are being met, and the City of Newport will assess whether the pier design is adequate to address forces associated with flooding once the recommendations of the coastal engineering report have been prepared relative to scour and flood loading on the structure, and, following the Port of Newport actions to incorporate these recommendations into the final pier design.

The location of the proposed office building appears to be in the base floodplain, based on the topographic information provided by KPFF for this analysis. To mitigate this impact, the proposed office building should be elevated so that its lowest floor is at least 1 foot above the BFE of 13 feet NAVD 88. It is recommended that this structure be constructed to an elevation at least 1 foot about BFE using methods that comply with the standards of the floodplain management ordinance, in which case the risk of flood damage will be minimized. The Port of Newport's current design indicates the finished floor of the proposed office building will be at an elevation of 16.00 feet NAVD 88; which is three feet above the BFE. If the proposed building is constructed to this elevation using methods that comply with the standards of the City's floodplain management ordinance, it will be elevated above the BFE, and the risk of flood damage will be minimized.

Based on the information provided to date by the Port of Newport, the steps being taken by the Port of Newport in the design and proposed construction of the pier and shore-side facilities (proposed office building) at the MOC-P leased site are appropriate and will minimize the risk of flooding and impact of flood damage. These issues will continue to be monitored by NOAA, and the City; and will be reviewed as part of the Corps of Engineers' permit approval process, and local permitting processes.

VIII. PUBLIC NOTICE AND AGENCY FINAL DETERMINATION OF PRACTICABLE ALTERNATIVE

Prior to making a final determination on this matter, NOAA will, as required under E.O. 11988, issue a public notice and provide an opportunity for comment. NOAA will give serious consideration to all comments, and then make a final determination regarding whether there was a practicable alternative to the Port of Newport.

FIGURES:

Figures 1a & 1b: Newport Site Layout and Pier Design (Final Revised Proposal; June 2009)

Figures 2a & 2b: Newport Interim Site Layout and Pier Design (Interim Design; February 2010)

Figures 3a & 3b: FEMA Flood Insurance Rate Map – Newport Oregon

- 1982
- 2009

Figure 4: Delineation of Floodplain Boundaries using Current Topography – MOC-P Site (KPFF; February 2010)

APPENDICES:

Appendix A: Synopsis of NOAA Marine Operations Center-Pacific Lease Acquisition Process (September 2, 2009)

Appendix B: January 29, 2010, NOAA response to GAO

Appendix C: January 22, 2010, Federal Emergency Management Agency Analysis of Floodplain: Final Revised Proposals

Appendix D: February 19, 2010, Note to the File

Appendix E: KPFF's February 4, 2010, Memorandum to the Port of Newport

Figures 1a & 1b

Newport Site Layout and Pier Design (Final Revised Proposal; June 2009)

March 22, 2010

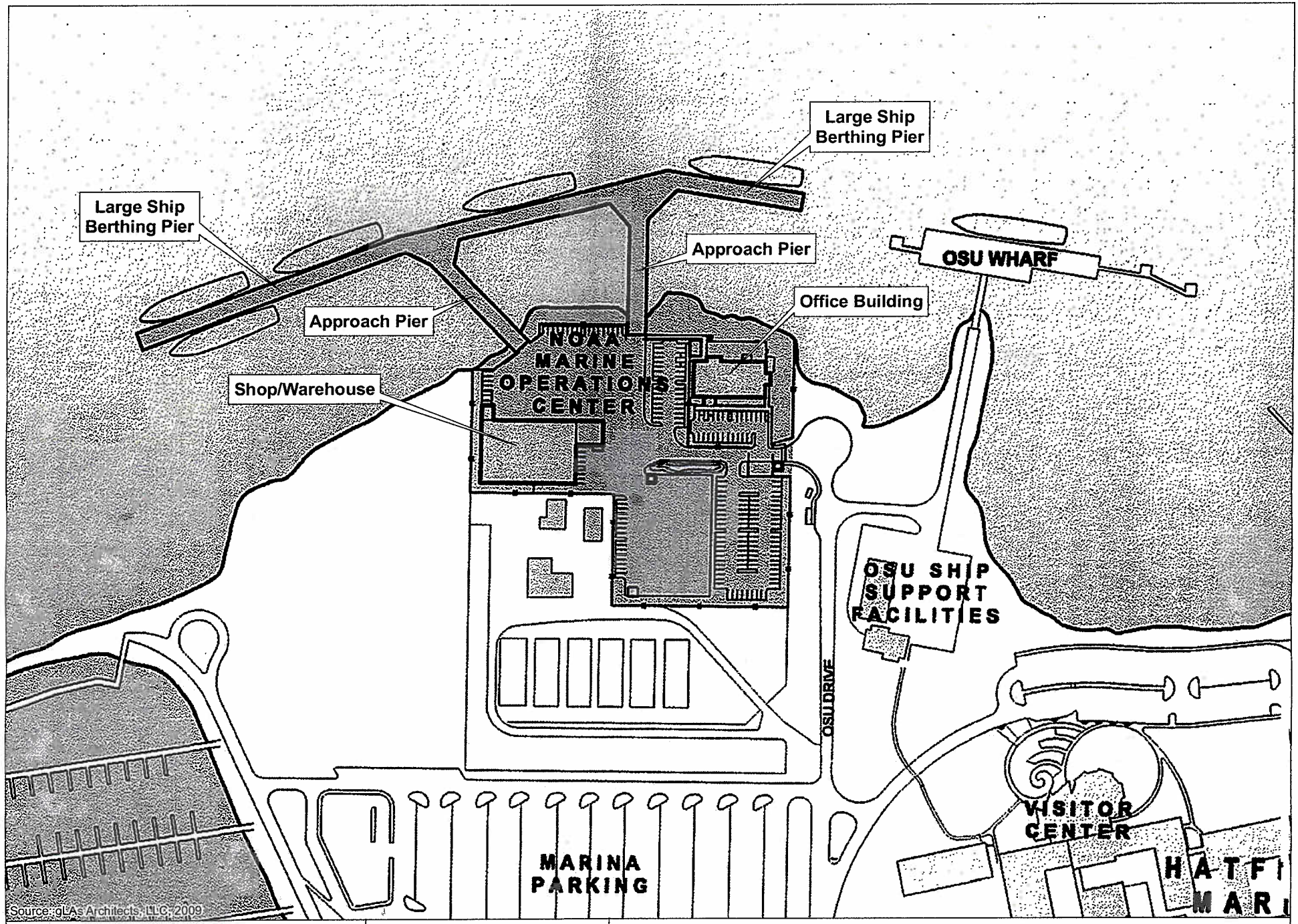
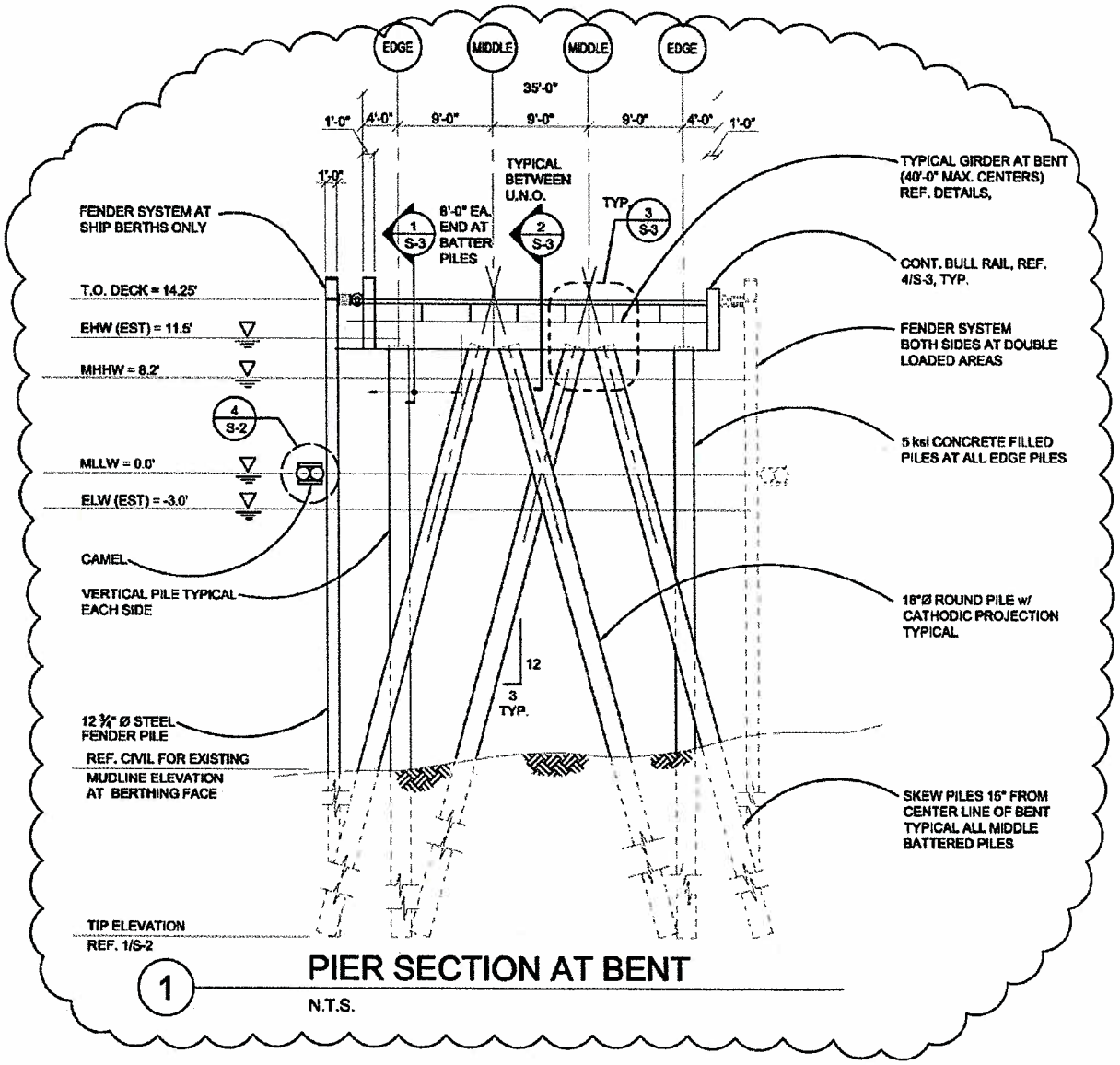


Figure 1a
Port of Newport Final Revised Proposal, June 2009 - Plan View



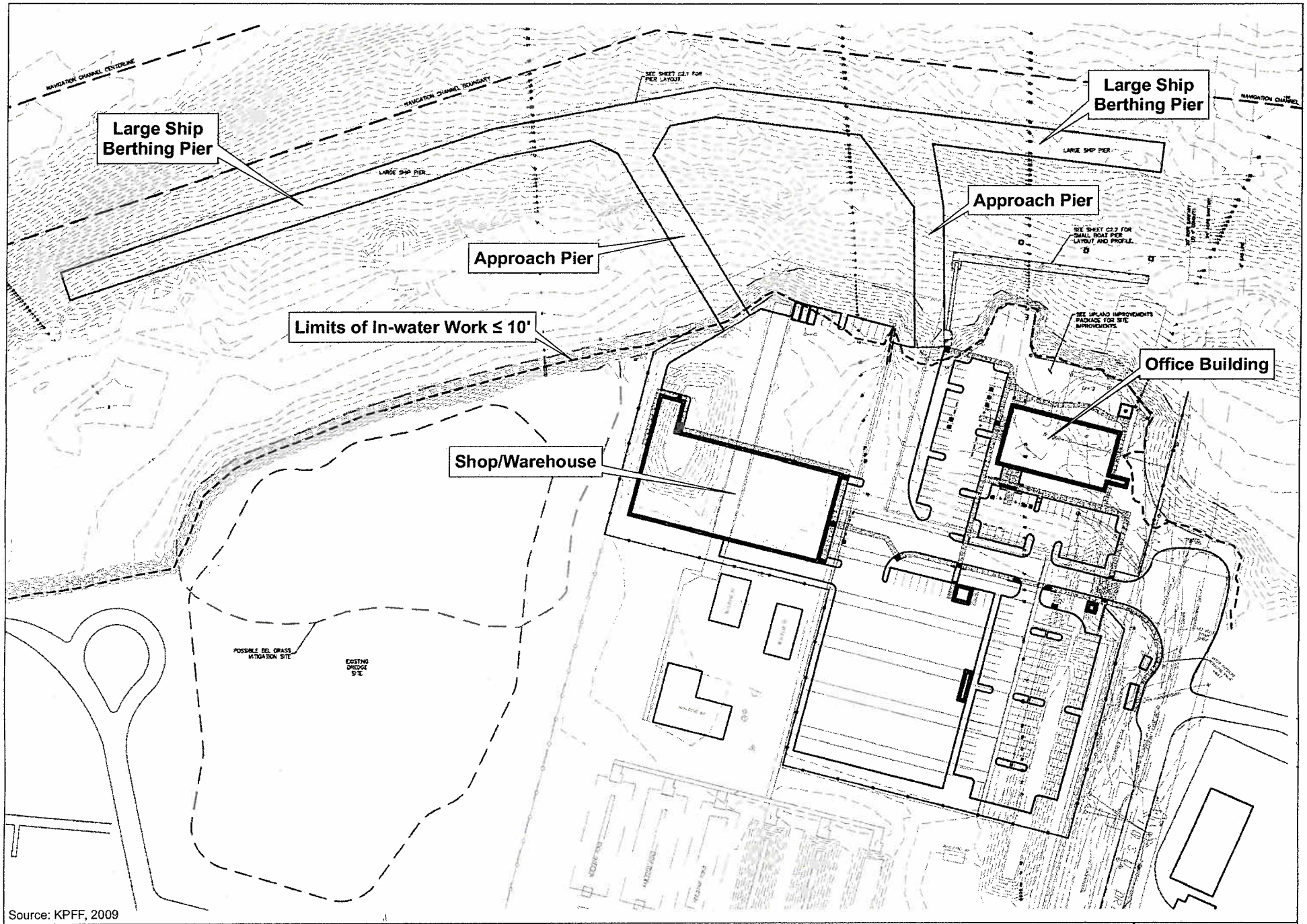
Source: KPFF, 2009

L:\Projects\NOAA_SanJose_2864507\3\Maps\Newport_figures\Fig_1b.mxd - 2/18/2010 @ 6:09:42 PM	Final Technical Memo: Task 1 Assessment of Port of Newport Floodplain Impacts	**Figure 1b** Port of Newport Final Revised Proposal, June 2009 - Profile View

Figures 2a & 2b

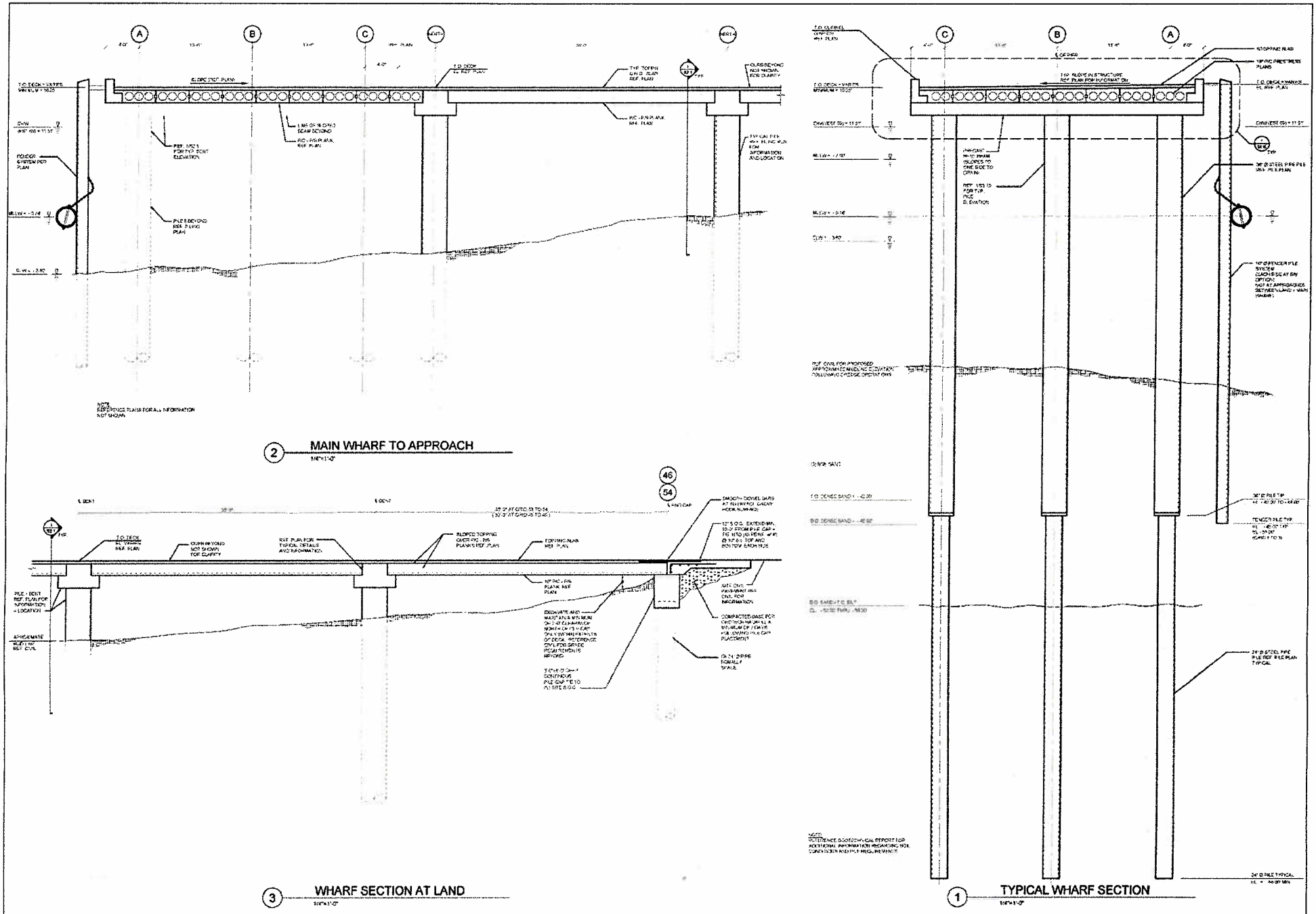
Newport Interim Site Layout and Pier Design (Interim Design; February 2010)

March 22, 2010



Source: KPFF, 2009

Figure 2a
KPFF Interim MOC-P Facility Design, February 2010 - Plan View



Source: KPFF, 2009

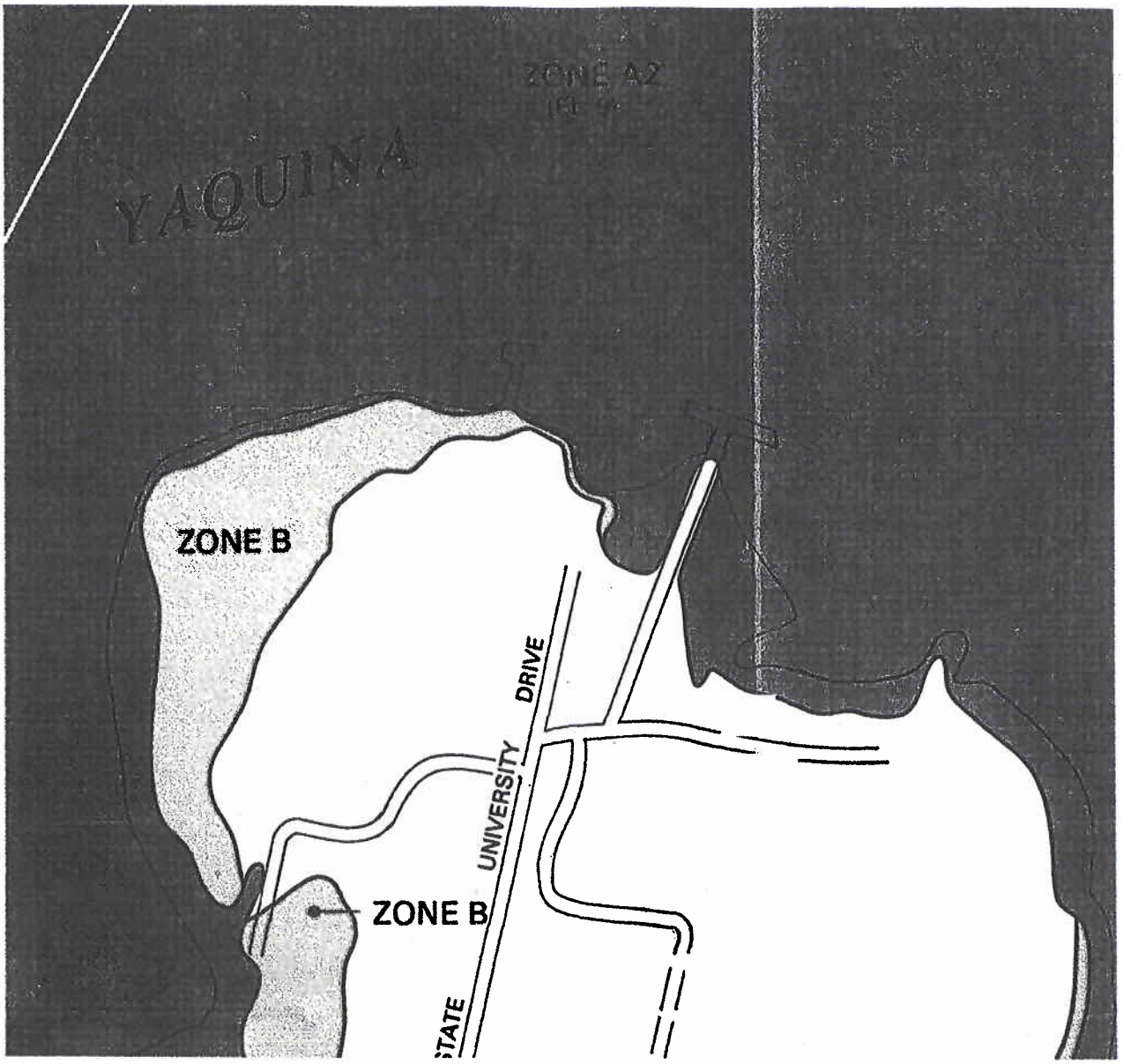
L:\Projects\NOAA_SanJose_28615073\Maps\Newport_figures\Fig_2b.mxd - 2/18/2010 @ 5:58:17 PM	Final Technical Memo: Task 1 Assessment of Port of Newport Floodplain Impacts	**Figure 2b** KPFF Interim MOC-P Pier Design, February 2010 - Profile View

Figures 3a & 3b

FEMA Flood Insurance Rate Map: Newport Oregon

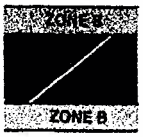
Figure 3a: 1982

Figure 3b: 2009



KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations*
100-Year Flood Boundary
500-Year Flood Boundary



Base Flood Elevation Line With Elevation in Feet** — 513

Base Flood Elevation in Feet Where Uniform Within Zone** — (EL 987)

Elevation Reference Mark — RM7×

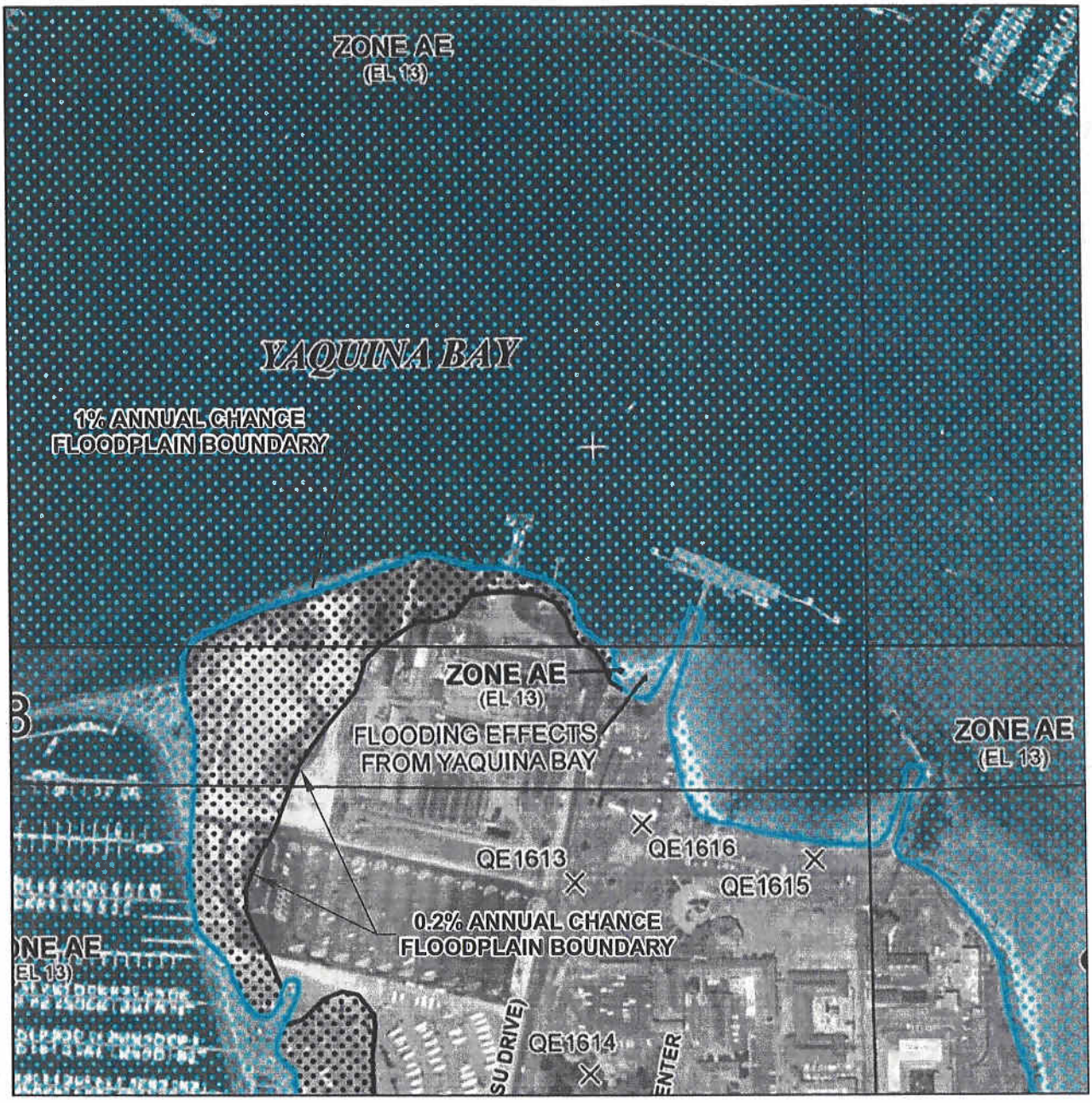
River Mile — • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

Source: FEMA, 1982

Figure 3a
Flood Insurance Rate Map for Newport, Oregon, 1982



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

OTHER FLOOD AREAS

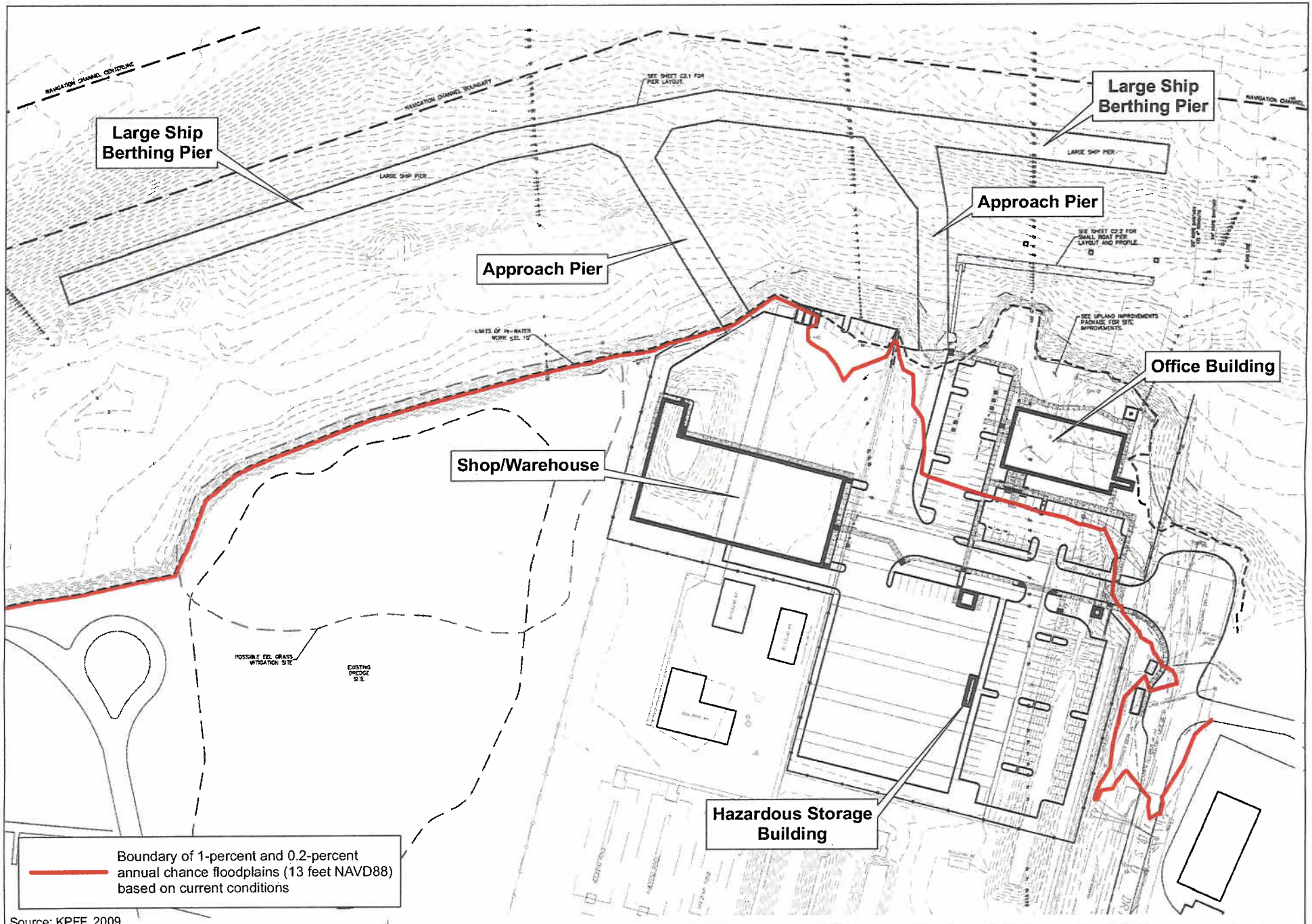
ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

Source: FEMA, 2009

Figure 3b Flood Insurance Rate Map for Lincoln County, Oregon, and Incorporated Areas, 2009

Figure 4

Delineation of Floodplain Boundaries Using Current Topography: MOC-P Site (KPFF; February 2010)



Source: KPFF, 2009

Figure 4
Delineation of Floodplain Boundaries Using Current Topography

Appendix A

Synopsis of NOAA Marine Operations Center-Pacific Lease Acquisition Process (September 2, 2009)

Synopsis of NOAA Marine Operations Center—Pacific Lease Acquisition Process (September 2, 2009)

BACKGROUND

On August 7, 2009, the National Oceanic and Atmospheric Administration (NOAA) awarded a long-term lease to the Port of Newport, in Newport, Oregon as the future site of NOAA's Marine Operations Center—Pacific. The award was the result of a competitive process, conducted pursuant to Federal lease acquisition regulations. As such, certain statutory and regulatory provisions restrict the release of source selection and contractor proposal information both during and after the completion of a competitive acquisition. These restrictions are intended to protect the confidential and proprietary information of those who elect to compete for Federal contracts. In addition, the regulations protect the integrity of the procurement process to ensure that source selection officials are able to carry out their duties without regard to political or personal interference. These standards are set out in the Procurement Integrity Act, 41 U.S.C. 423, and are implemented by Subpart 3.104 of the Federal Acquisition Regulation. Release of some information both before and after award may also be prohibited by the Privacy Act, 5 US.C. 552a, and the Trade Secrets Act, 18 U.S.C. 1905.

The synopsis that follows contains information that NOAA is legally permitted to disclose regarding the MOC-P lease award to the Port of Newport. The following synopsis sets out the lease acquisition process, the evaluation criteria that NOAA officials followed in evaluating the offers received, and the award decision.

PURPOSE OF AWARD

The purpose of the acquisition was to award a long-term operating lease to support NOAA's Office of Marine and Aviation Operations (OMAO) MOC-P requirements. The current MOC-P lease expires June 30, 2011. MOC-P provides centralized management of ten NOAA ships on the West Coast, including Alaska and Hawaii, and is the permanent homeport for four of these ships. MOC-P has 110 ship crew members and 60 staff. The lease that will result from this acquisition will require the landlord to provide approximately 31,010 rsf, 75-100 parking spaces (50 secured), 10,000 sf of open storage, 20,000 sf of laydown area, 1,560 usable linear feet of piers for large ships with pier width of 25 feet (20 feet usable) with 30 feet or more width preferred, and 400 linear feet of small boat piers.

OVERVIEW OF LEASE/ACQUISITION PROCESS

NOAA followed a prescribed, competitive process to acquire a new lease for land, buildings and structures to support the MOC-P.

- NOAA is acquiring land, buildings and structures by lease, under delegated authority (September 5, 2008 delegation) from the General Services Administration (GSA) (40 U.S.C. 585 as implemented by GSA Regulations (GSAM) Section 570).

- The GSA authority is further defined under Federal Management Regulations (FMR) 40 CFR Part 73.45 and FMR Bulletin 2008-B1, which delineates the process under which agencies—such as NOAA—are delegated authority for leases that are less than prospectus level (for FY 2009, this is $2.66M annual rent without operating costs).

- The MOC-P acquisition, because of its estimated rent, requires a full and open competition under GSAM 570.3. Under a full and open competition, specific steps and procedures are required, which are outlined below.

The competitive process involves the following steps leading up to award and subsequent occupancy:

1. MARKET ANALYSIS: Designed to determine whether there is sufficient likelihood of competition within a geographically-delineated area. The market analysis for the MOC-P lease acquisition was used to validate the selection of Washington and Oregon for the delineated area. The market analysis was completed in October 2008.

2. SOLICITATION FOR OFFERS (SFO): The SFO is issued to all prospective, interested offerors, and is published in Federal Biz Ops. The SFO includes the description of requirements, the schedule for submission of formal offers, the technical evaluation factors, and the source selection procedures. The SFO stated that this acquisition is to be a "best value" selection. The SFO is required to comply with the competition requirements under Federal Acquisition Regulations (FAR) Part 15, (15.304 and 15.101-1 or -2) for source selection actions. The SFO for MOC-P was released November 21, 2008, with proposals due February 4, 2009.

    - NOAA uses a "best value" source selection process (pursuant to GSA Regulations Section 570.304) for major acquisitions.

    - The best value method allows the Government to conduct a comparative assessment of proposals against specific selection criteria. The method allows projects to be awarded to contractors that offer the best combination of price and technical qualifications.

3. EVALUATION OF OFFERS AND NEGOTIATIONS: All timely offers are evaluated against the technical evaluation factors, with discussions and formal negotiations, as necessary. For MOC-P, the technical offers for these sites were evaluated in March 2009 by the Source Evaluation Board (SEB), comprised of real property experts, engineers, and technical representatives from the Office of Marine and Aviation Operations at MOC-P—all Board members were based in Seattle, WA.

   Following evaluation of both technical and cost factors, the Source Selection Official and the contracting officer determined the competitive range. Offers were individually notified, by letter dated April 20, 2009, of their inclusion in the competitive range along with possible discussion points for the negotiation.

   Negotiations were held with each offeror on April 28-29, 2009; final offers were due on June 4, 2009.

The SEB reconvened and reviewed the final technical offers. The contracting officer conducted a price analysis of the offers, reviewed the SEB's technical analysis of the offers, and made a recommendation to the Source Selection Official.

4. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) ASSESSMENT: NOAA is required to comply with NEPA requirements, including the following prior to awarding the lease: due diligence, public scoping, environmental assessment, etc. In the case of MOC-P, four sites were assessed:

    - 1801 Fairview Ave East, Inc., Lake Union, Seattle, WA (existing MOC-P site);
    - Port of Port Angeles, Port Angeles, WA (Terminal 3);
    - Port of Bellingham, Bellingham, WA (Bellingham Shipping Terminal); and
    - Port of Newport, Newport, OR (Dock 2).

    On July 29, 2009, NOAA issued a Finding of No Significant Impact (FONSI) for all four of the sites assessed.

5. LEASE AWARD: Once NEPA reviews are complete, the government determines the proposal that represents the best value (see below) to the government, makes an award to the successful offeror, and notifies the unsuccessful offerors. In the case of MOC-P, the Source Selection Official reviewed the contracting officer's recommendation, including the SEB's technical evaluation report and the contracting officer's price analysis, and made the best value determination on August 4, 2009.

    The Port of Newport (OR) was selected as future site for MOC-P, with the lease award being made on August 7, 2009. The unsuccessful offerors were notified via email that they were not selected. The unsuccessful offerors were sent a letter advising them of the opportunity for a debriefing, and information regarding their right to file a protest; debriefings were conducted on August 17-18, 2009.

MOC-P LEASE AWARD

Technical Evaluation:

Technical Evaluation Criteria: The evaluation factors and subfactors used to assess the technical merits of each offer were set forth in the SFO, as follows:

- Factor "A" Location of Site
  Subfactors
    1. Site Compatibility
    2. Proximity to Shipping Route
    3. Proximity to NOAA Western Regional Center
    4. Proximity to "for-hire" Labor
    5. Access to Fire Protection
    6. Proximity to Emergency Medical Facility
    7. Access to Fuel
    8. Access to Airport

9. Access to Public Transportation
10. Proximity to Shipyard/Dry Dock
11. Physical Barriers
12. Access to Solid Waste Removal

- Factor "B" Site Configuration and Management
  Subfactors
  1. Site Configuration
  2. Site Protection
  3. Environmental Concerns and Natural Areas
  4. Tidal Range and Water Characteristics
  5. Unscheduled Port Closures
  6. Frequency of Dredging

- Factor "C" Quality of Building and Pier
  Subfactors
  1. Quality of Building Design and Efficiency
  2. Width of Pier
  3. Distance between Two Piers
  4. Distance between Piers and any Fixed Obstruction

- Factor "D" Availability
  1. Delivery Timeline

- Factor "E" Past Performance and Project Financing
  Subfactors
  1. Key Personnel
  2. Past Performance
  3. Evidence of Capability to Perform

- Factor "F" Quality of Life
  Subfactors
  1. Housing Availability
  2. Schools
  3. Proximity to Hotels, Motels, Food, and Recreational Facilities
  4. Proximity to Medical/Dental
  5. Proximity to Business District

These technical factors were significantly more important than price. Factors A, B, and C were of equal importance; and were significantly more important than Factors D, E and F. Factors D and E were of equal importance; and were significantly more important than Factor F.

The relative importance of the subfactors within the factors were as follows:

- Factor A (Location of Site):
  - Subfactor 1 is more important than individual subfactors 2-12;
  - Individual subfactors 2-6 are of equal importance and are more important than the individual subfactors 7-12; and

- Individual subfactors 7-12 are of equal importance.

- Factor B (Site Configuration & Management):
  - Individual subfactors 1-2 are of equal importance and are more important than individual subfactors 3-6;
  - Individual subfactors 3-5 are of equal importance and are more important than subfactor 6.

- Factor C (Quality of Building and Pier): Individual subfactors 1-4 are of equal importance.

- Factor E (Past Performance & Project Financing): Individual subfactors 1-3 are of equal importance.

- Factor F (Quality of Life):
  - Individual subfactors 1-3 are of equal importance and are more important than individual subfactors 4-5; and
  - Individual subfactors 4-5 are of equal importance.

Technical Ratings of Offers. The final offers submitted on June 4, 2009 were reviewed against these technical evaluation factors by the SEB. The offer submitted by the Port of Newport was judged to be the highest technically-ranked offer.

Price Evaluation:

Each Offeror's price was evaluated using the net present value (NPV) method. In addition to the cost of the lease, all offers, other than 1801 Fairview Avenue East LLC, were assessed a $7,300,000.00 relocation cost. As well as reviewing the NPV for each offer, the annual cost of the lease was also reviewed in order to determine whether the offered price was under the fiscal year 2009 prospectus level and if the lease scored as an operating lease using OMB A-11 Circular scoring Model. The proposal submitted by the Port of Newport offered the lowest price to the Government.

Best Value Decision:

Upon review of the technical evaluations of the offerors, and the price analysis, the contracting officer recommended, and the Source Selection Official concluded that the offer from the Port of Newport:

- Met all requirements outlined in the solicitation,
- Was evaluated as the most technically proficient offer, and
- Offers the Government the lowest price.

Based on these considerations, the Port of Newport, OR offer was selected as the offer that provided the best value to the government.

PROTEST PROCESS

- Under the leasing process of GSA Regulations (GSAM Section 570), protests are subject to the processes found in GSAM Section 533.

- Prior to submission of a formal protest, all parties are encouraged to use their best efforts to resolve concerns raised by an interested party at the contracting officer level (i.e., starting with the debrief).

- The offerors had several choices regarding filing a protest:

    - To the Agency,
    - To the Government Accountability Office (GAO); and/or
    - To the United States Court of Federal Claims (COFC).

  Protests filed with Agency. Protests to Agency must be filed with the NOAA contracting officer no later than 10 days after the basis of protest is known or should have been known, whichever is earlier. Agencies must seek to resolve the protest within 35 days.

  Protests filed with GAO. Protests to GAO must be filed within 10 days of knowledge of Federal action or within 5 days after a debriefing date offered to the protester, whichever is later. GAO must issue its response within 100 days of the protest filing. NOTE: Pursuing an Agency protest does not extend the time for obtaining a stay at GAO.

  Protests filed with COFC. In a protest to the COFC, there is a six year statute of limitations for filing, but later COFC protest actions may be meaningless if not filed immediately because construction and occupancy may be proceeding on the awarded site.

- The standard normally applied in considering the protest is whether there is a "reasonable basis" for the government's action.

Appendix B

NOAA response to GAO
January 29, 2010

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
CHIEF ADMINISTRATIVE OFFICER

January 29, 2010

Glenn G. Wolcott
Deputy Assistant General Counsel
United States Government Accountability Office
Washington, DC 20548

Dear Mr. Wolcott:

Subject: Protest of Port of Bellingham
B-401837

This is in response to the Government Accountability Office's (GAO) December 2, 2009 letter to Secretary Gary Locke, Department of Commerce, concerning GAO's decision sustaining the protest filed by Port of Bellingham against the award of a lease by the National Oceanic and Atmospheric Administration (NOAA) to Port of Newport (Newport, Oregon). Pursuant to 31 U.S.C. §3554(b)(3) (2000 & Supp. IV 2004), as the head of the lease acquisition activity responsible for solicitation No. 09WSA0200C, I am reporting on the actions taken and planned to be taken in response to GAO's recommended corrective actions in this matter.

Recommended Corrective Actions

In the December 2, 2009 decision, GAO sustained the Port of Bellingham protest on the basis that a portion of the pier structure at the Newport site would be in the 100-year floodplain, also known as the base floodplain; and that NOAA did not comply with the requirements set forth in the its solicitation for offers (and under Executive Order (E.O.) 11988 (*Floodplain Management,* May 24, 1977)) with respect to making an award to a site located within a base floodplain in the absence of making a determination that "there is no practicable alternative" to the Port of Newport's offer. GAO's recommended corrective actions were that NOAA conduct an assessment of whether there was a practicable alternative, as contemplated by the solicitation, to awarding the lease to the Port of Newport. If NOAA's analysis identifies a practicable alternative, GAO recommends that NOAA implement the alternative, if otherwise feasible. If NOAA's analysis concludes there is no practicable alternative, GAO recommends that NOAA comply with the procedural requirements established under E.O. 11988, and provide a copy of its documentation to the parties to the protest.

Following consultation on these issues within the Department of Commerce, NOAA is proceeding with all appropriate actions and intends to fully comply with GAO's decision and recommended corrective actions with respect to the E.O. 11988 requirements. In complying with GAO's recommended corrective actions, NOAA is taking the following specific actions consistent with the steps required under E.O. 11988. NOAA expects to complete all actions no later than May 28, 2010.

1. Assessment of Practicable Alternatives. NOAA will conduct an analysis of the offerors' previously submitted final revised proposals to determine if there is a practicable alternative that does not involve development in a base floodplain, and otherwise presents a feasible selection award under the solicitation for offers. In making this determination, NOAA will consider the final revised proposals submitted in response to the SFO.

   NOAA has requested that the Federal Emergency Management Agency (FEMA) conduct an analysis of floodplain issues associated with the final revised proposals submitted by the four offerors in this acquisition. NOAA will use FEMA's analysis as the basis for determining whether a lease based on each of the offerors' final revised proposals would result in an action being taken in a base floodplain. NOAA will use the FEMA analysis as part of NOAA's overall analysis of whether there is a practicable alternative, and document the basis of its initial determination of whether there is a practicable alternative to development in a base floodplain.

   If NOAA determines that a practicable alternative exists, and is otherwise feasible (e.g., within available resources and authorities) to implement, NOAA would take the necessary steps to implement the alternative. Pursuant to the GAO decision, NOAA would provide a copy of its decision and supporting analysis to all parties and to GAO.

2. Independent Validation of Draft Assessment. If NOAA determines that that there appears to be no practicable alternative to the Port of Newport lease award, NOAA would document the basis of this preliminary conclusion, as well as the potential impacts and measures proposed to avoid or minimize adverse effects. NOAA intends to request the General Services Administration (GSA) to conduct an independent review of NOAA's draft assessment of practicable alternatives. NOAA acknowledges that this step is not required in the normal assessment process, nor by GAO's decision, but believes this action is warranted in this instance. If GSA agrees to conduct this review, NOAA would take under consideration any recommended actions or revisions suggested by GSA, and proceed with the public notice process required pursuant to EO 11988.

3. Public Notice and Comment. If NOAA determines that there appears to be no practicable alternative to the Port of Newport lease award, NOAA would issue public notice of the proposed determination: in local newspapers and to the local government officials of the City of Newport, Lincoln County, Oregon; and to the parties to the protest (Port of Newport and Port of Bellingham) as required under the GAO decision. The draft assessment report, including the Port of Newport's proposed action, would be posted on the NOAA website for public review and comment for a period of 30 days. Again, this may go beyond what is normally required under the E.O 11988 process.

4. Final Determination of Practicable Alternatives. Following conclusion of the public notice and comment period, NOAA would finalize the assessment report and make a final determination.

5. Publication of Final Determination. NOAA would then publish a summary of its final determination to the parties and to GAO. The final report supporting NOAA's determination would be posted to NOAA's website, to allow broader public notice of the action, flood protection techniques and other mitigation measures that would be used to minimize flood risks and floodplain impacts.

NOAA believes this course of action is fully responsive to GAO's recommended corrective actions, and compliant with the E.O. 11988 assessment process.

Reimbursement of Costs

By letter dated January 13, 2010, the Port of Bellingham provided to NOAA its invoice for the costs of filing and pursuing this protest, including attorneys' fees. NOAA intends to timely respond to the request for reimbursement of such costs.

Please do not hesitate to contact me (301-713-0836) if there are questions or concerns.

Sincerely,

William F. Broglie
NOAA Chief Administrative Officer

Appendix C

Federal Emergency Management Agency
Analysis of Floodplain: Final Revised Proposals
January 22, 2010

March 22, 2010

U.S. Department of Homeland Security
Region X
130 228th Street, SW
Bothell, WA 98021-9796

FEMA

January 22, 2010

Mr. James R. Barrows
Real Property Contracting Officer
National Oceanic and Atmospheric Administration Office of the Chief Administrative Officer
Real Property Management Division – Western Region
7600 Sand Point Way NE
Seattle, Washington 98115-6349

Dear Mr. Barrows:

On January 8, 2010, National Oceanic and Atmospheric Administration (NOAA) requested the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) to review and analyze the flood zone determinations for each of four revised proposals of pier and shore-side facilities to support NOAA's Marine Operations Center-Pacific operations. Flood zone determinations are based on the lateral locations of a development, not just elevation.

Portions of three of the four proposed facility sites are located within Special Flood Hazard Areas as delineated on the National Flood Insurance Program's (NFIP) Flood Insurance Rate Maps for each of the affected communities. Development within Special Flood Hazard Areas requires obtaining local "flood hazard/protection" permits and development and construction in compliance with the local jurisdiction's floodplain management codes and ordinances. Compliance with these ordinances includes adherence with their building and construction codes, including but not limited to potential elevation of structures and construction standards that correspond with the potential risk for structures. Each community may require more specific detailed plans to more adequately address the flooding risk to the facilities and adjacent structures to determine compliance with their flood hazard/prevention codes and to issue their permits.

The Newport, Oregon facility site is within the Special Flood Hazard Area as shown on the Lincoln County, Oregon and Incorporated Cities Flood Insurance Rate Map, Panels 368 and 506 (Effective date December 18, 2009). All new pier and dock facilities and improvements to the existing pier and dock facilities would be in a Zone AE. Some of the shore-side development may also fall within the Zone AE depending upon the distance from the water's edge.

The Port of Port Angeles, Washington facility site is within the Special Flood Hazard Area as shown on City of Port Angeles, Washington Flood Insurance Study and Flood Insurance Rate Map, Panel 3 (Effective date September 28, 1990). The new preliminary Flood Insurance Rate Maps for Clallam County reconfirm this designation. (This preliminary Flood Insurance Rate Map is presently scheduled for release within the next 60 days; it will be approximately 1 year before this new map will go into effect.) All new pier and dock facilities and improvements to the existing pier and dock facilities would be in a Zone VE which is a velocity coastal zone.

Some of the shore-side development may fall within the Special Flood Hazard Area as well, depending upon the distance from the water's edge and proximity to Tumwater Creek.

The Port of Bellingham, Washington facility site is within the Special Flood Hazard Area as shown on the Whatcom County, (All Jurisdictions) (Effective date January 16, 2004). All of the improvements to the pier and dock facilities would be in a Zone A. Some of the shore-side development activities and facilities may also fall within the Zone A depending upon the distance from the water's edge.

The Lake Union facility site at 1801 Fairview Ave E, Seattle, Washington is not within a National Flood Insurance Program Special Flood Hazard Area, therefore not subject to E.O. 11988.

The information reviewed and analyzed for each of the four development proposals indicates that three of the four proposals are located within a National Flood Insurance Program Special Flood Hazard Area and subject to the E.O. 11988 process. All development occurring within Special Flood Hazard Areas within communities participating in the National Flood Insurance Program are required to regulate development occurring within these areas to remain in compliance with the NFIP. I have enclosed copies of National Flood Insurance Rate Maps for each of the proposed sites for reference.

Please contact me if you have any questions regarding these determinations or the National Flood Insurance Program. I can be reached at (425)487-4675 or at karen.wood-mcguiness@dhs.gov.

Sincerely,

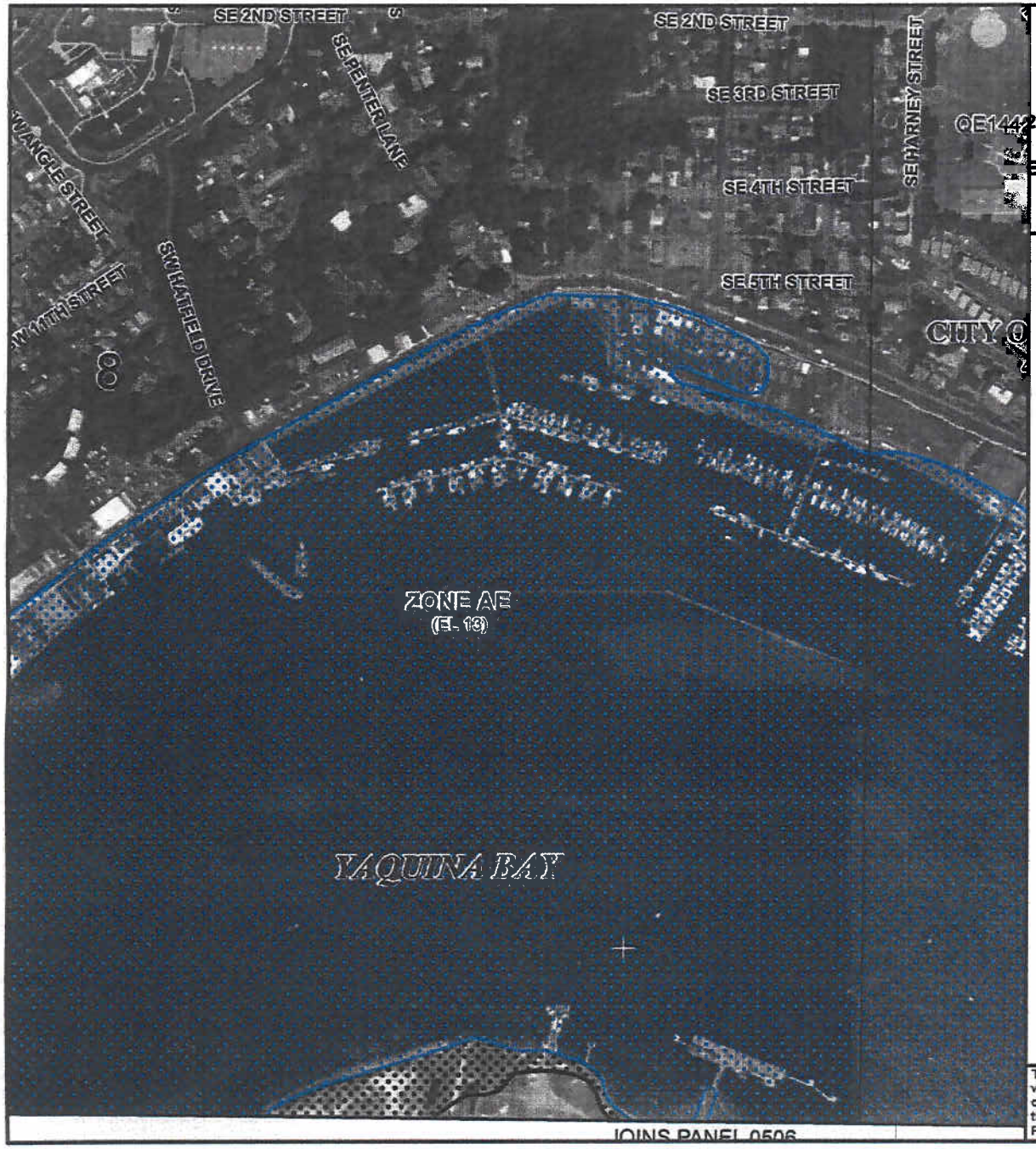
Karen Wood-McGuiness, CFM
Floodplain Management Specialist

Enclosures

cc: Mark Riebau, Branch Chief, Mitigation Division, FEMA Region 10

KW:bb

Newport Site



MAP SCALE 1" = 500'

250 0 500 1000

FEET

METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0368D

FIRM

FLOOD INSURANCE RATE MAP

LINCOLN COUNTY, OREGON AND INCORPORATED AREAS

PANEL 368 OF 880

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY	410129	0368	D
NEWPORT, CITY OF	410131	0368	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
41041C0368D

EFFECTIVE DATE
DECEMBER 18, 2009

Federal Emergency Management Agency

Newport Site

MAP SCALE 1" = 500'

250 0 500 1000

FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0506D

FIRM

FLOOD INSURANCE RATE MAP

LINCOLN COUNTY, OREGON AND INCORPORATED AREAS

PANEL 506 OF 880

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LINCOLN COUNTY	410120	0506	D
NEWPORT, CITY OF	410131	0506	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
41041C0506D

EFFECTIVE DATE
DECEMBER 18, 2009

Federal Emergency Management Agency

Port Angeles Site

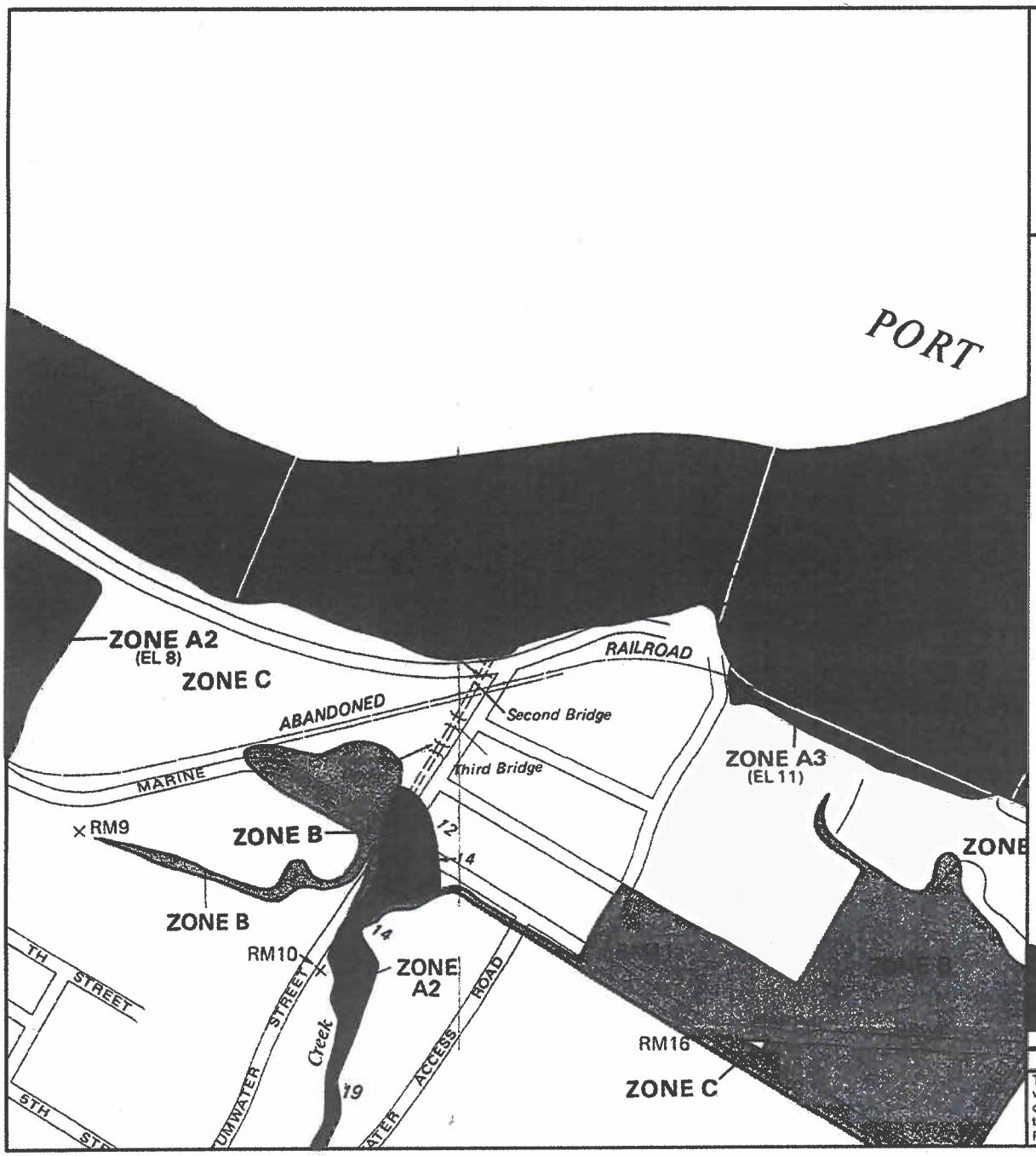
FEMA Flood Hazard Areas

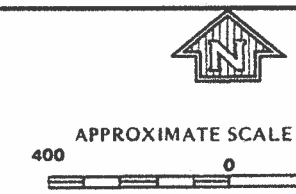
N
W E
S

0 0.25 0.5 1 1.5 2 Miles

Ediz Hook

Port Angeles Site





NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
PORT ANGELES, WASHINGTON
CLALLAM COUNTY

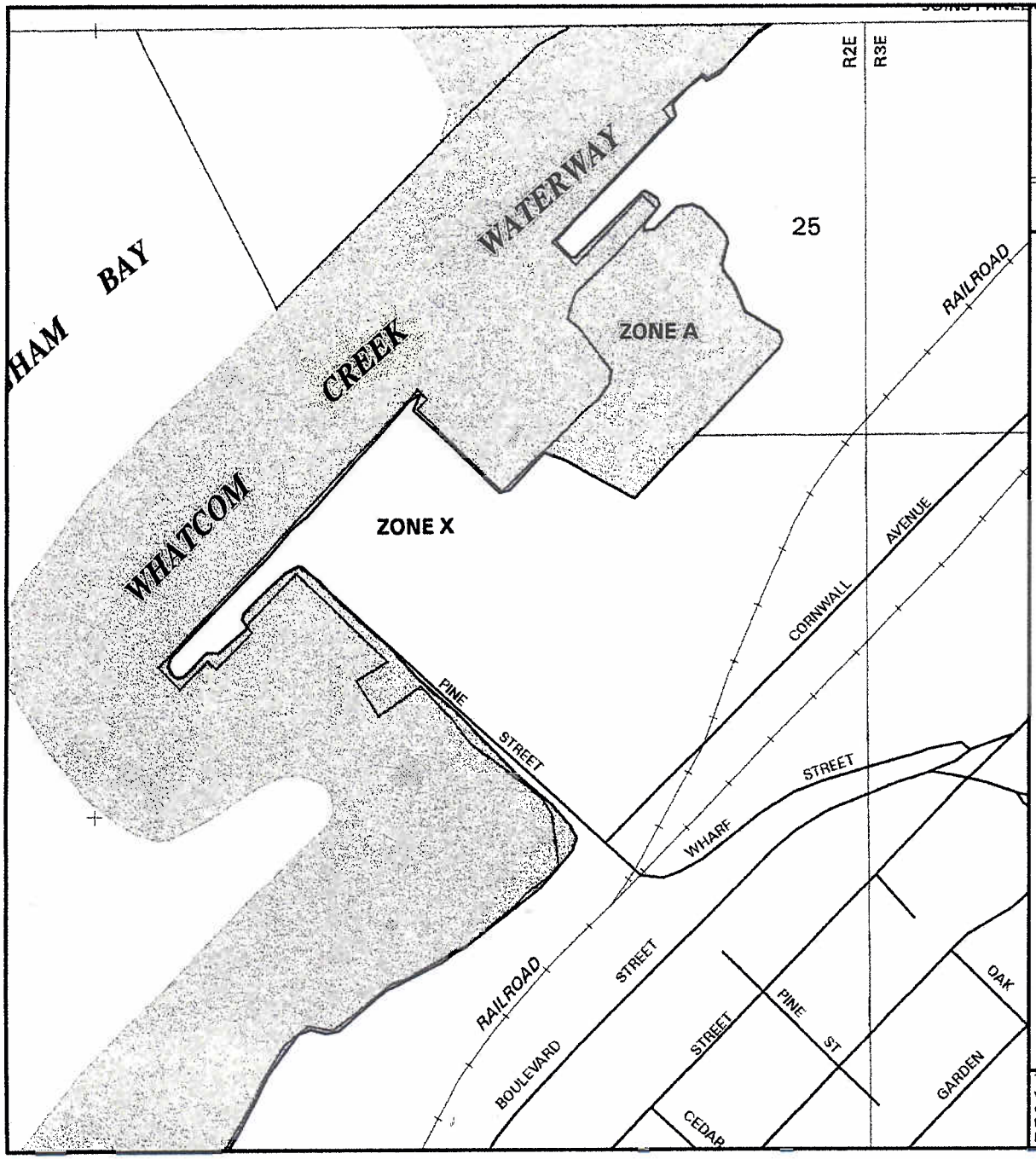
PANEL 3 OF 6
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
530023 0003 C

MAP REVISED:
SEPTEMBER 28, 1990

Federal Emergency Management Agency

Port of Bellingham Site



MAP SCALE 1" = 500'

250 0 500 1000 FEET

MFTF

NFIP NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1651D

FIRM

FLOOD INSURANCE RATE MAP

WHATCOM COUNTY, WASHINGTON (ALL JURISDICTIONS)

PANEL 1651 OF 2025

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BELLINGHAM, CITY OF	530149	1651	D

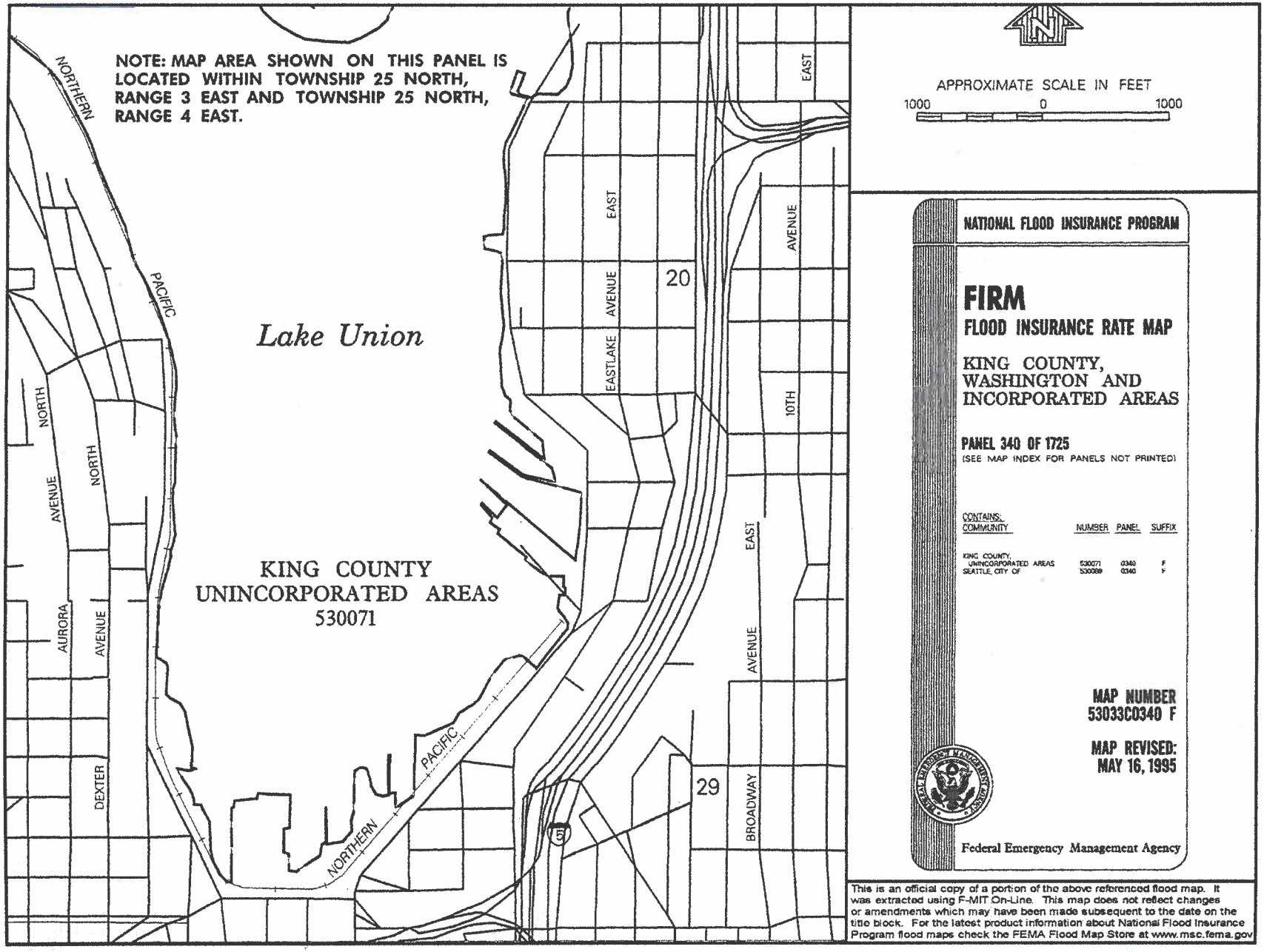
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER 53073C1651D

EFFECTIVE DATE: JANUARY 16, 2004

Federal Emergency Management Agency

1801 Fairview Ave E. Site



Appendix D

Note to the File
February 19, 2010

February 19, 2010

NOTE TO THE FILE

Re: FEMA Floodplain Analysis of MOC-P Offers

Following the Government Accountability Office's (GAO) December 2, 2009 in on the MOC-P protest submitted by the Port of Bellingham, NOAA began to receive questions regarding whether other offerors' final revised proposals also involved base floodplain issues. To provide a conclusive assessment on this issue, NOAA requested the Federal Emergency Management Agency (FEMA) – the Federal agency responsible for defining base floodplains – to conduct an analysis of floodplain issues associated with the final revised proposals submitted by the four offerors in this acquisition. [See January 8, 2010 letter attached.]

On January 26, 2010, NOAA received FEMA's response). [See FEMA's January 22, 2010 letter attached.] FEMA concluded that

> "Portions of three [Newport, Bellingham, and Port Angeles] of the four proposed facility sites are located within Special Flood Hazard Areas as delineated on the National Flood Insurance Program's (NFIP) Flood Insurance Rate Maps for each of the affected communities. Development within Special Flood Hazard Areas requires obtaining local "flood hazard/protection" permits and development and construction in compliance with the local jurisdiction's floodplain management codes and ordinances."

[NOTE: FEMA uses the terminology of "Special Flood Hazard Area" for the area subject to a 1% or greater chance of flooding in any given year. This terminology is equivalent to the older terminology of "100 year floodplain," and the more colloquial terminology of "base floodplain."]

The FEMA letter goes on to state

> "The information reviewed and analyzed for each of the four development proposals indicates that three of the four proposals are located within a National Flood Insurance Program Special Flood Hazard Area and subject to the E.O. 11988 process."

Following receipt of FEMA's January 22, 2010 letter, NOAA had several clarifying questions, which they discussed with FEMA. The following summarizes NOAA's understanding on these issues based on NOAA's discussion with FEMA on February 1, 2010, and follow-up clarifications from FEMA received on February 18, 2010.

1. **The first paragraph (page 1) of the response states that "Flood zone determinations are based on the lateral locations of a development, not just elevation." What does this statement mean?**

   ANSWER: Flood Zone Determinations are made taking into account both lateral location and elevation. This means that a structure designed above the base floodplain elevation (BFE), but located laterally within the Special Flood Hazard Area (SFHA), would be

considered in a Special Flood Hazard Area, and would need to comply with the Executive Order (E.O. 11988; *Floodplain Management*) and applicable floodplain management requirements.

2. **The second paragraph (page 1) of the response states that "Portions of three of the four proposed facility sites are located within Special Flood Hazard Areas as delineated on the National Flood Insurance Program's (NFIP) Flood Insurance Rate Maps for each of the affected communities." Does this statement mean that portions of each of the three sites referenced are in a "base floodplain" (aka "100-year floodplain")?**

   ANSWER: The Special Flood Hazard Area (SFHA) is the land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. These areas are subject to 44 CFR 60.3 and each community's flood hazard/protection code and floodplain management requirements. Therefore, portions of the Newport, Bellingham and Port Angeles proposed facility sites, as reflected in their final revised proposals, are located in a Special Flood Hazard Area.

3. **Paragraph 3 (page 1) states (with respect to Newport) that some of the shore-side development may also fall within the Zone AE depending upon the distance from the water's edge." Is it clear where this Zone AE boundary is relative to the current plans for development at the Newport site?**

   ANSWER: Currently this issue is not clear based on the level of detail provided in the site plan documents received by FEMA. If NOAA concludes that there appears to be no practicable alternative, the draft assessment – that would be prepared to document this proposed determination – would need to clarify this point, and include this as part of the assessment of potential impact of the proposed development at the Newport site. All new and improved proposed pier and dock facilities are within an AE zone and subject to the community's flood hazard/protection code and floodplain management regulations, and therefore subject to E.O. 11988. Any shore side development that falls within the AE zone are also subject to these regulations would also be subject to these requirements.

4. **Paragraph 4 (page 1) states (with respect to Port Angeles) that "All new pier and dock facilities and improvements to the existing pier and dock facilities would be in a Zone VE which is a velocity coastal zone." Please clarify/define a "velocity coastal zone."**

   ANSWER: Along a coast, FEMA determines SFHAs by analysis of storm surge, wind direction and speed, wave heights, and other factors. Velocity Coastal Zones (V Zones) are the more hazardous coastal flood zones because they are subject to high velocity wave action. FEMA applies the V-zone designation to those areas along the coast where water depth and other conditions would support at least a 3-foot wave height. FEMA usually designates A Zones in coastal areas landward of the V Zone. Coast flood hazards areas mapped as A Zones can be subject to storm surge and damaging waves; however, the waves are less than 3 feet in height. V-zone development regulations address the added risk of these zones.

5. **For all three sites, FEMA's letter makes statements with respect to shore-side facilities that are not conclusive. For example, the statement in #3 above for Newport ("some of the shore-side development may [emphasis added] also fall within the Zone AE); a similar statement for Port Angeles ("Some of the shore-side may [emphasis added] fall within the Special Flood Hazard Area…], and finally, with respect to Bellingham "Some of the shore-side development activities and facilities may [emphasis added] also fall within the Zone A depending upon the distance from the water's edge." Please clarify the apparent ambiguity of these determinations: why was FEMA not able to make firm determinations with respect to shore-side facilities for all three sites?**

   ANSWER: FEMA is not able to make conclusive statements with regard to the shore-side facilities proposed by the three offerors because the proposed site development plans for the shore-side facilities contained in the final revised proposals were not defined at a level of detail required to make a definitive determination due to scale and detailed construction plans. Since the proposed site development plans are primarily contained in the final revised proposals are primarily to provide a "test-fit" of NOAA's program of requirements at the proposed site, these plans are generally not developed, at this point, to a level of detail to make conclusive determinations with respect to falling within the SFHA.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
OFFICE OF THE CHIEF ADMINISTRATIVE OFFICER
Real Property Management Division - Western Region
7600 Sand Point Way NE
Seattle, Washington 98115-6349

January 8, 2010

Mr. Mark Riebau, Chief
Floodplain Management & Insurance Branch
FEMA
Federal Regional Center
130 228th Street, Southwest
Bothell, WA 98021-8627

Dear Mr. Riebau:

NOAA awarded a lease to the Port of Newport (OR) in August 2009 for pier and shore-side facilities to support NOAA's Marine Operations Center-Pacific operations. The lease award was protested to the Government Accountability Office (GAO) by an unsuccessful offeror. In early December, GAO sustained the protest on the grounds that portions of the pier structure (the pilings) at the Newport facility would be within the 100-year floodplain (also known as a "base floodplain"), and that NOAA did not comply with the requirement set forth in its solicitation for offers to make an award to a site located within a base floodplain only after making a determination that "there is no practicable alternative." GAO concluded that since portions (piles) of the Newport piers were in a base floodplain, NOAA was required to follow the E.O. 11988 process.

NOAA had determined during the lease acquisition process that the Port of Newport's site was not located in a base floodplain, since the deck of the proposed pier would be above the base floodplain level, and therefore did not proceed with the E.O. 11988 analysis discussed above. NOAA used this same approach in considering the other three offers.

The environmental assessment conducted on the four offers, which had responded to NOAA's solicitation for offers, had used the initial offers submitted by each offeror as the basis for the environmental assessment. Several of the offerors submitted revisions to their proposals that were not considered by the NEPA process.

NOAA seeks to determine for each of the four final revised proposals submitted whether (a) the site proposed for each offer is in a base floodplain, and (b) proposed actions by each offeror would result in development within a base floodplain area. Since the Federal Emergency Management Agency determines base floodplain areas, we are requesting your analysis and findings on these two issues for each proposal.

I have attached a copy of relevant documents contained within each of the final revised proposal from each offeror. Please advise whether additional information is required and if you have questions concerning any of the documents. Since the documents for sites other than the Port of Newport are considered to be procurement sensitive, we request that these materials be secured, and that only those FEMA officials with a specific need to know in reviewing the documents relative to the current NOAA request be allowed access to the materials. People involved in this analysis will need to sign the enclosed non-disclosure certificate and return the original to the contracting officer.

We would appreciate your expeditious consideration and response on this issue. Please fax the signed non-disclosure form(s) back to me at (206)527-7169. If you have any questions please contact me at (206)526-6478, E-mail James.R.Barrows@noaa.gov.

Sincerely,

James R Barrows
Real Property Contracting Officer

Enclosures
Cc: NOAA CAO – William F. Broglie

Appendix E

KPFF Memorandum to the Port of Newport
February 4, 2010

kpff Consulting Engineers

U.S. Bancorp Tower, 111 SW 5th Avenue, Suite 2500
Portland, OR 97204 (503) 227-3251 FAX (503) 274-4681

M E M O R A N D U M

DATE: February 4, 2010

TO: Don Mann / Port of Newport

CC: Joshua Dodson / Day CPM

FROM: Curt Vanderzanden, PE / KPFF

RE: NOAA MOC-P / Response to Request for Flood Plain Related Information

PROJECT NO.: 308336

Don,

Following is KPFF's response to a request for information from James Barrows (NOAA) relating to the pier design and the flood plain received via email dated February 2, 2010. Please do not hesitate to contact us if additional information is required.

1. *What will be the finished graded elevation of upland areas within the affected property?*

   The finish grade elevations of the upland areas will range from approximately 14.00 near the southern end of the site to 16.25 near the waterfront at the connections to the access piers. The finish floor elevation of the proposed warehouse and office building is 16.00. All elevations given are based on NAVD 88 datum. The base flood elevation at the site, as indicated on the most current FEMA Flood Insurance Rate Map for the area, is 13.00 NAVD 88.

2. *What is the overall pier design configuration, pier materials and number or density of piles proposed?*
   The wharf structure is comprised of a continuous reinforced cast-in-place topping slab over precast-pre-stressed planks spanning to precast bent pile caps all supported upon steel pipe piles and/or precast, pre-stressed concrete piles. There are three 36-inch diameter piles per bent. Bents are spaced between 35 and 40 feet on center, orientated perpendicular to the length of the wharf. The fender system is comprised of a continuous camel, attached to steel pipe and/or precast-pre-stressed concrete piles, connected back to the wharf with rubber fenders. Fender piles are spaced at approximately 9 feet on center.

3. *What is the height of the pier deck above mean sea level or, better, NAVD 88?*

   The height of the pier deck will be set at a minimum elevation of 16.25 per NAVD 88.

4. *What design methods are to be applied that will reduce impacts to floodplains or the effect of flooding on proposed facilities (e.g., wave loads, water proofing, torque on piles due to moorings?*

   The following are the primary design methods employed to mitigate flood impacts on the wharf:

   - The finish grade of the upland area is all above the 100-year flood elevation and therefore upland facilities will not be impacted by flooding.

- The elevation of the wharf has been set at a minimum elevation of 16.25 feet, approximately 3.25 feet above the current FEMA 100 year flood elevation of 13.00.
- Battered piles have been omitted, resulting in less overall congestion below the wharf.
- Relatively large diameter piles and smaller quantity verses more frequent and smaller diameter piles are being used, minimizing congestion and the overall likelihood of debris being caught below the wharf.
- A test pile program has been recently completed, with piles being proof tested to provide actual capacities; resulting in fewer overall piles for the wharf and fender system.
- Bents are orientated normal to the projected mooring loads, which result in a stronger and stiffer structure. The structural system performs similar to a ductile moment frame, which has been proven to perform well in seismic events. The frame system being employed exhibits good ductility characteristic, and has been shown to perform well under lateral loading.
- The fender system includes a continuous camel and vertical piles at an approximate 9 foot spacing. The camel and relatively tightly spaced piles will help divert and minimize floating debris from being trapped below the wharf. Additionally, fender buffer piles will be situated at the east and south east end of the wharf to mitigate debris traveling downriver from being trapped below.
- Steel piles are protected using a combination of systems, including cathodic protection and epoxy coating. All protection systems are being designed by a corrosion consultant specializing in marine environments. The bents, planks and topping slabs are all reinforced concrete comprised of concrete mixes exhibiting qualities and characteristics suitable for marine environments

In addition to the design features identified above, the Port of Newport has indicated that, in their routine course of maintaining their existing facilities, their staff performs inspections of their water side facilities following high water events to identify and address issues with debris accumulation. This effort will be extended to include the proposed NOAA facility.

5. *Previously KPFF was using a bridge design criteria for the vertical loads (pre-cast concrete slabs on pile bents spaced approximately 30' on center). How will this approach adequately address lateral berthing loads and estuary current forces associated with a 100-year (plus) flood event and other loads wind, seismic, tidal current). As a site on a navigable river, how were barge/vessel impacts considered to the pier structure.*

   The following are being implemented to address loads and forces noted above:
   - Bents will be orientated normal to the projected mooring loads, which results in a stronger and stiffer structure. The structural system performs similar to a ductile moment frame, which has been proven to perform well in seismic events and flood events. The frame system being employed exhibits excellent ductility characteristic, and has been shown to perform well under lateral loading.
   - There are multiple bents that occur along the length of wharf as noted above, which provides enhanced structural redundancy.
   - Relatively large diameter piles and smaller quantity verses more frequent and smaller diameter piles are being used. The total effective influence area as a result of hydrostatic forces from high water will be reduced.

- A consultant specializing in berthing loading and current force impacts on structures is modeling all applicable estuary forces, tidal currents, wind loads and flows in the bay on the wharf. The results will be utilized in the analysis and design of the structural system.
- The fender system is designed to absorb the majority of the energy as a result of berthing. Multiple fenders as noted above provide redundancy in the overall system.
- The structure is designed for the extreme combinations as a result of seismic, wind, hydrostatic and flood loading as governed by the applicable codes and the Unified Facilities Criteria.

In addition to the performance characteristics noted above, the following are being implemented to address barge/vessel impacts:

- The wharf has been located such that it is a minimum of 55 feet away from the extreme southern edge of the navigation channel. This provides a buffer from passing ships in the bay.
- Impacts as a result of barges and vessels will be resisted by the fender system located along the side of the wharf vulnerable to impacts. The fender system has a high energy absorbing characteristics, and will deflect, fracture or yield prior to causing significant impacts to the wharf.
- The wharf has been orientated such that it is situated between the jetty due west and an existing dock to the east, minimizing the potential for a stray barge or vessel from drifting into it.
- The approach piers connecting the wharf to the site are very stiff and are orientated perpendicular to the main wharf such that they can absorb extreme loads as a result of impact. The overload will be transferred thru the structure and resisted by passive pressures against the shore.

6. *Water: Have they taken appropriate measures to safeguard the potable water supply from contamination, if the facility is submerged during a flood event?*

   The domestic and fire protection lines on the pier will be mounted along the land-side bull rail of the pier deck; approximately 2 feet above the 100-year flood elevation of 13.0. In addition, the system will have watertight joints and fittings and will be constructed of material suitable for saltwater exposure. Backflow protection per local code requirements will also be installed.

   The potential for impacts from floating debris during a flood event is limited through the installation of the water and fire protection lines on the outside of the landside bull rail. These lines are offered additional protection from floating debris through the installation of the fender system as described in question number 4 above.

   The finish grades of the upland area are above the 100-year flood elevation minimizing risk to the water system resulting from flooding.

7. *Sewer: Are the sewer facilities protected from Flooding? Contamination of the river due to leaking pump stations?*

   No pump stations are proposed for the site. NOAA vessels will utilize their onboard sewer pumps to convey their waste through a force main installed on the pier to a gravity sewer system on the upland portion of the site. The sanitary force main on the pier will be mounted along the landside

bull rail of the pier deck; approximately 1.5 feet above the 100-year flood elevation of 13.0. In addition, the system will have watertight joints and fittings and will be constructed of material suitable for saltwater exposure.

The potential for impacts from floating debris during a flood event is limited through the installation of the water and fire protection lines on the outside of the landside bull rail. These lines are offered additional protection from floating debris through the installation of the fender system as described in question number 4 above.

The finish grades of the upland area are above the 100-year flood elevation minimizing risk to the sewer system resulting from flooding.

8. *Gas, Electrical, communications: Are these utilities protected against damage from a flood?*

Electrical and communication conduits on the pier will be located along the underside of the pier deck, passing through the bents with sleeves as required. This will provide approximately 6-inches of clearance above the 100-year flood elevation. In addition, the system will have watertight joints and fittings and will be constructed of material suitable for saltwater exposure. Electrical switch board and other panels will be located in weather-proof enclosures installed on the pier deck.

Protection of these conduits from floating debris will be achieved through the installation of the fender system as described in question number 4 above.

The finish grades of the upland area are above the 100-year flood elevation minimizing risk to these facilities resulting from flooding.

9. *Are underground storage tanks proposed on-site?*

No underground storage tanks are being proposed on-site. Fuel for a proposed emergency generator will be contained in an above ground tank, installed above the 100-year flood elevation. It should also be noted that the fuel tank will be set above the surrounding grades on a curbed structure and will be seismically restrained. These restraints will provide the additional benefit of anchoring the fuel tank against hydrostatic forces as a result of flooding well above the 100-year flood elevation.

A couple of additional items of note:

- All equipment and materials storage at the facility will all be above the 100-year flood elevation.
- The pier design includes the incorporation of a drainage system consisting of storm filter catch basins to treat run off from the pier as well as shut-off valves located downstream of the catch basins to provide the ability to contain any spills that could occur.