

Department of Public Services

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GRAYS HARBOR COUNTY

STATE OF WASHINGTON

July 8, 2013

TO: Board of County Commissioners
FROM: Russell Esses, County Engineer
SUBJECT: Wishkah Road – Kersh Flood Levee Project
R-70-09889-36-00

I am attaching the Final Project Report – Analysis of Alternatives, prepared by our consultant AMEC Environment & Infrastructure, Inc. for your review. AMEC considered the following five (5) alternatives:

1. Do nothing
2. Raise roadway embankment
3. Construct New levee east side of Wishkah Rd
4. Construct Sheet pile flood wall east side of Wishkah Rd
5. Re-route Wishkah Road to higher ground

AMEC concluded that construction of a sheet pile floodwall is the only feasible alternative to protect this area from flooding. Staff agrees and recommends the County do the following in the listed order as funding becomes available:

1. Immediately complete the road raising portion of this alternative as it is shovel ready. This would involve raising the road at three dips within the project limits 0.6 feet to elevation 11.5 feet and overlaying the complete project with a 0.25 foot overlay. Also, we recommend raising one dip outside the project site at M.P. 3.6, approximately 1-foot to reduce flooding at that location. The estimated cost of this work is \$500,000. This interim measure will reduce how often the road is impacted from flooding.
2. Complete the Design, Permits, Environmental Studies and Plans, Specifications and Estimate (PS&E) for the sheet pile wall alternative so it is shovel ready. The estimated cost of the design phase is \$540,000.
3. Acquire the necessary property to complete the project. The estimated cost of the property acquisition phase is \$150,000.
4. Construct the sheet pile wall alternative. The estimated cost of the construction phase is \$5,000,000.

Sincerely,

Russell D. Esses

County Engineer

ACCEPTED and APPROVED this 8th day of July, 2013.

BOARD OF COUNTY COMMISSIONERS
GRAYS HARBOR COUNTY, WASHINGTON

Excused

Herb Welch, Chairman

Frank Gordon

Frank Gordon, Commissioner

Wes Cormier

Wes Cormier, Commissioner

ATTEST:

Donna McCallum

Clerk of the Board Date



June 28, 2013
Project No. 3-915-17568-0

Grays Harbor County
100 W. Broadway, Suite 31
Montesano, WA 98563

Attention: Mr. Russ Esses, PE

Subject: Analysis of Alternatives
Kersh-Wishkah Flood Levee Project
Grays Harbor County, Washington

Dear Russ:

AMEC Environment & Infrastructure, Inc. (AMEC), is pleased to submit this report, which summarizes the completed analysis of the alternatives considered to reduce flooding of the portion of Wishkah Road from milepost 2.2 to 2.7. The purpose of our analysis was to develop alternatives to achieve the established flood reduction goal and recommend an alternative that best meets the project objectives.

As outlined in our contract dated February 12, 2013, we performed the following work tasks:

1. Establish goals and design criteria and review existing information,
2. Gather data and evaluate permit requirements,
3. Develop alternatives and perform engineering analysis, and
4. Effectively manage the project and complete a report of findings.

This work is documented and summarized through this report, with accompanying appendices. This report has been prepared for the exclusive use of Grays Harbor County, for specific application to this project, in accordance with generally accepted engineering practice.

Based on the data and analyses presented in this report, AMEC developed the following recommendations:

1. Choose the sheet pile wall alternative, since it is the only technically feasible option to meet the design objectives.
2. Proceed with the design, permitting, and property acquisition phases of the project.

AMEC Environment & Infrastructure, Inc.
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We recommend that additional effort be put toward acquiring the funds necessary to bring this project to fruition. We appreciate the opportunity to be of service on this project. If you have any questions regarding this report or any aspects of the project, please feel free to contact our office.

Sincerely,

AMEC Environment & Infrastructure, Inc.

A handwritten signature in black ink that reads "Ryan Bartelheimer".

Ryan Bartelheimer, P.E.
Senior Environmental Engineer