

EXHIBIT E-1

Gowers Engineering

**Forensic Inspection Report for the Old
Commercial Receiving Dock Adjacent to
Steel Wall (Pac-Choice Dock)**

Dave Gowers Engineering

Industrial, Commercial & Residential Engineering Services

File #: 2253
Port of Brookings Harbor
Brookings Harbor, Brookings, Oregon 97415
May 16, 2016
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FORENSIC INSPECTION REPORT

FILE #: 2253
CLIENT: Port of Brookings Harbor
PROJECT SITE: Old Commercial Receiving Dock Adjacent to Steel Wall
Brookings Harbor, Brookings, Oregon 97415

This report summarizes the findings of an inspection of the referenced project site on May 6th, 2016.

I: SCOPE OF SERVICE

- Inspect the project site structure, and determine structural adequacy and condition.

II: PERSONNEL CONTACT

1. At the time of the inspection, in addition to the author, the following personnel were present at the project site:
 - a. Ted Fitzgerald, Port Administrator.
 - b. Dave Hoover, general contractor

III: OBSERVATIONS

1. The project site structure comprises an existing receiving dock approximately 100 feet long x 50 feet wide, which is mostly paved with concrete. The dock runs north/south to the east side of the Chetco River. It is bounded to the north by a section of new dock construction, and to the south by a section of relatively new steel wall dock construction.
2. A width of approximately 25 feet adjacent to the Chetco River is supported on wood piles and beams in various stages of dilapidation.
3. A sheet pile sea wall is located approximately 25 feet in from the river edge of the dock. This sheet pile wall is substantially dilapidated, and is leaning towards the river at the top for approximately half its length. This sheet pile wall contains fill on the landward side, the fill providing the bearing of the concrete deck which is part of the overall dock structure.

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4. A localized failure of the dock substructure system has allowed localized collapse of the dock concrete paving at the north end. Fill has become displaced due to long term erosion, leaving voids under the north end of the concrete paving.
5. Emergency repairs have been effected along the north edge of the receiving dock, in the form of low strength reinforced lean mix concrete subsurface walls between the existing dock, and new dock construction. These have been placed primarily to maintain fill retention under the new dock construction

III: CONCLUSIONS & RECOMMENDATIONS

1. The existing receiving dock is in a dilapidated condition, and is in need of substantial repair, both locally and globally.
2. It is unclear the extent of bearing erosion under the concrete paving, resulting in all paving being suspect regarding bearing capacity, and its ability to support the working dock loads.
3. It is my opinion that the dock should be taken out of service until a comprehensive repair solution is developed, and repairs have been implemented.

IV: GENERAL CLOSURE NOTES

The opinions expressed in this report are based upon a visual examination of the subject property to the extent that the reported features were visible and accessible at the time of the inspection. No tests, calculations or detailed engineering analyses were undertaken, or are implied, as part of this inspection assignment. It is believed the conclusions reached in this report, and recommendations based thereon, are sound, and are based on the author's experience, both with regard to construction, and structural design.

Report prepared by:



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