



ALAMEDA CORRIDOR TRANSPORTATION AUTHORITY

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

October 14, 2020

**To:** Parties listed on Exhibit A

**Subject:** Notice of Mutual Agreement No. 2020-4 - Request for Approval under Amended and Restated Alameda Corridor Use and Operating Agreement

**Matter:** Alameda Corridor Proposed Calendar Year 2021 Maintenance of Way and Operations & Maintenance Budgets

Dear Sir or Madam:

Reference is made to that certain Amended and Restated Alameda Corridor Use and Operating Agreement dated as of December 15, 2016 (the "Agreement"), 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 decisions to be made from time to time by either 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. 2020-4, 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 November 30, 2020. 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 black ink, appearing to read "Michael C. Leue".

Michael C. Leue, 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

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

Port of Long Beach  
415 W. Ocean Blvd., 11th Floor  
Long Beach, CA 90802  
Attn: Executive Director  
Email: mario.cordero@polb.com

Union Pacific Railroad Company  
1400 Douglas Street -Stop 1180  
Omaha, Nebraska 68179  
Attn: Director Joint Facilities  
Email: melissagrosz@up.com

Cc:

Email: Brian.Aman@bnsf.com  
Email: Katherine.Sieverson@bnsf.com  
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Email: David.Albers@longbeach.gov  
Email: duane.kenagy@polb.com  
Email: carlo.luzzi@polb.com

**EXHIBIT B**

**NOTICE OF MUTUAL AGREEMENT**

**Number:** 2020-4

**Subject:** Approval Request for the Alameda Corridor Proposed Calendar Year 2021 Maintenance of Way and Operations & Maintenance Budgets

**Recommendation:**

1. Approve 2021 Special Capital Items in the amount of \$5,028,688 that will be charged to the Reserve Account and included in the proposed 2021 Maintenance of Way (MOW) Budget.
2. Approve the proposed 2021 MOW Budget in the amount of \$13,899,014.
3. Approve the overall proposed 2021 Operations and Maintenance (O&M) Budget in the amount of \$19,419,644, containing the MOW Budget, other estimated annual O&M expenses, and a \$300,000 contingency.
4. Authorize \_\_\_\_\_

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[insert job title(s) or group/division name at Port or Railroad] with delegated authority to provide written approval of the allocation and use of the contingency fund and to provide written approval of the transfer of amounts from one MOW Budget line item to another as needed to accomplish work. Written approval can be in the form of an email affirming its approval.

**Discussion:**

Section 2.5(b) of the Amended and Restated Use and Operating Agreement, dated as of December 15, 2016, (the "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 for 2021 are comprised of two documents.

1. 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.
2. 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.

Attached for approval is the detail for both budgets for calendar year 2021.

The proposed 2021 MOW Budget was originally prepared in draft form by the Maintenance Contractor and submitted for review by the Railroads, the Ports, and ACTA. Two meetings among the staffs of the Railroads, Ports and ACTA were held on September 15 and 29, 2020 to review and modify as necessary the draft budget. Discussions during and after that meeting resulted in the attached MOW and O&M Budgets submitted for approval. Major items reviewed included 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 Contractor staffing levels. The O&M Budget includes a \$300,000 contingency to be allocated as necessary during the year for unbudgeted, under-budgeted, or unplanned emergency work.

Attachment 1 contains a description of the special 2021 capital expenditures included in the MOW Budget. Attachment 2 is the proposed 2021 MOW Budget spreadsheet and related detail. Attachment 3 is the proposed 2021 O&M Budget spreadsheet. It is recommended that each of these items be approved.

Summary Comparison - 2021 vs. 2020 MOW and O&M Budgets

*MOW Budget*

The proposed 2021 MOW Budget of \$13,899,014 is 4.1% higher than the 2020 MOW Budget MOW Budget, primarily due to increased labor rates, additional labor positions, and additional maintenance and capital replacement activity. The funding of the proposed 2021 MOW Budget is split between ACTA fee revenue (about 60%) and payment by the Railroads (about 40%).

The proposed 2021 MOW Budget is divided into three categories: Labor Positions, Operations Maintenance, and Capital Costs. The Labor category is up 9.9% over the 2020 MOW Budget, due to addition of an administrative assistant position, an equipment operator and an approximate average annual salary increases of 3.5% for non-management positions (by union contract), an approximate average of 2.0% for management positions.

The Operations Maintenance category is up 13.6% from the 2020 MOW Budget, primarily due to increased rail grinding costs, Henry Ford Avenue crossing, Crucero diamond replacement and other maintenance.

The Capital Costs category is down -4.8% over the 2020 MOW Budget. Capital work can vary dramatically from year to year due to replacement needs. See Attachment 1 for 2021 special Capital Items. The 2021 Capital Costs decrease is primarily due to the completion of projects during 2020..

<b>MOW Budget Summary</b> <i>(in millions of dollars)</i>			
<b>MOW Budget</b>	<b>Proposed 2021</b>	<b>Amended 2020</b>	<b>% Change</b>
A. Labor	\$3.896	\$3.546	9.9%
B. Operations Maintenance	4.114	3.622	13.6%
C. Capital Costs	5.889	6.184	-4.8%
Total MOW	\$13.889	\$13.352	4.1%

#### *O&M Budget*

The proposed 2021 O&M Budget of \$19,419,644, is the sum of the proposed 2021 MOW Budget of \$13,899,014, a \$300,000 contingency, and \$5,220,630 in other costs. These other costs are about 0.7% above those in the 2020 O&M Budget. Only about 3.4% of these other costs is paid from ACTA fee revenue (Reserve Account), and about 96.6% is paid by the Railroads either directly or from deposits made to ACTA known as M&O charges. The proposed 2021 O&M Budget is 3.1% above the 2020 O&M Budget. Primarily due to the proposed 2021 MOW Budget increase described previously.

<b>O&amp;M Budget Summary</b> <i>(in millions of dollars)</i>			
<b>O&amp;M Budget</b>	<b>Proposed 2021</b>	<b>Amended 2020</b>	<b>% Change</b>
I. MOW Contractor <sup>(1)</sup>	\$8.010	\$7.168	11.8%
II. Capital Costs <sup>(2)</sup>	5.889	6.184	-4.8%
Contingency	0.300	0.300	0.0%
III. Operating & Other	5.221	5.185	0.7%
Total O&M	\$19.420	\$18.837	3.1%

<sup>(1)</sup> A+B from MOW Budget

<sup>(2)</sup> C from MOW Budget

#### **Items of Note:**

1. The proposed 2021 MOW Budget is prepared before the close of the previously approved 2020 MOW Budget period, and is based on estimates of where ongoing 2020 work will stand at year's end. Therefore, to the extent that certain 2020 work is not completed to the anticipated level, costs for that work may carry over into 2021 impacting the net 2021 expenditures.

2. Decisions regarding the use of the contingency fund were previously approved by the former Alameda Corridor Operating Committee. Because the Operating Committee no longer exists, delegation is sought pursuant to the aforementioned Recommendation No. 4 for a designated individual or designated individuals within each entity to be given authority to approve the allocation and use of contingency funds as needed for the MOW Budget, including unfunded and underfunded work. Further delegation is sought for such designated individual(s) to have authority to approve the shift of amounts from one MOW Budget line item to another as needed, provided that the total MOW Budget (which is the MOW contract value) plus the \$300,000 contingency is not exceeded. Such delegated authority will provide additional budgetary flexibility and efficiency as to not hold up necessary operations work pending Board approval any time an individual estimated line item may be exceeded. Approvals from the designees of at least three of the four parties (BNSF, UP, POLB, and POLA) are required in advance to authorize the allocation and use of contingency funds and the transfer of MOW Budget line items from one line item to another. Note that such delegation was similarly approved for the 2020 MOW and O&M Budgets.

3. Budget Flexibility

- Flexibility between line items shall remain within the same category: Labor, Operations Maintenance, or Capital unless otherwise authorized by at least 75% of the delegates.
- Any anticipated overrun in the approved budget for a particular category shall be communicated by RailWorks and shall be authorized by at least 75% of the delegates named in Recommendation 4 of this NMA 2020-4 in advance of any overrun or transfer of budget funds.

In summary, the budget is comprised of 3 sections: Labor, Operations Maintenance, or Capital. Flexibility between line items must remain within the same section.

Finally, if there is an anticipated overrun in any of the three sections, there shall be a written communication by RailWorks to ACTA and a written approval by 75% of the delegates prior to incurring the cost. It is important to allow ACTA the flexibility to administer the RailWorks budget and the intent of these guidelines is to provide that flexibility, while protecting the Railroads and Ports from unexpected budget creep.

4. Reporting (Section 13.2 of the Alameda Corridor Maintenance Agreement)

- RailWorks shall generate a quarterly report for budget status and projection;
- RailWorks shall develop a rolling 5-year plan for maintenance programs and capital;
- RailWorks shall develop a detailed report to support the manpower requirements for the annual budget.

Notice of Mutual Agreement No. 2020-4  
October 14, 2020  
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**Please provide your acceptance and approval by affixing your signature, name and title below:**

**Port of Los Angeles**

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

Printed Name: \_\_\_\_\_

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

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

**Port of Long Beach**

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

Printed Name: \_\_\_\_\_

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

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

**BNSF Railway Company**

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

Printed Name: \_\_\_\_\_

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

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

**Union Pacific Railroad Company**

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

Printed Name: \_\_\_\_\_

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

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

**Attachments:**

- 1 – 2021 Special Capital Items
- 2 – Proposed 2021 MOW Budget and Detail
- 3 – Proposed 2021 O&M Budget

**Attachment 1****2021 Special Capital Items**

For 2021, the following Special Capital Items totaling \$5,028,688 are budgeted within the \$5,888,775 of Capital Costs, all of which will be charged to the Reserve Account.

**1. Rail Grinding, Item 3.f. - \$514,809**

In 2021, it is proposed to grind all the switches and the mainline rail over a more extended period to optimize remaining useful life.

**2. Replace 20 Frogs Item 3.h-2 - \$771,002**

There are approximately 125 switches on the Corridor. In 2021, 20 frogs will be replaced.

**3. Replace Switch Point and Stock Rail Combinations Item 3.h-3 - \$461,895**

There are approximately 125 switches on the Corridor. In 2021, switch points and stock rail will be replaced at 20 locations.

**4. Insulated Joint Replacement Item 3.h-5 - \$456,541**

Insulated joints will be replaced at 80 locations.

**5. Pump Station Upgrades, Item 3.o. - \$213,500**

Maintenance of both pump stations in the trench over the past several years has included phased repair and/or replacement of various components. Each location has 11 pumps: 4 large, 3 medium, and 4 small. Beginning in 2018, in addition to routine maintenance of all pump station components, one large and one medium pump at each location will receive major overhaul or replacement each year.

**6. Trench Emergency Ladder Repairs, Item 3.r. - \$129,000**

The 47 trench emergency ladders have and will continue to undergo upgrades to ensure they are in working order. This 2021 amount of \$129,000 is the remaining balance of the \$540,000 originally approved in 2014.

**7. Rehab Henry Ford Crossing - Near PHL Offices N of BridgeItem 3.w.1 - \$439,984**

The track crossing at Henry Ford Avenue near PHL home yard is about 240 feet long and needs replacement due to settlement and deterioration of the underlying wood ties. It is planned to replace the entire crossing with new rail, concrete ties, and new concrete crossing panels.

**8. Replace Signal Batteries, Item 3.y. - \$110,000**

There are approximately 30 signal houses on the Corridor, each containing an average of 30 batteries. The plan for 2021 is to replace about 180 of the 900 batteries. A ten-year plan is in place to incrementally replace all batteries.

**9. Replace Crucero Diamonds, Item 3.aa-1 - \$566,095**

Replace two diamonds at CP Crucero and Long Beach Lead with concrete ties.

**10. Curved Rail Replacement Item 3.gg-3 - \$776,462**

Rail on curves wears faster than rail in straight track, and must be replaced after excessive wear. Approximately 12,000 feet of curves will be replaced, which is about double that budget in recent years.

**11. Fixed Trench Ladders Item 3.ll. - \$420,000**

A prototype fixed stairway was fabricated and installed in 2019 as adjunct emergency egress from the trench. The 47 drop ladders will remain in place. An additional 4 stairways are anticipated to be completed in 2019. An additional 4 will be installed in 2020 between Randolph St. in Vernon and Myrrh St. in Compton. A different design is needed north of Randolph St. due to closer strut spacing, which may necessitate one or two additional fixed stairways.

**12. M23A Switch Machines Item 3.oo - \$30,800**

Two M23A switch machines will be purchased in 2021.

**13. Signal Module Replacements, Item 3.pp. - \$138,600**

There are about 30 control points on the Corridor. It is proposed to replace modules at 5 locations per year over a six-year period. The existing modules are nearly 20 years old, which is near the end of their expected useful life, and the original manufacturer (GE) will stop servicing these modules. Those pulled from service will be used as spares in the event of failures.





## Alameda Corridor - Proposed CY 2021 MOW Budget Detail

### Cost Code

		U of M	QTY	Rate	Split	Total
<b>2.b</b>	<b>Pump Station Maintenance</b>					
	Vehicle (Split 50/50 between 2.b & 2.e)	Monthly	12	\$ 1,823.20	50%	\$ 10,939.20
					SUBTOTAL:	\$ 10,939.20
					Markup:	\$ -
					TOTAL:	\$ 10,939.20
<b>2.b.i</b>	<b>Pump Station Repairs and Supplies</b>					
	Subcontractor - Repairs to Pumps	LS	1	\$ 17,000.00	100%	\$ 17,000.00
	Environmental Supplies (Chemicals for water treatment)	LS	1	\$ 12,000.00	100%	\$ 12,000.00
					SUBTOTAL:	\$ 29,000.00
					Subcontractor	5% Markup: \$ 850.00
					Supplies	10% Markup: \$ 1,200.00
						TOTAL: \$ 31,050.00
<b>2.c</b>	<b>AEI &amp; Other Miscellaneous Maintenance - AAR Unit Count</b>					
	AEI / Comm Technician	HR	2000	\$ 104.44	100%	\$ 208,880.00
	AEI / Comm Technician - OT (Assumed 80 Hours)	HR	80	\$ 145.00	100%	\$ 11,600.00
	AEI / Comm Technician - DT (Assumed 16 Hours)	HR	16	\$ 195.00	100%	\$ 3,120.00
	Signal / Comm Supervisor	HR	200	\$ 120.00	100%	\$ 24,000.00
	Vehicle - AEI / Comm Technician	Monthly	96	\$ 12.58	100%	\$ 1,207.68
	Vehicle - Signal / Comm Supervisor	Monthly	12	\$ 2,163.49	100%	\$ 25,961.88
	Equipment - Bucket Truck	Monthly	12	\$ 173.40	100%	\$ 2,080.80
	Material Ongoing Purchases Total = LS (RWKS purchase)	LS	12	\$ 221.36	100%	\$ 2,656.32
	Material - Initial Inventory Purchase	LS	1	\$ 12,500.00	100%	\$ 12,500.00
					SUBTOTAL:	\$ 292,006.68
					Subcontractor	5% Markup: \$ 13,975.33
					Materials	10% Markup: \$ 1,250.00
						TOTAL: \$ 307,232.01
<b>2.d</b>	<b>Rail Flaw Detection</b>					
	Subcontractor - Mobilization	EA	3	\$ 3,750.00	100%	\$ 11,250.00
	Subcontractor - Daily Rate (3-day minimums)	EA	3	\$ 13,000.00	100%	\$ 39,000.00
					SUBTOTAL:	\$ 50,250.00
					Subcontractor	5% Markup: \$ 2,512.50
						TOTAL: \$ 52,762.50
<b>2.e</b>	<b>Graffiti Control</b>					
	Vehicle (Split 50/50 between 2.b & 2.e)	Monthly	12	\$ 1,823.20	50%	\$ 10,939.20
	Materials	LS	1	\$ 12,000.00	100%	\$ 12,000.00
					SUBTOTAL:	\$ 22,939.20
					Materials	10% Markup: \$ 1,200.00
						TOTAL: \$ 24,139.20
<b>2.f</b>	<b>Weed Abatement</b>					
	Subcontractor	LS	1	\$ 32,000.00	100%	\$ 32,000.00
	Disposal - Dumpsters @ 1 per month	EA	12	\$ 1,000.00	100%	\$ 12,000.00
	Specialty Equipment Rental	EA	12	\$ 1,100.00	100%	\$ 13,200.00
					SUBTOTAL:	\$ 57,200.00
					Subcontractor	5% Markup: \$ 2,200.00
					Rental	15% Markup: \$ 1,980.00
						TOTAL: \$ 61,380.00
<b>2.g</b>	<b>Safety Training</b>					
	Subcontractor - Training (Classes and Seminars)	LS	1	\$ 17,500.00	100%	\$ 17,500.00
	Instructor Lodging and Meals	Days	5	\$ 2,500.00	100%	\$ 12,500.00
					SUBTOTAL:	\$ 30,000.00
					Subcontractor	5% Markup: \$ 1,500.00
						TOTAL: \$ 31,500.00

2.h	Safety Management	U of M	QTY	Rate	Split	Total
Drug Testing - Employees		EA	30	\$ 750.00	100%	\$ 22,500.00
						\$ -
					SUBTOTAL:	\$ 22,500.00
		Supplies		10% Markup:	\$ 2,250.00	
					TOTAL:	\$ 24,750.00
2.i	Vehicles	U of M	QTY	Rate	Split	Total
2.i.i	Contract Manager	Monthly	12	\$ 1,718.00	100%	\$ 20,616.00
2.i.ii	Track Supervisor - HiRail	Monthly	12	\$ 2,163.00	100%	\$ 25,956.00
2.i.iii	Welding Truck - HiRail	Monthly	12	\$ 6,032.00	100%	\$ 72,384.00
2.i.iv	Track Foreman - HiRail (2 Each)	Monthly	24	\$ 2,813.00	100%	\$ 67,512.00
2.i.v	Assistant Track Foreman - HiRail	Monthly	12	\$ 1,963.00	100%	\$ 23,556.00
2.i.vi	Track Inspector - HiRail	Monthly	12	\$ 2,163.00	100%	\$ 25,956.00
2.i.vii	Track Superintendent - HiRail	Monthly	12	\$ 2,147.39	100%	\$ 25,768.68
					SUBTOTAL:	\$ 261,748.68
					Markup:	\$ -
					TOTAL:	\$ 261,748.68
2.k	Bridge Superintendent / Safety Vehicle	U of M	QTY	Rate	Split	Total
	Safety Supervisor Vehicle	Monthly	12	\$ 996.74	100%	\$ 11,960.88
					SUBTOTAL:	\$ 11,960.88
					Markup:	\$ -
					TOTAL:	\$ 11,960.88
2.l	Full-Time Equipment	U of M	QTY	Rate	Split	Total
	Hi-Rail Grapple / Boom Truck	Monthly	12	\$ 9,252.00	100%	\$ 111,024.00
	Hi-Rail Bucket Truck	Monthly	12	\$ 4,653.00	100%	\$ 55,836.00
	Combination Backhoe	Monthly	12	\$ 7,380.00	100%	\$ 88,560.00
					SUBTOTAL:	\$ 255,420.00
					Markup:	\$ -
					TOTAL:	\$ 255,420.00
2.m	Maintenance Program Rail Grinding	U of M	QTY	Rate	Split	Total
	Special Trackwork Grinding Unit Mobilization	LS	1	\$ 84,000.00	100%	\$ 84,000.00
	Special Trackwork Grinding - Interval to be Determined Annually	Day	50	\$ 10,800.00	100%	\$ 540,000.00
	Crane for Mobilization and Demobilization	EA	2	\$ 7,500.00	100%	\$ 15,000.00
	Fuel	Gallons	12000	\$ 4.00	100%	\$ 48,000.00
	Pre-Grind Inspection Mobilization	LS	1	\$ 10,066.00	100%	\$ 10,066.00
	Pre-Grinding Inspections	Days	2	\$ 6,600.00	100%	\$ 13,200.00
	Signal Support	Days	60	\$ 936.16	100%	\$ 56,169.60
	Budget Carry Over from 2020 Planned Work Not Completed	LS	1	\$ 247,060.00	100%	\$ 247,060.00
					SUBTOTAL:	\$ 1,013,495.60
					Supplies	15% Markup: \$ 7,200.00
					Subcontractor	5% Markup: \$ 8,921.78
					TOTAL:	\$ 1,029,617.38
2.n	Track Materials / Supplies / Rentals	U of M	QTY	Rate	Split	Total
	Equipment Rental	Monthly	12	\$ 3,300.00	100%	\$ 39,600.00
	Program Track Materials - Pads, clips, insulator (non-capital)	Monthly	12	\$ 15,000.00	100%	\$ 180,000.00
	Miscellaneous Track Materials - Bolts, etc.	Monthly	12	\$ 4,500.00	100%	\$ 54,000.00
	Curve Grease - Grease and miscellaneous parts and pieces	Monthly	12	\$ 4,000.00	100%	\$ 48,000.00
	Supplies and Consumables - Welding, etc.	Monthly	12	\$ 2,500.00	100%	\$ 30,000.00
			0	\$ -	100%	\$ -
					SUBTOTAL:	\$ 351,600.00
					Materials / Supplies / Rentals	10% Markup: \$ 35,160.00
					TOTAL:	\$ 386,760.00

2.o	Signal Maintenance	U of M	QTY	Rate	Split	Total
Signal / Comm Supervisor	HR	1800	\$ 120.00	100%	\$	216,000.00
Signal / Comm Supervisor - OT	HR	75	\$ 161.00	100%	\$	12,075.00
Signal / Comm Supervisor - DT	HR	25	\$ 211.00	100%	\$	5,275.00
Signal Engineer	HR	500	\$ 120.00	100%	\$	60,000.00
Signal Engineer - OT	HR	25	\$ 161.00	100%	\$	4,025.00
Signal Engineer - DT	HR	16	\$ 211.00	100%	\$	3,376.00
Signal Test Maintainer	HR	2000	\$ 104.44	100%	\$	208,880.00
Signal Test Maintainer - OT	HR	75	\$ 145.00	100%	\$	10,875.00
Signal Test Maintainer - DT	HR	25	\$ 195.00	100%	\$	4,875.00
Signal Maintainer	HR	6000	\$ 104.44	100%	\$	626,640.00
Signal Maintainer - OT	HR	225	\$ 145.00	100%	\$	32,625.00
Signal Maintainer - DT	HR	75	\$ 195.00	100%	\$	14,625.00
Vehicle - Signal / Comm Supervisor	Monthly	12	\$ 1,560.60	100%	\$	18,727.20
Vehicle - Signal Engineer	Monthly	12	\$ 425.00	100%	\$	5,100.00
Vehicle - Signal Test Maintainer	Monthly	12	\$ 2,163.49	100%	\$	25,961.88
Vehicle - Signal Maintainers (3)	Monthly	12	\$ 6,490.47	100%	\$	77,885.64
Vehicle - Signal Test Maintainer &/or Signal Maintainer for Call-Outs	HR	400	\$ 12.58	100%	\$	5,032.00
Vehicle - Sig/Comm Supv &/or Signal Engineer for Call-Outs	HR	100	\$ 10.08	100%	\$	1,008.00
Equipment - Bucket Truck	Monthly	12	\$ 1,992.24	100%	\$	23,906.88
Material Ongoing Purchases Total = LS (RWKS purchase)	LS	1	\$ 50,000.00	100%	\$	50,000.00
				SUBTOTAL:	\$	1,406,892.60
				Subcontractor	5%	Markup: \$ 67,844.63
				Supplies	10%	Markup: \$ 5,000.00
				TOTAL:	\$	1,479,737.23
2.p	Ladder / Fence / Traffic Support	U of M	QTY	Rate	Split	Total
Subcontractor						
Subcontractor - Ladder Replacement Parts	LS	1	\$ 11,000.00	100%	\$	11,000.00
Traffic Support	LS	1	\$ 32,000.00	100%	\$	32,000.00
Fence Repair / Replacement	LS	1	\$ 210,000.00	100%	\$	210,000.00
				SUBTOTAL:	\$	-
				Subcontractor	5%	Markup: \$ 12,650.00
				TOTAL:	\$	265,650.00
2.q	Security - Trench Cameras	U of M	QTY	Rate	Split	Total
Wire Replacement	LS	1	\$ 5,500.00	100%	\$	5,500.00
Motion Detector Replacement Parts	LS	1	\$ 5,800.00	100%	\$	5,800.00
Camera Replacement Parts	LS	1	\$ 12,000.00	100%	\$	12,000.00
				SUBTOTAL:	\$	-
				Supplies	10%	Markup: \$ 2,330.00
				TOTAL:	\$	25,630.00
2.r	Yard / Office Security / Maintenance / Support	U of M	QTY	Rate	Split	Total
Subcontractor						
Security Guard Services	Monthly	12	\$ 14,000.00	100%	\$	168,000.00
Janitorial Services	Monthly	12	\$ 1,500.00	100%	\$	18,000.00
HVAC and Building Maintenance (Electrical, Mechanical, Pest)	Monthly	12	\$ 1,000.00	100%	\$	12,000.00
				SUBTOTAL:	\$	-
				Subcontractor	5%	Markup: \$ 9,900.00
				TOTAL:	\$	207,900.00
2.s	Underwater Bridge Inspection	U of M	QTY	Rate	Split	Total
Not needed until 2023	LS	0	\$ -	100%	\$	-
				SUBTOTAL:	\$	-
				Subcontractor	5%	Markup: \$ -
				TOTAL:	\$	-
2.t	Trench Ditch Cleaning	U of M	QTY	Rate	Split	Total
Track Foreman	Hours	0	\$ 88.65	100%	\$	-
Track Foreman Truck	Hours	0	\$ 16.03	100%	\$	-
Hi-Rail Vac	Weeks	4	\$ 12,000.00	100%	\$	48,000.00
Track Laborers	Hours	0	\$ 81.14	100%	\$	-
Flagger	Days	0	\$ 900.00	100%	\$	-
				SUBTOTAL:	\$	48,000.00
				Subcontractor	5%	Markup: \$ 2,400.00
				TOTAL:	\$	50,400.00

		U of M	QTY	Rate	Split	Total
2.v	Replace Signal Wire on Corridor					
	Subcontractor	LS	1	\$ 23,000.00	100%	\$ 23,000.00
					\$	-
					SUBTOTAL:	\$ 23,000.00
					5%	Markup: \$ 1,150.00
					TOTAL:	\$ 24,150.00
2.w	Railroad Reporting & Record Keeping Software System					
	Subcontractor					
	Tier Based Management Fee	LS	1	\$ 36,000.00	100%	\$ 36,000.00
	Updates	LS	1	\$ 4,000.00	100%	\$ 4,000.00
					\$	-
					SUBTOTAL:	\$ 40,000.00
					5%	Markup: \$ 2,000.00
					TOTAL:	\$ 42,000.00
2.x	Railroad Emergency Drill Exercise					
		U of M	QTY	Rate	Split	Total
		LS	1		100%	\$ -
					SUBTOTAL:	\$ -
					10%	Markup: \$ -
					TOTAL:	\$ -
2_aa	AEI Readers Upgrade					
	Subcontractor - Highball Signal	U of M	QTY	Rate	Split	Total
		LS	1	\$ 10,000.00	100%	\$ 10,000.00
					SUBTOTAL:	\$ 10,000.00
					5%	Markup: \$ 500.00
					TOTAL:	\$ 10,500.00
2.bb	Bridge Inspections					
	Subcontractor - to be determined	U of M	QTY	Rate	Split	Total
		LS	1	\$ 32,000.00	100%	\$ 32,000.00
					SUBTOTAL:	\$ 32,000.00
					5%	Markup: \$ 1,600.00
					TOTAL:	\$ 33,600.00

## Proposed CY2021 Capital Program

### Cost Code

		U of M	QTY	Rate	Split	Total
3.a	<b>Surfacing Unit - 70 Days Total - INCREASE to 70</b>					
	Mark IV Tamper	Days	0	\$ 1,178.57	100%	\$ -
	Ballast Regulator	Days	0	\$ 666.69	100%	\$ -
	Tamper Operator Truck	Days	0	\$ 100.63	100%	\$ -
	Tamper Operator	Hours	0	\$ 86.22	100%	\$ -
	Ballast Regulator Operator	Hours	0	\$ 86.22	100%	\$ -
	Signal Support	Days	70	\$ 936.16	100%	\$ 65,531.20
	Subcontractor Tamping & Regulating - LazerWest	Days	70	\$ 5,005.00	100%	\$ 350,350.00
	Daily Rate = \$5,941.16					
					SUBTOTAL:	\$ 415,881.20
					Markup:	\$ -
					TOTAL:	\$ 415,881.20
3.b	<b>Surfacing Unit Mobilization</b>					
	Subcontractor	LS	12	\$ 4,000.00	100%	\$ 48,000.00
	Tamper Operator	Hours	96	\$ 113.01	100%	\$ 10,849.38
	Tamper Operator Truck	Days	12	\$ 100.63	100%	\$ 1,207.56
					\$ -	
					SUBTOTAL:	\$ 60,056.94
					Subcontractor	5% Markup:
						\$ 2,400.00
					TOTAL:	\$ 62,456.94
3.c.i	<b>Reballast Program - Labor</b>					
	Track Foreman	Hour	256	\$ 91.72	100%	\$ 23,479.94
	Track Laborers (4 each)	Hour	1024	\$ 84.21	100%	\$ 86,232.49
					\$ -	
					\$ -	
					SUBTOTAL:	\$ 109,712.44
					Markup:	\$ -
					TOTAL:	\$ 109,712.44
3.c.ii	<b>Reballast Program - Operated Equipment</b>					
	Hi-Rail Dump	Hours	256	\$ 35.09	100%	\$ 8,983.04
	Hi-Rail Dump Mobilization (Subcontractor)	EA	2	\$ 3,500.00	100%	\$ 7,000.00
	Ballast Regulator	Hours	256	\$ 83.34	100%	\$ 21,335.04
	Ballast Regulator Mobilization (Subcontractor)	EA	2	\$ 4,000.00	100%	\$ 8,000.00
	Front End Loader	Hours	256	\$ 36.83	100%	\$ 9,428.48
	Front End Loader Mobilization (Subcontractor)	EA	2	\$ 2,500.00	100%	\$ 5,000.00
	Operator	Hours	768	\$ 113.01	100%	\$ 86,795.07
	Operator Truck	Hours	256	\$ 12.48	100%	\$ 3,194.88
					SUBTOTAL:	\$ 149,736.51
					Subcontractor	5% Markup:
						\$ 1,000.00
					TOTAL:	\$ 150,736.51
3.d	<b>Reballast Program - 1000 Tons Ballast</b>					
	Ballast	Ton	1000	\$ 53.00	100%	\$ 53,000.00
					\$ -	
					SUBTOTAL:	\$ 53,000.00
					Materials	10% Markup:
						\$ 5,300.00
					TOTAL:	\$ 58,300.00
3.f	<b>Capital Program Rail Grinding</b>					
	Special Trackwork Grinding Unit Mobilization	LS	1	\$ 84,000.00	100%	\$ 84,000.00
	Special Trackwork Grinding - Interval to be Determined Annually	Day	50	\$ 10,800.00	100%	\$ 540,000.00
	Crane for Mobilization and Demobilization	EA	2	\$ 7,500.00	100%	\$ 15,000.00
	Fuel	Gallons	12000	\$ 4.00	100%	\$ 48,000.00
	Pre-Grind Inspection Mobilization	LS	1	\$ 10,066.00	100%	\$ 10,066.00
	Pre-Grinding Inspections	Days	2	\$ 6,600.00	100%	\$ 13,200.00
	Signal Support	Days	60	\$ 936.16	100%	\$ 56,169.60
	Budget Carry Over from 2020 Planned Work Not Completed	LS	1	\$ 247,060.00	100%	\$ 247,060.00
	Total is split 50/50 between R.R. M&O Cost (2.m) and Capital					SUBTOTAL: \$ 1,013,495.60
					Supplies	15% Markup:
					Subcontractor	5% Markup:
						\$ 8,921.78
					TOTAL:	\$ 1,029,617.38
3.h-2	<b>Replace 20 Frogs</b>					
	Weld Kits	EA	80	\$ 125.00	100%	\$ 10,000.00
	#10 RBM Frogs	EA	2	\$ 18,000.00	100%	\$ 36,000.00
	#14 RBM Frogs	EA	10	\$ 22,000.00	100%	\$ 220,000.00
	#20 RBM Frogs	EA	8	\$ 27,000.00	100%	\$ 216,000.00



					SUBTOTAL: \$ 120,000.00
		Subs	5%	Markup:	\$ 3,000.00
		Materials	10%	Markup:	\$ 6,000.00
				TOTAL:	\$ 129,000.00
<b>3.w.1</b>	<b>Rehab Henry Ford Crossing - Near PHL Offices N of Bridge</b>	<b>U of M</b>	<b>QTY</b>	<b>Rate</b>	<b>Split</b>
	136RE, HH Rail (6 @ 80')	Tn	10.88	\$ 1,400.00	100% \$ 15,232.00
	10' Wood Ties (240' @ 19.5" C-C = 130 each)	Ea	148	\$ 100.00	100% \$ 14,800.00
	Cast Pandrol Plates (Need to know curvature through crossing & MGT)	Ea	300	\$ 28.00	100% \$ 8,400.00
	Screw Spikes	Ea	1250	\$ 4.50	100% \$ 5,625.00
	Galvanized E-Clips	Ea	650	\$ 5.50	100% \$ 3,575.00
	Ballast (\$45/tn)	Tn	360	\$ 45.00	100% \$ 16,200.00
	Concrete Crossing Panels	TF	140	\$ 300.00	100% \$ 42,000.00
	Weld Kits	Ea	14	\$ 125.00	100% \$ 1,750.00
	Panel Handling Chains	Ea	1	\$ 2,500.00	100% \$ 2,500.00
	Signal Conduit	LS	1	\$ 3,000.00	100% \$ 3,000.00
	Fabric	SF	2640	\$ 5.00	100% \$ 13,200.00
	<b>RailWorks Outside Labor</b>				
	<b>Construct Panel</b>				
	Track Foreman	Hour	24	\$ 91.72	100% \$ 2,201.24
	Assistant Foreman	Hour	24	\$ 90.22	100% \$ 2,165.21
	Welder	Hour	24	\$ 88.72	100% \$ 2,129.18
	Welder Helper	Hour	24	\$ 84.21	100% \$ 2,021.07
	Track Laborers	Hour	96	\$ 84.21	100% \$ 8,084.30
	Equipment Operators	Hour	48	\$ 113.01	100% \$ 5,424.69
	Rental Excavator	Week	0.5	\$ 4,423.68	100% \$ 2,211.84
	Front End Loader	Hour	24	\$ 36.11	100% \$ 866.64
	Foreman Truck	Hour	24	\$ 16.03	100% \$ 384.72
	Welding Truck	Hour	24	\$ 34.38	100% \$ 825.12
	Assistant Foreman Truck	Hour	24	\$ 11.19	100% \$ 268.56
	<b>Install During Outage</b>				
	Track Foreman	Hour	24	\$ 91.72	100% \$ 2,201.24
	Assistant Foreman	Hour	24	\$ 90.22	100% \$ 2,165.21
	Welder	Hour	24	\$ 88.72	100% \$ 2,129.18
	Welder Helper	Hour	24	\$ 84.21	100% \$ 2,021.07
	Track Laborers	Hour	96	\$ 84.21	100% \$ 8,084.30
	Equipment Operators	Hour	48	\$ 113.01	100% \$ 5,424.69
	Rental Excavator	Week	0.5	\$ 4,423.68	100% \$ 2,211.84
	Front End Loader	Hour	24	\$ 36.11	100% \$ 866.64
	Assistant Foreman Truck	Hour	24	\$ 16.03	100% \$ 384.72
	Welding Truck	Hour	24	\$ 34.38	100% \$ 825.12
	Assistant Foreman Truck	Hour	24	\$ 11.19	100% \$ 268.56
	<b>Return to Tamp / Destress / Clean-Up Site</b>				
	Track Foreman	Hour	8	\$ 91.72	100% \$ 733.75
	Assistant Foreman	Hour	8	\$ 90.22	100% \$ 721.74
	Welder	Hour	8	\$ 88.72	100% \$ 709.73
	Welder Helper	Hour	8	\$ 84.21	100% \$ 673.69
	Track Laborers	Hour	32	\$ 84.21	100% \$ 2,694.77
	Equipment Operators	Hour	16	\$ 113.01	100% \$ 1,808.23
	Rental Excavator	Week	0.5	\$ 4,423.68	100% \$ 2,211.84
	Front End Loader	Hour	8	\$ 36.11	100% \$ 288.88
	Foreman Truck	Hour	8	\$ 16.03	100% \$ 128.24
	Welding Truck	Hour	8	\$ 34.38	100% \$ 275.04
	Asst. Foreman Truck	Hour	8	\$ 11.19	100% \$ 89.52
	<b>Return to Tamp / Install &amp; Weld Panels / Demobilization</b>				
	Track Foreman	Hour	8	\$ 91.72	100% \$ 733.75
	Assistant Foreman	Hour	8	\$ 90.22	100% \$ 721.74
	Welder	Hour	8	\$ 88.72	100% \$ 709.73
	Welder Helper	Hour	8	\$ 84.21	100% \$ 673.69
	Track Laborers	Hour	32	\$ 84.21	100% \$ 2,694.77
	Equipment Operators	Hour	16	\$ 113.01	100% \$ 1,808.23
	Rental Excavator	Week	0.5	\$ 4,423.68	100% \$ 2,211.84
	Front End Loader	Hour	8	\$ 36.11	100% \$ 288.88
	Foreman Truck	Hour	8	\$ 16.03	100% \$ 128.24
	Welding Truck	Hour	8	\$ 34.38	100% \$ 275.04
	Assistant Foreman Truck	Hour	8	\$ 11.19	100% \$ 89.52
	<b>Surfacing Crew</b>	<b>Day</b>	<b>6</b>	<b>\$ 5,005.00</b>	<b>100% \$ 30,030.00</b>
	<b>Flagger</b>	<b>Hour</b>	<b>64</b>	<b>\$ 91.72</b>	<b>100% \$ 5,889.99</b>
	<b>Flagger Truck</b>	<b>Hour</b>	<b>64</b>	<b>\$ 12.24</b>	<b>100% \$ 783.36</b>
	<b>Ballast Disposal Trucking (3 Hours per Load, 12 tn per load)</b>	<b>Hour</b>	<b>60</b>	<b>\$ 150.00</b>	<b>100% \$ 9,000.00</b>
	<b>Ballast Disposal</b>	<b>Tn</b>	<b>240</b>	<b>\$ 45.00</b>	<b>100% \$ 10,800.00</b>
	<b>Asphalt Disposal Trucking (3 Hours per Load, 12 tn per load)</b>	<b>Hour</b>	<b>48</b>	<b>\$ 150.00</b>	<b>100% \$ 7,200.00</b>
	<b>Asphalt Disposal</b>	<b>Tn</b>	<b>230</b>	<b>\$ 45.00</b>	<b>100% \$ 10,350.00</b>
	<b>Saw Cut Sub</b>	<b>LF</b>	<b>280</b>	<b>\$ 10.00</b>	<b>100% \$ 2,800.00</b>



					SUBTOTAL: \$ 400,000.00
		Subcontractor	5%	Markup:	\$ 20,000.00
				TOTAL:	\$ 420,000.00
3.mm	<b>Miscellaneous Trench Structure Repairs</b>	U of M	QTY	Rate	Split
	Subcontractor - Labor, Equipment & Materials	LS	1	\$ 60,000.00	100% \$ 60,000.00
					\$ -
					SUBTOTAL: \$ 60,000.00
	Subcontractor	5%	Markup:	\$ 3,000.00	
				TOTAL:	\$ 63,000.00
3.oo	<b>Replacement of M23A Switches</b>	U of M	QTY	Rate	Split
	Subcontractor - Highball Signal - M23A Switches	EA	2	\$ 14,000.00	100% \$ 28,000.00
					\$ -
					SUBTOTAL: \$ 28,000.00
	Material	10%	Markup:	\$ 2,800.00	
				TOTAL:	\$ 30,800.00
3.pp	<b>Signal Module VHLC Replacements to XLC - REPEAT FOR 3 LOCATIK</b>	U of M	QTY	Rate	Split
	Materials - New XLC Module	Ea	3	\$ 33,000.00	100% \$ 99,000.00
	Design Changes and Prints	Ea	3	\$ 3,500.00	100% \$ 10,500.00
	Software + Engineering	Ea	3	\$ 5,500.00	100% \$ 16,500.00
	Ongoing for life of contract to complete 18 locations				
					SUBTOTAL: \$ 126,000.00
	Materials	10%	Markup:	\$ 12,600.00	
				TOTAL:	\$ 138,600.00



