



**ALAMEDA CORRIDOR TRANSPORTATION AUTHORITY**

3760 KILROY AIRPORT WAY, SUITE 200, LONG BEACH, CA 90806 • (562) 247-7777 • FAX (562) 247-7090

August 2, 2018

**To:** Parties listed on Exhibit A

**Subject:** Notice of Mutual Agreement No. 2018-4 - Request for Approval under Amended and Restated Alameda Corridor Use and Operating Agreement

**Matter:** Approval Request to Amend the 2018 Alameda Corridor Maintenance of Way and Operation & Maintenance Budgets for Additional Expenditures and Restoration of Contingency Amount

Dear Sir or Madam:

Reference is made to that certain Amended and Restated Alameda Corridor Use and Operating Agreement (the Agreement), dated December 15, 2016, by and among the BNSF Railway Company (BNSF), Union Pacific Railroad Company (UP), the City of Los Angeles, acting by and through its Board of Harbor Commissioners (POLA), the City of Long Beach, acting by and through its Board of Harbor Commissioners (POLB), and the Alameda Corridor Transportation Authority (ACTA).

The Agreement governs the use and operation of the Alameda Corridor and, among other things, contains provisions which require certain parties to make decisions from time to time by Mutual Agreement (as defined in the Agreement) or unanimous consent/approval. In particular, Mutual Agreement requires the approval from at least three of the following parties: BNSF, UP, POLB, and POLA, and unanimous consent/approval requires the approval of each of the same four entities. Pursuant to the terms of the Agreement, ACTA as an entity does not approve or disapprove Mutual Agreement matters.

Attached as Exhibit B is Notice of Mutual Agreement (NMA) No. 2018-4, for which approval by the requisite parties is requested at this time. The matter to be approved is described in the attached NMA (the "Matter"). Following consideration of the Matter, please email to ACTA a signed copy of the attached NMA (or, if such Matter is not approved by your entity, a written statement indicating such disapproval), no later than September 15, 2018. Once all responses are received, ACTA will send a letter to the four entities with the results.

If there are any questions, please advise.

Sincerely,

A handwritten signature in blue ink, appearing to read 'John T. Doherty', is written over a horizontal line.

John T. Doherty, P.E.  
Chief Executive Officer

**EXHIBIT A**

**LIST OF PARTIES**

Port of Los Angeles  
425 South Palos Verdes Street  
San Pedro, California 90733  
Attn: Executive Director  
Email: gene\_seroka@portla.org

Port of Long Beach  
4801 Airport Plaza Drive  
Long Beach, California 90815  
Attn: Executive Director  
Email: mario.cordero@polb.com

BNSF Railway Company  
2500 Lou Menk Drive  
AOG -Garden Level  
Fort Worth, Texas 76131  
Attn: Assistant Vice President - Contracts  
& Joint Facilities  
Email: sarah.bailiff@bnsf.com

Union Pacific Railroad Company  
1400 Douglas Street -Stop 1160  
Omaha, Nebraska 68179  
Attn: Executive Vice President of  
Operations  
Email: jointfacilitycontracts@up.com

**Cc:**

Email: Brian.Aman@bnsf.com  
Email: JBarager@UP.com  
Email: tgioiello@portla.org  
Email: carlo.luzzi@polb.com  
Email: hmcloskey@portla.org  
Email: Lauren.Misajon@longbeach.gov  
Email: duane.kenagy@polb.com

**EXHIBIT B**

**NOTICE OF MUTUAL AGREEMENT**

**Number: 2018-4**

**Subject: Approval Request to Amend the 2018 Alameda Corridor  
Maintenance of Way and Operations & Maintenance  
Budgets for Additional Expenditures and Restoration of  
Contingency Amount**

**Recommendation:**

1. Approve a \$390,000 budget increase to the previously approved 2018 Alameda Corridor Maintenance of Way (MOW) and Operations & Maintenance (O&M) Budgets for certain unbudgeted and under-budgeted items.
2. Restore the original 2018 approved \$200,000 contingency in the O&M Budget to be available for future needs.

**Discussion:**

In December 2017, the Railroads and Ports approved the 2018 MOW and O&M Budgets through Mutual Agreement No. 2017-6. See Background Section below for a general description of these budgets.

The 2018 O&M Budget provided a \$200,000 contingency to be allocated as necessary during the year for unbudgeted, under-budgeted, or unplanned emergency work. The approval of the initial 2018 Budgets also authorized Port and Railroad staff to allocate the contingency as needed and report back to their respective approval entities concerning its use and any need for replenishment. As described below, several budgeted items will overrun their approved amounts and one unbudgeted item must be added. The total value of the budget increase is \$390,000, which exceeds the approved \$200,000 contingency amount. The contingency is being used to initiate some of the work listed below, but in no event will the \$200,000 contingency amount be exceeded before approval of the requested budget increase.

**Budget Items**

1. *Item 2.p. Ladder/Fence/Traffic Support* – Reinforcing the ROW fencing at CP Nadeau (attaching expanded metal mesh to existing chainlink) to discourage trespass (\$102.5K total - \$50K more than budgeted)

2. Positive Train Control (PTC) Support and Design (\$73.5K total - \$20K more than budgeted) (UP only cost unless BNSF requests data)
  - a. *Item 2.y. PTC Support at CP W&E Redondo* - Additional funds for BBII costs (\$11.5K total - \$8K more than budgeted)
  - b. *Section III. PTC Design Consultant for CP W&E Redondo* – Additional funds for design consultant through construction (\$62K total - \$12K more than budgeted)
3. *Item 2.z. Extraordinary Right-of-Way Cleanup* – Remove Item 2.z. Extraordinary Right-of-Way Cleanup from Section I. Maintenance of Way Contractor's Costs and move it to Section III. Corridor Operating and Other MOW Cost. This work is being completed by ACTA's environmental contractor, not its Maintenance Contractor. Additional periodic cleanup of the ROW at CP Nadeau and other locations along the Corridor due to illegal dumping is required (\$71.5K total - \$40K more than budgeted)
4. *Item 3.ii. Fixed Trench Ladders* - Additional cost to design, fabricate and install prototype stair in trench (\$76.75K total - \$40K more than budgeted)
5. AEI Readers Upgrade as requested by the Railroads (estimated \$240K total cost)
  - a. *New Item 2.aa. AEI Readers Upgrade (MOW Contractor Costs)* – Equipment, software, licensing, set-up, and installation support for the upgrade of the AEI readers - \$189.6K
  - b. *Section III. Corridor Operating & Other MOW Costs – New Item – AEI Readers Upgrade (non-MOW Contractor Costs)* – Equipment - \$50.4K

### Request

It is requested that the Ports and Railroads amend the 2018 MOW and O&M Budgets to add \$390,000 overall. It is also requested that the \$200,000 contingency be restored to be available for the remainder of 2018. If approved, the revised overall 2018 O&M Budget, which contains both the MOW Budget and other estimated annual O&M expenses, will be \$12,109,796 (\$11,719,796 + \$390,000).

### Background:

The Amended and Restated Use and Operating Agreement (Agreement) requires that the Ports and Railroads through Mutual Agreement approve an Annual Maintenance and Capital Improvement Plan and Budget prior to January 1 of each year. The Plan and Budget are comprised of two documents.

The first is the **Maintenance of Way (MOW) Budget** as prepared by the Maintenance Contractor, which includes the projected maintenance and capital costs to be incurred by the Contractor for the coming year. The second is the overall **Operations and Maintenance (O&M) Budget**, which incorporates the MOW Budget, as well as other estimated O&M expenses, including but not limited to insurance, dispatching, security, utilities, and support costs.

Major items within the MOW and O&M Budgets include allocation of costs between the Rail and Non-Rail maintenance categories, Capital Expenses made in accordance with the approved definition of Capital Expenses, and proposed Maintenance Contractor staffing levels.

**Please provide your acceptance and approval by affixing your signature, name and title below:**

**Port of Los Angeles**

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Port of Long Beach**

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**BNSF Railway Company**

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Union Pacific Railroad Company**

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**Attachments to Exhibit B:**

Attachment 1 - Draft Revised 2018 MOW Budget (changes noted in yellow)

Attachment 2 - Draft Revised 2018 MOW Budget Detail (changes noted in yellow)

Attachment 3 - Draft Revised 2018 O&M Budget (changes noted in yellow)

# NMA 2018-4 - Attachment 1 to Exhibit B - Alameda Corridor - Draft Revised 2018 Maintenance of Way Budget

**LABOR POSITIONS**

MANAGEMENT POSITIONS	Positions	Needed Portion	EST Hours	Hourly RATE	OT RATE	OT VALUE	2018 VALUE	Share	R.R. M & O		Reserve Account		ACTA Operating Budget			2017 Amended		2017	
									Rail Cost	Hours	Non-Rail Cost	Hours	Share	Cost	Hours	Share	Cost	Approved Budget	Projected Cost
1.a.i Contract Manager	1	100.0%	1800	\$ 145.00	N/A	N/A	\$ 261,000	70.0%	\$ 182,700	1,260	25.0%	\$ 65,250	450	5.0%	\$ 13,050	90	\$ 226,800	\$ 226,800	
1.a.ii Track Superintendent	1	100.0%	1840	\$ 99.75	N/A	N/A	\$ 183,540	75.0%	\$ 137,655	1,380	25.0%	\$ 45,885	460	0.0%	\$ -	-	\$ 174,800	\$ 174,800	
1.a.iii Bridge Supt. / Safety	1	100.0%	1800	\$ 106.58	N/A	N/A	\$ 191,835	20.0%	\$ 38,367	360	80.0%	\$ 153,468	1,440	0.0%	\$ -	-	\$ 182,700	\$ 8,000	
1.a.iv Office Manager	1	100.0%	1880	\$ 58.45	N/A	N/A	\$ 109,886	70.0%	\$ 76,920	1,316	25.0%	\$ 27,472	470	5.0%	\$ 5,494	94	\$ 99,640	\$ 99,640	
<b>STAFF POSITIONS</b>																			
1.b. Track Inspector	1	100.0%	2000	\$ 63.53	\$ 95.29	\$ 13,340.25	\$ 140,390	75.0%	\$ 105,293	1,500	25.0%	\$ 35,098	500	0.0%	\$ -	-	\$ 133,705	\$ 133,705	
1.b.i Track Foreman	1	100.0%	2000	\$ 61.95	\$ 92.93	\$ 13,009.50	\$ 136,910	75.0%	\$ 102,682	1,500	25.0%	\$ 34,227	500	0.0%	\$ -	-	\$ 130,390	\$ 130,390	
1.b.ii Assistant Foreman	1	100.0%	2000	\$ 53.03	\$ 79.54	\$ 9,544.50	\$ 115,595	75.0%	\$ 86,696	1,500	25.0%	\$ 28,899	500	0.0%	\$ -	-	\$ 110,090	\$ 110,090	
1.b.iii Track Laborers	3	100.0%	5880	\$ 49.88	\$ 74.81	\$ 26,393.85	\$ 239,744	75.0%	\$ 179,744	4,410	25.0%	\$ 79,915	1,470	0.0%	\$ -	-	\$ 304,437	\$ 304,437	
1.b.iv Equipment Operators	1	100.0%	2000	\$ 79.01	\$ 118.52	\$ 14,222.25	\$ 172,247	75.0%	\$ 129,185	1,500	25.0%	\$ 43,062	500	0.0%	\$ -	-	\$ 164,045	\$ 164,045	
1.b.v Welder	1	100.0%	2000	\$ 61.43	\$ 92.14	\$ 11,056.50	\$ 133,907	100.0%	\$ 133,907	2,000	0.0%	\$ -	-	0.0%	\$ -	-	\$ 127,530	\$ 127,530	
1.b.vi Welder Helper	1	100.0%	2000	\$ 49.88	\$ 74.82	\$ 8,978.40	\$ 108,738	100.0%	\$ 108,738	2,000	0.0%	\$ -	-	0.0%	\$ -	-	\$ 98,645	\$ 98,645	
1b.vii Laborer (Graffiti/Pump Station)	1	100.0%	2000	\$ 49.88	\$ 74.81	\$ 8,977.50	\$ 108,728	0.0%	\$ -	-	100.0%	\$ 108,728	2,000	0.0%	\$ -	-	\$ 103,550	\$ 103,550	
<b>SUBTOTAL:</b>							\$ 1,982,434		\$ 1,341,887	18,726		\$ 622,002	8,290		\$ 18,544	184	\$ 1,856,332	\$ 1,681,632	
Note: Track Inspector & Track Foreman OT based on 7%; Assistant Foreman, Track Laborers, Equipment Operator, Welder, Welder Helper OT based on 6%.							\$ 1,856,332		\$ 1,254,323	18,726		\$ 585,687	8,290		\$ 16,322				

**ESTIMATED COST CENTERS FOR 2018**

2.a. Administrative Burden					* see attachment	\$ 73,710	70.0%	\$ 51,597		25.0%	\$ 18,428		5.0%	\$ 3,686		\$ 70,560	\$ 70,560
2.a.i. Accounting Support						-	70.0%	\$ -		25.0%	\$ -		5.0%	\$ -		\$ 25,000	\$ 2,846
2.b. Pump Station Maintenance					*see attachment	\$ 13,695	0.0%	\$ -		100.0%	\$ 13,695		0.0%	\$ -		\$ 12,450	\$ 12,450
2.b.i. Pump Station Repairs & Supplies					*see attachment	\$ 26,250	0.0%	\$ -		100.0%	\$ 26,250		0.0%	\$ -		\$ 25,500	\$ 30,500
2.c. AEI & Misc. Maint-AAR Unit Count-757 Units @ \$216/Unit					*see attachment	\$ 163,512	0.0%	\$ -		0.0%	\$ -		100.0%	\$ 163,512		\$ 155,942	\$ 155,942
2.d. Rail Flaw Detection (Subcontractor)						\$ 32,000	100.0%	\$ 32,000		0.0%	\$ -		0.0%	\$ -		\$ 30,000	\$ 32,800
2.e. Graffiti Control					*see attachment	\$ 21,780	0.0%	\$ -		100.0%	\$ 21,780		0.0%	\$ -		\$ 19,950	\$ 19,950
2.f. Weed Abatement (Subcontractor)						\$ 25,000	80.0%	\$ 20,000		20.0%	\$ 5,000		0.0%	\$ -		\$ 25,000	\$ 10,000
2.g. Safety Training					*see attachment	\$ 25,500	85.0%	\$ 21,675		15.0%	\$ 3,825		0.0%	\$ -		\$ 25,000	\$ 25,000
2.h. Safety Management					*see attachment	\$ 25,125	85.0%	\$ 21,356		15.0%	\$ 3,769		0.0%	\$ -		\$ 18,500	\$ 18,500
2.i. Vehicles					*see attachment												
2.i.i Contract Manager						\$ 26,851	70.0%	\$ 18,795		25.0%	\$ 6,713		5.0%	\$ 1,343		\$ 19,795	\$ 19,795
2.i.ii Track Superintendent						\$ 39,984	75.0%	\$ 29,988		25.0%	\$ 9,996		0.0%	\$ -		\$ 39,384	\$ 39,384
2.i.iii Welding Truck						\$ 42,528	100.0%	\$ 42,528		0.0%	\$ -		0.0%	\$ -		\$ 42,528	\$ 42,528
2.i.iv Track Foreman						\$ 36,672	75.0%	\$ 27,504		25.0%	\$ 9,168		0.0%	\$ -		\$ 36,672	\$ 36,672
2.i.v. Assistant Track Foreman						\$ 36,804	75.0%	\$ 27,603		25.0%	\$ 9,201		0.0%	\$ -		\$ 36,804	\$ 36,804
2.i.vi Track Inspector						\$ 36,708	75.0%	\$ 27,531		25.0%	\$ 9,177		0.0%	\$ -		\$ 34,908	\$ 34,908
2.k. Bridge Superintendent/Safety Vehicle					*see attachment	\$ 24,600	20.0%	\$ 4,920		80.0%	\$ 19,680		0.0%	\$ -		\$ 19,800	\$ 19,800
2.l. Hi-Rail Boom Truck					*see attachment	\$ 79,200	80.0%	\$ 63,360		20.0%	\$ 15,840		0.0%	\$ -		\$ 72,000	\$ 72,000
2.m. Maint. Program Rail Grinding-Loram (Subcontractor)					*see attachment	\$ 83,475	100.0%	\$ 83,475		0.0%	\$ -		0.0%	\$ -		\$ 83,475	\$ 83,475
2.n. Track Materials / Supplies & Rentals					*see attachment	\$ 246,960	100.0%	\$ 246,960		0.0%	\$ -		0.0%	\$ -		\$ 239,400	\$ 239,400
2.o. Signal Maintenance - AAR Unit Count - 4901 Units @ \$216/Unit					*see attachment	\$ 1,058,616	100.0%	\$ 1,058,616		0.0%	\$ -		0.0%	\$ -		\$ 1,009,606	\$ 1,009,606
2.p. Ladder / Fence / Traffic Support					*see attachment	\$ 102,500	0.0%	\$ -		100.0%	\$ 102,500		0.0%	\$ -		\$ 36,750	\$ 46,750
2.q. Security (Trench Cameras)					*see attachment	\$ 21,000	70.0%	\$ 14,700		25.0%	\$ 5,250		5.0%	\$ 1,050		\$ 21,000	\$ 15,000
2.r. Security & Yard/Office Maintenance & Support					*see attachment	\$ 194,460	100.0%	\$ 194,460		0.0%	\$ -		0.0%	\$ -		\$ 162,750	\$ 162,750
2.s. Underwater Bridge Inspection					*see attachment	\$ 15,750	100.0%	\$ 15,750		0.0%	\$ -		0.0%	\$ -		\$ -	\$ -
2.t. Trench Ditch Cleaning					*see attachment	\$ 116,198	0.0%	\$ -		100.0%	\$ 116,198.40		0.0%	\$ -		\$ 113,820	\$ 40,000
2.v. Replace Signal Wire on Corridor						\$ 20,000	100.0%	\$ 20,000		0.0%	\$ -		0.0%	\$ -		\$ 20,000	\$ 20,000
2.w. Railroad Reporting & Record Keeping Software System						\$ 16,500	100.0%	\$ 16,500		0.0%	\$ -		0.0%	\$ -		\$ 16,500	\$ 16,500
2.x. Railroad Emergency Drill Exercise						\$ 20,000	100.0%	\$ 20,000		0.0%	\$ -		0.0%	\$ -		\$ 20,000	\$ 16,000
2.y. PTC Support at CP W&E Redondo (UP only unless BNSF also requests data)					*see attachment	\$ 11,500	100.0%	\$ 11,500		0.0%	\$ -		0.0%	\$ -		\$ -	\$ -
2.z. Extraordinary Right-of-Way Cleanup					*see attachment	\$ -	100.0%	\$ -		0.0%	\$ -		0.0%	\$ -		\$ -	\$ -
2.aa. AEI Readers Upgrade					*see attachment	\$ 189,600	100.0%	\$ 189,600		0.0%	\$ -		0.0%	\$ -		\$ -	\$ -
<b>SUBTOTAL:</b>							\$ 2,826,478		\$ 2,179,156		\$ 396,469		\$ 250,852		\$ 2,433,094	\$ 2,329,920	
<b>TOTAL Operating Expenses:</b>							\$ 4,808,911		\$ 3,521,043		\$ 1,018,471		\$ 269,397		\$ 4,289,426	\$ 4,011,552	
							\$ 4,289,426		\$ 3,203,391		\$ 906,952		\$ 179,082				

**2018 CAPITAL BUDGET**

		2018															
3.a. Surfacing Unit - 45 Days @ \$4,600/Day			\$ 207,000	0.0%	\$ -		100.0%	\$ 207,000		0.0%	\$ -			\$ 198,000	\$ 198,000		
Surfacing Mobilization			\$ 25,000	0.0%	\$ -		100.0%	\$ 25,000		0.0%	\$ -			\$ 25,000	\$ 25,000		
3.c.i. Reballast Program (Labor)			\$ 25,728	0.0%	\$ -		100.0%	\$ 25,728		0.0%	\$ -			\$ 14,760	\$ 14,760		
3.c.ii. Reballast Program (Operated Equipment)			\$ 44,000	0.0%	\$ -		100.0%	\$ 44,000		0.0%	\$ -			\$ 51,360	\$ 51,360		
3.d. Ballast - 1,000 Tons @ \$36/Ton			\$ 36,000	0.0%	\$ -		100.0%	\$ 36,000		0.0%	\$ -			\$ 63,000	\$ 63,000		
3.f. Capital Program Rail Grinding-Loram			\$ 83,475	0.0%	\$ -		100.0%	\$ 83,475		0.0%	\$ -			\$ 83,475	\$ 83,475		
3.g. Track Reballast			\$ 38,150	0.0%	\$ -		100.0%	\$ 38,150		0.0%	\$ -			\$ 71,800	\$ 71,800		
3.h. Rail / Switch Component & Tie Replacement			\$ 226,937	0.0%	\$ -		100.0%	\$ 226,937		0.0%	\$ -			\$ 273,611	\$ 273,611		
3.o. Pump Station Upgrades			\$ 231,000	0.0%	\$ -		100.0%	\$ 231,000		0.0%	\$ -			\$ 232,050	\$ 232,050		
3.r. Trench Emergency Ladder/Stair Study/Repairs			\$ 150,000	0.0%	\$ -		100.0%	\$ 150,000		0.0%	\$ -			\$ 225,000	\$ 75,000		
3.u. Replace Long Beach Crossing Diamonds			\$ -	0.0%	\$ -		100.0%	\$ -		0.0%	\$ -			\$ -	\$ 60,000		
3.w. Rehab Henry Ford Crossing @ CP Dominguez			\$ 371,675	0.0%	\$ -		100.0%	\$ 371,675		0.0%	\$ -			\$ 411,675	\$ -		
3.y. Signal Battery Replacement (10 Year Program)			\$ 50,000	0.0%	\$ -		100.0%	\$ 50,000		0.0%	\$ -			\$ 50,000	\$ 45,249		
3.z. Crossing HXP Replacement Cards			\$ -	0.0%	\$ -		100.0%	\$ -		0.0%	\$ -			\$ 25,000	\$ 22,232		
3.aa. Retie Crucero to LB Diamond w/ Concrete Ties			\$ 24,483	0.0%	\$ -		100.0%	\$ 24,483		0.0%	\$ -			\$ 65,528	\$ 40,688		
3.bb. Replace Hot Box Detector @ MP 12.90			\$ 16,800	0.0%	\$ -		100.0%	\$ 16,800		0.0%	\$ -			\$ 123,000	\$ 31,000		
3.dd. Santa Fe Avenue High Security Fence			\$ -	0.0%	\$ -		100.0%	\$ -		0.0%	\$ -			\$ 57,750	\$ 37,000		
3.ee. Crash Barrier @ Manville Road/SR91 Off-ramp			\$ -	0.0%	\$ -		100.0%	\$ -		0.0%	\$ -			\$ 54,895	\$ 30,000		
3.ff. Redondo Tower Fire (NMA 2017-02)			\$ -	0.0%	\$ -		100.0%	\$ -		0.0%	\$ -			\$ 275,000	\$ 265,000		
3.gg. Curve Rail Replacement			\$ 283,500	0.0%	\$ -		100.0%	\$ 283,500		0.0%	\$ -			\$ -	\$ -		
3.hh. Diamond Replacements - West Thenard			\$ 462,000	0.0%	\$ -		100.0%	\$ 462,000		0.0%	\$ -			\$ -	\$ -		
3.ii. Signal Circuit Controllers for Switches			\$ 31,500	0.0%</													

NMA 2018-4 - Attachment 2 to Exhibit B. - Draft Revised 2018 ACTA MOW Budget Detail

2.a	ADMINISTRATIVE BURDEN	DURATION	QTY	RATE	COST
	Cell Phone Service	Monthly	12	\$ 1,100	\$ 13,200
	Telephone Service	Monthly	12	\$ 900	\$ 10,800
	Office Supplies	Monthly	12	\$ 1,100	\$ 13,200
	Postal Services & Supplies	Monthly	12	\$ 750	\$ 9,000
	Ice / Water & Coffee Supplies	Monthly	12	\$ 1,000	\$ 12,000
	Dump Fees	Monthly	12	\$ 1,000	\$ 12,000
	<b>SUBTOTAL</b>				\$ 70,200
	<b>5% MU</b>				\$ 3,510
	<b>TOTAL</b>				<b>\$ 73,710</b>

2.b.	PUMP STATION MAINTENANCE	DURATION	QTY	RATE		
	Vehicle	Monthly	12	\$ 2,283	50%	\$ 13,695
	<b>TOTAL</b>					<b>\$ 13,695</b>

Note: The vehicle cost is split 50/50 between 2.b. & 2.e.

2.b.1	PUMP STATION SUPPLIES & REPAIRS				
	Repairs to Pumps (Minor repairs & parts)				\$ 15,000
	Environmental Supplies (Chemicals for water treatment)				\$ 10,000
	<b>SUBTOTAL</b>				<b>\$ 25,000</b>
	<b>5% MU</b>				\$ 1,250
	<b>TOTAL</b>				<b>\$ 26,250</b>

2.c.	AEI & OTHER MISC MAINTENANCE - AAR UNIT COUNT		QTY	RATE	
	AEI Technician	1,450 Hours			
	Vehicle				
	Materials		757	\$ 216	\$ 163,512
	Note: 5% Increase from 2017				
	<b>TOTAL</b>				<b>\$ 163,512</b>

2.e	GRAFFITI CONTROL	DURATION	QTY	RATE		
	Vehicle	Monthly	12	\$ 2,283	50%	\$ 13,695
	Material Costs *		LS			\$ 7,700
	<b>SUBTOTAL</b>					<b>\$ 21,395</b>
	<b>5% MU*</b>					\$ 385
	<b>TOTAL</b>					<b>\$ 21,780</b>

Note: The vehicle cost is split 50/50 between 2.b. & 2.e.

2.g.	SAFETY TRAINING	DURATION	QTY	RATE	
	Training (Classes and seminars)		LS		\$ 15,000
	Instructor Lodging & Meals	Days	5	\$ 2,000	\$ 10,000
	<b>SUBTOTAL</b>				<b>\$ 25,000</b>
	<b>5% MU*</b>				\$ 500
	<b>TOTAL</b>				<b>\$ 25,500</b>

2.h.	SAFETY MANAGEMENT		QTY	RATE	
	Safety Supplies & Equipment		LS		\$ 12,000
	Drug Testing - Employees		25	\$ 500	\$ 12,500
	<b>SUBTOTAL</b>				<b>\$ 24,500</b>
	<b>5% MU*</b>				\$ 625
	<b>TOTAL</b>				<b>\$ 25,125</b>

2.i.	VEHICLES	Monthly Rate	Registration	Insurance	Fuel Cost	Monthly Cost	YEARLY TOTAL
2.i.i	Contract Manager	\$ 1,400	\$ 31	\$ 100	\$ 600	\$ 2,131	\$ 25,572
2.i.ii	Track Superintendent*	\$ 2,426	\$ 56	\$ 100	\$ 750	\$ 3,332	\$ 39,984
2.i.iii	Welding Truck*	\$ 2,877	\$ 67	\$ 100	\$ 500	\$ 3,544	\$ 42,528
2.i.iv	Track Foreman*	\$ 2,392	\$ 64	\$ 100	\$ 500	\$ 3,056	\$ 36,672
2.i.v	Assistant Track Forman*	\$ 2,426	\$ 41	\$ 100	\$ 500	\$ 3,067	\$ 36,804
2.i.vi	Track Inspector *	\$ 2,251	\$ 58	\$ 100	\$ 650	\$ 3,059	\$ 36,708
	<b>SUBTOTAL</b>						\$ 218,268
	<b>5% MU (Contract Manager vehicle only)</b>						\$ 1,279
	<b>TOTAL</b>						<b>\$ 219,547</b>

\*Denotes Hi-Rail Vehicle

2.k		Monthly Rate	Registration	Insurance	Fuel Cost	Monthly Cost	YEARLY TOTAL
	Bridge Superintendent/Safety Vehicle	\$ 1,400	\$ 50	\$ 100	\$ 500	\$ 2,050	\$ 24,600
	<b>TOTAL</b>						<b>\$ 24,600</b>

2.l.		DURATION	QTY	RATE	
	Hi-Rail Boom Truck (used by track & signal forces)	Monthly	12	\$ 6,600	\$ 79,200
	<b>Total</b>				<b>\$ 79,200</b>

Annual budget based on existing Corridor Maintenance Contractor's estimate. Contract expires April 14, 2018. Budget does not represent commitment to existing Contractor. Estimate is subject to revision based on new contractor selection.

2.m.	MAINTENANCE PROGRAM RAIL GRINDING-LORAM	DURATION	QTY	RATE	
	114 Stone Train	Days	2	\$ 50,000	\$ 100,000
	Fuel	Gallons	6,000	\$ 4	\$ 24,000
	Pre-Grinding Inspection	Days	1	\$ 15,000	\$ 15,000
	Mobilization		LS		\$ 20,000
	<b>SUBTOTAL</b>				\$ 159,000
	<b>5% MU</b>				\$ 7,950
	<b>TOTAL</b>				<b>\$ 166,950</b>

Note: This total is split 50/50 between Railroad M&O 2.m. & Capital 3.f. (\$83,475/each)

2.n.	TRACK MATERIALS / SUPPLIES & RENTALS	DURATION	QTY	RATE	
	Equipment Rental	Monthly	12	\$ 3,100	\$ 37,200
	Program Track Materials	Monthly	12	\$ 10,000	\$ 120,000
	Miscellaneous Track Materials	Monthly	12	\$ 3,000	\$ 36,000
	Curve Grease	Monthly	12	\$ 2,000	\$ 24,000
	Supplies & Consumables	Monthly	12	\$ 1,500	\$ 18,000
	<b>SUBTOTAL</b>				\$ 235,200
	<b>5% MU</b>				\$ 11,760
	<b>TOTAL</b>				<b>\$ 246,960</b>

2.o.	SIGNAL MAINTENANCE - AAR UNIT COUNTS		QTY	RATE	
	Signal Supervisor	1,560 Hours			
	Signal Engineer	728 Hours			
	Test Maintainer	1,872 Hours			
	Signal Maintainers (3)	2,080 Hours			
	Vehicles				
	Materials				
			4,901	\$ 216	\$ 1,058,616
	Note: 5% Increase from 2017				
	<b>TOTAL</b>				<b>\$ 1,058,616</b>

2.p.	LADDER / FENCE / TRAFFIC SUPPORT				
	Ladder Replacement Parts				\$ 10,000
	Traffic Support				\$ 10,000
	Fence Replacement/Repair				\$ 77,619
	<b>SUBTOTAL</b>				\$ 97,619
	<b>5% MU</b>				\$ 4,881
	<b>TOTAL</b>				<b>\$ 102,500</b>

2.q.	SECURITY (TRENCH CAMERAS)				
	Wire Replacement				\$ 5,000
	Motion Detector Replacement Parts				\$ 5,000
	Camera Replacement Parts				\$ 10,000
	<b>SUBTOTAL</b>				\$ 20,000
	<b>5% MU</b>				\$ 1,000
	<b>TOTAL</b>				<b>\$ 21,000</b>

2.r.	SECURITY & YARD/OFFICE MAINTENANCE & SUPPORT				
	Security Guard Services				\$ 150,000
	Janitorial Services				\$ 7,700
	HVAC & Building Maintenance (Includes electrical, plumbing, and pest control)				\$ 27,500
	<b>SUBTOTAL</b>				\$ 185,200
	<b>5% MU</b>				\$ 9,260
	<b>TOTAL</b>				<b>\$ 194,460</b>

2.s.	UNDERWATER BRIDGE INSPECTION				
	Subcontractor				\$ 15,000
	<b>SUBTOTAL</b>				\$ 15,000
	<b>5% MU</b>				\$ 750
	<b>TOTAL</b>				<b>\$ 15,750</b>

2.t.	TRENCH DITCH CLEANING	DURATION	QTY	RATE	
	Assistant Foreman - BBII inside labor	Hours	240	\$ 53.03	\$ 12,727
	Track Laborer - BBII inside labor	Hours	240	\$ 49.88	\$ 11,971
	Hi-Rail Vac Truck	Days	30	\$ 2,450	\$ 73,500
	Flagging - BBII inside labor	Days	30	\$ 600	\$ 18,000
	<b>TOTAL</b>				<b>\$ 116,198</b>

Annual budget based on existing Corridor Maintenance Contractor's estimate. Contract expires April 14, 2018. Budget does not represent commitment to existing Contractor. Estimate is subject to revision based on new contractor selection.

2.y. **POSITIVE TRAIN CONTROL (PTC) SUPPORT at CP W&E Redondo**

BBII Costs	\$ 11,500
<b>SUBTOTAL</b>	<b>\$ 11,500</b>
5% MU	\$ -
<b>TOTAL</b>	<b>\$ 11,500</b>

2.z. **EXTRAORDINARY RIGHT-OF-WAY CLEANUP (Being Moved to Section III of O&M Budget)**

Subcontractor	\$ -
<b>SUBTOTAL</b>	<b>\$ -</b>
5% MU	\$ -
<b>TOTAL</b>	<b>\$ -</b>

2.aa. **AEI READERS UPGRADE**

Equipment, Software & Licensing	\$ 167,071
BBII Costs	\$ 14,175
<b>SUBTOTAL</b>	<b>\$ 181,246</b>
5% MU	\$ 8,354
<b>TOTAL</b>	<b>\$ 189,600</b>

*Annual budget based on existing Corridor Maintenance Contractor's estimate. Contract expires April 14, 2018. Budget does not represent commitment to existing Contractor. Estimate is subject to revision based on new contractor selection.*

**2018 CAPITAL Program**

3.a.	<b>SURFACING PROGRAM</b>	<b>DURATION</b>	<b>QTY</b>	<b>RATE</b>	
	Surfacing Unit - BBII outside labor & machinery	Days	45	\$ 4,600	\$ 207,000
	Mobilization		LS		\$ 25,000
	Note: All labor, equipment, and fuel included in daily rate				
	<b>TOTAL</b>				<b>\$ 232,000</b>
3.c.i.	<b>REBALLAST PROGRAM</b>	<b>DURATION</b>	<b>QTY</b>	<b>RATE</b>	
	Assistant Foreman - BBII inside labor	Hours	250	\$ 53.03	\$ 13,258
	Track Laborer - BBII inside labor	Hours	250	\$ 49.88	\$ 12,470
	<b>TOTAL</b>				<b>\$ 25,728</b>
3.c.ii	<b>REBALLAST PROGRAM</b>	<b>DURATION</b>	<b>QTY</b>	<b>RATE</b>	
	Operated Equipment	Hours	400	\$ 110	\$ 44,000
	<b>TOTAL</b>				<b>\$ 44,000</b>
3.f.	<b>CAPITAL PROGRAM RAIL GRINDING-LORAM</b>	<b>DURATION</b>	<b>QTY</b>	<b>RATE</b>	
	114 Stone Train	Days	2	\$ 50,000	\$ 100,000
	Fuel	Gallons	6,000	\$ 4	\$ 24,000
	Pre-Grinding Inspection	Days	1	\$ 15,000	\$ 15,000
	Mobilization		LS		\$ 20,000
	<b>SUBTOTAL</b>				\$ 159,000
	<b>5% MU</b>				\$ 7,950
	<b>TOTAL</b>				<b>\$ 166,950</b>
	Note: This total is split 50/50 between Railroad M&O 2.m. & Capital 3.f. (\$83,475/each)				
3.g	<b>TRACK REBALLAST</b>	<b>DURATION</b>	<b>QTY</b>	<b>RATE</b>	
	Equipment Rental*	Days	10	\$ 1,000	\$ 10,000
	Hi-Rail Vac Truck	Days	10	\$ 2,450	\$ 24,500
	Ballast Car Rental*	Days	10	\$ 300	\$ 3,000
	<b>SUBTOTAL</b>				\$ 37,500
	<b>5% MU*</b>				\$ 650
	<b>TOTAL</b>				<b>\$ 38,150</b>
3.h.	<b>SWITCH COMPONENT REPLACEMENT (Frogs &amp; Concrete Switch Ties)</b>		<b>QTY</b>	<b>RATE</b>	
	#10 RBM Frogs		2	\$ 16,250	\$ 32,500
	#14 RBM Frogs		2	\$ 19,250	\$ 38,500
	#20 RBM Frogs		2	\$ 23,500	\$ 47,000
	#14 Switch Ties (2 L.H. & 2 R. H.)		4	\$ 9,096	\$ 36,385
	#20 Switch Ties (2 L.H. & 2 R. H.)		4	\$ 9,936	\$ 39,745
	Transportation & Tax		LS		\$ 22,000
	<b>SUBTOTAL</b>				\$ 216,130
	<b>5% MU</b>				\$ 10,807
	<b>TOTAL</b>				<b>\$ 226,937</b>
3.o	<b>PUMP STATION UPGRADES</b>				
	Carryover from 2017 - Phase 2, 3, & 4				\$ 30,000
	Phase 2, 3, & 4 - Additional Costs				\$ 20,000
	Replace Two Pumps at Greenleaf Pump Station				\$ 130,000
	Parts & Materials				\$ 40,000
	<b>SUBTOTAL</b>				\$ 220,000
	<b>5% MU</b>				\$ 11,000
	<b>TOTAL</b>				<b>\$ 231,000</b>

Annual budget based on existing Corridor Maintenance Contractor's estimate. Contract expires April 14, 2018. Budget does not represent commitment to existing Contractor. Estimate is subject to revision based on new contractor selection.

**3.w. REHAB HENRY FORD CROSSING @ CP DOMINGUEZ**

Carryover from 2017			
Surfacing- BBII outside labor			\$ 13,200
Labor- BBII inside labor			\$ 30,000
Labor - BBII outside labor			\$ 25,000
Welding - BBII inside labor			\$ 10,000
Subject to 5% MU			
Rail, Ties, & Trim			\$ 52,000
Concrete Crossing Panels (custom designed for curve)			\$ 90,000
Rental Equipment			\$ 20,000
Ballast & Fabric			\$ 5,000
Consultants - as needed			\$ 25,000
Paving & Track Subcontractors			\$ 30,000
Traffic Permits & Mitigation			\$ 40,000
Contingency			\$ 10,000
Clean-up & Tie Disposal			\$ 7,500
<b>SUBTOTAL</b>			<b>\$ 357,700</b>
<b>5% MU</b>			<b>\$ 13,975</b>
<b>TOTAL</b>			<b>\$ 371,675</b>

Note: Engineering and Permit Costs (\$40K) included under Section III. Corridor Operating & Other MOW Cost of O&M Budget

**3.aa. RETIE CRUCERO TO LB DIAMONDS WITH CONCRETE TIES**

	DURATION	QTY	RATE	
Carryover from 2017				
Track Foreman - BBII inside labor	Hours	40	\$61.95	\$ 2,478
Track Laborers - BBII inside labor	Hours	130	\$49.88	\$ 6,484
Equipment Operators - BBII inside labor	Hours	80	\$79.01	\$ 6,321
Surfacing Unit - BBII outside labor & machinery	Days	2	\$4,600.00	\$ 9,200
<b>SUBTOTAL</b>				<b>\$ 24,483</b>
<b>5% MU*</b>				<b>\$ -</b>
<b>TOTAL</b>				<b>\$ 24,483</b>

**3.bb. REPLACE NEW HOT BOX DETECTOR @ MP 12.9**

Carryover from 2017			
HBD Converter			\$ 16,000
<b>SUBTOTAL</b>			<b>\$ 16,000</b>
<b>5% MU*</b>			<b>\$ 800</b>
<b>TOTAL</b>			<b>\$ 16,800</b>

**3.gg. CURVE RAIL REPLACEMENT**

	MEASUREMENT	QTY	RATE	
Subcontractor Labor, Equipment, & Materials	Linear Feet	6,000	\$ 45	\$ 270,000
<b>SUBTOTAL</b>				<b>\$ 270,000</b>
<b>5% MU</b>				<b>\$ 13,500</b>
<b>TOTAL</b>				<b>\$ 283,500</b>

**3.hh. DIAMOND REPLACEMENTS - WEST THENARD**

	QTY	RATE	
Diamonds	4	\$ 110,000	\$ 440,000
Subcontractor Labor & Equipment - 2019 Work			\$ -
<b>SUBTOTAL</b>			<b>\$ 440,000</b>
<b>5% MU</b>			<b>\$ 22,000</b>
<b>TOTAL</b>			<b>\$ 462,000</b>

**3.ii. SIGNAL CIRCUIT CONTROLLERS FOR SWITCHES (In Cycle)**

	DURATION	QTY	RATE	
Subcontractor Labor, Equipment, & Materials	Yearly	5	\$ 6,000	\$ 30,000
<b>SUBTOTAL</b>				<b>\$ 30,000</b>
<b>5% MU</b>				<b>\$ 1,500</b>
<b>TOTAL</b>				<b>\$ 31,500</b>

Annual budget based on existing Corridor Maintenance Contractor's estimate. Contract expires April 14, 2018. Budget does not represent commitment to existing Contractor. Estimate is subject to revision based on new contractor selection.

3.jj.	RETIE VARIOUS CONTROL POINTS WITH CONCRETE TIES	DURATION	QTY	RATE	
	Replace Wood Ties With Concrete Ties*		200	\$ 135	\$ 27,000
	Clips, Pads, & Insulators*		LS		\$ 5,000
	Track Foreman - BBII inside labor	Hours	40	\$ 61.95	\$ 2,478
	Track Laborers - BBII inside labor	Hours	160	\$ 49.88	\$ 7,981
	Equipment Operators - BBII inside labor	Hours	80	\$ 79.01	\$ 6,321
	Surfacing Unit - BBII outside labor & machinery	Days	3	\$ 4,600	\$ 13,800
	<b>SUBTOTAL</b>				\$ 62,580
	<b>5% MU*</b>				\$ 1,600
	<b>TOTAL</b>				<b>\$ 64,180</b>
<b>3.kk.</b>	<b>UPGRADE AND REFURNISH MAINTENANCE FACILITY</b>				
	Subcontractor Labor, Equipment, & Materials				\$ 15,000
	<b>SUBTOTAL</b>				\$ 15,000
	<b>5% MU</b>				\$ 750
	<b>TOTAL</b>				<b>\$ 15,750</b>
<b>3.ii.</b>	<b>FIXED TRENCH LADDERS</b>				
	Subcontractor Labor, Equipment, & Materials				\$ 73,095
	<b>SUBTOTAL</b>				\$ 73,095
	<b>5% MU</b>				\$ 3,655
	<b>TOTAL</b>				<b>\$ 76,750</b>
<b>3.mm.</b>	<b>MISCELLANEOUS TRENCH STRUCTURE REPAIRS</b>				
	Subcontractor Labor, Equipment, & Materials				\$ 60,000
	<b>SUBTOTAL</b>				\$ 60,000
	<b>5% MU</b>				\$ 3,000
	<b>TOTAL</b>				<b>\$ 63,000</b>

NMA 2018-4 - Attachment 3 to Exhibit B - Draft Revised 2018 Alameda Corridor Operations & Maintenance Budget

	Calendar Year 2018						Calendar Year 2017					
	Basis of Apportionment		R.R. M & O Rail	Reserve Account Non-	ACTA Operating	Total	R.R. M & O Rail Cost	Reserve Account Non-	ACTA Operating	Total		
	GR Ton MI	Train MI	Cost (A)	Rail Cost (B)	Budget Cost (C)		(A)	Rail Cost (B)	Budget Cost (C)			
<b>I. Maintenance of Way Contractor's Costs:</b>												
1.a.i	Contract Manager	GTM	TM	\$ 182,700	\$ 65,250	\$ 13,050	\$ 261,000	\$ 158,760	\$ 56,700	\$ 11,340	\$ 226,800	
1.a.ii	Track Superintendent	GTM	TM	137,655	45,885	-	183,540	131,100	43,700	-	174,800	
1.a.iii	Bridge Supt. / Safety	GTM	TM	38,367	153,468	-	191,835	36,540	146,160	-	182,700	
1.a.iv	Office Manager	GTM	TM	76,920	27,472	5,494	109,886	69,748	24,910	4,982	99,640	
1.b.	Track Inspector	GTM	TM	105,293	35,098	-	140,390	100,279	33,426	-	133,705	
1.b.i	Track Foreman	GTM	TM	102,682	34,227	-	136,910	97,793	32,598	-	130,390	
1.b.ii	Assistant Foreman	GTM	TM	86,696	28,899	-	115,595	82,568	27,523	-	110,090	
1.b.iii	Track Laborers	GTM	TM	239,744	79,915	-	319,659	228,328	76,109	-	304,437	
1.b.iv	Equipment Operators	GTM	TM	129,185	43,062	-	172,247	123,034	41,011	-	164,045	
1.b.v	Welder	GTM	TM	133,907	-	-	133,907	127,530	-	-	127,530	
1.b.vi	Welder Helper	GTM	TM	108,738	-	-	108,738	98,645	-	-	98,645	
1.b.vii	Laborer (Graffiti/Pump Station)	GTM	TM	-	-	-	-	-	-	-	-	
2.a.	Administrative Burden	GTM	TM	51,597	18,428	3,686	73,710	49,392	17,640	3,528	70,560	
2.a.i	Accounting Support	GTM	TM	-	-	-	-	17,500	6,250	1,250	25,000	
2.b.	Pump Station Maintenance	GTM	TM	-	-	-	-	-	12,450	-	12,450	
2.b.i	Pump Station Repairs & Supplies	GTM	TM	-	26,250	-	26,250	-	25,500	-	25,500	
2.c.	AEI & Misc Maint-AAR Unit Count-757 Units @ \$216/Unit	GTM	TM	-	-	163,512	163,512	-	-	155,942	155,942	
2.d.	Rail Flaw Detection (Subcontractor)	GTM	TM	32,000	-	-	32,000	30,000	-	-	30,000	
2.e.	Graffiti Control	GTM	TM	-	21,780	-	21,780	-	19,950	-	19,950	
2.f.	Weed Abatement (Subcontractor)	GTM	TM	20,000	5,000	-	25,000	20,000	5,000	-	25,000	
2.g.	Safety Training	GTM	TM	21,675	3,825	-	25,500	21,250	3,750	-	25,000	
2.h.	Safety Management	GTM	TM	21,356	3,769	-	25,125	15,725	2,775	-	18,500	
2.i.	Vehicles	GTM	TM	173,949	44,255	1,343	219,547	167,210	41,891	990	210,091	
2.k.	Bridge Superintendent / Safety Vehicle	GTM	TM	4,920	19,680	-	24,600	3,960	15,840	-	19,800	
2.l.	Hi-Rail Boom Truck	GTM	TM	63,360	15,840	-	79,200	57,600	14,400	-	72,000	
2.m.	Maintenance Program Rail Grinding - Loram (1/2 of Capital cost, see 3.f.)	GTM	TM	83,475	-	-	83,475	83,475	-	-	83,475	
2.n.	Track Materials / Supplies & Rentals	GTM	TM	246,960	-	-	246,960	239,400	-	-	239,400	
2.o.	Signal Maintenance - AAR Unit Count - 4901 Units @ \$216/Unit	GTM	TM	1,058,616	-	-	1,058,616	1,009,606	-	-	1,009,606	
2.p.	Ladder / Fence / Traffic Support	GTM	TM	-	102,500	-	102,500	-	36,750	-	36,750	
2.q.	Security (Trench Cameras)	GTM	TM	14,700	5,250	1,050	21,000	14,700	5,250	1,050	21,000	
2.r.	Security & Yard / Office Maintenance & Support	GTM	TM	194,460	-	-	194,460	162,750	-	-	162,750	
2.s.	Underwater Bridge Inspection	GTM	TM	15,750	-	-	15,750	-	-	-	15,750	
2.t.	Trench Ditch Cleaning	GTM	TM	-	116,198	-	116,198	-	113,820	-	113,820	
2.v.	Replace Signal Wire on Corridor	GTM	TM	20,000	-	-	20,000	20,000	-	-	20,000	
2.w.	Railroad Reporting & Record Keeping Software System	GTM	TM	16,500	-	-	16,500	16,500	-	-	16,500	
2.x.	Railroad Emergency Drill Exercise	GTM	TM	20,000	-	-	20,000	20,000	-	-	20,000	
2.y.	PTC Support at CP W&E Redondo (UP only unless BNSF also requests data)	GTM	TM	11,500	-	-	11,500	-	-	-	11,500	
2.z.	Extraordinary-Right-of-Way Cleanup	GTM	TM	-	-	-	-	-	-	-	-	
2.aa.	AEI Readers Upgrade (7)	GTM	TM	108,337	-	81,263	189,600	-	-	-	189,600	
<b>Subtotal MOW Contractor's Costs</b>				\$3,521,043	\$1,018,471	\$269,397	\$4,808,912	\$3,203,391	\$906,952	\$179,082	\$4,289,426	
<b>II. Annual Capital Cost</b>												
3.a.	Surfacing Unit - 45 Days @ \$4,600/Day			\$ -	\$ 207,000	\$ -	\$ 207,000	\$ -	\$ 198,000	\$ -	\$ 198,000	
	Surfacing Mobilization			-	25,000	-	25,000	-	25,000	-	25,000	
3.c.i	Reballast Program (Labor)			-	25,728	-	25,728	-	14,760	-	14,760	
3.c.ii	Reballast Program (Operated Equipment)			-	44,000	-	44,000	-	51,360	-	51,360	
3.d.	Ballast - 1,000 Tons @ \$36/Ton			-	36,000	-	36,000	-	63,000	-	63,000	
3.f.	Capital Program Rail Grinding - Loram			-	83,475	-	83,475	-	83,475	-	83,475	
3.g.	Track Reballast			-	38,150	-	38,150	-	71,800	-	71,800	
3.h.	Rail / Switch Component & Tie Replacement			-	226,937	-	226,937	-	273,611	-	273,611	
3.o.	Pump Station Upgrades			-	231,000	-	231,000	-	232,050	-	232,050	
3.r.	Trench Emergency Ladder/Stair Study/Repairs			-	150,000	-	150,000	-	225,000	-	225,000	
3.a.	Replace Long Beach Crossing Diamonds			-	-	-	-	-	-	-	-	
3.w.	Rehab Henry Ford Crossing @ CP Dominguez			-	371,675	-	371,675	-	411,675	-	411,675	
3.y.	Signal Battery Replacement (10-Year Program)			-	50,000	-	50,000	-	50,000	-	50,000	
3.z.	Crossing HXP Replacement Cards			-	-	-	-	-	25,000	-	25,000	
3.aa.	Retie Crucero to LB Diamond w/ Concrete Ties			-	24,483	-	24,483	-	65,528	-	65,528	
3.bb.	Replace Hot Box Detector @ MP 12.90			-	16,800	-	16,800	-	123,000	-	123,000	
3.dd.	Santa Fe Ave High Security Fence			-	-	-	-	-	57,750	-	57,750	
3.ee.	Crash Barrier @ Manville Road/SR91 Off-ramp			-	-	-	-	-	54,895	-	54,895	
3.ff.	Redondo Tower Fire (NMA 2017-02)			-	-	-	-	-	275,000	-	275,000	
3.gg.	Curve Rail Replacement			-	283,500	-	283,500	-	-	-	-	
3.hh.	Diamond Replacements - West Thenard			-	462,000	-	462,000	-	-	-	-	
3.ii.	Signal Circuit Controllers for Switches			-	31,500	-	31,500	-	-	-	-	
3.jj.	Retie Various Control Points with Concrete Ties			-	64,180	-	64,180	-	-	-	-	
3.kk.	Upgrade and Refurbish Maintenance Facility			-	15,750	-	15,750	-	-	-	-	
3.ll.	Fixed French Ladders			-	76,750	-	76,750	-	-	-	-	
3.mn.	Misc. Trench Structure Repairs			-	63,000	-	63,000	-	-	-	-	
<b>Subtotal Capital Expenditures</b>				\$0	\$2,526,927	\$0	\$2,526,927	\$0	\$2,300,904	\$0	\$2,300,904	
<b>Subtotal of I &amp; II</b>				\$3,521,043	\$3,545,398	\$269,397	\$7,335,839	\$3,203,391	\$3,207,856	\$179,082	\$6,590,329	
Multiple use contingency for 2018, not in MOW Budget but included in O&M Budget							\$200,000				\$200,000	
<b>III. Corridor Operating &amp; Other MOW Cost</b>												
	Insurance (annual amount) (D)			\$ 1,281,653	\$ -	\$ -	\$ 1,281,653	\$ 1,401,283	\$ -	\$ -	\$ 1,401,283	
	Dispatching (1)			618,181	-	-	618,181	612,060	-	-	612,060	
	Security - Labor (2)			1,293,594	-	-	1,293,594	1,243,840	-	-	1,243,840	
	Security - Equipment (3)			265,302	-	-	265,302	260,100	-	-	260,100	
	Utilities (5)			334,058	-	-	334,058	318,150	-	-	318,150	
	Storm Water Discharge Permits, Water Testing & Support Services (4)			30,000	-	-	30,000	30,000	-	-	30,000	
	Provide 3rd Party Security Monitoring & Support Services			2,500	-	-	2,500	2,500	-	-	2,500	
	ADASH Plume Monitoring Software			1,500	-	-	1,500	1,250	-	-	1,250	
	M&O or Capital Reserve Support Service (6)			354,953	118,318	-	473,271	350,000	120,920	-	470,920	
	Communications Network and Alarm/Phone Upgrades and Renewals			50,000	-	-	50,000	27,000	-	-	27,000	
	Redondo Junction Tower Fire (NMA 2017-02)			-	-	-	-	-	475,000	-	475,000	
	Rehab Henry Ford Crossing @ CP Dominguez (Engineering & Permits) (Also see 3.w.)			-	40,000	-	40,000	-	-	-	40,000	
	PTC Design Consultant for CP W&E Redondo (UP only unless BNSF also requests data)			62,000	-	-	62,000	-	-	-	62,000	
	Extraordinary-Right-of-Way Cleanup			71,500	-	-	71,500	-	-	-	71,500	
	AEI Readers Upgrade (7)			28,799	-	21,601	50,400	-	-	-	50,400	
<b>Subtotal Operating &amp; Other MOW</b>				\$4,394,039	\$158,318	\$21,601	\$4,573,957	\$4,246,183	\$595,920	\$0	\$4,842,103	
<b>Total of I, II, &amp; III</b>				\$7,915,082	\$3,703,716	\$290,998	\$12,109,796	\$7,449,575	\$3,803,776	\$179,082	\$11,632,432	

(1,2,3) These costs are for memorandum purposes only and are internal Railroads costs not paid by ACTA

(4) Includes annual fees

(5) 2017 Budget + 5%

(6) Split based on work estimates

(7) Split based upon allocation plan for installation & maintenance agreed to by ACTA and the Railroads

(A) Costs paid by Railroads promoted among carriers

(B) Costs paid by ACTA from the Reserve Account

(C) Costs paid by ACTA

(D) Only an Estimate based on 2016 +3%