2013 JUL 24 AM 10: 37

RECEIVED-DOCKETING Commission of Ohio

PUCO

Memo

To:

Docketing Division

From:

George Martin, Grade Crossing Planner, Rail Division

Re:

In the matter of the authorization of RJ Corman Railroad (Western) to install an active grade

crossing warning device in Allen County

Date:

July 24, 2013

The Ohio Rail Development Commission (ORDC) has authorized funding for RJ Corman Railroad (Western) (RJCW) to install mast mounted flashing lights and roadway gates at the S Wapak Rd/TR 91, DOT# 261649F, grade crossing in Shawnee Township, Allen County. The crossing was surveyed on March 12, 2013, and was found to warrant the upgrade.

The project will be paid for with federal funds, and is actual cost. As the plan and estimate has already been submitted and approved, staff requests an Entry with completion of the project in nine months. Construction may commence at once. Staff requests that the following language be incorporated in the Entry:

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the railroad will be responsible for this work. This work includes, but is not limited to:

Any ancillary work to make the warning devices function as designed and visible to the roadway user, and

MUTCD compliance, including minor roadway work if necessary.

A suggested case coding and heading would be:

PUCO Case No. 13- la l -RR-FED In the matter of the authorization of RJ Corman Railroad (Western) to install an active grade crossing warning device in Allen County

C: Legal Department

Please serve the following parties of record

Ms Cathy Stout

Ohio Rail Development Commission

1980 West Broad St, Mailstop #3140

Columbus, Oh 43223

Shawnee Township Trustees

2530 Ft Amanda Rd

Lima, Oh 45804

Ms Deborah Hawley

RJ Corman Railroad Group

PO Box 788

Nicholasville, Ky 40340

AEP

OHIO RAIL DEVELOPMENT COMMISSION INTER-OFFICE COMMUNICATION

TO: Randall Schumacher, Supervisor, Rail Division, PUCO

FROM: Cathy Stout, Manager, Safety Section, ORDC

BY: Don Damron, Project Manager, ORDC

SUBJECT: Allen County, TR 91, S. Wapak Road

DOT# 261 649 F PID# 95762

DATE: July 16, 2013

The Ohio Rail Development Commission (ORDC) established a diagnostic survey at the subject location on 3/12/2013. The Public Utilities Commission of Ohio (PUCO) attended the review. The Diagnostic Team recommended the improvement of warning devices to flashing lights and roadway gates. Copies of the diagnostic review form and the plan and estimate are attached.

PE has already been provided by the railroad. ORDC approves the site plans and estimates as provided. Please issue a construction-only order for the project outlined above. This authorization is made with the stipulation and understanding that an approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit.

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the <u>railroad will be responsible</u> for this work. This work includes, but is not limited to:

- any ancillary work to make warning devices function as designed and visible to the roadway user, and
- MUTCD compliance including minor roadway work if necessary.

Thank you for your assistance with these matters.

Attachments:

Diagnostic Review Plan & Estimate

c: George Martin, PUCO ORDC Project Manager (file)



OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223 John R. Kasich, Governor • James G. Bradley, Chairman

July 16, 2013

Ms. Deborah J. Hawley RJ Corman Railroad Group PO Box 788 Nicholasville, KY 40340

RE:

Grade Crossing Warning Device Improvement

Allen County, TR 91, S. Wapak Road

DOT# 261 649 F PID# 95762

Dear Ms. Hawley:

The plan and estimate dated 5/20/2013, for the referenced project has been reviewed and is acceptable. RJ Corman Railroad Company may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$156,475.38 and is broken down as follows: \$122,579.38 for the signal installation, and \$33,896.00 for the roadway surface reconstruction. An additional cost related to the asphalt paving of the roadway surface is also anticipated and this and any other additional costs must be approved in writing by the Ohio Rail Development Commission (ORDC) prior to being incurred. Emergency verbal authorizations by ORDC may be permitted and will be confirmed by ORDC in writing within ten (10) business days of the verbal approval.

This authorization is contingent upon RJ Corman Railroad Company accepting the following instructions:

- 1. RJ Corman Railroad Company's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Don Damron, ORDC, email don.damron@dot.state.oh.us, and to the Public Utilities Commission of Ohio at George.martin@puc.state.oh.us. RJ Corman Railroad Company's project foreman will also notify the same of any stops and re-starts of the work activity and of the date work was completed for the project.
- 2. RJ Corman Railroad Company will coordinate with Shawnee Township and/or the Allen County Engineers office to finalize the construction schedule and coordinate the arrangements necessary to close Wapak Road, control traffic, and arrange for and complete the reconstruction of the roadway surface including any asphalt paving that will be required.



www.rail.ohio.gov phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

- 3. RJ Corman Railroad Company will arrange for utilities to be located at the project site by the Ohio Utilities Protection Service (OUPS) prior to any construction activities at the site. Utilities that are not participating members of the service must be contacted directly by RJ Corman Railroad Company.
- 3. RJ Corman Railroad Company's project foremen will notify Don Damron at 614-917-8466 (mobile telephone) or don.damron@dot.state.oh.us (email) of any changes in the scope of work, cost overruns, material changes, etc. which are not included in the approved plan and estimate and secure approval of same before the work is performed.
- 4. RJ Corman Railroad Company will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
- 5. RJ Corman Railroad Company will furnish two (2) copies of the final all-inclusive bill to ORDC stating the exact dates of starting and completing work, the initial and final dates of construction and location where the accounts may be audited.
- 6. Revise the plan, if the railroad right-of-way is adequate, to move the 6 X 6 Bungalow from the 15 feet from rail as illustrated on the plan dated 6/17/2013 to 25 feet from rail.

Thank you for your assistance with these matters.

Sincerely,

Donald J. Damron

Project Manager

C: Randall Schumacher, Supervisor, Rail Division, PUCO George Martin, Grade Crossing Planner, PUCO ORDC (file)



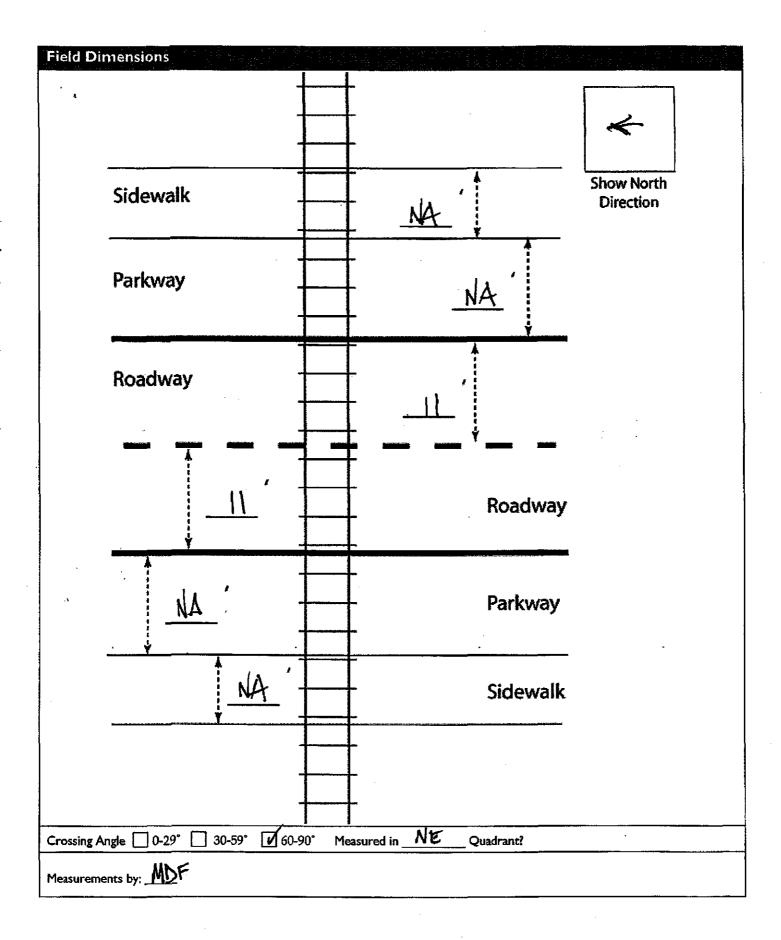
Diagnostic Review Team Survey

,			Date: 3/	12/13	
Location Data					
	in Postania de A				
Street or Road Name: 5 Wapak Road				•	
Route/Road Number (i.e. Twp., Co., SR or US) TR 91			US DOT No.:	261649F	
County: ALL Township:	Shawnee	City: (In of Near)	Lima		
Raifroad Name: R.J. Corman	Raifroad Western O	H Line		Branch/Line Name:	SPEG
Nearest RR Timetable Station: Lima			RR Milepost	57.1	
On-Site Review Team					
(Include: Name - Organization - Phone Number - E 1. George Martin, PUCO - 614-203-4714			; ;		
2. Zachary J. Gerdeman, Roadway Tech.	, Allen County Cell: (5	67) 204-2196.			
3. Jim Boles / Supt. of Signals / RJ Corma	ın RR - 502-507-9135				
4. MIKE FORTE OF	rdc T		-61	4-374-9	287
5. And McDomora B.	rekeya Pipelia	·			
6. LOW DUMRON O	RPC		6/9	4 466-3	2509
7. Muchous Revist	ST POLICE DEP.	<i>F</i>	_	9.227.3	•
8. DAVE BELTON S	HAWNEE TWP	TRUSTEE	41	9,991.9	8706
9. Clark Rasnear	B.T. Como) t-	Y	19-733	-D549
Type of Warning Devices	/Installed	l?		Quantity/Co	mments
Advance Warning Signs (condition?)	Yes	No	. 2		
'Stop' Signs	Yes	No No			
'Stop Ahead' Signs	∏,Yes	M No			
Pavement Markings (condition?)	√7/Yes	No	ني		~ (420)
Crossbucks	" Yes	No	NEW	YIEW	
Number of Tracks Signs		W No	1,100	1.5.5.	
Inventory Tags	¥ Yes	No			
Interconnected Highway Traffic Signal		No No	,		
Mast-Mounted Flashing Lights		K No			
Cantilever Flashing Lights		№ No	Number:		Length:
Side Lights		No No	1 (4.11.50)		
		Ø No	Number:		Length:
Automatic Gates			LAGILIDON		m-011-5-111
Automatic Gates Bells			Number		
Bells	Yes	₹ No	Number:		
Bells Sidewalk Gate Arms	Yes Yes	₹ No K No	Number:		
Bells Sidewalk Gate Arms 'No Turn' Signs	☐ Yes ☐ Yes ☐ Yes	¥ No ₩ No	Number:		
Bells Sidewalk Gate Arms	☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes	₹ No K No	Number:		

Safety Data (Obtain c	rash repo	rts, if possible, prior to review)	
		ial Information (from database)	Revised
Number & dates of crashes in previous 5 years	0		1 July 2012
Hazard Ranking	1314	Date Run: 3/5/13	AI WAZI
Railroad Data			Maran da kalendar kan kabana da ka
Railroad Characteri	stics	Initial Information (from database)	Revised
Total trains per day		2	
< per day	•		1 PER WOOK
Day thru trains		2	1717
Night thru trains			74100
Daytime switching movem	ents		
Nighttime switching move	ments	*	
Total number of tracks		1	
Number of main tracks		1	
Number of other tracks			
Maximum train speed		25	·
Typical train speed			25
Amtrak		<u> </u>	N
If non-gated crossing, is clearing	ng sight distan	ce adequate in all quadrants? (See Table 1)	Yes No
If multiple tracks, can two trai	ns occupy cro	ossing at the same time? 🔲 Yes 🔣 No	٠.
Can one train block the moto	rists' view of	another train at crossing? 🔲 Yes (Explain be	elow) 🛛 No
Can one or more tracks be el	iminated thro	ough the crossing? Tyes 🔯 No	
		roadway within 100 ft of this crossing?	Yes 🔃 No
If yes, Crossing DOT #(if of If yes, distance		asurement between track centerlines at close	st point along roadway)
Roadway Data			
Local Highway Authority:		Shawnee Township	
Roadway Character	istics	Initial Information (from database)	Revised
Average daily traffic		2815 (2011)	
Highway paved		X Yes No	Yes No
Roadway Surface: X Blackto	Gravel	Concrete Other	•
Roadway width: 18 ft. 2	1	÷ .	
Number of highway lanes		2 .	
Urban or Rural		Rural	
Vehicle Speed: 45 MPH		•	
School Bus Operation: N	• ₽ Y		
Hazardous Materials Trucks		Yes Amount	
Shoulders: 💆 No 🗹			
Is the shoulder surfaced? 🔀	No 🗌	Yes	
is there existing guardrail alor	g roadway in	crossing vicinity? No X Yes	
Is stopping site distance adequ	iate? (See Tab	ole 2) 🌃 Yes 🔲 No If no, deficient :	approach(es)

Potential Red Flags / Project Challenges
Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):
Crossing Consolidation or Closure:
CLOSSILIK COLISORIGATION OF CLOSULA.
Real Estate or ROW:
(a) 11 (1h1/h1/ 100 00
40' HIGHWAY 100' RR
Culverts / Drainage / Ballast Conditions:
RRIGON EMBANEMENT APPROX ZOFT ABOVE GRADE IN AC CUADRANTS. RODDINAY ASSENDS TO RR BRODE.
QUADRANTS. KORDINAY ASSENDS TO RR BRODE.
Roadway and/or Sidewalks:
Circuitry (e.g. reaches out to other crossings, specific needs, etc.):
Circuity (a.g. reaction out to out to out a country and the country (a.g. reaction out to out to out to out to
Environmental:
Other:

Diagnostic Team Recommendations	
	Quadrants Needed
Install/upgrade active devices	
Automatic Flashing Lights (AFLS)	
☐ AFLS /Cants	
AFLS / Gates	NW SE
AFLS / Gates / Cants	
Bells / number	I STOP RINGING WHEN GATES AR HORIZONTAL
Upgrade circuitry / type	AR HORIZONTAL
Sidelights	
Guardrail Needed	
☐ Install/Replace curb	
Bungalow placement & offset from rail & highway	DECON.
Other (define) ASPIAIT + FLANG	E SURFACE 1550C
Comments:	
☐ Install/upgrade traffic signal preemption	
☐ No improvements needed	
Other (define)	
Acknowledgement of Recommendations (each entity represented acknowledgement): 256 mys 648 Our 048	at the diagnostic must have at least one signature MDF



Field Sketch
Include utilities as marked by OUPS and LHA; include ROW boundaries as indicated by railroad and LHA.
P
ELEC+CABLE
of - worker 10
1 11
MANHOLE
\$?\$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
TOWNG OLD RE EQUIP.
-!-1-1- OLD RR
-1-1-1- OLD RR -1-1-1- TRACKS (NO RAIL)
GAS 70 (NO RAIL)
LINE TO DO GAS LINE
MARKERS
GUDRD
(778.)
Crossing Angle 0-29° 30-59° 60-90° Measured in NE Quadrant?
Sketch by: MDF

TABLE I

Clearing Sight Distances

Maximum Authorized Train Speed	Distance (dT) Along Railroad from Crossing (f			
1 - 10	240			
15	360			
20	480			
25	600			
30	720			
35	840			
40	960			
45	1080			
50	1200			
55	1320			
60	1440			
65	1560			
70	1680			
75	1800			
80	1920			
85	2040			
90	2160			

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers and level single track 90 degree crossings; and may need to be adjusted for multiple tracks, skewed crossings or approaches on grades.

Clearing Sight Distance is to be measured in each vehicle travel direction at <u>non-gated crossings</u> as viewed from a point 25 feet from centerline of nearest track in the center of whichever travel lane is nearest the direction along track being measured.

Table 2

Stopping Sight Distances

Highway Vehicle Speed	Distance (dH) Along Roadway from Crossing (ft)
0	n/a
5	50
10	70
15	105
20	135
25	180
30	225
35	280
40	340
45	410
50	490
55	570
60	660
65	760
70	865

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers on dry level pavements.

Stopping Sight Distance is to be measured on each roadway approach to crossing from stop bar.

County:

Allen

Location:

Wapak Road/TR 91

DOT#:

261649F

Estimate for Signal Installation

Material	Quantity	Unit	Description	Unit Pr	ice	Ext	ension
	1	Each	Signal Warning System Complete	\$	116,904.38	\$	116,904,38
Labor	Quantity	Unit					
	60	Hours	Supervisor/Laborer	\$	60.00	\$	3,600.00
	5	Nights	One Room/Lodging	\$	85.00	\$	425.00
	6	Days	Meals	\$	25.00	\$	150.00
Equipment	Quantity	Unit					
	60	Hours	Work Truck	\$	25.00	\$	1,500.00
Sub-total for Si	onal Installation					s	122.579.38

5/20/2013

Estimate for Grade Crossing Surface

Material	Quantity	Unit	Description	Unit Price		Exte	nsion
	36	TF	Concrete 4' Panels	\$	250.00	\$	9,000.00
	120	Ft	115 RE New Rail (2 sticks in 60 Ft Pieces)	\$	40.00	\$	4,800.00
	40	Tons	Rock	\$	26.00	\$	1,040.00
	0	Keg	Spikes (50#)	\$	35.00	\$	-
	20	Each	Ties (7x9 lG)	\$	60.00	\$	1,200.00
	100	Each	Anchors (115#)	\$	2.30	\$	230.00
	4	Each	Field Welds	\$	140.00	\$	560.00
	1	Keg	Track Bolts w/ Washers (50/keg)	\$	175.00	\$	175.00
	0	Each	115re 19'6" glued joints	\$	1,800.00	\$	-
Labor	Hours						
	20	1	Supervisor	\$	55.00	\$	1,100.00
	20	4	Laborers	\$	35.00	\$	2,800.00
	20	1	Operator	\$	40.00	\$	800.00
	20	1	Welder	\$	45.00	\$	900.00
=	2 days	7	Meals	\$	25.00	\$	350.00
	4 rooms	2 nights	Lodging	\$	60.00	\$	480.00
Equipment	Hours						
	20	1	Backhoe	\$	53.55	\$	1,071.00
	20	1	Prentice Truck	\$	107.00	\$	2,140.00
	0	1	Trackhoe	\$	150.00	\$	_
	20	2	P/U Truck (F-250)	\$	24.00	\$	960.00
	20	1	Dump Truck	\$	83.00	\$	1,660.00
	10	1	Roller	\$	59.00	\$	590.00
	20	1	Work Truck (F-550)	\$	44.00	\$	880.00
							400.00
	20	1	Backhoe Trailer	\$	8.00	\$	160.00
	20 0	1 1		\$ \$	8.00 300.00	\$ \$	160.00
		1 1 1	Backhoe Trailer Mark IV Tamper Ballast Regulator	\$ \$ \$		-	160.00 - -

Project Total:

\$ 156,475.38

33,896.00

Sub-total for Grade Crossing Surface

^{*} Labor & Equipment costs are based on 8-hr days.

* R.J. Corman is NOT responsible for paving or traffic control.



Mr. Jim D. Boles RJ Corman Railroad Corporation 101 McKenna Way Bardstown, KY 40004

Email: jimandbonnieboles@hotmail.com

April 4, 2013

REF: RJ Corman-Wapak Road QN: 2013-025435

Dear Mr. Jim Boles.

In response to the RJ Corman Railroad Corporation request, GE Transportation Systems Global Signaling, LLC (GETSGS) is pleased to provide a proposal for the RJ Corman-Wapak Road project.

The proposed equipment, services and application engineering are described below, and the accompanying material list that identifies the proposed equipment and quantities is attached hereto.

Wapak Rd. Lima, OH

GETSGS Total Quoted Price including freight to location is: **\$116,904.** Please review the accompanying material list that indicates the items we propose to furnish at the stated price.

Total Material Price	\$ 66,745.43
Control Shelter Wiring	\$ 7,115.40
Application Engineering	\$ 5,004.00
Shipment	\$ 2,858.82
Installation Service	\$ 35,180.72
Total	\$ 116,904.38

GETSGS' total quoted price for your solution is set out herein in U.S. Dollars, shipment shall be per Incoterms 2010 FOB jobsite, and is exclusive of all taxes, tariffs, licenses, bonds, and permits as stated in the section of 2 and 4 of the Standard Terms and Conditions of Sale. This proposal will remain valid for sixty (60) days from the date of this letter.

Delivery is estimated to be approximately 90 days after receipt of a purchase order and the finalization of engineering details, but actual delivery times may vary.

GE Transportation

Franklin Reynolds
Commercial Operations Leader

GE Transportation Systems Global Signaling, LLC 2712 Dillingham Rd Grain Valley, MO 64029

T 203 522 7900 Franklin.Reynolds@ge.com http://www.getransportation.com/



Mr. Jim D. Boles 2013-025435 Page 2 of 4

Payment terms are net thirty (30) days. Please reference 2013-025435 when ordering this equipment. Faxed purchase orders should be sent to Kelly Pollard at (866) 481-9910. Mailed purchase orders should be sent to:

GE Transportation Systems Global Signaling, LLC Attention: Kelly Pollard 2712 S. Dillingham Rd. Grain Valley, MQ 64029

GETSGS welcomes the opportunity to provide a solution to your transportation needs. If you have any questions or require any further assistance, please feel free to contact us.

Thank you,

Franklin Reynolds

Commercial Operations Leader

Enc. Material List

cc: Paul Klienhenz

Eduardo Luckie Melissa Weiler Kelly Pollard

General Proposal Terms:

 This quotation is a financial proposal and is predicated upon your acceptance of our current Standard Terms and Conditions of Sale. Acceptance of this proposal by you shall form a legally binding contract. Standard Terms and Conditions of Sale can be viewed at https://customer.getransportation.com/public/signaling/GS. Sales Terms.pdf.

Equipment will be invoiced at the quoted price when shipped, and/or Services will be invoiced at the quoted price when delivered.

3. GETSGS reserves the right to subject orders to a credit limit or other approved terms of payment.

4. In the event there are any discrepancies between your specification and the proposed solution, GETSGS agrees to work with you in an effort to find a mutually satisfactory solution to your transportation needs.

 Please note that whenever GETSGS is referred to in this proposal, it is understood to mean GETSGS and/or one or more of GETSGS's affiliated entities, and GETSGS have one or more of GETSGS's affiliated entities enter into relevant contractual documentation and/or provide some or all of the products and services to be provided.



Location/Description	QTY		GETSGS-PN
Wapak Rd			
Control Shelter			
HSE 6X6 AL S/L SKR101 L/EPD/KY	1	EA	028633-020
PROTECTOR SURGE TVSS TLE 120\$	1	EA	
ASSY SCX-1 CONFIG A W/STDXING	1		800-087051-007
ASSY BSA-4	1	EA	250597-000
ASSY XLC TOP LEVEL	2		250991-000
ASSY PLUGBOARD XLC	2	EA	
CHARGER 20A 12V CRAGG 20ETC12V	1	EA	017061-201
CHARGER 40A 12V CRAGG 40ETC12V	1	EA	017061-203
HIGHWAY CROSSING MONITOR SYSTEM	1	EA	180394-MON
MONITOR LOW VOLT BATT 12V DBL	1	EA	017225-005
XFMR 115-230VPRI/16VCT 5A 80VA	1	EΑ	016206-105
RLY DPDT 12VDC 5A OCT	1	EA	007192-032
SCKT RLY 8-PIN OCT SCREW PNLMT	1	EΑ	132246-001
ASSEMBLY, 4 POST TERMINALBLOCK	36	EA	203032-000
ASSY AGA-1	40	EA	202216-001
ASSY AGE-1	5	EA	202217-000
RES VAR ADJ 4 OHM 1.94AMP	4	EA	002014-014
RLY ST 500 OHM NEUT 4FB-2F-1B	1	EA	007149-003
RLY ST 194 OHM 3 SEC SR 4FB	1	EA	007149-011
RLY ST PLBD W/O TERM	2	EΑ	007149-100
KIT RLY FL E-POST MOD W/S STUD	2	EA	005634-000
NUT INSULATED HARMON	28	EA	013986-000
TEST LINK W/PLT & INSUL	88	EA	032257-002
ASSY SINGLE ROW TERM 12 POST	1_	EA	250084-212
WIRE 16AWG/19 EPR NYL BRD CASE	450	FT	012236-000
WIRE 10AWG/37 EPR NYL BRD CASE	650	FT	012236-004
WIRE 6AWG/19THHN BLK	240	FT	012253-000
WIRE 6AWG/19 THHN GRN	40	FT	012253-002
CABLE RAW 3/14AWG PWR 300V	10	FT	012690-010
CONN PLUG L6-15 250V 15A 2P3W	2	EA	132286-001
ASSY 2WAY TERM BLK W/AAR HARD	5	EA	202810-000
ASSY TERM STRIP DBL POST 12	6	EA	250094-300
GROUND POST P5-162	3	EA	113047-000
ASSY LIGHT PO EXT-GEMS	1_	EA	201744-001
WRENCH AAR TERMINAL	1	EA	095905-000
WRENCH RLY TST E-POST	1	EA	095605-000
LABEL RK PNL-LAMP LIGHTING RES	1	EA	125371-000
LABEL, DANGER 240 V, 1.75 X 2.	1	EA	SQS109
THERMOSTAT SPDT REMOTE BULB 8A	1	EA	009186-004
KIT SM PRTS GENERIC	1	EΑ	18 <u>0394</u> -XXX
KNIFE SWITCH	1	EΑ	009291-10X
Field Material			

FND SIGNAL 32 X 32 X 60	2	EA	17190-4
GATE ASSY 3593B CTWT 16-32'	2	E	076037-018
HEATER FOR GATE MECH 110V **	2	ΕĄ	4137-01
MAST AL 5" X 14' M90R X-NONE	2	EA	51105-01
BASE 5" JCT BOX 32 TERM	2	EΑ	022603-011
KIT FOUNDATION LEVEL BOLT	8	EΑ	180554-000
LENS LED FLASHING 12" RED	8	EA	180572-006
GATE KEEPER SK1000-2W DUAL DIR	2	EA	076007-005
GATE ARM 19-24' AG HI GSI	2	EA	076045-021
LIGHT KIT GATEARM 3 4" W/WIRES	2	SE	
WRENCH TORQUE WCH 3590-K-9	1	EA	095936-001
SIGN XING S-F HI 5"MTG SIG/GAT	2	EA	
BELL LOUD 5" OR 4" MAST MTG	2	EA	
CABLE UG 3 COND #4 AWG	75	FT	
CABLE UG 5 COND #6 AWG SOLID	325	FT	
CABLE UG 7 COND #14 AWG SOLID	325	FT	<u> </u>
CABLE UG 3 COND #9 AWG SOLID	325	FT	
WIRE UG TRK #6 AWG DUPLEX	350	FT	
BATT GNB 50A11 1 CELL	7	ΕA	
BATT GNB 50A13 1 CELL 320AH	6	EA	
ASSY RING-10	3	EA	
WIRE #6 SOFT BARE COPPER	40	FT	
ROD 5/8 X 8 NS GRD ***	4	EA	
CLAMP GROUND FOR 5/8 ROD	4	EA	
BOND JOINT 3/16" X 6-1/2" XS	135	EA	
BOND JOINT 3/16"X48"XS SBXS	135	EA	
BOND STRAND 8-STR 3/16" TINNED	75	FT	
BOOTLEG BOND W/COUPLER KIT	12	EA	
TAPE ELECTRICAL 3M #33+ 3/4"	4	RL	
TAPE ELECTRICAL 3M #130-C	4	RL	· · · · · · · · · · · · · · · · · · ·
COMPOUND INSULATING ELECTRICAL	1	EA	
HOSE RUBBER 3/4"	60	EA	
		EA	· · · · · · · · · · · · · · · · · · ·
STAPLE GROUND WIRE 1-1/16"X3"	18	T	† · · · · · · · · · · · · · · · · · · ·
TIE CABLE .184 X 7.31" HIG TEM LUG RNG 1/4" 12-10AWG INS BLK	40	EA	
	40	EA	
WIRE DIESEL 10AWG 2000 VOLTS	400	FT	
STAPLE COPPERWELD 3/8 X 1-3/4	60		1148-01
GREASE RUST PREVENTIVE NO OXID	1	EA	1906-01
SLEEVE NICO 3/16"-#6 AWG REDUC	6	EA	1145-01
CLIP TRACK WIRE RETAINER	12	EA	
INSULATED RAIL JOINT	8	EA	N/A CUST
COMPOUND DUCT SEAL 5 LB PLUG	3	PK	1179-01
LOCK BRONZE HEX SAFETRAN	5	EA	005778-005
TRAY BATT 12X24 POLYETHYLENE	4	EA	040231-000
Field Cable Tag Kit	1	EA	180394-FTG



Quote 1

4/15/13

mine Stagens in the same of the foreign process of the state interest and

er er gefanlig dag fagtig geschenschingen er den bestehende for

Account: RJ Corman

Western Ohio Line / Walpak Road/TR 91

Material	\$97,400.00
Shop Labor	\$1,700.00
Engineering	\$2,900.00
İnstall	\$33,600.00
Total Signal Cost	\$135,600.00
Freight	\$3,600.00
Total Cost	\$139,200.00

Cleveland Lin / Wooster Ave. /SR 800

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$104,400.00
	\$ 1,700.00
	\$ 2,900.00
	\$ 38,500.00
Cost	\$147,500.00
100 1 1 1	\$ 3,600,00
	\$151,100.00
	2ost

Thank you
Matthew Bolte
Packaged Solutions Manager
RJ Corman Signaling, LLC
101 RJ Corman Drive
PO Box 788
Nicholasville, KY 40340
Matthew Bolte@RJCorman.com
(502) 689-6675 Cell

ITEM DESCRIPTION:	O.E.N.	QTY	U/M
ium. 6" x 8" Sheker W/.P.O. LTS & C.E. Pipes, w/Relay Bar & Heater	PTMW	1/8	A
CX-1 "A" Unit For Standard Crossing	CETS CS	7'11	
rossing Larry Controller (XLC)	GETS GS	3 6	*
iughoeird Kit For XLC	GETS GS	3 E	
ack Recition, Ring 10	GETS GS	3.6	
Tv1 Relay Socket w/Test Posts, 10-14 crimp	SAFETRAN	2 6	A
elay, ST-1, 4FB-2F-18, 500ohm	SAFETRAN	2 E	Α
seistor, Adjustable, 2.5 Ohms	SAFETRAN		
esistor, Adjustable, 1.3 Chans, H. D. Daning Arrester, Cararylan	SAFETRAN	- 8 E	
oraning verosies, caracteristry of the control of t	SAFETRAN SAFETRAN	20 8	
C Line Surge Protector, Model SP-20A	SAFETRAN	2 6	
IJ TC Blue Flex Wire	BURGO	:700 F	
4 TC Blue Flex Wire	BURGO	eno F	
OH2 AMP Evelets	SAFETRAN	150	
A/16 AMP Eyelds	SAFETRAN	100 E	A
ower Off Transformer, \$20V / 12V	Mäster Dict	1 5	
attery Charger, 20E.1 G-12V	RECO	. 26	
ille Switch Crossing Cut-Out Switch	Radio Shack		
Post Terminal Block w/Hardware	ERICO	20 E	
ush Button Box will eminate only	Lavy	1	
ggs, Slip On Ide-On Stendi	ACE	0.5	č00
and Strand, Ericot SESSTLINS864	Cadillac Sign Co. BURCO	200 F	
est Link. 17 Official wiGold Nut	Law	50 8	
old Terminal Insulated Nut	1800	50	
eminal Block 2 x 6 wifer no only	L&W	5 8	
erminal Block: 2 post 2-3/8! wifet nut only	LAW	8 6	A
5 Non-Insulated Terminal Eye 1/4 atud	LAW	30 E	
5 Noti-Insulated Terminal Eye 5/10 stud	L&W	30 [
inding (Barrel) Nuts	LSVY	150 8	
lakstakter Tekt Switch: 3 post lest terminal	L&W		A
rap, Solg, t' Centers sap, Sold: 2-38" Centers	LGW	30	
sep, Solid, 2-3/8: Conters	LBW	3	
jes Srap 1 Centers 12 Field	LW	2 [
ircul Plain Helder WIS Misc. Package	Vilage Supplies Progress		A
The place I make the			2
Cantilever Material-Wooster Avenue (A	Aaterial & Installa	tion)	
	ô.E.N.	OTY	UM
TIEW DESCRIPTION			
TEM DESCRIPTION	Zinger zerenden er	11	
ecopy ac Bell 5' MTG	WCH	2 6	A
Geotophic Bell, 5" MTG C" Head W24" Secreptuand & Hood (Painted AL)	WCH		
Gebrase Galf, F. MTG. C'Head W24" Sackground & Hood (Panted AL) Terminal For LED Hookup (For larger RDG & GE LED)	WCH .	20 8	A
ectopac (8af. 5° MTG " Head W24° Sackground & Hood (Paintad AL) Terminal For LED Hook-up (For farger RDG & GE LED) VERRAY LED Fiesbing Light Unit (12°) wSloeighte	WCH WCH RDG	20	A
ectronic Balf, 5° MTG. 2° Head W24° Spokground & Hood (Partled AL). Terminal For LED Hook-up (For larger ROG & GE LED). VERRAY LED Hashing Light Unit (12°) w/Sleetghts: ant, 22°-velangle 10° least, Payrs, Lanct Sox & BPS	WCH WCH ROG Progress	20 g	A
Gebrand Galf, F. MTG. 7' Head W24' Sackground & Hood (Panted AL). Terminal For LED Hookup (For larger RDG & GE LED). VERRAY LED Fissibling Light Unit (12') willdeights. att. 22' wrisingle 10' Mess, Plant, Junet Sox & BPS. att. 22' wrisingle 12' Mass, Plant, Junet Sox & BPS.	WCH WCH RDG Progress Progress	20 E	A.
scrippic Galf, 5° MTG. 7° Head W24° Sackground & Hood (Painted AL). Terminal For LED Hookup (For larger RDG & GE LED). VERRAY LED Florking Light Unit (12") w/Sloeights. art. 22 "wrange 10" Mest, Plant, Junet Box & BPS. art. 22 "wrange 10" Mest, Plant, Junet Box & BPS.	WOH WOH RDG Progress Progress Progress	20 i 25 i	A
ectronic Ball, 5° MTG. 2° Hend WZ4° Background & Hood (Panted AL). Terminal For LED Hook-up (For farger RDG & GE LED). VERRAY LED Habiting Light that (12°) wishestglies: ant, 22° whange 10° Mass, Plant, Lincat Soy & 8758 ant, 29° whinge 12° Mass, Plant, John & Box & 8768 hing Harness for 22° Cantilever (Mass, Lime & Tip). King Harness for 22° Cantilever (Mass, Lime & Tip).	WGH WGH REGG REGGES REGGES REGGES REGGES Progress Progress	20 E	À
Settonic Gell, 5" ATT3 C Hend WZA" Sackground & Hood (Painted AL) Terminal For LED Hook-up (For fatger RDG & GE LED) VERRAY LED Flastking Light Unit (12") w/Steelights and, 22" w/single 10" Mess, Plant, Junet, Sox & BPS and, 20 w/single 12" Mess, Plant, Junet, Sox & BPS filing Hamses for 22" Candlever (Mess, Lame & Tip) string Hamses for 22" Candlever (Mess, Lame & Tip) refacels, 5"-10" Adapter for Bold	WCH WCH RUG RUG Progress Progress Progress Progress Progress Progress	20 i 25 i	
destront: Bell, 5" MTG. 2" Head W24" Sackground & Hood, (Partled AL). Terminal For LED Hooksup (For farger RDG & GE LED) VERRAY LED Firstbing Light Unit (12") w/Sleetghes ent., 22" witingle 10" Mass, Plans, Juncet Soy, & BPS ant., 20" witingle 12" Mass, Plans, Juncet Soy, & BPS infig Harness for 22" Camplever (Mass, Larse & Tip) Arking Harness for 22" Camplever (Mass, Larse & Tip) invacio, 5"-10" Adapter for Bell invacio, 5"-12" Adapter for Bell without State Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher without State Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher Water Cruss Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher Water Cruss Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher	WOH RUG RUG Progress Progress Progress Progress Progress Progress Progress	25 25 25 25 25 25 25 25 25 25 25 25 25 2	A A
destront: Bell, 5" MTG. 2" Head W24" Sackground & Hood, (Partled AL). Terminal For LED Hooksup (For farger RDG & GE LED) VERRAY LED Firstbing Light Unit (12") w/Sleetghes ent., 22" witingle 10" Mass, Plans, Juncet Soy, & BPS ant., 20" witingle 12" Mass, Plans, Juncet Soy, & BPS infig Harness for 22" Camplever (Mass, Larse & Tip) Arking Harness for 22" Camplever (Mass, Larse & Tip) invacio, 5"-10" Adapter for Bell invacio, 5"-12" Adapter for Bell without State Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher without State Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher Water Cruss Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher Water Cruss Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher	WGH ROG ROGS Progress	20 25 31	A
destront: Bell, 5" MTG. 2" Head W24" Sackground & Hood, (Partled AL). Terminal For LED Hooksup (For farger RDG & GE LED) VERRAY LED Firstbing Light Unit (12") w/Sleetghes ent., 22" witingle 10" Mass, Plans, Juncet Soy, & BPS ant., 20" witingle 12" Mass, Plans, Juncet Soy, & BPS infig Harness for 22" Camplever (Mass, Larse & Tip) Arking Harness for 22" Camplever (Mass, Larse & Tip) invacio, 5"-10" Adapter for Bell invacio, 5"-12" Adapter for Bell without State Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher without State Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher Water Cruss Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher Water Cruss Arm Assembly Larse Heads, Carollineer Mass Mig, w/ Higher	WOH RUG RUG Progress Progress Progress Progress Progress Progress Progress	20 25 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A A A A A A A
destrond: Bell, 5" MTG. 2" Head WZA" Background & Hood (Painted AL). Terminal For LED Hookeap (For larger RDG & GE LED). VERRAY LED Healthing Light Unit (12") w/Specigites: and, 22"-wisingle 10" Mass, Plons, Juncat Sox & BPS. and, 25" w/bingle 12" Mass, Plons, Juncat Sox & BPS. and, 26" w/bingle 12" Mass, Plons, Juncat Sox & BPS. fairig Harness for 22" Camplever (Mass, Larse & Tip). Wing Jammas for 25" Camplever (Mass, Larse & Tip). Wing Const. 6"-10" Adapter for Bell Way (Cross Arm Assembly Less Heads, Camberer Mast Mig. w/ Piroly. Way (Cross Arm Assembly Less Heads, Camberer Tip Mig. Way (Cross Arm Assembly Less Heads, Camberer Tip Mig. Way (Cross Arm Assembly Less Heads, Camberer Tip Mig. Crossams Assembly Mounting KI.	WGH RUGG Reggess Progress	20 25 35 1 1 2 2	A A A A A A A A A A A A A A A A A A A
destronat Gall, 5° MTG. 2° Hend W24° Sacriground & Hood (Painted AL). Terminal For LED Hook up (For farger RDG & GE LED). VERRAY LED Flastling Light Unit (12°) w/Sidelights and 2° w/single 10° Mess, Plant, Junc & Sox & BPS and , 20° w/single 12° Mass, Plant, Junc & Sox & BPS and , 20° w/single 12° Mass, Plant, Junc & Sox & BPS fair of Harness for 22° Camiliever (Mass, Lame & Tip). Asing Harness for 22° Camiliever (Mass, Lame & Tip). Water Start of 20° Camiliever (Mass, Lame & Tip). Water Chast Am Assembly Less Heads, Camiliever Mast Mig. W High. Way Chast Am Assembly Less Heads, Cardiover Tip Mig. Way Chast Am Assembly Less Heads, Cardiover Lane Mig. Crossams Assembly Mounting Kil	WCH WOH RUG RUG Progress		
Sectional Gall, 5' MTG. 2' Head W2A' Sackground & Hood (Panted AL). Terminal For LED Hookup (For farger RDG & GE LED). VERRAY LED Firstling Light Unit (12') w/Sidelights. act., 22' whingle 10' Mast, Pinn., Junc. Soc. & BPS. Aling Hamess for 22' Cardiever (Mast, Lame & Tip). Aling Hamess for 22' Cardiever (Mast, Lame & Tip). Aling Hamess for 22' Cardiever (Mast, Lame & Tip). Innacte. 6'-10' Adapter for Ball Way (Chas Arm Assembly Less Heads, Cardiever Mast Nig. w/High). Way Chas Arm Assembly Less Heads, Cardiever Mast Nig. w/High: Way Chas Arm Assembly Less Heads, Cardiever Lane Mig. Way Chas Arm Assembly Less Heads, Cardiever Lane Mig. Way Chas Arm Assembly Less Heads, Cardiever Lane Mig. Way Chas Arm Assembly Mounting Kill I'm Mounting Bracket. ant. Mast Mounting Kill for Railroad Crossing Signe.	WCH WOH RUG RUG Progress	20 25: 11 11 11 12 2 2 2 2 2 2 2 2 2 2 2 2 2	
destronc Ball, 5" MTG. 2" Head W24" Sackground & Hood (Partied AL). Terminal For LED Hooksup (For larger RDG & GE LED). VERRAY LED Habiting Light Unit (12") w/Specigites: ant., 22"-whitingle 10" Mast, Plont., Junct. Sox. & BPS. ant., 25" w/bingle 12" Mast, Plont., Junct. Box & BPS. ant., 26" w/bingle 12" Mast, Plont., Junct. Box & BPS. firing Hamess for 22" Camblever (Mast, Larse & Tip). Wing Hamess for 25" Camblever (Mast, Larse & Tip). Wing Chass Arm Assembly Less Heads, Camblever Mast Mig. w/ Piroly. Way: Chass Arm Assembly Less Heads, Camblever Mast Mig. w/ Piroly. Way: Chass Arm Assembly Less Heads, Camblever Larse Mig. Crossams Assembly Mounting Kit. Im Mounting Bracket. ant. Mast Mounting Riches.	WGH WGH RUGG Progress 20 25 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4	A A A A A A A A A A A A A A A A A A A	
Settonic Gall, 5" ATTG: L' Head WZA" Sackground & Hood (Panted AL). Terminal For LED Hook-up (For farger RDG & GE LED). VERRAY LED Flastling Light Unit (12") w/Sidelights. act., 22" whingle 10" Mass, Plant, Junch Sox & BPS. Joing Hamess for 22" Cardiever (Mass, Lame & Tip). Atting Hamess for 22" Cardiever (Mass, Lame & Tip). Atting Hamess for 22" Cardiever (Mass, Lame & Tip). Atting Hamess for 22" Cardiever (Mass, Lame & Tip). Atting Hamess for 22" Cardiever (Mass, Lame & Tip). Atting Hamess for 25" Cardiever (Mass, Lame & Tip). Atting Hamess for 26" Cardiever (Mass, Lame & Tip). Atting Hamess for 26" Cardiever (Mass, Lame & Tip). Atting Hamess for 26" Cardiever (Mass, Lame & Tip). Atting Hames Arm Assembly Less Heads, Cardiever Mass Mig. W Hintly. Attantion of the Massembly Lass Heads, Cardiever Mass Mig. W Hintly. Attantion of the Massembly Lass Heads, Cardiever Lane Mig. Crossame Assembly Mounting Kit m Mounting Bracket. and Mass Mounting Kit for Railroad Crossing Signs.	WCH WOH RUG RUG Progress	20 25: 11 11 11 12 2 2 2 2 2 2 2 2 2 2 2 2 2	A A A A A A A A A A A A A A A A A A A

,这是是是不是的,我们的人,也是不是我们的,我们的人,也是是我们的人,也是是我们的人,也是是我们的人,也是是我们的人,也是是我们的人,也是是我们的人,也是是我们 一个一个是是我们的人,也是不是我们的人,也是我们的人,我们就是我们的人,我们就是我们的人,也是我们的人,也是我们的人,也是我们的人,也是我们的人,也是我们的人,也

FEM DESCRIPTI satisfied Jerminal Viterich, 127 / Trangle Pupbard Terminal Wrench attery, 284 Amp Hour John Oundon Builet Camera Getterf Microphyte	in the second se		O.E.M. Velcop/Gerns SAFETRAN	1	U/M EA EA
Augboard Terminal Wirerch lattery, 264 Amp Hour olof Duadoor Builet Carriera Granic Microphosa			SAFETRAN	1	
ugboard Terminal Wronch attery, 264 Amp Hour old: Outsfoor Bullet Carriera breast Microphoea		And the state of t			EA
olor Duksoor Bullet Carnera artiset Microphone		V- V- 1			
artiact Microphona		ایگومدانس <u>تا دیشت و در تشنیت بایدی ب</u> ی	GNB		EA
	* ji		Creat Electronics		EA
			Crest Electronics Crest Electronics		EA EA
V DC-500mA Transformer VR	- 1911	 	Lorex		EA
Mini Cable w/BNC's			Crest Electronics	2	EA
Mini Cable willing's		er angermerke	Crest Electronics		EA
NC Female to RNC Male		Commence of the second second	Crest Electronics		EA
deo to VGA Converter			Crest Electronics		EA
"TIT LCD Monitor		-	Local		EA
rundation, LIP, Cantilever, Single 6		ere see richt erentemen bestellt	Progress	500	EA
rick Cable, 45 Tw; Pr; (113-12-3933) (mail Cable, 5/2 # 6 AWG (206-11-6245)	1000 C		Okonite Okonie	400	
Cable, 3/C# 6 AWG (206-11-8243)			Okonite	100	
stread Emergency Contact Sign - FNRR	A ACCEPTAGE OF THE PARTY OF THE	da Salakan ara	Lyle Signs		ĒĀ.
ex Rairsed Lock			Sateron		EA
opperweid Ground Rod, 5/6" X 8"			Esico		EA
adweld One Shot 5/8"	Kagantanga		Elico		EA
idweld Raf Bonds, 3/16" x 7-1/2" XS		A CONTRACTOR OF STREET	Erico	150	
eck Cornector, Web	تستنبة سيبس		Erico	150	EA
ack Connector, Web ack Wire Retainer Clip, Erico #SBA2458	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	وويها والمتابعة والمتابعة والمتابعة	Busco		EA
VC Sch-80 Conquit	···		848		FF
Meter Base, Breaker Box, W.H. & Pole			Commercial		EA
oricrete 4000 psi:	5.1.14		Local	12	YD
ress Stone:			Local		EA
heel grinding 1" X 5"			Enco		EA
8" Bonding bit/flat strank		1. 2. 2. 2. 2. 2. 2.	EW.		EA
educing Siceve, 3/16 - #6 Tinned		Ayla da Nagil Taya Sali Ta	LEW		EA
pilcing Sieeve, 3/16 - 3/16 Timed	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Lavy		E \$
deing 1			Locas		EA
Strenized Nails	ولني ولرانهم والمجاسم		Local		EA
to for tabing 1"			Local	1	EA
est Shrink Tubing	- 2 2		Local		EA EA
uct Seal	Zha Killinia	The state of the s	Local		LB .
ecincal Tape			Local		EA
ond Strand, Erico# SBS8TLINS664		مهمات وسيادة المسادة الماسسان	Burco		FT.
o Oxide Greate Bara-Copper	20 10 10 10 10 10 10 10 10 10 10 10 10 10	- Carlon Constitution of the Constitution of t	Sefetran Grainger		F
eld Minerial Misc. Package		بمستنب أربي والهابات أج	Progress		lot
			1.030		1
sulated Rail Joints 100# Fiber			314	1 6	EA
**************************************	and any plantachili	د المراجع في المراجع بالمراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع		1	
	· · · · · · · · · · · · · · · · · · ·		I		
Mark State Control of the Control of			Line Item Scope	<u> </u>	177019.11
Section 1		e gwww.serien	Commence of the commence of th	1000	
	19 May 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Metorial	غسيان	\$ 104,400.0
<u> sa a 18 de esperante de la companya de la company</u>		and the second second section is	I Shop Labor	1	1.5 1.700.0
	in the state of the same of	and the second second second			
			Engineering		\$ 2,900.0
			Engineering Install		\$ 2,900.0
			Engineering		\$ 2,900.0
			Engineering Install		\$ 2,900.0 \$ 38,500.0 \$147,500.0

seas one distribution of consistency of consistency of the consistency

AND THE PARTY OF A SECOND CONTROL OF THE PARTY OF THE PAR

ITEM DESCRIPTION	O.E.M.	OTY	LUM:
ulated Terminal Whench; 1/2" / Triangle	Velcop/Gerna		EA
oboard Terminal Wrench	SAFETRAN		EA
tlery, 264 Amp Hour	GNB		EA
ttery, 312 Amp Hour	GNB		EA
for Outdoor Statet Carners	Crest Electronics	1	EA
illact Microphone	Creek Electronics		EA
V DC-600m) Transformer	Crest Electronics	. 2	
	Lorex	1	EA
Wird Cable W/BNC's	Crest Electronics	2	EA
Mini Cable wronch	Crest Electronics	. 1	EA
C Female to RNC Mate	Crest Electronics	2	EA
Sec to VQA Converter	Crest Electronics	1	EA
TET LCO Monitor	Local	1	SA
ne Lighte, 6 de, complete, lass were w/LED	GEMS	3	EA
Tall Galv: Steel Gate Foundation w/32' Square Base	Progress	2	FA
Na Arm 27: HWP; Al but sec. Fg 2nd/3rd sec (HI (r/ichala))	NEG	- 5	EA EA
ns Ama Light (Nos 3C#14	NEG	- 50	et .
KK Cable #5 Tw. Pr. (119.12-9933)	Okonite	360	
nel Cable, SrC # 6 AVIG (206-11-6246)	Cionita	360	
PM C40M; 7/C #14.AWG (206-11,5887)	Chonife	350	
Cable, SIG # 6 AWG (206-11-6243)	Cloonite	100	
Small Emergency Contact Sign - FARR	Lyle Signs		EA
a Rairond Luck	Saletran		
pperweld Ground Red 5/8" X 8	Enco		EA EA
Aveid Cree Shot, 5/8*	Enco		50
chinal Rea Source; 3/16" x 7-1/2" XS		180	EA.
ick Connector, Web	Erico		
ick Sphnecker Yeeb			EA -
	Erica	150	
nck Were Reteiner City, Erico #SBA2468	Burno		<u>EA</u>
C Sch. 80 Conduit Mater Base, Brasker Sox, W.H. & Pole	B&S		T
Moter daze Flashet Rolf, M. W. & Lote	Commercial	1	EA
est Stone	Local		EA .
eel conduct X &	Enco		EA.
F Bonding Dames shares	LAW		EA
5 Bonding Odriat shark ducing Slaeves, 2/16 - 45 Tinned Bong Slaeves, 2/16 - 2/16 Tinned	LSW		EA
acing Steams, 206 - 3/16 Tricked	LAW		EA.
	Local		ET.
0166	Local		EA
Aveninged Needs	Local	12	ĒĀ
a for tubing 1	Local		EA
int States Tubering	Locai		EA
or Seat (c).	Local		LB:
ctrical Tape	Locel		EA
nd Strand, Encor SBSBT LH65684	Butto		FT
Octo Cress	Seletran		ĒÁ
Bart Copper	Grainger		FT
ki Naterial Misc. Package	Progress		Lot
ulated Raf Joints 100# Fiber	314		EA
		· · · · ·	- The second
rent and the second of the sec	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Line from Sco	50	minmon
<u>ىدىنى ئەسلىمىيە ئېدىڭ ئالىكى ئەرەپ بەرسىمىيەت كەرسىدىدىدىك ئالىرىنى ئالىرىنى ئالىرىنى ئالىرىنى ئالىرىنى ئالىرى</u>	WHEN SERVING AND	-	
	Material		\$ 97,400
and the second of the second 	Shor Labor	<u>}</u>	\$ 1,700
a Market Caracter for the Caracter of the Caracter Andrews Caracter for the Caracter for t		 _	
	Engineering Install	1	\$ 2,900 \$ 33,800
THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, T			\$ 135,600
<u> 1980 - Maria Maria da Arra d</u>	Total Signal Cost	1. :	A 102'000
	Com Signal Cost	<u> </u>	\$ 3,600

	O.E.W.	OTT		U/in
	1,000,000	15.7	-	
n. 6'x 5' Sheller W.P.C. LTG & C.E. Pipes, witholdy Bar & Heater	PTMAY	1 1	ĒĀ.	
61 "A" Unit For Standard Grossing sping Larng Controller (NLC)	GETS GS		Ē,	<u> </u>
Saard Ka For XLC	GETS GS		EX:	
x Recifier Ring 10	GETS GS	1-3	E	-
Relay Sockel w/Test Poets, 10-14 crimp	SAFETRAN		ĒA	1,700
y, ST-1, 4F8-2F-18, 500ohm	SAFETRAN	1 1	Ē.	**.**
y, ST-1, 4F8, 194ohm SR, 3 380	SAFETRAN		EA.	
stor, Adjustable, 2.5 Ohme	SAFETRAN		EA.	
stor, Adjustable, 1.5 Chins, H. D.	SAFETRAN		ĒĀ	
Ining Arrester, Clearview	SAFETRAN	34	EA	
w Day Equation	SAFETRAN	5		
Gock, Skiple	SAFETRAN			, .
ine Surge Protector, Model SP-20A	SAFETRAN	800	EA	
TC Blue Flox Were	BURCO			
TC Blue Flox Whee 12 AMP Eveleds	. BURCO	700 150		<u> </u>
16 AMP Cyslets	SAFETRAN	100		
er Off Transformer: \$20V / \$2V	Master Tief	1 101	EA	سنستياؤك
. 204, NC84-20.	GRAINGER	+	EA	
by Charger, 40ETC 12V	RECO	1-3	ĒA	
ery Charger, 20ETC-(2V	RECO		EA	سىسىلىد رايا
e Switch Crossing Cut-Out Switch	Radio Sheck		EA	. سموب, و
ed Terminal Block wit Hardweit	ERICO	34	EA.	
Sto Con	ACE	0.5	Rel	2:
r-On Stenda	Caddlec Sice Co		EA:	
Stand Encor SBS&TLINS664	BURCO	200		
Link 1º Offish wiGold Ned	J. J. W.		E	
Terrorial insulated Nat	LEW		EA.	- 11
ninel Block, 2 x 6 what nix only	Few		ĒA	منتيب
niral Block, 2 post 2-3/8" writet trut only forr-trautated Terminal Eye 1/4 stud	LEW		EA.	- '5,
ion-insulated Terminal Eye 5/75 Rud	LSW		EA	
ing (Barret) Nuts	Law		ĒĀ.	
taingr Test Switch, 3 post test terminal	Law		EA	
p Sold 1" Centers	LZW		EA	
o, Solid 2-3/8 Centers	LEW	3	EA	. Au . 1
Strap 1" Certers 12 Hole:	Law		EA_	no la
id Plan Hokker	Village Supplies		EA	
S Miso. Package	Progress	1.4	lol	
		$\psi_{i,j}$	سبيا	acutaly.
Gate/Flasher Material-Wapak Road (Material &	installation)			<u> </u>
FTEM DESCRIPTION	O.E.W.	Oir		
	<u> </u>	-	· · ·	
tronic Bell 5" MTG.	WCH	2	£λ	
lead w/24" Background & Hood (Painted AL)				
Terminal For LED Hook-up (For larger RDG & GE LED)	WCH	B	EΑ	
I STATE OF THE STATE OF THE SECOND STATE OF THE SECOND SEC	RDG	10	EA:	
RRAY LEO Flashing Light Unit (12") w/skielights	(0.01		EA	
RRAY LED Flastang Light Unit (12") wisklelights Saver, Two Wey	OSI		EA.	W 5.
RRAY LEO Flashing Light Unit (125 w/Sidelights : Savret, Two Wig. 1. Next. 5° x 16° Base Hote 0 Dogrees & Main Hote 90 Degrees right	Progress	1 2	1	
RRAY LEO Flashing Light Unit (125 w/Skielights Saver) (Two Way Nest 5" x 16" Raise Hote O Dogrees & Main Hole 90 Degrees 1916 Soir Reats 5" WZT-WFT Cap	Progress Progress	2	EA	
RRAY LEO Flashing Light Unit (125 w/Sidelights Saver) (Two Wey , Mast, 5° x 16° Base Hote 0 Dogrees & Main Hote 90 Degrees right , Sox Rese, 5° WIZTRFT, Cap by Cross Ann Assembly Late Heads (Gate Flashin)	Progress Progress Progress	2 2	돬	
RRAY LEO Flashing Light Unit (125 w/Sidelights : Savrel, Two Wig. 1. Misst, S. X. 15 Bass Hote 0 Dogress, & Main Hote 90 Degrees right Solv Read, S. WIZTIPT Cap. 19 Cross Arm Assembly Media Heads (Galla Flashie) Trossamm Assembly Mounting (R	Progress Progress Progress Progress	2 2 2	EA EA	
RRAY LEO Flashing Uight Unit (125 w/Sidelights) Saver, Two Wig. Nov. Hest S. x. 15 Rass Hole O Degrees & Main Hole 90 Degrees right Soit Rees, St Wizz NPT Cap. By Cross Arm Assembly Less Heads (Outs Flashlar) rossams Are smily Mounting Kit said Crossing Sign, 14 said Crossing Sign, 14	Progress Progress Progress Progress Progress	2 2 2 2 2		
RRAY LEO Resting Light One (12) w/Sidelights Earle; Two Wig. Nest: 5° x 16° Base Hote 0 Dogress & Main Hote 90 Degrees right. Sole Rest: 5° Wiz THFT. Cap. By Cross Arm Assembly Less Heads (One Flasher) rossemma Assembly Mounting Ri. said Crossing Sign. Hi. pointing Rift for Retoad Crossing Signs w/Estension Bracket.	Progress Progress Progress Progress	2 2 2 2 2	EA EA	
RRAY LEO Flashing Light Unit (12") w/Sidelights: 1 Sares, Two Wig. 1. Nest, 5" x 16" Base Hote 0 Dogrees & Main Hote 90 Degrees right. 1. Sos, Base, 5" Wiz THF, Cap. 19 Cross Arm. Assembly Lese Heads (Onto Flashie) rosed crossing Sign. Hit posted Crossing Sign. Hit posting Sign of Patrond Crossing Signs w/Estension Brackets.	Progress Progress Progress Progress Progress Progress Progress	2 2 2 2 2 2	EX EX EX EX	
RRAY LEO Flashing Light Unit (125 w/Skielights) Baver, Two Wity. Nest S ** 16 Bass Hote 0 Dogress & Main Hole 90 Degress right. Spic Base - 5* WIZTYPT Cas. By Cross Arm Assembly Less flasds (Onto Flashier) rossemus Arventily Mounting Kit oad Crossing Sign; HI ounting Kit for Rathoad Crossing Signs w/Estension Bracket. 3563-8 Mochanism Assembly, Noticing the 5* Mass (Noticing Hardware, Heater, Flax. duit, with fittings, Long Arm Scipports & Courterweight kit for 16* - 24* Arms.	Progress Progress Progress Progress Progress Progress Progress W-C-H	2 2 2 2 2 2	EX EX EX EX	
RRAY LEO Resting Light One (12) w/Sidelights * Save); Two We * Nest 5' x 16' Base Hote 0 Dogrees & Main Hote 90 Dogrees right * Soc Rees; 5' Wiz THF (Cap * Soc Rees; 5' Wiz THF (Cap * Soc Cost Arm Assembly Least Heads (One Flashle) rosserms Assembly Mounting (R * said Choising Sign, H * outfort for Restord Costsing Signs w/Estension Bracket * SOC B Mindrentism Assembly including the 5' May Mounting Herdware; Heater, Flax * Out, with history, Long Arms Supports & Courserveight Ni for 15' - 24' Arms * LAMP Eyelots ***	Progress	2 2 2 2 2 2 2 100	EA EA EA EA	
RRAY LEO Flashing Light Unit (125 w/Skielights) Baver, Two Wity. Nest S ** 16 Bass Hote 0 Dogress & Main Hole 90 Degress right. Spic Base - 5* WIZTYPT Cas. By Cross Arm Assembly Less flasds (Onto Flashier) rossemus Arventily Mounting Kit oad Crossing Sign; HI ounting Kit for Rathoad Crossing Signs w/Estension Bracket. 3563-8 Mochanism Assembly, Noticing the 5* Mass (Noticing Hardware, Heater, Flax. duit, with fittings, Long Arm Scipports & Courterweight kit for 16* - 24* Arms.	Progress Progress Progress Progress Progress Progress Progress W-C-H	2 2 2 2 2 2 100 280	EA EA EA EA	

A CARACTER CONTROL OF THE CONTROL OF THE STATE OF THE CONTROL OF T



April 5, 2013

Mr. J D Boles RJ Corman 101 McKenna Way Bardstown, KY 40004

Subject: Price Estimate For Proposed Railroad Signal

Project Located at Wapak Rd. (TR-91) near Lima, OH

Dear Mr. Boles:

With reference to the above subject and your recent request for a price, Midsouth Railroad Service is pleased to offer the following proposal:

WAPAK RD. (TR-91) NEAR LIMA, OH

Material and labor to furnish and install a grade crossing signal system consisting of a pre-wired control shelter and two 12" LED flashing light/gate assemblies. Train detection to be made with solid-state equipment using a GETS SCX AC/DC track circuitry. Signal activation will be controlled with mechanical vital relays. Please refer to the accompanying material list of items and quantities we propose to furnish and install at the stated price below:

Material and installation

\$ 137,000.00

FOB:

Destination

Terms:

Net 30 Days

Delivery:

Typically 120-160 Days Upon Acceptance of Order (Weather Permitting)

The above price is firm for sixty (60) days and based on the following:

(1) Price does not include cost incurred by railroad

(2) Commercial AC power or meter service must be available within 75 ft. of proposed instrument shelter site.

(3) Installation is based on no hindering obstacles, such as rock, water, or utilities that may interfere with the installation and operation of proposed material.

(4) Price is based on furnishing material as indicated on the material list which accompanies this proposal.

(5) Meter service included

We sincerely appreciate your consideration of Midsouth Railroad Service to meet your signal construction needs and please know that we are dedicated to your total satisfaction. If you have any questions please do not hesitate to call me at (318) 614-7281.

Sincerely,

Mark Nelson Vice President

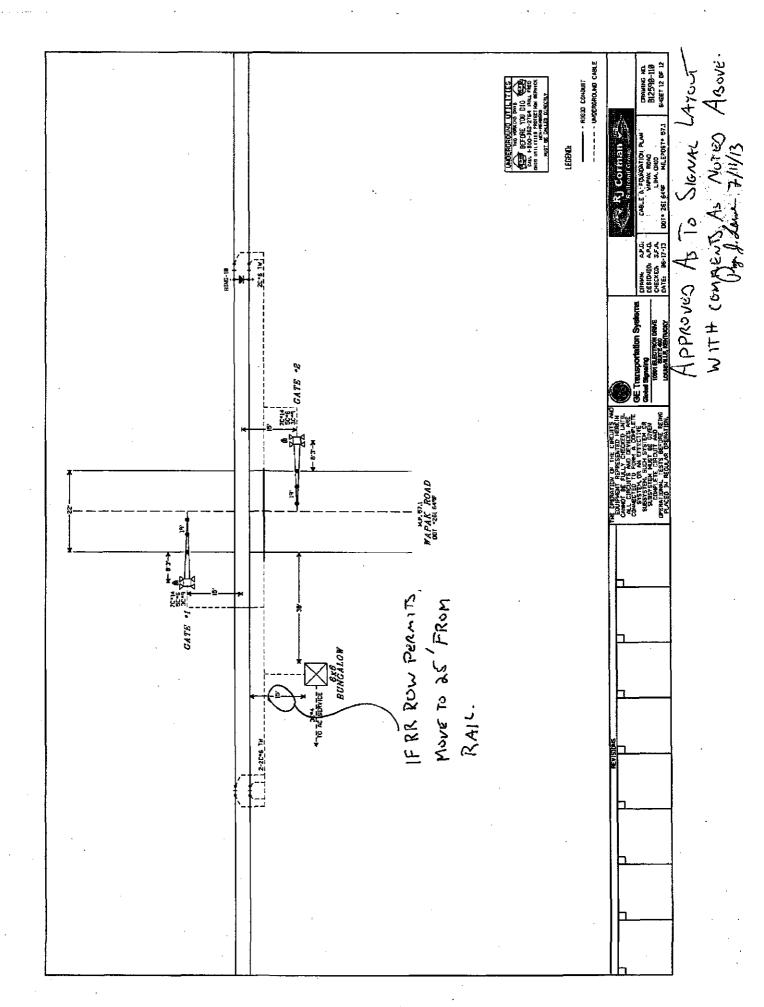
Mach Nelson

Location/Description	QTY		GETSGS-PN	ı
Wapak Rd				1
Control Shelter			1	1
HSE 6X6 AL S/L SKR101 L/EPD/KY	1	EΑ	028633-020	1
PROTECTOR SURGE TVSS TLE 120S	1			1
ASSY SCX-1 CONFIG A W/STDXING	1	ΕA		
ASSY BSA-4	1	_		1
ASSY XLC TOP LEVEL	2	-	250991-000	1
ASSY PLUGBOARD XLC	2		251071-100	l
CHARGER 20A 12V CRAGG 20ETC12V	1		017061-201	ı
CHARGER 40A 12V CRAGG 40ETC12V	1		017061-203	1
HIGHWAY CROSSING MONITOR SYSTEM	1	-		I
MONITOR LOW VOLT BATT 12V DBL	1			,
XFMR 115-230VPRI/16VCT 5A 80VA	1	_		I
RLY DPDT 12VDC 5A OCT	1	EA		1
SCKT RLY 8-PIN OCT SCREW PNLMT	1 1	EA		.
		_		i
ASSEMBLY, 4 POST TERMINALBLOCK	36	EA		4
ASSY AGE 4	40	1 -	<u> </u>	I
ASSY AGE-1	5	EA	 	f
RES VAR ADJ 4 OHM 1.94AMP	4	EA		•
RLY ST 500 OHM NEUT 4FB-2F-1B	1	EA		Í
RLY ST 194 OHM 3 SEC SR 4FB	1			1
RLY ST PLBD W/O TERM	2	EA		1
KIT RLY FL E-POST MOD W/S STUD	2	EA		4
NUT INSULATED HARMON	28	EA		1
TEST LINK W/PLT & INSUL	88	EA		4
ASSY SINGLE ROW TERM 12 POST	1	EA		4
WIRE 16AWG/19 EPR NYL BRD CASE	450	FT		4
WIRE 10AWG/37 EPR NYL BRD CASE	650	FT		1
WIRE 6AWG/19THHN BLK	240	FT	012253-000	1
WIRE 6AWG/19 THHN GRN	40	FT	012253-002	1
CABLE RAW 3/14AWG PWR 300V	10	FT	012690-010	ĺ
CONN PLUG L6-15 250V 15A 2P3W	2	EA	132286-001	J
ASSY 2WAY TERM BLK W/AAR HARD	5	EA	202810-000	Ĺ
ASSY TERM STRIP DBL POST 12	6	EA	250094-300	1
GROUND POST P5-162	3	EA	113047-000	1
ASSY LIGHT PO EXT-GEMS	1	EA	201744-001	1
WRENCH AAR TERMINAL	1	_	095905-000	1
WRENCH RLY TST E-POST	1	· · · · · · · · · · · · · · · · · · ·	095605-000	1
LABEL RK PNL-LAMP LIGHTING RES	1	+	125371-000	1
LABEL, DANGER 240 V, 1.75 X 2.	1	_	SQS109	1
THERMOSTAT SPDT REMOTE BULB 8A	1	EA		1
KIT SM PRTS GENERIC	1		180394-XXX	1
KNIFE SWITCH	1		009291-10X	1
Field Material	_		1.520. 15%	1
1 PT-7 PT-101	+	+		1
	2	ΙFΔ	1 17190-4	1
FND SIGNAL 32 X 32 X 60 GATE ASSY 3593B CTWT 16-32'	2	-	17190-4 076037-018	1

and the second of the second o

MAST AL 5" X 14' M90R X-NONE	2	EA	51105-01
BASE 5" JCT BOX 32 TERM	2	EA	022603-011
KIT FOUNDATION LEVEL BOLT	8	EΑ	180554-000
LENS LED FLASHING 12" RED	8	EA	180572-006
GATE KEEPER SK1000-2W DUAL DIR	2	ΕA	076007-005
GATE ARM 19-24' AG HI GSI	2	EΑ	076045-021
LIGHT KIT GATEARM 3 4" W/WIRES	2	SE	076084-000
WRENCH TORQUE WCH 3590-K-9	1	EΑ	095936-001
SIGN XING S-F HI 5"MTG SIG/GAT	2	EΑ	60007-05
BELL LOUD 5" OR 4" MAST MTG	2	EΑ	1450-01
CABLE UG 3 COND #4 AWG	75	FT	5192-02
CABLE UG 5 COND #6 AWG SOLID	325	Fī	1076-02
CABLE UG 7 COND #14 AWG SOLID	325	FT	1023-02
CABLE UG 3 COND #9 AWG SOLID	325	FT	1078-02
WIRE UG TRK #6 AWG DUPLEX	350	FT	1094-02
BATT GNB 50A11 1 CELL	7	EA	017134-104
BATT GNB 50A13 1 CELL 320AH	6	EA	017134-105
ASSY RING-10	3	EΑ	800-004080-000
WIRE #6 SOFT BARE COPPER	40	FT	1436-01
ROD 5/8 X 8 NS GRD ***	4	EΑ	1357-01
CLAMP GROUND FOR 5/8 ROD	4	EA	1359-01
BOND JOINT 3/16" X 6-1/2" XS	135	EΑ	1072-01
BOND JOINT 3/16"X48"XS SBXS	135	EA	005712-010
BOND STRAND 8-STR 3/16" TINNED	75	F	4133-01
BOOTLEG BOND W/COUPLER KIT	12	ΕĀ	3522-01
TAPE ELECTRICAL 3M #33+ 3/4*	4	RL	1190-01
TAPE ELECTRICAL 3M #130-C	4	RL	1321-01
COMPOUND INSULATING ELECTRICAL	1	ΕA	4123-01
HOSE RUBBER 3/4"	60	EA	005360-015
STAPLE GROUND WIRE 1-1/16"X3"	18	EA	113005-000
TIE CABLE .184 X 7.31" HIG TEM	40	EA	4125-01
LUG RNG 1/4" 12-10AWG INS BLK	40	EA	032114-008
WIRE DIESEL 10AWG 2000 VOLTS	400	FT	2125-01
STAPLE COPPERWELD 3/8 X 1-3/4	60	EA	1148-01
GREASE RUST PREVENTIVE NO OXID	1	EA	1906-01
SLEEVE NICO 3/16"-#6 AWG REDUC	6	EA	1145-01
CLIP TRACK WIRE RETAINER	12	EA	1118-01
INSULATED RAIL JOINT	8	EA	N/A CUST
COMPOUND DUCT SEAL 5 LB PLUG	3	PK	1179-01
LOCK BRONZE HEX SAFETRAN	5	EA	005778-005
TRAY BATT 12X24 POLYETHYLENE	4	EA	040231-000
Field Cable Tag Kit	1	EA	180394-FTG

· ····



From:

Lowe, Ryan

To: Cc: Damron, Don Stout, Catherine

Subject:

RE: Site plan for TR91, Wapak Road

Date:

Thursday, July 11, 2013 12:20:00 PM

Don & Cathy,

Only comment—if RR Right of Way (and other site constraints) allow, I would like to see the bungalow in the SW quadrant moved to 25' from center of rail.

Go ahead and authorize if you wish with this comment, I will sign and seal when I'm next down.

Thanks,

Ryan Lowe, P.E.

Ohio Department of Transportation
Office of Traffic Engineering - ITS and Signals Section

1980 West Broad Street .

Columbus, OH 43223

Mail Stop: 5160

Phone: (614) 387-3174

From: Damron, Don

Sent: Thursday, July 11, 2013 11:33 AM

To: Lowe, Ryan

Subject: FW: Site plan for TR91, Wapak Road

Ryan,

Here are the plans for Wapak Road for your review. Thanks.

Don

Donald J. Damron AICP
Grade Crossing Specialist, Project Manager
Ohio Rail Development Commission
Mail Stop #3140
1980 W Broad St.
Columbus, OH 43223

Office: 614-466-2509 Cell: 614-917-8466

don.damron@dot.state.oh.us

From: Hammond, Janet S. [mailto:Janet.Hammond@RJCorman.com]

Sent: Tuesday, June 25, 2013 3:00 PM