UNITED STATES OF AMERICA
U.S. DEPARTMENT OF TRANSPORTATION
MARITIME ADMINISTRATION
WASHINGTON, DC 20590

GRANT AGREEMENT UNDER THE TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS ACT, 2010 (DIVISION A OF THE CONSOLIDATED APPROPRIATIONS ACT, 2010 (PUB. L. 111– 117, DEC. 16, 2009)), FOR THE NATIONAL INFRASTRUCTURE INVESTMENTS DISCRETIONARY GRANT PROGRAM (TIGER II DISCRETIONARY GRANTS)

PORT OF LOS ANGELES

PORT OF LOS ANGELES: WEST BASIN RAILYARD

MARAD TIGER II Grant Number: DTMA1G11003

Appropriation Data:

7069M0143O 2011 1PLARG0003 0000150002 41010 61006600 - $16,000,000

This Agreement (the "Agreement" or "Grant Agreement") reflects the selection of Port of Los Angeles ("Grantee" or "Recipient") as a Recipient of a grant awarded under the provisions of the Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2010 (Division A of the Consolidated Appropriations Act, 2010 (Pub. L. 111–117, Dec. 16, 2009)), regarding National Infrastructure Investments (the "Act"). The grant program under the Act is referred to as "TIGER II Discretionary Grants."

SECTION 1. TERMS AND CONDITIONS OF THE GRANT

1.1 This Agreement is entered into between United States Department of Transportation ("DOT" or the "Government") and the Grantee. This Agreement will be administered by The Maritime Administration (also referred to herein as "MARAD").

1.2 This Grant is made to the Grantee for the project as described in the Grantee's Technical Application (the "Project") and the negotiated provisions on the Project's material terms and conditions, including the Project's scope, assurance/confirmation that all required funding has been obtained and committed, and the timeline for completion of the Project.

1.3 The Government, having reviewed and considered the Grantee's Technical Application and finding it acceptable, pursuant to the Act awards a TIGER II Discretionary Grant in the amount of Sixteen Million Dollars ($16,000,000.00), for the entire period of performance (referred to as the "Grant"). This Grant is the total not-to-exceed amount of funding that is being provided under this Agreement. Grantee certifies that not less than Ninety-four Million Five-hundred and Eleven Thousand Dollars ($94,511,000.00) in non-Federal funds are committed to fund the Project, satisfying the Act's requirement that at least twenty percent (20%) of the Project's costs are funded by non-Federal sources. The Government's liability to make payments to the Grantee under this Grant Agreement is limited to those funds obligated by the Government under this Agreement as indicated herein and by any subsequent amendments agreed to in writing by all parties.

1.4 The Grantee agrees to abide and comply with all terms and conditions of this Agreement and to abide by, and comply with, all requirements as specified in the Exhibits and Attachments, identified in paragraphs 1.5 and 1.6, which are considered as integral parts of this Agreement. Each Exhibit and Attachment identified below is deemed to be incorporated by reference into this Agreement as is fully set out herein.

1.5 This Agreement shall also include the following Exhibits, attached, as integral parts hereof:

Exhibit A	Legislative Authority
Exhibit B	General Terms and Conditions
Exhibit C	Applicable Federal Laws and Regulations
Exhibit D	Grant Assurances
Exhibit E	Responsibility and Authority of the Grantee
Exhibit F	Reimbursement of Project Costs
Exhibit G	Grant Requirements and Contract Clauses

Exhibit H Quarterly Progress Reports: Format and Content

1.6 This Grant Agreement shall also include the following Attachments as integral parts hereof:

Attachment A	Statement of Work
Attachment B	Project Schedule
Attachment C	Project Budget
Attachment D	Performance Measurement Table
Attachment E	Grant Application

1.7 In the case of any inconsistency or conflict between the specific provisions of this Grant Agreement, the Exhibits, and the Attachments, such inconsistency or conflict shall be resolved as follows: First, by giving preference to the specific provisions and terms of this Grant Agreement; second, by giving preference to the provisions and terms of the Exhibits; and, finally, by giving preference to the provisions and terms in the Attachments.

SECTION 2. GRANTEE AND PROJECT INFORMATION

Grantee, in accordance with the requirements of the TIGER II Discretionary Grant Program, provides the following information:

2.1 Project's Statement of Work Summary (for further information see Attachment A): The West Basin Railyard project will construct an intermodal railyard, which includes staging and storage tracks connecting Port of Los Angeles (POLA) on-dock railyards with the Alameda Corridor. It will also include a new railyard for the short-line railroad serving Union Pacific (UP), Burlington Northern Santa Fe (BNSF), POLA, and the Port of Long Beach (POLB). The project will also remove two at-grade rail-highway crossings.

2.2 Project's Schedule Summary (for further information see Attachment B):

Planned Contract Award Date: December 30, 2011 (latest date June 29, 2012)

Planned Construction Start Date: December 31, 2011 (latest date June 30, 2012)

Planned Project Completion Date: June 2014

2.3 Project's Budget Summary (for further information see Attachment C):

TIGER II Grant Funds and Additional Sources of Project Funds:

Grant Funds and Sources of Project Funds:

Source	Amount
TIGER II Discretionary Grant	$ 16,000,000.00
Federal Other	$0.00
State	$ 51,230,000.00
Regional (federal RSTP funds programmed by Los Angeles County Metropolitan Transportation Authority)	$ 8,584,000.00
Port of Los Angeles	$ 34,697,000.00
Total for Construction Phase (including utilities)	**$110,511,000.00**

2.4 Project's State and Local Planning Requirements:

- State Goods Movement Action Plan (2006)
- State Proposition 1B Trade Corridors Improvement Fund (TCIF) program approved by the California Transportation Commission (CTC) (2008)
- Federally required SCAG Regional Transportation Plan (2008 RTP & included in draft 2012 RTP currently being prepared by SCAG) & Regional/Federal Transportation Improvement Programs (amended 2010 RTIP/FTIP)
- 2009 METRO Long-Range Regional Transportation Plan

2.5 Project's Environmental Approvals and Processes:

National Environmental Policy Act (NEPA) Requirement: Notwithstanding the US Army Corps of Engineers NEPA approval described in this paragraph, the Grantee may not draw down funds or incur expenses under this Agreement unless and until the NEPA process has been completed, and approved by MARAD with a determination of whether further review, documentation, and/or mitigation measures are required; and the Grantee has satisfied any requirements contained in MARAD's determination. Once these conditions have been successfully completed, the Agency will then notify the Grantee that the review is complete. At that time, the distribution and expenditure of TIGER II Discretionary Grant funds may be authorized.

Environmental Documentation Type, Titles and Date: An EIS/EIR was approved and certified by the City of Los Angeles Board of Harbor Commissioners in December 2007 for the West Basin Railyard, as a project element of the aforementioned TraPac container terminal project. The US Army Corps of Engineers was the NEPA lead agency and issued a Record of Decision for the permitted action related to the terminal wharf. The State Department of Transportation (Caltrans) issued a Categorical Exclusion for the West Basin Railyard element on December 21, 2010.

Environmental Decision Type and Date: An EIS/EIR was approved and certified by the City of Los Angeles Board of Harbor Commissioners in December 2007 for the West

Basin Railyard, as a project element of the aforementioned TraPac container terminal project. The US Army Corps of Engineers was the NEPA lead agency and issued a Record of Decision for the permitted action related to the terminal wharf. Caltrans issued a Categorical Exclusion for the West Basin Railyard element on December 21, 2010.

Name of Agency and Office Approving each Environmental Decision Document

Mr. Ronald Kosinski
Deputy District Director, District 7
Division of Environmental Planning
State Department of Transportation

2.6 Grantee's and any Sub-Grantee's Dun and Bradstreet Information:

Dun and Bradstreet Data Universal Numbering System (DUNS) No. of the Grantee: 195388855

Name of any First-Tier Sub-Grantees or Sub-Recipients (if applicable – to be reported if/when identified. If not applicable please note is N/A): West Basin Railyard

DUNS No. of First-Tier Sub-Grantee or Sub-Recipient (if applicable – to be reported if/when identified): 138332569

2.7 Grantee's Designation of Official Contact (to whom all communications from Government will be addressed):

Mr. Ron Groves, P.E.
Sr. Civil Engineer
Engineering Division
Port of Los Angeles
425 South Palos Verdes Street
San Pedro, CA 90731
(310) 732-3648
rgroves@portla.org

SECTION 3. REPORTING REQUIREMENTS

Subject to the Paperwork Reduction Act, and consistent with the purposes of the TIGER II Discretionary Grant Program, Grantee agrees to collect data necessary to measure performance of the Project and to ensure accountability and transparency in Government spending. Grantee further agrees to submit periodic reports to the Government that contain data necessary to measure performance of the Project and to ensure accountability and transparency in Government spending.

3.1 **Project Outcomes and Performance Measurement Reports**: Grantee shall collect the data necessary to track and report on each of the performance measures identified in the Performance Measurement Table in Attachment D and report results of the data for each measure to the Government periodically, according to the reporting schedule identified in Attachment D. Furthermore, Grantee agrees to provide an initial Pre-project Report and a final Project Outcomes Report to the Government.

3.1.1 The Pre-project Report shall consist of current baseline data for each of the performance measures specified in the Performance Measurement Table in Attachment D. The Pre-project Report shall include a detailed description of data sources, assumptions, variability, and the estimated level of precision for each measure. Grantee shall submit the report to the Government by 30 days prior to project completion (opening day of operations), to provide the latest data for pre-project conditions, and the best data for comparison to post-project conditions.

3.1.2 Grantee shall submit interim Project Performance Measurement Reports to the Government for each of the performance measures specified in the Performance Measurement Table in Attachment D following Project completion. Grantee shall submit reports at each of the intervals identified for the duration of the time period specified in the Performance Measurement Table in Attachment D. Grantee shall represent that the data in each of the interim Project Performance Reports is current as of the final date of the reporting interval.

3.1.3 The Project Outcomes Report shall consist of a narrative discussion detailing Project successes and/or the influence of external factors on Project expectations. Grantee shall submit the Project Outcomes Report to the Government by January 15, 2018, which includes an *ex post* examination of project effectiveness in relation to the Pre-project Report baselines.

3.1.4 Grantee shall submit each report via email to each of the Government contacts identified in paragraph 3.5 of this Agreement and, additionally, to outcomes@dot.gov. The email shall reference and identify in the email subject line the TIGER Grant Number and provide the number of the Performance Measures report submitted, e.g., Re: [Modal] Tiger Grant No. 52 - Performance Measure Report No. 1 or 2 or 3, etc.

3.2 **Project Progress and Monitoring Reports**: Consistent with the purposes of the TIGER II Discretionary Grant Program, to ensure accountability and transparency in Government spending, the Grantee shall submit quarterly progress reports and the Federal Financial Report (SF-425) to the Government contacts listed in paragraph 3.5, or other system as designated by the Government, as set forth in Exhibit H, Quarterly Progress Reports: Format and Content, to the Government on a quarterly basis, beginning on the 20th of the first month of the calendar year quarter following the execution of the Agreement, and on the 20th of the first month of each calendar year quarter thereafter until completion of the Project. The initial report shall include a detailed description, and, where appropriate, drawings, of the items funded.

3.2.1 The Grantee shall submit all required reports and documents to the Government electronically, referencing the Grant number to each of the Government contacts identified in paragraph 3.5 of this Agreement.

3.3 **Annual Budget Review and Program Plan**: The Grantee shall submit an Annual Budget Review and Program Plan to the Government via e-mail 60 days prior to the end of each Agreement year. The Annual Budget Review and Program Plan shall provide a detailed schedule of activities, estimate of specific performance objectives, include forecasted expenditures, and schedule of milestones for the upcoming Agreement year. If there are no proposed deviations from the Approved Detailed Project Budget, attached hereto as Attachment C, the Annual Budget Review shall contain a statement stating such. The Grantee will meet with the Government to discuss the Annual Budget Review and Program Plan. If there is an actual or projected project cost increase, the annual submittal should include a written plan for providing additional sources of funding to cover the project budget shortfall or supporting documentation of committed funds to cover the cost increase. To the extent the annual budget update deviates from the approved project budget by more than 10 percent, then work proposed under the Annual Budget Review and Program Plan shall not commence until written approval from the Government is received.

3.4 **Closeout Process**: Closeout occurs when all required project work and all administrative procedures described in Title 23 (or 49 C.F.R. part 18 or part 19, as applicable) are completed, and the Government notifies the Grantee and forwards the final Federal assistance payment, or when the Government acknowledges Grantee's remittance of the proper refund. Within 90 days of the Project completion date or termination by the Government, the Grantee agrees to submit a final Federal Financial Report (SF-425), a certification or summary of project expenses, and third-party audit reports.

3.5 All notices or information required by this Agreement should be addressed and sent to all the Government contacts as follows:

Mr. Robert Bouchard
Grants Officer Technical Representative
MARAD
1200 New Jersey Ave, SE
MAR-510
Washington, DC 20590
202-366-5076
Robert.Bouchard@dot.gov

Miss. Judy Bowers
Grants Officer
1200 New Jersey Ave, SE
MAR-380, W28-201
Washington, DC 20590

202-366-1913
Judy.Bowers@dot.gov

Mr. Robert Mariner
Office of the Secretary of Transportation
1200 New Jersey Ave, SE (W84-224)
Washington, DC 20590
202-366-8914
Robert.Mariner@dot.gov

SECTION 4. SPECIAL GRANT REQUIREMENTS

4.1 There are no special grant requirements for this Project.

SECTION 5. TERMINATION, EXPIRATION, AND MODIFICATION

5.1 Subject to terms set forth in this Agreement, the Government reserves, in its sole discretion, the right to terminate this Agreement and all of the obligations associated with this Agreement, unless otherwise agreed to in a signed writing between the Grantee and the Government, if any of the following occurs:

5.1.1 The Grantee fails to obtain or provide any non-TIGER II Discretionary Grant contribution or alternatives approved by the Government as provided in this Agreement and in accordance with the Project Schedule (Attachment B);

5.1.2 The Grantee (via the City of Los Angeles Board of Harbor Commissioners) fails to award construction contract(s) on or before June 30, 2012.

5.1.3 The Grantee fails to begin expenditure of Grant funds within 120 days of the award of the construction contract.

5.1.4 The Grantee fails to meet the conditions and obligations specified under this Agreement including, but not limited to, a material failure to comply with the Project Schedule (Attachment B), even if it is beyond the reasonable control of the Grantee; or

5.1.5 The Government, in its sole discretion, determines that termination of the Agreement is in the public interest.

5.2 Funds made available under this Agreement shall be obligated by Grantee on or before September 30, 2012. Funds made available under this Agreement, once obligated, are available for liquidation and adjustment through September 30, 2017, the "Grant Termination Date." Unless otherwise agreed to by the parties, this Agreement shall terminate on the Grant Termination Date.

5.3 Either party (the Government or the Grantee) may seek to amend or modify this Agreement prior to the Grant Termination Date by written notice (formal letter) to the

other party and in accordance with 49 C.F.R. parts 18.43 and 18.44. The Grant Agreement may be amended or modified only on the mutual written agreement by both parties.

SECTION 6. AWARD AND EXECUTION OF GRANT AGREEMENT

There are three (3) identical counterparts of this Agreement in hard copy; each counterpart is to be fully signed in writing by the parties and each counterpart is deemed to be an original writing having identical legal effect. Upon final execution of this Agreement by the Grantee, the effective date shall be the date the Government awarded funding under this Agreement as set forth below. When signed and dated by the authorized official of the Government, this instrument will constitute an Award under the Act.

EXECUTION BY THE GOVERNMENT

Executed this 11 day of March, 2011.

David T. Matsuda
Signature of Government's Authorized Representative

David T. Matsuda
Name of Government's Authorized Representative

Maritime Administrator
Title

EXECUTION BY THE GRANTEE/RECIPIENT

By signature below, the Grantee/Recipient acknowledges that it accepts and agrees to be bound by this Agreement.

Executed this 11th day of March, 2011.

Geraldine Knatz
Signature of Grantee's Authorized Representative

GERALDINE KNATZ, Ph.D.
Name of Grantee's Authorized Representative

Executive Director
Title

ATTACHMENT A
STATEMENT OF WORK

The project is located in the West Basin district of the POLA, and accessed via Alameda Street, which is the eastern boundary of the Wilmington community (Alameda Street/Harry Bridges Boulevard is also a federally designated National Highway System Intermodal Connector Route). Figure 3 illustrates the project and location, as it relates to the subregional rail system.

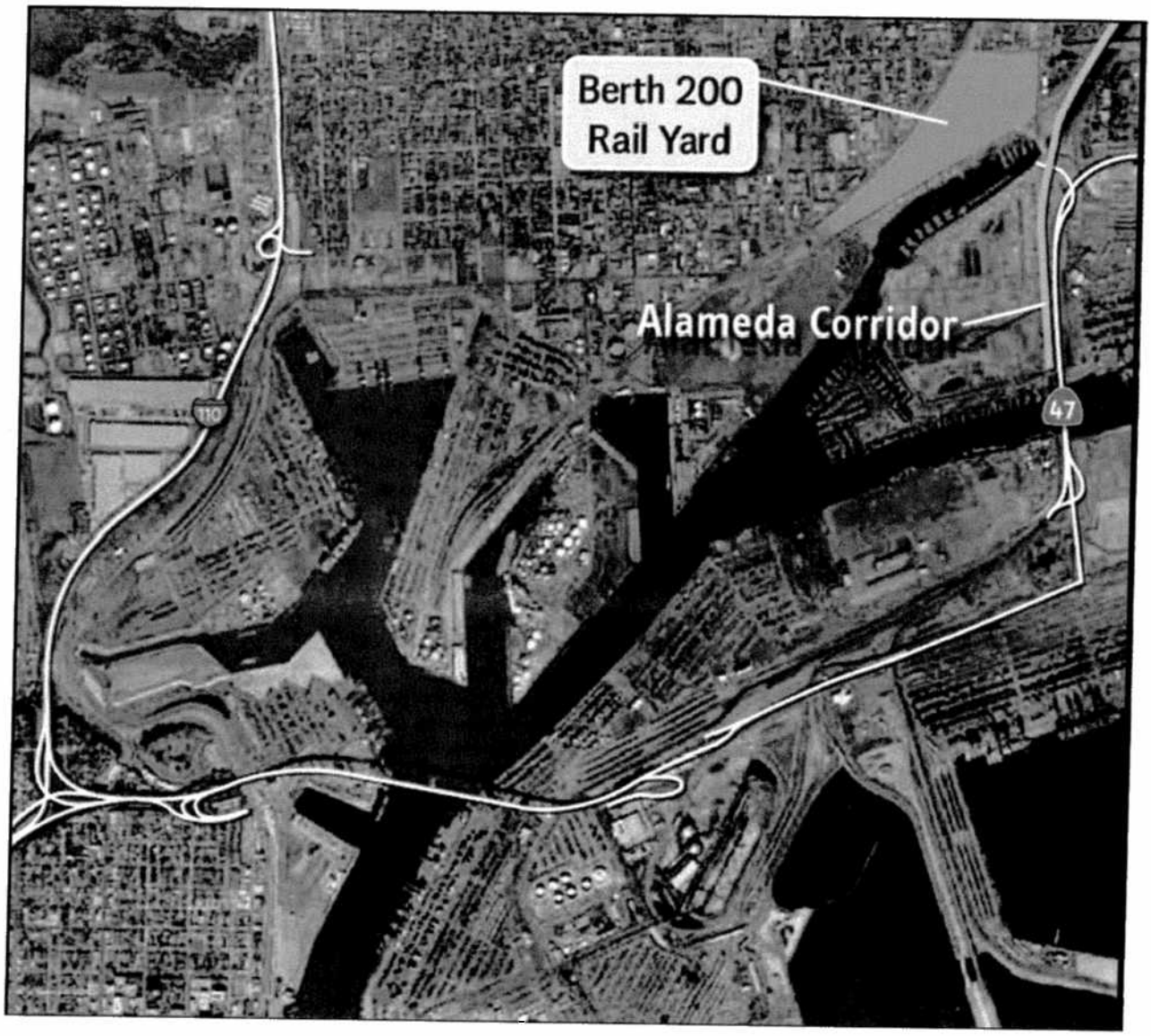
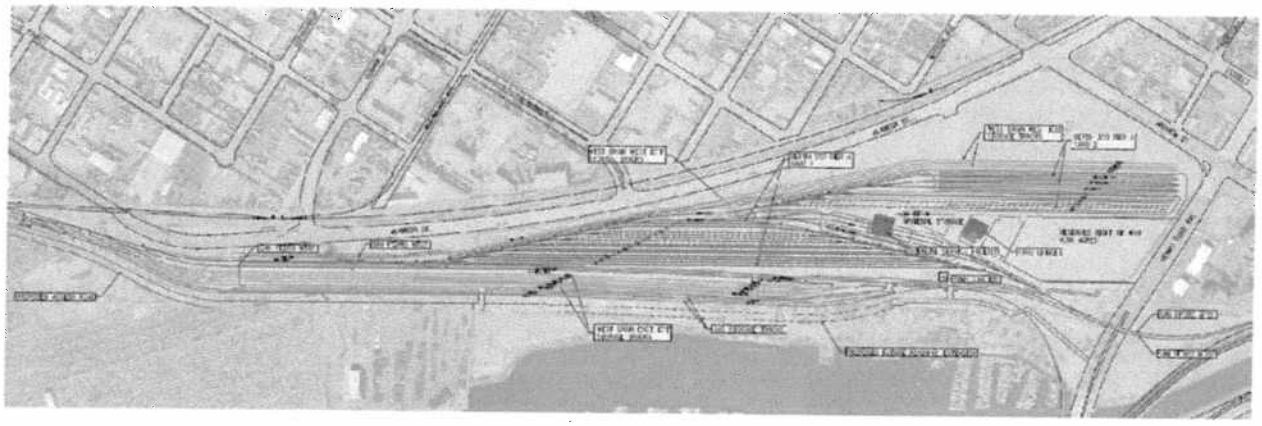


Figure 4 illustrates the project site plan.



The project entails construction of an intermodal railyard, which includes staging and storage tracks for adjacent on-dock railyards for two container terminals (China Shipping/West Basin Container Terminal and Trans Pacific Container Service Corp. (TraPac)), and a short-line railroad that switches for the Union Pacific (UP) Railroad, Burlington Northern Santa Fe (BNSF) Railway, and other POLA/POLB terminals. The project also includes the removal of two at-grade rail-highway crossings. The West Basin Railyard functions as a critical link between the POLA and the Alameda Corridor, providing a staging and railcar storage area for trains entering from or departing to the Alameda Corridor.

The project entails the following elements:

- Receiving/departures, storage, and repair tracks
- Upgrade the crossing protection systems at two at-grade rail-highway crossings.
- Relocation of an existing railroad switching/classification yard (Pier A Railyard); Pier A Railyard also serves as the hub of operations for Pacific Harbor Line (PHL), a short-line railroad that provides rail car switching for (and under contract to) the POLA/POLB
- Rail equipment maintenance and servicing facilities, new administration and operations buildings, and various supporting utilities

ATTACHMENT B
PROJECT SCHEDULE

Task	Duration	Start	Finish	Predecessors
1. Design	1325d	4/16/08	11/30/11	
2. Utility & R/W Design	700d	11/1/10	11/30/11	
3. E76 Review/Approval	61d	11/30/11	1/30/12	1,2
4. Construction Bid and Award	211d	2/1/12	12/30/11	3
5. Construction: Management	821 d	6/1/12	8/31/14	1,2
6. Construction: Utility/ROW	730 d	8/31/12	8/31/14	4
7. Construction: Railyard	730d	8/31/12	8/31/14	4

ATTACHMENT C
PROJECT BUDGET

Fund Source	FY 11/12	FY 12/13	FY 13/14	FY 14/15	Total
Port Funds		$2,112	$29,648	$2,937	$34,697
STPL-R-STP Local Regional		$2,417	$6,167		$8,584
TCIF - State Bond -	$250	$23,050	$27,930		$51,230
TIGER 2 - Federal	$250	$8,000	$7,750		$16,000
Const. Cost Total	$500	$35,579	$71,495	$2,937	$110,511

ATTACHMENT C
PROJECT BUDGET

Fund Source	FY 11/12	FY 12/13	FY 13/14	FY 14/15	Total
Port Funds		$2,112	$29,648	$2,937	$34,697
STPL-R-STP Local Regional		$2,417	$6,167		$8,584
TCIF - State Bond -	$250	$23,050	$27,930		$51,230
TIGER 2 - Federal	$250	$8,000	$7,750		$16,000
Const. Cost Total	$500	$35,579	$71,495	$2,937	$110,511

COST ESTIMATE
BERTH 200 RAIL YARD

Berth 200 Rail Yard
80% Submittal

ITEM NO.	WORK DESCRIPTION	QNTY	UNIT	Berth 200 Rail Yard UNIT COST	Berth 200 Rail Yard TOTAL COST
01000	ADMINISTRATIVE				
	PERMITS AND FEES (ANY & ALL NOT IDENTIFIED AS AN OWNER-PAID PERMIT)	1	AL		
	TRAFFIC CONTROL - Fries	1	DAYS	$18,151.37	$18,151.37
	TRAFFIC CONTROL - Avalon	1	DAYS	$12,734.97	$12,734.97
	TRAFFIC CONTROL - Henry Ford	1	DAYS	$22,431.38	$22,431.38
	PROJECT SCHEDULE	1	LS	$30,000.00	$30,000.00
	TESTING AND INSPECTION	1	AL		
	MOBILIZATION (INCLUDING BUT NOT LIMITED TO TEMPORARY FACILITIES, SAFETY, EQUIPMENT MOBILIZATION, SURVEY, INSURANCE, WORKMEN'S COMP)	1	LS	$4,284,376.89	$4,284,376.89
	DEMOBILIZATION (INCLUDING BUT NOT LIMITED TO COMMISSIONING, TRAINING, FINAL CLEAN-UP AND REMOVAL OF TEMPORARY FACILITIES)	1	LS	$1,713,750.76	$1,713,750.76
	SITE-SPECIFIC POLLUTION CONTROL PLANS: O DUST CONTROL O INDUSTRIAL WASTEWATER MANAGEMENT O STORMWATER POLLUTION PREVENTION (SWPP) O PROJECT-GENERATED HAZARDOUS WASTE MANAGEMENT	1	LS	$50,000.00	$50,000.00
	ADMINISTRATIVE SUBTOTAL				$6,131,445.37
02000	SITE PREPARATION	QNTY	UNIT	UNIT COST	TOTAL COST
	TRACK	1	LS		
	CLEAR & GRUB, TOTAL SITE - Remove Existing AC	21,651	CY	$15.00	$324,765.00
	EXCAVATION (INCL. 10% EXPANSION FACTOR)	37,555	CY	$15.00	$563,325.00
	Embankment	143,597	CY	$20.00	$2,871,940.00
	CIVIL				
	Rough Grading	123,350	CY	$11.60	$1,430,860.00
	Fill, Furnish & Install	57,100	CY	$28.80	$1,644,480.00
	REMOVALS	454	LF	$2.00	$908.00
	Curb & Gutter	180	SF	$0.30	$54.00
	Remove Concrete Pavement	2521	LF	$1.50	$3,781.50
	Berm	43	EA	$1,500.00	$64,500.00
	Tree	3	EA	$1,000.00	$3,000.00
	Utility Pole	3	EA	$250.00	$750.00
	Street Light Pull Box	247	EA	$1.00	$247.00
	Post	1	EA	$2,500.00	$2,500.00
	Fuel Pump	1	EA	$2,500.00	$2,500.00
	Propane Tank	15	EA	$3,500.00	$52,500.00
	R/R Crossing Signal	4	EA	$2,000.00	$8,000.00
	Utility Vent	1	EA	$750.00	$750.00
	Above Ground Utility Box or Control Box	1	LF	$1,750.00	$1,750.00
	Electrical Panel or Signal Pullbox	1	LF	$2,500.00	$2,500.00
	Monitoring Well	21	SF	$750.00	$15,750.00
	Utility Valve	1	EA	$4,000.00	$4,000.00
	Traffic Signal	2	EA	$1,000.00	$2,000.00
	Power Pole	1	EA	$10,000.00	$10,000.00
	Building	18466	EA	$0.50	$9,233.00
	Fence	243	SF	$1.50	$364.50
	Wall	2064254	SF	$0.30	$619,276.20
	Pulverize Existing AC in Place	21	EA	$500.00	$10,500.00
	Light Pole	12	EA	$250.00	$3,000.00
	Pull Box	19	EA	$300.00	$5,700.00
	Fire Hydrant				

COST ESTIMATE
BERTH 200 RAIL YARD

	Crossing Arm	10	EA	$2,000.00	$20,000.00
	Pole Anchor	14	EA	$150.00	$2,100.00
	RR Switch Assembly	16	EA	$3,000.00	$48,000.00
	Grate	15	EA	$350.00	$5,250.00
	Inlert Structure, Low Flow	1	EA	$300.00	$300.00
	Manhole	2	EA	$400.00	$800.00
	Sewer Cleanout	3	EA	$300.00	$900.00
	Clear & Grub	1759194	SF	$0.10	$175,919.40
	RELOCATIONS				
	Utility Pole	3	EA	$8,000.00	$24,000.00
	Telephone manhole	1	EA	$750.00	$750.00
	Alley Grating Basin	1	EA	$350.00	$350.00
	Low Flow Inlet Structure	2	EA	$1,000.00	$2,000.00
	ADJUST TO GRADE				
	Street Light Pull Box	8	EA	$300.00	$2,400.00
	Adjust Water Meter to Grade	2	EA	$350.00	$700.00
	Utiltiy Vent'	1	EA	$750.00	$750.00
	Electrical Panel or Signal Pullbox	1	EA	$300.00	$300.00
	Monitoring Well	5	EA	$1,500.00	$7,500.00
	Utility Valve	12	EA	$450.00	$5,400.00
	Utility Vault	4	EA	$750.00	$3,000.00
	Sewer Manhole	6	EA	$500.00	$3,000.00
	SITE PREPARATION SUBTOTALS				**$7,962,353.60**
	CROSSINGS	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
	FRIES/WATER STREET				
	CONSTRUCT 6" CONCRETE CURB TYPE A	1325	LF	$18.00	$23,850.00
	REMOVE CURB & GUTTER	593	LF	$12.00	$7,116.00
	CONSTRUCT 6" CURB & GUTTER (2' Gutter)	705	LF	$25.00	$17,625.00
	CONSTRUCT 6" CURB & GUTTER (1' Gutter)	334	LF	$20.00	$6,680.00
	REMOVE EXISTING DRIVEWAY	100	LF	$10.00	$1,000.00
	REMOVE ASPHALT CONCRETE PAVEMENT	24339	SF	$3.00	$73,017.00
	CONSTRUCT 5" ASPHALT CONCRETE PAVEMENT	22071	SF	$10.00	$220,710.00
	REMOVE UNTREATED BASE MATERIAL	23849	SF	$2.00	$47,698.00
	CONSTRUCT 8" UNTREATED BASE MATERIAL	21581	SF	$4.00	$86,324.00
	ADJUST MANHOLE TO GRADE	6	EA	$750.00	$4,500.00
	COLDPLANE AC PAVEMENT	29741	SF	$2.50	$74,352.50
	CONSTRUCT VARIABLE THICKNESS AC PAVEMENT	29741	SF	$9.00	$267,669.00
	RELOCATE UTILITY POLE	4	EA	$1,500.00	$6,000.00
	RELOCATE AND/OR ADJUST FIRE HYDRANT TO GRADE	2	EA	$2,000.00	$4,000.00
	RELOCATE AND/OR ADJUST WATER METER TO GRADE	1	EA	$800.00	$800.00
	REMOVE CONCRETE CROSSING PANEL	310	TF	$40.00	$12,400.00
	INSTALL CONCRETE CROSSING PANEL	360	TF	$700.00	$252,000.00
	RELOCATE AND/OR ADJUST WATER VALVE TO GRADE	10	EA	$600.00	$6,000.00
	RELOCATE VAULT (PETROLEUM)	1	EA	$2,500.00	$2,500.00
	RELOCATE AND/OR ADJUST OIL VALVE TO GRADE	2	EA	$1,200.00	$2,400.00
	SAWCUT FULL DEPTH AC	4555	LF	$4.00	$18,220.00
	REMOVE CONCRETE WALK	1335	SF	$6.00	$8,010.00
	CONSTRUCT CONCRETE WALK	995	SF	$13.00	$12,935.00
	3" AC OVER COMPACTED NATIVE	819	SF	$5.00	$4,095.00
	BACKFILL WITH COMPACTED NATIVE OR APPROVED EQUAL	210	CF	$3.00	$630.00
	CONSTRUCT SIDE OPENING CATCH BASIN (W=3.5')	2	EA	$3,500.00	$7,000.00
	CONSTRUCT WARPED GUTTER AT CATCH BASIN	27	LF	$30.00	$810.00
	REMOVE SIDE OPENING CATCH BASIN	1	EA	$750.00	$750.00
	CONSTRUCT METAL BEAM GUARDRAIL	20	LF	$50.00	$1,000.00
	RELOCATE STORM DRAIN MANHOLE	3	EA	$6,000.00	$18,000.00
	RELOCATE MAN HOLE	4	EA	$5,500.00	$22,000.00
	RELOCATE RAILROAD SWITCH				

COST ESTIMATE
BERTH 200 RAIL YARD

SUB_TOTAL FRIES/WATER STREET				$1,210,091.50
AVALON				
REMOVE CONCRETE CURB	100	LF	$6.00	$600.00
CONSTRUCT 6" CONCRETE CURB TYPE A	562	LF	$18.00	$10,116.00
REMOVE CURB & GUTTER	406	LF	$12.00	$4,872.00
CONSTRUCT 6" CURB & GUTTER (2' Gutter)	213	LF	$25.00	$5,325.00
REMOVE EXISTING DRIVEWAY	77	LF	$10.00	$770.00
REMOVE ASPHALT CONCRETE PAVEMENT	7,748	SF	$3.00	$23,244.00
CONSTRUCT 5" ASPHALT CONCRETE PAVEMENT	4,624	SF	$10.00	$46,240.00
REMOVE UNTREATED BASE MATERIAL	7,748	SF	$2.00	$15,496.00
CONSTRUCT 8" UNTREATED BASE MATERIAL	4,624	SF	$4.00	$18,496.00
COLDPLANE AC PAVEMENT	3,026	SF	$2.50	$7,565.00
CONSTRUCT VARIABLE THICKNESS AC PAVEMENT	3,528	SF	$9.00	$31,752.00
RELOCATE UTILITY POLE	2	EA	$1,500.00	$3,000.00
RELOCATE AND/OR ADJUST FIRE HYDRANT TO GRADE	1	EA	$2,000.00	$2,000.00
REMOVE CONCRETE CROSSING PANEL	110	TF	$40.00	$4,400.00
INSTALL CONCRETE CROSSING PANEL	580	TF	$700.00	$406,000.00
RELOCATE AND/OR ADJUST STREET LIGHT POLE	4	EA	$2,000.00	$8,000.00
RELOCATE AND/OR ADJUST WATER VALVE TO GRADE	4	EA	$600.00	$2,400.00
SAWCUT FULL DEPTH AC	851	LF	$4.00	$3,404.00
REMOVE CONCRETE WALK	3522	SF	$6.00	$21,132.00
CONSTRUCT CONCRETE WALK	1893	SF	$13.00	$24,609.00
3" A.C. OVER COMPACTED NATIVE	995	SF	$5.00	$4,975.00
CONSTRUCT CONCRETE GUTTER	64	LF	$18.00	$1,152.00
TREE WELL COVER-TYPE A	2	EA	$800.00	$1,600.00
TREE WELL	2	EA	$700.00	$1,400.00
CONSTRUCT NEW CURB RAMP	1	EA	$1,200.00	$1,200.00
RELOCATE AND/OR ADJUST GUY WIRE AND/OR POLE TO GRADE	1	EA	$1,250.00	$1,250.00
RELOCATE RAILROAD SWITCH	1	EA	$3,000.00	$3,000.00
PROTECT IN PLACE OIL PIPE LINES (4 LINES) KM	250	LF	$250.00	$62,500.00
RELOCATE SIGNAL BOX	1	EA	$7,500.00	$7,500.00
RELOCATE UTILITY STRUCTURE (CAGED PIPES)	1	EA	$125,000.00	$125,000.00
SUB_TOTAL AVALON				$848,998.00
LEEWARD AVENUE				
CONSTRUCT 5" ASPHALT CONCRETE PAVEMENT	350	SF	$10.00	$3,500.00
CONSTRUCT 8" UNTREATED BASE MATERIAL	350	SF	$4.00	$1,400.00
CONSTRUCT VARIABLE THICKNESS AC PAVEMENT	285	SF	$9.00	$2,565.00
REMOVE CONCRETE CROSSING PANEL	60	TF	$40.00	$2,400.00
INSTALL CONCRETE CROSSING PANEL	40	TF	$700.00	$28,000.00
SUB_TOTAL LEEWARD				$37,865.00
HENRY FORD				
REMOVE CONCRETE CURB	955	LF	$5.00	$4,775.00
CONSTRUCT CONCRETE CURB	645	LF	$18.00	$11,610.00
REMOVE CURB & GUTTER	1115	LF	$10.00	$11,150.00
CONSTRUCT CURB & GUTTER	1065	LF	$25.00	$26,625.00
REMOVE EXISTING DRIVEWAY	130	LF	$8.00	$1,040.00
CONSTRUCT DRIVEWAY	126	LF	$15.00	$1,890.00
REMOVE ASPHALT CONCRETE PAVEMENT	56620	SF	$3.00	$169,860.00
CONSTRUCT ASPHALT CONCRETE PAVEMENT	54000	SF	$9.00	$486,000.00
REMOVE UNTREATED BASE MATERIAL	50150	SF	$2.00	$100,300.00
CONSTRUCT UNTREATED BASE MATERIAL	54000	SF	$4.00	$216,000.00
ADJUST MANHOLE TO GRADE	1	EA	$650.00	$650.00
CONSTRUCT VARIABLE THICKNESS AC PAVEMENT	825	SF	$10.00	$8,250.00
RELOCATE AND/OR ADJUST STREET LIGHTING PULL BOX TO GRADE	9	EA	$600.00	$5,400.00
RELOCATE AND/OR ADJUST FIRE HYDRANT TO GRADE	3	EA	$2,000.00	$6,000.00

	RELOCATE STREET SIGN	1	EA	$300.00	$300.00
	REMOVE CONCRETE CROSSING PANEL	140	TF	$40.00	$5,600.00
	INSTALL CONCRETE CROSSING PANEL	280	TF	$700.00	$196,000.00
	RELOCATE AND/OR ADJUST STREET LIGHT POLE	7	EA	$1,500.00	$10,500.00
	RELOCATE AND/OR ADJUST WATER VALVE TO GRADE	7	EA	$600.00	$4,200.00
	RELOCATE AND/OR ADJUST POWER POLE TO GRADE	5	EA	$500.00	$2,500.00
	RELOCATE AND/OR ADJUST OVERHEAD SIGN BRIDGE TO GRADE	1	EA	$800.00	$800.00
	SAWCUT FULL DEPTH AC	300	LF	$5.00	$1,500.00
	REMOVE CONCRETE WALK	7380	SF	$6.00	$44,280.00
	CONSTRUCT CONCRETE WALK	7895	SF	$13.00	$102,635.00
	3" AC OVER COMPACTED NATIVE	1800	SF	$5.00	$9,000.00
	CONSTRUCT CONCRETE GUTTER	200	LF	$18.00	$3,600.00
	CONSTRUCT NEW CURB RAMP	4	EA	$120.00	$480.00
	BACKFILL WITH COMPACTED NATIVE OR APPROVED EQUAL	6800	CF	$5.00	$34,000.00
	RELOCATE AND/OR ADJUST GUY WIRE AND/OR POLE TO GRADE	6	EA	$850.00	$5,100.00
	RELOCATE AND/OR ADJUST GAS VALVE TO GRADE	2	EA	$600.00	$1,200.00
	CONSTRUCT SIDE OPENING CATCH BASIN (W=7.0')	3	EA	$4,000.00	$12,000.00
	CONSTRUCT WARPED GUTTER AT CATCH BASIN	51	LF	$30.00	$1,530.00
	REMOVE SIDE OPENING CATCH BASIN	3	EA	$750.00	$2,250.00
	RELOCATE AND/OR ADJUST TREE TO GRADE	7	EA	$1,200.00	$8,400.00
	CONSTRUCT METAL BEAM GUARDRAIL				
	SUB_TOTAL HENRY FORD				**$1,495,425.00**
	NEPTUNE AVE				
	REMOVE ASPHALT CONCRETE PAVEMENT	1100	SF	$3.00	$3,300.00
	CONSTRUCT ASPHALT CONCRETE PAVEMENT	2060	SF	$9.00	$18,540.00
	REMOVE UNTREATED BASE MATERIAL	1100	SF	$2.00	$2,200.00
	CONSTRUCT UNTREATED BASE MATERIAL	2060	SF	$4.00	$8,240.00
	ADJUST MANHOLE TO GRADE	1	EA	$650.00	$650.00
	COLDPLANE AC PAVEMENT	20000	SF	$2.50	$50,000.00
	CONSTRUCT VARIABLE THICKNESS AC PAVEMENT	21100	SF	$10.00	$211,000.00
	RELOCATE UTILITY POLE	1	EA	$1,200.00	$1,200.00
	RELOCATE AND/OR ADJUST FIRE HYDRANT TO GRADE	1	EA	$2,000.00	$2,000.00
	INSTALL CONCRETE CROSSING PANEL	220	TF	$700.00	$154,000.00
	RELOCATE AND/OR ADJUST WATER VALVE TO GRADE	1	EA	$600.00	$600.00
	SAWCUT FULL DEPTH AC	1340	LF	$5.00	$6,700.00
	RELOCATE AND/OR ADJUST DWPPS VENT TO GRADE	1	EA	$1,250.00	$1,250.00
	SUB_TOTAL NEPTUNE				**$459,680.00**
	CROSSINGS SUB-TOTAL				**$4,052,059.50**
92460	**TRACKWORK**	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
	TRACK (INCLUDES RAIL, CONCRETE TIES, FASTENERS, INSTALLATION INCL. WELDS (ASSUME ONE PER 500'))	97,459	TF	$192.00	$18,712,128.00
	# 9 TURNOUT (FURNISH & INSTALL)	43	EA	$125,000.00	$5,375,000.00
	#11 TURNOUT (FURNISH & INSTALL)	45	EA	$130,000.00	$5,850,000.00
	#15 TURNOUT (FURNISH & INSTALL)	2	EA	$150,000.00	$300,000.00
	DIAMOND SPECIAL TRACKWORK	1	EA	$250,000.00	$250,000.00
	Sub-ballast	97,112	CY	$45.00	$4,370,040.00
	Bumping Post	6	EA	$8,000.00	$48,000.00
	ARTICULATING MECHANICAL BLUE FLAG DERAIL, AUTOMATIC	6	EA	$9,000.00	$54,000.00
	TRACKWORK SUB-TOTAL				**$34,959,168.00**
92500	**PAVEMENT [ROADWAYS, CARTWAYS & WALKWAYS]**	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
	5" ASPHALT CONCRETE FURNISH & INSTALL	9,538	TN	$75.44	$719,375.19
	PERMEABLE INTERLOCKING CONCRETE PAVEMENT WITH SAND BEDDING, FURNISH & INSTALL	25,409	SF	$25.54	$648,951.99
	18" GRAVEL, FURNISH & INSTALL	4,155	CY	$33.50	$139,203.67
	6" PERMEABLE BASE	627	CY	$34.69	$21,764.11

COST ESTIMATE
BERTH 200 RAIL YARD

	8" CMB (DEPARTMENT FURNISHED), INSTALL	5,270	CY	$4.75	$25,031.35
	13" CMB (DEPARTMENT FURNISHED), INSTALL	4,628	CY	$4.75	$21,984.28
	6" COMPACTED SUBGRADE, INSTALL	4,423	CY	$5.32	$23,529.82
	12" COMPACTED SUBGRADE, INSTALL	4,272	CY	$5.32	$22,728.36
	9" PORTLAND CEMENT CONCRETE, FURNISHED & INSTALL	1,581	CY	$172.50	$272,739.13
	CONCRETE RAIL CROSSING PANEL (10' X 8.125'), FURNISH & INSTALL	26	EA	$2,912.21	$75,717.46
					$1,971,225.15
	PAVEMENT SUB-TOTAL	QNTY	UNIT	UNIT COST	TOTAL COST
02584 - 02700	UTILITIES				
	PETROLEUM & GAS PIPELINES - RELOCATION/PROTECT-IN-PLACE				
	Vopak	4,000	LF	$800.00	$3,200,000.00
	Vopak	1	LS	$1,000,000.00	$1,000,000.00
	Valero	1,000	LF	$500.00	$500,000.00
	Valero	2,000	LF	$800.00	$1,600,000.00
	Tidelands	610	LF	$500.00	$305,000.00
	Tidelands	1,000	LF	$800.00	$800,000.00
	Tidelands	1	LS	$500,000.00	$500,000.00
	Shell	150	LF	$500.00	$75,000.00
	SC Gas Co	110	LF	$500.00	$55,000.00
	Paramount	450	LF	$500.00	$225,000.00
	ExxonMobil	650	LF	$500.00	$325,000.00
	KMEP	315	LF	$500.00	$157,500.00
	ConocoPhillips	1,200	LF	$500.00	$600,000.00
	Chevron	420	LF	$500.00	$210,000.00
	DOMESTIC WATER SERVICE				
	Furnish and Install XX" Domestic Water Service Per LADWP Std Plan A9467	768	LF	$150.00	$115,200.00
	Furnish and Install Water Meter Per LADWP Standard Plan XX	2	EA	$3,000.00	$6,000.00
	Furnish & Install Domestic Water Service (Misc Valves/ Specialties)	1	LS	$5,000.00	$5,000.00
	FIRE PROTECTION WATER SERVICE				
	Fire Hydrant Assembly and Lateral Per LADWP Std Plan A9456-2	33	EA	$7,500.00	$247,500.00
	XX" DIP Fire Hydrant Line Per LADWP Std Plan XX	6,880	LF	$75.00	$516,000.00
	Furnish and Install 8" Ø Backflow Preventer	1	EA	$4,000.00	$4,000.00
	POC 8" & 6" FW TO (E) 12" STEEL WATER MAIN, HOT TAP + GATE VALVE	1	EA	$4,000.00	$4,000.00
	UNDERDRAINS				
	UNDERDRAIN, 8"Ø - PERFORATED PVC, FURNISH & INSTALL	20,056	LF	$16.00	$320,932.80
	RAIL BALLAST OR PERMEABLE MATERIAL	979	CY	$34.69	$33,956.31
	SUB BALLAST MATERIAL	1,114	CY	$34.69	$38,658.80
	BALLAST MATERIAL	10,896	CY	$34.69	$377,977.73
	UNDERDRAIN SINGLE RISER, FURNISH & INSTALL	18	EA	$885.00	$15,930.00
	UNDERDRAIN DOUBLE RISER, FURNISH & INSTALL	29	EA	$1,051.00	$30,479.00
	SADDEL CONNECTION, FURNISH & INSTALL	38	EA	$2,058.00	$78,204.00
	STORM DRAINS				
	18" RCP, FURNISH & INSTALL	3,046	LF	$118.18	$359,881.09
	24" RCP, FURNISH & INSTALL	763	LF	$131.19	$100,115.02
	30" RCP, FURNISH & INSTALL	2,683	LF	$146.45	$392,912.17
	33" RCP, FURNISH & INSTALL	164	LF	$153.20	$25,124.80
	36" RCP, FURNISH & INSTALL	1,205	LF	$159.36	$192,030.39
	CONNECTION TO EXISTING JUNCTION STRUCTURE, FURNISH & INSTALL	1	EA	$4,478.00	$4,478.00
	DROP INLET, FURNISH & INSTALL	9	EA	$6,474.00	$58,266.00
	STORM DRAIN MANHOLE, FURNISH & INSTALL	34	EA	$3,636.00	$123,624.00
	CONTECH STORM FILTER OR EQUAL, FURNISH & INSTALL	3	EA	$15,694.00	$47,082.00
	CURB CATCH BASINS (APWA STD 300-2), FURNISH & INSTALL	8	EA	$4,465.00	$35,720.00
	CATCH BASINS, FURNISH & INSTALL	9	EA	$785.00	$7,065.00
	STORM DRAINAGE FLOWSERVE PUMP (MODEL NO. 28AFV), FURNISH & INSTALL	2	EA	$138,000.00	$276,000.00
	STORM DRAINAGE SUBMERSIBLE PUMP, FURNISH & INSTALL	1	EA	$11,500.00	$11,500.00

	ABANDON IN-PLACE EXISTING STORM DRAIN PIPES W/ 1 SACK MIX	580	CY	$92.00	$53,360.00
	RELOCATING EXISTING INLET STRUCTURE	1	LS	$5,936.00	$5,936.00
	STROM DRAING PUMP STATION MODIFICATION - STRUCTURAL	35	CY	$463.00	$18,205.00
	SANITARY SEWER/ INDUSTRIAL WASTE (includes shoring, trenching, laying, & backfill)				
	Construct XX" DIP Sewer Line With Bedding Per City of Los Angeles Std Plan S-252-1	1,004	LF	$50.00	$50,200.00
	Construct Sewer Cleanout Per SPPWC Std Plan 204-1	6	EA	$700.00	$4,200.00
	Construct Manhole Per City of Los Angeles Std Plan XX	1	EA	$6,000.00	$6,000.00
	Construct Sewer Pump Station	1	EA	$80,000.00	$80,000.00
	ABANDON EXISTING UTILITIES				
	4" Sewer	268	LF	$10.00	$2,680.00
	30" Storm Drain	166	LF	$25.00	$4,150.00
	12" Storm Drain	178	LF	$20.00	$3,560.00
	24" Storm drain	1,112	LF	$20.00	$22,240.00
	8" Storm Drain	96	LF	$15.00	$1,440.00
	42" Storm Drain	349	LF	$25.00	$8,725.00
	Water	323	LF	$10.00	$3,230.00
	4" Water	299	LF	$10.00	$2,990.00
	6" Water	856	LF	$10.00	$8,560.00
	8" Water	542	LF	$10.00	$5,420.00
	10" Water	144	LF	$10.00	$1,440.00
	12" Water	1,356	LF	$10.00	$13,560.00
	Electrical Conduit	7,071	LF	$10.00	$70,710.00
	UTILITIES SUB-TOTAL				**$13,344,741.12**
	SIGNAGE & STRIPING	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
	PARKING LOT STRIPING AND HANDICAPE SIGNAGE, FURNISH & INSTALL	1	LS	$28,750.00	$28,750.00
	CROSSING REGULATORY SIGNS AND 24" STOP BARS (INSIDE THE YARD), FURNISH & INSTALL	6	EA	$174.36	$1,046.18
	BUILDING DIRECTIONAL SIGNAGE	7	EA	$174.36	$1,220.52
	YARD DIRECTIONAL PAVEMENT MARKINGS (96 ARROWS, 43 STOP BARS, 23 MESSAGES, 1,454LF CENTERLINE)	1	LS	$11,500.00	$11,500.00
	SIGNAGE & STRIPING SUB-TOTAL				**$42,516.68**
02800	**FENCING**	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
	8' CHAIN LINK FENCE WITH 3-STRAND WIRE	23,574	LF	$40.47	$954,039.78
	ELECTRICAL CHAIN LINK SLIDING GATE WITH STEEL GUIDE TRACKS & 2'X60' REINFORCED CONCRETE PAD (INCLUDING MOTOR, TRAFFIC LOOPS, ACCESSORIES), FURNISH & INSTALL	60	LF	$346.86	$20,811.60
	2'x6' REINFORCED CONCRETE PAD	4	CY	$289.35	$1,284.78
	CONCRETE PAD: FORMWORK	244	SF	$4.12	$1,005.28
	CONCRETE PAD: REINFORCING STEEL	667	LB	$1.17	$780.00
	8' CHAIN LINK GATE	192	LF	$231.86	$44,517.12
	KNOX SECURITY/FIRE DEPARTMENT OVERRIDE DEVICE	2	EA	$2,875.00	$5,750.00
	FENCING SUB-TOTAL				**$1,028,188.54**
02900	**LANDSCAPING & IRRIGATION**	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
	o PROVIDE DESIGN BY LICENSED LANDSCAPE ARCHITECT FOR GROUND COVER, PLANTS AND IRRIGATION AT ENTRANCE AREA AS INDICATED ON DRAWINGS. o INSTALL LANDSCAPE & IRRIGATION SYSTEM, MAINTAIN, AND PROVIDE WARRANTY FOR 18 MONTHS.	1	AL		
	PLANTING				
	Soil Preparation and Weed Abatement	51,550	SF	$0.20	$10,310.00
	Sodded Turf	730	SF	$1.00	$730.00

COST ESTIMATE
BERTH 200 RAIL YARD

	Gravel Mulch	50,820	SF	$0.50	$25,410.00
	Palm Tree - 20' BTH	209	EA	$2,000.00	$418,000.00
	36" Box Tree	87	EA	$750.00	$65,250.00
	1 Gallon Shrub	530	EA	$9.00	$4,770.00
	5 Gallon Shrub	2,761	EA	$20.00	$55,220.00
	15 Gallon Shrub	172	EA	$95.00	$16,340.00
	15 Gallom Vine	230	EA	$95.00	$21,850.00
	IRRIGATION				
	Automatic Irrigation System	39,330	SF	$4.00	$157,320.00
	Drip Irrigation System	12,220	SF	$7.50	$91,650.00
	Controller System	2	EA	$5,000.00	$10,000.00
	Point of Connection	2	EA	$6,000.00	$12,000.00
	Solar Panel System	2	EA	$10,000.00	$20,000.00
	SITE AMENITIES				
	Tubular Steel Pedestrian Gate	1	SET	$2,500.00	$2,500.00
	Tubular Steel Electrical Vehiculer Gate with two motors	1	SET	$7,000.00	$7,000.00
	Tubular Steel Fence	660	LF	$70.00	$46,200.00
	Temporary Construction Fence	5,755	LF	$5.00	$28,775.00
	Concrete Pavers - Alameda St.	52,740	SF	$11.75	$619,695.00
	Concrete Pavers - Yard Office	1,400	SF	$11.75	$16,450.00
	Concrete Paving	2,470	SF	$8.00	$19,760.00
	Concrete Banding	407	SF	$15.00	$6,105.00
	Decomposed Granite	1,410	SF	$0.50	$705.00
	Pilaster - Alameda St.	2	EA	$1,200.00	$2,400.00
	Pilaster - Yard Office	9	EA	$1,200.00	$10,800.00
	Header Board	470	LF	$5.00	$2,350.00
	Iron Edging	6,560	LF	$5.00	$32,800.00
	Aluminum Edging	3,450	LF	$5.00	$17,250.00
	Mowstrip	15	LF	$16.00	$240.00
	Trash Receptacle	2	EA	$2,165.00	$4,330.00
	Bench	4	EA	$2,675.00	$10,700.00
	Bike Rack	1	EA	$1,500.00	$1,500.00
	Cylinder Planter	19	ES		
	Overhead Structure	100	SF	$50.00	$5,000.00
	Seat Wall with Pilaster	30	LF	$200.00	$6,000.00
	30' High Flag Pole	1	EA	$6,000.00	$6,000.00
	Site Work				
	Point of Connection System	2	EA	$6,000.00	$12,000.00
	Post Installation Maintenance				
	18 Months Maintenance Post Installation	51,550	SF	.02/SF/Mth	$18,560.00
					$1,785,970.00
	LANDSCAPING & IRRIGATION SUB-TOTAL	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
03300	**CAST-IN-PLACE CONCRETE**				
	CONCRETE CURB TYPE C (a = 2', b=6", 6"CF), FURNISH & INSTALL	910	LF	$16.01	$14,569.10
	LONGITUDINAL GUTTER (WITH 3'-6" #8 BAR @ 9.5" O.C.), LAHD STD PLAN H-201-00, FURNISH & INSTALL	246	CY	$517.50	$127,266.67
	CONCRETE SWALES, FURNISH & INSTALL	181	CY	$402.50	$72,734.65
	CONCRETE DRIVEWAY, FURNISH & INSTALL	1,745	SF	$5.90	$10,294.62
	5' CONCRETE SIDEWALK (3" PCC WITH 4" CMB), FURNISH & INSTALL	3,819	SF	$5.90	$22,531.10
					$247,396.13
	CAST-IN-PLACE CONCRETE SUB-TOTAL	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
03300	**CONCRETE BRIDGE OVER DRAINAGE CHANNEL**	1	LS		
	CONCRETE BRIDGE SUB-TOTAL	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
04000	**SITE MASONRY**				
	SITE MASONRY SUB-TOTAL	**QNTY**	**UNIT**	**UNIT COST**	**TOTAL COST**
05000	**METALS**	1	EA		
	FIXED BOLLARDS				

COST ESTIMATE
BERTH 200 RAIL YARD

J.L. PATTERSON ASSOCIATES, INC.

	METALS SUB-TOTAL				
07000	THERMAL & MOISTURE PROTECTION	QNTY	UNIT	UNIT COST	TOTAL COST
	WATER REPELLENT TO CMU WALLS	1	SF		
	THERMAL & MOISTURE PROTECTION SUB-TOTAL				
11000	EQUIPMENT	QNTY	UNIT	UNIT COST	TOTAL COST
	EQUIPMENT SUB-TOTAL				
13000	RR Signal	QNTY	UNIT	UNIT COST	TOTAL COST
	CP Anaheim	1	LS	$699,645.00	$699,645.00
	CP Ford/Henry Ford Ave Xing	1	LS	$967,645.00	$967,645.00
	CP Marina	1	LS	$1,613,645.00	$1,613,645.00
	Leeward Bay marina Access Xing	1	LS	$286,245.00	$286,245.00
	CP Eubank	1	LS	$322,645.00	$322,645.00
	CP Banning	1	LS	$762,645.00	$762,645.00
	Avalon Blvd Xing	1	LS	$815,645.00	$815,645.00
	Fries Ave North	1	LS	$405,245.00	$405,245.00
	Fries Ave South	1	LS	$914,245.00	$914,245.00
	Fries Ave (WBE) & Auto Interlocking	1	LS	$765,245.00	$765,245.00
	Neptune Ave	1	LS	$286,245.00	$286,245.00
	DTMF Switches	1	LS	$929,145.00	$929,145.00
	Yard Remote Control	1	LS	$307,645.00	$307,645.00
	Shipping & Handling - 15%	1	LS	$1,361,382.75	$1,361,382.75
	Tie-In Work - 5%	1	LS	$453,794.25	$453,794.25
	Stagework Funding - 15%	1	LS	$1,565,590.16	$1,565,590.16
	Modification of PHL Office PC System	1	LS	$50,000.00	$50,000.00
	SPECIAL CONSTRUCTION SUB-TOTAL				$12,506,652.16
16000	ELECTRICAL	QNTY	UNIT	UNIT COST	TOTAL COST
	NOT USED				
	ELECTRICAL SUB-TOTAL				
80000	BUILDINGS AND PITS – ALL DIVISIONS	QNTY	UNIT	UNIT COST	TOTAL COST
	YARD OFFICE	1	LS	$4,483,291.00	$4,483,291.00
	MAINTENANCE	1	LS	$3,303,976.00	$3,303,976.00
	BUILDINGS AND PITS SUB-TOTAL				$7,787,267.09
CONSTRUCTION SUB-TOTAL					$91,818,983.25
CONSTRUCTION CONTINGENCY (15% of CONSTRUCTION TOTAL - LESS ADMIN)					$12,853,130.68

CONSTRUCTION TOTAL	$104,672,113.93
ROADWAY CONSTRUCTION COST (Excludes Engineering & CM)	$5,838,970.52

CONSTRUCTION TOTAL (INCLUDING ROADWAY CONSTRUCTION)	$110,511,084

ATTACHMENT D
PERFORMANCE MEASURES

Study Area: The West Basin Railyard of the Ports of Los Angeles/Long Beach Rail System as described in Attachment A: Statement of Work.

Reporting: Quarterly reports should measure and report data in the first full quarter of operation after project construction and continue for the duration of the Measurement Period defined in Table D.1. Grantee need not include any analysis in addition to the described data. Quarterly report due dates are as follows:

Reporting Period	Due
January, February, March	June 1st
April, May, June	September 1st
July, August, September	December 1st
October, November, December	March 1st

Table D.1: Performance Measurement Table

Measure	Description of Measure	Frequency	Measurement Period
Number of Truck movements	TraPac and WBCT terminals gate truck movements (which use the Alameda Corridor)	Quarterly	**Pre-project report**: Once prior to project construction. **Interim Project Performance Reports:** For a period of 3 years after project construction is completed and until the Project Outcomes report is submitted
Number of on-dock TEU	TraPac and WBCT terminals gate on-dock TEU (which use the Alameda Corridor)	Quarterly	**Pre-project report**: Once prior to project construction. **Interim Project Performance Reports:** For a period of 3 years after project construction is completed and until the Project Outcomes report is submitted.

Number of Rail cars	The number of rail cars using the West Basin Railyard (all container railcars and non-local industry, non-intermodal railcars use the West Basin Railyard to access the Alameda Corridor)	Quarterly	**Pre-project report**: Once prior to project construction. **Interim Project Performance Reports:** For a period of 3 years after project construction is completed and until the Project Outcomes report is submitted
Rail Tonnage	The associated tonnage on rail cars using the West Basin Railyard (all container railcars and non-local industry, non-intermodal railcars use the West Basin Railyard to access the Alameda Corridor)	Quarterly	**Pre-project report**: Once prior to project construction. **Interim Project Performance Reports:** For a period of 3 years after project construction is completed and until the Project Outcomes report is submitted