

TC 59-115 Rev. 10/2024 Page 1 of 4

KENTUCKY INDUSTRIAL ACCESS AND SAFETY IMPROVEMENT (KIASI) PROJECT APPLICATION

SECTION 1: PROJECT OVERVIEV	v				
	P	ROJE	CT TITLE		
	CNO&TP Industrial L	ead Ro	padbed Stabilization Project		
	APPLICANT LEGAL	NAM	E		APPLICATION YEAR
Norfolk Southern Railway					2025
APPLICAN1	ГТҮРЕ		COUNTIES IMPAC	TED BY	THE PROJECT
Class I Freight Railroad			Kenton and Boone Counties		
PROJECT PHYSICAL ADDRESS					
38.977700, -84.611344 and 38.9	23217, -84.626047				
RAILROAD(S) SERVIN	G THE SITE	EN	ITITY OWNING PROJECT SITE	E (if diffe	erent from applicant)
Norfolk Southern		N/A			
TOTAL PROJECT COST	KIASI FUNDING REQUESTED	i	APPLICANT MATCH	IT MATCH APPLICAN (50% N	
\$ 655,000	\$ 327,500		\$ 327,500		50 %
Will the proposed project be ma	tching <u>awarded</u> feder	ral fund	ds? 🛛 NO 🗌 YES		
Does applicant plan to use their	·		· ·	(Force /	Account) or
competitively bid out all work re					
DESCRIPTION OF PROPOSED PR		project	description and the proposed w	ork to be	e completed. Text is
limited to the space provided below	•	dhada	on two industrial loads on th	o CNOS	TD one of the highest
The proposed project involves the density segments of NS' nework					
Both industrial leads are being in		_			•
recurring defects, quarterly main			_		
treat the industry lead tracks wi	•		-		•
embankment, filling any ballast	•	•			
	•		<u>-</u>		
DESCRIPTION OF HOW PROJECT					
TRANSPORTATION OPTIONS, CO Completion of the project will ensu					
completion of the project will ensu					
investment, shippers would lose vit					
increasing the burden on public roa		,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
DESCRIPTION OF HOW PROJECT	WOULD ENHANCE R	AIL LII	NE CORRIDORS TO INCREASE	ON-TIN	WE PERFORMANCE
(Text is limited to the space provide	d below.)				

On-time performance improves when costly and lengthy infrastructure repairs are avoided. While the proactive stabilization of this roadbed may temporarily impede movement, it ensures the long-term ability to provide quality service to customers and guarantees the safe movement of their freight. This investment not only enhances operational efficiency but also reinforces the reliability of the rail network.

DESCRIPTION OF HOW PROJECT WOULD IMPROVE RAIL SERVICES TO EXISTING INDUSTRIES AND ENCOURAGE **INVESTMENT IN THE COMMONWEALTH** (Text is limited to the space provided below.)

Stabilized roadbeds maintain track geometry over time, significantly reducing the need for repairs and minimizing operational disruptions for Norfolk Southern and its customers. This proactive approach also minimizes wear on rolling stock and track components, enhancing overall efficiency and reliability.



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KENTUCKY INDUSTRIAL ACCESS AND SAFETY IMPROVEMENT (KIASI) PROJECT APPLICATION

SECTION 1: PROJECT OVERVIEW (CONTIN	IUED)						
DESCRIPTION OF PROPOSED PROJECT REA				RUCTION	BEGIN AND		
Norfolk Southern is ready to commence the pr	oject upon award,	with an anticipated co	mpletion by the er	nd of Q3 2	2025.		
APPLICATION PRIMARY CONTACT NAME & TITLE Derek Sublette, Assistant Vice President Government Relations MAILING ADDRESS CITY STATE IN 46204 Indianapolis IN 46204 f awarded, will signatory be different from the Primary Contact? MAILING ADDRESS CITY STATE IN 46204 IN 46204 AGREEMENT SIGNATORY NAME & TITLE PHONE Alan Johnson, Chief Engineer Design and Construction MAILING ADDRESS CITY STATE ZIP Alan Johnson, Chief Engineer Design and Construction MAILING ADDRESS CITY STATE ZIP 550 West Peachtree NW, Atlanta, GA 30144 Atlanta GA 30308 f awarded, will Project Manager be different from the Primary Contact? PROJECT MANAGER NAME & TITLE PHONE EMAIL William Graham, Manager Construction Services 404-245-0097 william.graham@nscorp.com SECTION 3: PROPOSED PROJECT PERMITS/APPROVALS/READINESS A. Have consultations with state or federal agencies (US Army Corps of Engineers, US Coast Guard, US Fish and							
SECTION 2: CONTACT INFORMATION							
APPLICATION PRIMARY CONTACT NA	AME & TITLE	PHONE		EMAIL			
Derek Sublette, Assistant Vice President G Relations	overnment	317-472-2844	derek.sublette@	nscorp.	com		
MAILING ADDRESS		CITY	1	STATE	ZIP		
101 W. Ohio Street, Suite 2000	Indianapolis		IN	46204			
If awarded, will signatory be different fron	n the Primary Cor	ntact? 🗌 NO 🛛	YES (Provide sign	atory info	rmation.)		
AGREEMENT SIGNATORY NAME	& TITLE	PHONE		EMAIL			
Alan Johnson, Chief Engineer Design and C	Construction	404-213-5055	alan.johnson@n	om			
MAILING ADDRESS	CITY	1	STATE	ZIP			
650 West Peachtree NW, Atlanta, GA 3014	Atlanta GA 30144 STATE ZIP GA 30308						
lf awarded, will Project Manager be differ	ent from the Prim	nary Contact? 🔲 No	O XES (Provid	de inform	ation.)		
PROJECT MANAGER NAME &	TITLE	PHONE		EMAIL			
William Graham, Manager Construction S	ervices	404-245-0097	william.graham(@nscorp	.com		
SECTION 3: PROPOSED PROJECT PERMITS	S/APPROVALS/RE	EADINESS					
A. Have consultations with state or feder Wildlife Service, Kentucky Division of V permits? No							
B. Have all required permits been obtain	ed? Not Applicab	ole					
C. Will the proposed project have <u>ANY</u> in	npacts on a public	road (City, County,	State, US)?	☑ NO [YES		
D. Have all necessary roadway authoritie	s been notified al	bout the proposed p	roject? YES	☐ NO	⊠ N/A		
E. Has preliminary engineering been com				N/A			
What engineering still needs to be don	ne and when will	it be completed? No	ne				
SECTION 4: ECONOMIC DEVELOPMENT IF	NFORMATION						
A. If the project will provide new and/or	increased service	to an industrial park	«:				
Total acres of the industrial park	Total amount o	f developable acres	Acres that ma	y be ser	ved by project		



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KENTUCKY INDUSTRIAL ACCESS AND SAFETY IMPROVEMENT (KIASI) PROJECT APPLICATION

SECT	ION 4: ECONOMIC DEVELOPMENT INFORMATION (CONTINUED)		
В. І	Jtility infrastructure in place to the site to be served by the proje Electric Natural Gas Water	ct:] Wastewater	Fiber/te	elecom
ı	Provide listing of the names of existing companies currently servent number of existing full-time jobs, potential new full-time jobs to land ncurred for each company.			•
	COMPANY NAME		ME JOBS	CAPITAL
		CURRENT	POTENTIAL	INVESTMENT
	Aristech Acrylics LLC			<u> </u>
	Ouro Hilex Poly LLC ohnson Control Inc			\$ \$
4	Offisor Control inc			 ჭ
5				\$
6				\$
7				\$
8				\$
9				\$
10	Are there any companies considering location or expansion of a p			\$
	and potential capital investment to be incurred).			
SECT	TION 5: SUBMISSION CHECKLIST (See KIASI Guidance Document, Sec	ction VI, for deta	ils.)	
	Kentucky Industrial Access and Safety Improvement (KIASI)	Project Applic	ation (TC 59-11	5)
	Statement of Work			
	Scope of Work			
	Project Schedule/Timeline			
	□ Diagrams/maps depicting proposed project			
	Rail Connectivity Letter (as applicable)			
	Detailed engineering assessment report (as applicable)			
	Aerial Photographs and photographic documentation of cro	ossing location	and condition	
	Plans, schematics, details, drawings of the proposed project	t (as applicable	e)	
	For equipment purchases, a price quote on letterhead from estimate for the project			projects, a <u>detailed</u>
	Road authority consultation letters (as applicable)			
	Public Interest Finding (as applicable)			
		ctors from ann	licant	
	Required Annual Affidavit for Bidders, Offerors and Contraction	ctors from app	IICdIIL.	



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KENTUCKY INDUSTRIAL ACCESS AND SAFETY IMPROVEMENT (KIASI) PROJECT APPLICATION

SECTION 6: KENTUCKY RAILROAD ANNUAL REPORT		
I hereby certify that as an applicant defined as a railro	ad in 603 KAR 7:090(1), my company has comp	pleted and submitted
TC 59-102, Kentucky Railroad Annual Report, in com	pliance with the provisions of 603 KAR 7:09	0 at the time of thi
application to be considered an eligible applicant. If		
submission, I agree that this application shall be imme	diately rejected without consideration and ret	turned to me withou
review.	T	
PRINTED NAME AND TITLE	SIGNATURE	DATE
Derek Sublete AUP Coverand Altre	All lit	3.6.25
SECTION 7: BUSINESS STANDING CERTIFICATION		
I hereby certify that the applicant is a business entity	in good standing with the Office of the Kentuc	cky Secretary of State
or under the laws of the jurisdiction(s) in which the		
delinquent in taxes owed to any taxing entity. Applica		
application immediately being rejected without consid		
PRINTED NAME AND TITLE	SIGNATURE	DATE
Darek Sablette AP Government Polition	the last	3.6.25
SECTION 8: APPLICANT CERTIFICATION		
have read the Kentucky Industrial Access and Safety In	mprovement (KIASI) Projects guidance docume	ent, and I understand
and agree to abide by what is stated therein. I also h		
falsification to authorities), that the above information		
PRINTED NAME AND TITLE	SIGNATURE	DATE
Dank Suffelle ADP sourcement	Cut Wa	3.6.25
Polotion	3	

Submission Directions: Applicants must combine their completed application and all required attachments into a single PDF and submit it electronically via email to address provided in call for projects. It is the responsibility of the applicant to ensure delivery of the emailed submission.



Required Affidavit for Bidders, Offerors and Contractors (KRS 45A.110 & 45A.115)

Affidavit Effective for One (1) Year from Date of Execution

Instructions: Pursuant to <u>KRS 45A.110</u> and <u>45A.115</u>, a bidder, offeror, or contractor ("Contractor") is required to submit a Required Affidavit for Bidders, Offerors, and Contractors to be awarded a contract, or for the renewal of a contract. An authorized representative of the contracting party must complete the attestation below, have the attestation notarized, and return the completed affidavit to the Commonwealth.

Attestation

As a duly authorized representative for the Contractor, I swear and affirm under penalty of perjury, that that the Contractor has not knowingly violated campaign finance laws of the Commonwealth of Kentucky and that the award of a contract will not violate any provision of the campaign finance laws of the Commonwealth. For purposes of this attestation, "Knowingly" means that the bidder or offeror is aware or should have been aware of the existence of a violation. The bidder or offer understands that the Commonwealth retains the right to request an updated affidavit at any time.

Signature ADP, Government Relations	Dersk Suble He Printed Name 12. Z. 24
Title	Date
Bidder or Offeror Name:	
Address:	
Commonwealth of Kentucky Vendor Code (If known):	
Subscribed and sworn to before me this 2nd day of	& December 2024.
State of: Notary:	2 1 1 1 1
	4
County of: MARION My Commission	on Expires: 5/2/2029

MICHELE D. STEELE Notary Public - Seal Johnson County - State of Indiana Commission Number NP0644149 My Commission Expires May 2, 2029



Engineering - Design & Construction 650 West Peachtree Street NW - Box 45 Atlanta, Georgia 30308

Chase Hobbs Construction Project Manager Cell: (859) 455-6652

Subject: Florence, KY - Roadbed Instability - Milepost CNTOP 12.5 (Rice Industrial Lead)

Atlanta – May 31, 2024 File # TRK0032070 PID#G745

Mr. D. M. Taylor Division Engineer – Midwest

A site investigation was performed to inspect the roadbed instability throughout the Rice Industrial Lead at milepost CNTOP-12.5 in Florence, KY.

Site Description

This site consists of a single lead coming off the CNOTP mainline. The lead track crosses a small valley and consists of several switches and a diamond. A key switching area is susceptible to collecting runoff and drainage water from adjacent properties. Shallow ballast sections were observed to be fouled with mud and fines. The track repeatedly develops profile and cross level defects. To correct these recurring defects maintenance is required on a quarterly basis contingent on major rain events. MWS forces have also cut bleeders and culverts in to help alleviate the pooling of water.

Assessment

These spots are being impacted by bearing failures within the weak subgrade materials. This is indicated by soft soils protruding from the shoulder, mud infiltrating the ballast section and pumping ties. The conditions worsen when there

is a significant rain event. Subgrade stability is a function of soil type, water content, and compaction. Based on the nature of the site the water runoff reacts with the soil lowering its bearing and shear strength.



Recommendations

To address this instability, I recommend treating the industry lead track with grout injections. The injected grout will displace perched water from the embankment, filling any ballast pockets, and add strength to the existing embankment materials. The injections should extend through the full depth of the embankment to the native material below. The grouting would be accomplished using on track equipment, and therefore is most efficiently completed with consistent track time windows which should be available on this industry lead. The estimated cost of this work for 1,600 ft is **\$265,000**.

No work will proceed until authorized to do so and funding has been assigned. Please contact me with any questions or comments concerning this matter.

Thanks, Chase Hobbs

CC: E.F. Boyle W.D. Gibson B.T. Taggart A.B. Johnson C.A. Phillips R.C. Zaluski S.E. Spiller G.R. Andrews W.S. Graham D.R. Adams A.P. Machalette E.C. Schmeltz T.King

Norfolk Southern - Design & Construction Estimate Summary Sheet



Internal and Confidential

Capital Project Estimate 2024

Original

DESCRIPTION: CNOTP - 12.5 Rice Industrial Lead LOCATION: Florence, KY - CNOTP - 12.5

D&C PROJECT ID: G745

PREPARED BY: CJH **ESTIMATE DATE:** 5/30/2024

RAILWAY LENGTH: 0 TF INDUSTRY LENGTH: 1600'

MW&S DIVISION & MP: Midwest -- MP CNOTP-12.5 to MP CNOTP-12.5

D&C PLAN #: 0

NS FILE #: TRK0032070

OFF. TRACKWORK: 0

TOTAL LENGTH: 0 TF

Department	AFE Code	Property	Labor	Mater	ial	Contract		Other		Additives		Capital		Expense		BILLABLE
	5108	Crossties	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
	5178	Switch Ties	\$ -	\$	- \$	-	\$	-	\$		\$	-	\$	-	\$	
	5109.1	New Rail	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
Maintenance of Way	5109.11	Relay Rail	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
MNR-66	5109.2	New OTM	\$ 6,000	\$	- \$	-	\$	-	\$	10,000	\$	16,000	\$	-	\$	
	5109.21	Relay OTM	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
	5111	Ballast	\$ -	\$	- \$		\$	-	\$	-	\$	-	\$	-	\$	
	5139	Grade Crossings	\$ -	\$	- \$		\$	-	\$	-	\$	-	\$	-	\$	
		SUBTOTALS:	\$ 6,000	\$	- \$	-	\$	-	\$	10,000	\$	16,000	\$	-	\$	
								7	TOTA	AL - DEPT. 66:	\$					16
	5103	Grading	\$ -	\$	- \$	247,000	\$	-	\$	2,000	\$	249,000	\$	-	\$	
	5106	Drainage	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
	5108	Crossties	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
Desire 0	5178	Switch Ties	\$ -	\$	- \$		\$	-	\$	-	\$		\$	-	\$	
Design & Construction	5109.1	New Rail	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
ENP-62	5109.11	Relay Rail	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
	5109.2	New OTM	\$ -	\$	- \$	·	\$	-	\$	-	\$	-	\$	-	\$	
	5109.21	Relay OTM	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
	5111	Ballast	\$ -	\$	- \$		\$	-	\$	-	\$	-	\$	-	\$	
	5139	Grade Crossings	\$ -	\$	- \$		\$	-	\$	-	\$	-	\$	-	\$	
		SUBTOTALS:	\$ -	\$	- \$	247,000	\$	-	\$	2,000	\$	249,000	\$	-	\$	
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C&S-52	5126	Communications	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
000-02	5127	Signals	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
BBD-63	5106	Bridges and Structures	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
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RES-21	5102	Real Estate	\$ -	\$	- \$	-	\$	-	\$	-	\$	-	\$	-	\$	
RES-21 FAC-9C	5102 5131	Real Estate Mechanical	\$ - \$ -	\$	- 9	•	\$	-	\$	-	\$	-	\$	-	\$	
FAC-9C	5131	Mechanical	\$ -	\$	- \$	-	\$		\$		\$	-	\$		\$	
FAC-9C EAS-57	5131 5116	Mechanical Buildings	\$ - \$ -	\$	- 9	-	\$	-	\$	-	\$	-	\$	-	\$	
FAC-9C EAS-57 LAW-36	5131 5116 5102	Mechanical Buildings Law	\$ - \$ -	\$ \$ \$	- \$ - \$	- 5 -	\$ \$		\$ \$	-	\$ \$	- -	\$ \$	-	\$ \$	
FAC-9C EAS-57 LAW-36 TTT-94	5131 5116 5102 5126	Mechanical Buildings Law T-Cubed	\$ - \$ - \$ -	\$ \$ \$	- \$ - \$ - \$ - \$		\$ \$	- - - -	\$ \$	-	\$ \$ \$: :	\$ \$ \$	-	\$ \$ \$	
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54	5131 5116 5102 5126 5103	Mechanical Buildings Law T-Cubed Environmental	\$ - \$ - \$ - \$ -	\$ \$ \$ \$	- \$ - \$ - \$ - \$ - \$	5 - 5 - 5 -	\$ \$ \$ \$	- - - -	\$ \$ \$ \$	- - - -	\$ \$ \$ \$	- - - -	\$ \$ \$ \$	- - - -	\$ \$ \$ \$	
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54 FNP-15	5131 5116 5102 5126 5103 5109	Mechanical Buildings Law T-Cubed Environmental Insurance	\$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	5 - 5 - 5 - 5 -	\$ \$ \$ \$ \$		\$ \$ \$ \$		\$ \$ \$ \$ \$	- - - - -	\$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54 FNP-15 INT-43	5131 5116 5102 5126 5103 5109 5125	Mechanical Buildings Law T-Cubed Environmental Insurance Intermodal	\$ - \$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	5 - 5 - 5 - 5 - 6 -	\$ \$ \$ \$ \$	- - - -	\$ \$ \$ \$ \$	- - - -	\$ \$ \$ \$ \$ \$	- - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - -	\$ \$ \$ \$ \$ \$	
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54 FNP-15	5131 5116 5102 5126 5103 5109	Mechanical Buildings Law T-Cubed Environmental Insurance	\$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$	- \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$	5 - 5 - 5 - 5 - 6 -	\$ \$ \$ \$ \$		\$ \$ \$ \$		\$ \$ \$ \$ \$	- - - - -	\$ \$ \$ \$	- - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54 FNP-15 INT-43	5131 5116 5102 5126 5103 5109 5125	Mechanical Buildings Law T-Cubed Environmental Insurance Intermodal	\$ - \$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$	- - - - -	\$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$	
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54 FNP-15 INT-43 BLK-24	5131 5116 5102 5126 5103 5109 5125 5103	Mechanical Buildings Law T-Cubed Environmental Insurance Intermodal Bulk Facilities	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- 3 - 3 - 3 - 3 - 3 - 3 - 3	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$	- - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - -	\$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54 FNP-15 INT-43 BLK-24 TRV-56	5131 5116 5102 5126 5103 5109 5125 5103 5116	Mechanical Buildings Law T-Cubed Environmental Insurance Intermodal Bulk Facilities Terminals	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- \$ \$ - \$ \$ - \$ \$ - \$ \$ \$ - \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ \$ \$ - \$	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ \$ \$ \$ \$ \$	- - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Total Billat
FAC-9C EAS-57 LAW-36 TTT-94 ENV-54 FNP-15 INT-43 BLK-24 TRV-56	5131 5116 5102 5126 5103 5109 5125 5103 5116	Mechanical Buildings Law T-Cubed Environmental Insurance Intermodal Bulk Facilities Terminals	\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- \$ \$ - \$ \$ - \$ \$ - \$ \$ \$ - \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ - \$ \$ \$ \$ \$ \$ \$ - \$	5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	\$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$	- - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	otal Billat

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Engineering - Design & Construction 650 West Peachtree Street NW - Box 45 Atlanta, Georgia 30308

Chase Hobbs Construction Project Manager Cell: (859) 455-6652

Subject: Richwood, KY - Roadbed Instability - Milepost CNTOP 16.7 (Richwood Industrial Lead)

Atlanta – May 31, 2024 File # TRK0032070 PID#G744

Mr. D. M. Taylor Division Engineer – Midwest

A site investigation was performed to inspect the roadbed instability throughout the Richwood Industrial Lead at milepost CNTOP-16.7 in Richwood, KY.

Site Description

This site consists of a single lead coming off the CNOTP mainline. The track has a downhill grade that crosses shallow cuts and fills. Runoff and drainage from the adjacent properties flow into the ditches located on both sides of the track bed. Shallow ballast sections were observed to be fouled with mud and fines. The track repeatedly develops profile and cross level defects. To correct these recurring defects maintenance is



required on a quarterly basis contingent on major rain events.

Assessment

These spots are being impacted by bearing failures within the weak subgrade materials. This is indicated by soft soils protruding from the shoulder, mud infiltrating the ballast section and pumping ties. The conditions worsen when there is a significant rain event. Subgrade stability is a function of soil type, water content, and compaction. Based on the nature of the site the water runoff reacts with the soil lowering its bearing and shear strength.

Recommendations

To address this instability, I recommend treating the industry lead track with grout injections. The injected grout will displace perched water from the embankment, filling any ballast pockets, and add strength to the existing embankment materials. The injections should extend through the full depth of the embankment to the native material below. The grouting would be accomplished using on track equipment, and therefore is most efficiently completed with consistent track time windows which should be available on this industry lead. The estimated cost of this work for 2,400 ft is \$390,000.

No work will proceed until authorized to do so and funding has been assigned. Please contact me with any questions or comments concerning this matter.

Thanks, Chase Hobbs

CC: E.F. Boyle W.D. Gibson B.T. Taggart A.B. Johnson C.A. Phillips R.C. Zaluski S.E. Spiller G.R. Andrews D.R. Adams W.S. Graham A.P. Machalette E.C. Schmeltz T.King

Norfolk Southern - Design & Construction Estimate Summary Sheet



Internal and Confidential

Capital Project Estimate 2024

Original

DESCRIPTION: Roadbed Stabilization - Richwood Industrial Lead

LOCATION: Richwood, KY - CNOTP 16.7 NS FILE #: TRK0032070

PREPARED BY: CJH **ESTIMATE DATE:** 5/30/2024

RAILWAY LENGTH: 0 TF INDUSTRY LENGTH: 2400'

MW&S DIVISION & MP: Midwest -- MP CNOTP-16.7

D&C PLAN #: 0

D&C PROJECT ID: G744

OFF. TRACKWORK: 0

TOTAL LENGTH: 0 TF

Department	AFE	Property	Labor	Material	Contract		Other		Additives		Capital	F	xpense		BILLABLE
Department	Code 5108	Crossties	\$ -	\$ -	\$ -	\$	- Other	\$	-	\$	-	l s	•	\$	DILLABLE
	5108	Switch Ties	\$ -	\$ - \$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
	5109.1	New Rail	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
Maintenance of Way	5109.11	Relay Rail	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	s s	-	\$	
MNR-66	5109.1	New OTM	\$ 9,000	\$ -	\$ -	\$	-	\$	14,000	\$	23,000	s		\$	
	5109.21	Relay OTM	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	s	-	\$	
	5111	Ballast	\$ -	\$ -	\$ -	\$		\$		\$	_	\$	_	\$	
	5139	Grade Crossings	\$ -	\$ -	\$ -	\$		\$		\$	-	\$	-	\$	
		SUBTOTALS:		\$ -	\$ -	\$	-	\$	14,000	s	23,000	\$	_	\$	
			, ,,,,,,	•	•	<u> </u>			- DEPT. 66:	\$	-,	1 .		<u> </u>	2
	5103	Grading	-	\$ -	\$ 364,000	\$		Ī\$	3,000	\$	367,000	s	-	\$	
	5106	Drainage	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
	5108	Crossties	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
	5178	Switch Ties	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
Design &	5109.1	New Rail	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
Construction ENP-62	5109.11	Relay Rail	\$ -	\$ -	\$ -	\$	-	\$		\$	-	\$	-	\$	
ENP-62	5109.2	New OTM	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
	5109.21	Relay OTM	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
	5111	Ballast	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
	5139	Grade Crossings	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
		SUBTOTALS:	\$ -	\$ -	\$ 364,000	\$	-	\$	3,000	\$	367,000	\$	-	\$	
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C&S-52	5126	Communications	\$ -	\$ -	\$ -	\$		\$		\$	-	\$	-	\$	
C&S-52	5127	Signals	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
BBD-63	5106	Bridges and Structures	\$ -	\$ -	\$ -	\$	-	\$		\$	-	\$	-	\$	
RES-21	5102	Real Estate	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
FAC-9C	5131	Mechanical	\$ -	\$ -	\$ -	\$		\$		\$	-	\$	-	\$	
EAS-57	5116	Buildings	\$ -	\$ -	\$ -	\$		\$		s	-	\$		\$	
LAW-36	5102	Law	\$ -	\$ -	\$ -	\$	-	\$		s	-	\$		\$	
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ENV-54	5103	Environmental		,	\$ -	\$	-	\$	-	•	-	3	-		
FNP-15	5109	Insurance	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
INT-43	5125	Intermodal	\$ -	\$ -	-	\$	-	\$	-	\$	-	\$	•	\$	
BLK-24	5103	Bulk Facilities	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	\$	
TRV-56	5116	Terminals	\$ -	\$ -	-	\$	-	\$	-	\$	-	\$	-	\$	
OTHER	5103	OTHER CHARGES	\$ -	\$ -	-	\$	-	\$	-	\$	-	\$	-	\$	
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							со	ST BR	EAKDOWN:	\$	390,000	\$	-	\$	
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