

Redwood Marine Terminal Feasibility Study

Tasks 3 and 4 – Evaluation Phase and Recommendations, Final Draft Report



Submitted to:

**The Humboldt Bay Harbor, Recreation,
and Conservation District**



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1. Recommendations

The Humboldt Bay Harbor, Recreation and Conservation District retained TranSystems to evaluate the development opportunities for the Redwood Marine Terminal. Under Task 4, TranSystems has prepared two development options for consideration by the District, which are based on the findings and conclusions of Tasks 1, 2 and 3.

Development Option A – Stand-Alone Multipurpose Berth

The first option is premised upon the port serving local barge, project cargo and bulk cargo shipments, and cruise shipping lines. This option is based principally on the short to medium term market opportunities identified in the study. In addition, the berth would be suitable for handling coastal short sea shipping service if such services emerge over the next five to ten years. These non-rail dependent market sectors would be limited in scale, as they are driven by the small local economy, and they would place a restriction on the long term growth of the port.

Specific recommendations for Option A are:

1. Develop a single multipurpose berth that is suitable for a variety of ship types including multipurpose cargo ships, cruise ships and barges.
2. Develop and implement a marketing plan for pursuit of local cargo – bulk, project cargo, and barge.
3. Develop and implement a marketing plan for the cruise shipping sector in coordination with the City of Eureka, other regional agencies, and local private companies that could benefit from cruise shipping.
4. Develop and implement a marketing plan for pursuit of future coastal short sea shipping service.
5. Evaluate non-cargo opportunities on a case-by-case basis to insure each opportunity has a viable business plan and can be integrated into terminal development without compromising cargo related activities.
6. Enter negotiations with the Timber Heritage Association on use of the Roundhouse and nearby structures, and investigate integration of the Association’s proposed museum into the marketing plan for cruise shipping business (recommendation Number 3 above).
7. Develop permitting and other needs for aquaculture and related uses on property designated for “non-cargo uses”.
8. Warehouses:
 - a. Lease Warehouse #14 for short to medium term use if a tenant will contribute to the cost of improvements to the structure; otherwise consider removal of Warehouse #14 with the cost of demolition partially offset by recycling of the building’s timbers.
 - b. Continue to offer Warehouse #3 for storage of commercial fishing equipment and U.S. Coast Guard equipment, and develop long-term storage alternatives as terminal expansion takes place (note that Warehouse #3 remains in place during Phases 1 and 2 of development).
9. Enter negotiations with the Samoa Pacific Group to insure the Group’s adjacent property is available for medium to long term terminal development as future opportunities arise. Negotiations should evaluate different contractual structures such as first right of refusal to lease or purchase, lease, purchase and joint development.

10. Pursue the following actions on the other berths:
 - a. Consider use of the “Pre-Existing Cogeneration Plant Water Intake Berth” for aquaculture if it does not impede ship channel operations.
 - b. Conduct a structural evaluation of Berth 2 to determine its current condition, load bearing characteristics, and suitability for future commercial use.
 - c. Evaluate removal of the “Unnamed Harbor District Dock” dock as mitigation for future terminal development; the dock is unfit for commercial or recreational use.

11. Create an internal organization for the District that provides the appropriate expertise and management structures to support terminal development, marketing and sales.

The above recommendations would occur within approximately the first 12 to 18 months of the timeline, allowing the District to then move forward with detailed facility development (Figure 1.1).

Figure 1.1: Timeline for Option A – Standalone Multipurpose Berth

Option A Recommendation #	Phase	Six Month Intervals (Up to 5 Year Development Horizon)									
		1	2	3	4	5	6	7	8	9	10
# 1 to 11	Implement Recommendations 1 to 11										
<i>Future Phases:</i>	Master Plan										
	Business Plan / Funding										
	Pre-Design / Environmental / Permitting										
	Design										
	Mobilization and Construction										

Source: TranSystems

The estimated cost of Option A, Phase 1 development, which provides the basic berth and terminal infrastructure is:

Terminal Improvements	\$18,106,000
Terminal Building Improvements	\$3,521,580
Terminal Utility Improvements	\$923,000
Development Fees	\$3,609,000
Total Cost (Excluding Items Below)	\$29,407,580
<i>Demolition and Environmental Mitigation Cost Estimates (10% to 30%)*</i>	<i>\$2,940,758 to \$8,822,274</i>

* These cost items will be driven by the complexity of removal of the existing structures and environmental mitigation requirements related to structure improvement, removal and replacement. Full cost estimates would be developed during the detailed planning of new facilities.

Source: TranSystems

Development Option B – Multipurpose Berth Integrated with Long Term Expansion

The second option is premised on the District positioning the terminal as a new gateway for rail serviced markets. The District would pursue a multi-year terminal development effort given major terminal development can take 10 years or more to complete, and given the shipping industry is now considering alternatives to major West Coast port gateways that could face capacity constraints in the 2015 to 2020 time period. The District would be competing for investment against other secondary ports on the West Coast and new port locations. A rail connection is a requirement for the terminal to compete for inland markets. Option B incorporates initial construction of a multipurpose berth to allow the District to capitalize on short to medium term opportunities, and generate revenues to support long term development.

Specific recommendations for Option B are:

12. Develop a single multipurpose berth that is suitable for a variety of ship types including multipurpose cargo ships, cruise ships and barges, and which is designed so it can be integrated into larger terminal development. This incorporates implementation of recommendations 1 through 11 from Option A. The initial cost of development is the same as for Phase 1 in Development Option A above.
13. Develop and implement a marketing plan on major terminal development for discussions with the shipping lines, terminal operators, shippers of cargo, and major national railroads.
14. Pursue a coordinated development strategy with the State agency that manages the rail corridor.
15. Investigate environmental requirements and permits needed to extend the turning basin and dredge at the berth should there be market and shipping line demand.
16. Conduct further vessel simulation exercises for specific large commercial cargo and cruise vessels to support development of appropriate cost and construction requirements. Simulations should be coordinated with prospective shipping lines that may want to call at Humboldt Bay.

The timeline for Option B is presented in Figure 1.2 and is based on the industry norm of approximately 10 years for major terminal development from initial concept to completion.

Figure 1.2: Timeline for Option B – Multipurpose Berth Integrated with Long Term Expansion

Option B		Annual Intervals (Up to 10+ Year Development Horizon)										
Recommendation #	Phase	1	2	3	4	5	6	7	8	9	10	11
12	Multipurpose Berth	█	█	█	█	█						
13	Marketing Plan (Major Terminal)	█	█	█								
14	Rail Corridor Coordination	█	█	█								
15	Berth Dredging and Turning Basin	█	█									
16	Vessel Simulation	█										
<i>Future Phases:</i>	Master Plan				█	█						
	Business Plan / Financing					█	█					
	Pre-Design / Environmental / Permitting						█	█				
	Design							█	█			
	Mobilization and Construction									█	█	█

Source: TranSystems