



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

2009-84

April 23, 2009

**ORIGINAL**

**RECEIVED**  
APR 28 2009

Illinois Commerce Commission  
RAIL SAFETY SECTION

**SUBJECT: PRELIMINARY ENGINEERING**

Grade Crossing Agreement  
FAP 613 (US 6/34)  
Section 09R-3-P1  
Project No. RRS-0613(019)  
Job No. C-93-005-09  
Bureau County

IAIS RR  
DOT/AAR No. 863 568U  
Mile Post - 136.34  
Agreement No. RR309005

Mr. Thomas R. Klemm, P.E.  
Engineer Public Works/Real Estate  
Iowa Interstate Railroad, Ltd  
5900 6<sup>th</sup> Street Southwest  
Cedar Rapids, IA 52404-4804

X-12896

Dear Mr. Klemm:

As requested by your April 6, 2009 letter, we are transmitting your company's original of the fully-executed agreement for the subject project.

The detailed estimate of cost in the total amount of \$162,203.23 covering your force account work at the subject grade crossing has been reviewed and is satisfactory.

Upon approval of a form 1 or form 3 petition by the Illinois Commerce Commission, your Company is hereby authorized to assemble its materials and to proceed with its work as outlined on Exhibit A in the attached agreement.

Prior to scheduling actual construction activities, you are required to notify Mr. Steve Klein at our District Three office in Ottawa, Illinois, telephone (815) 434-8429, as specified on Exhibit A of the attached agreement.

This authorization to proceed is given with the condition that the NATIONAL GRADE CROSSING INVENTORY UPDATE FORM OMB-2130-0017 (FRA F-6180.71) be filed with the Director of Processing, Transportation Division, Illinois Commerce Commission within five days of the completion of the improvement at the crossing. Please also notify this office when your work is completed.

All bills for work performed at this location, are to be forwarded to our district office at the address listed above for payment. Your bills must include all identification included in the subject of this letter.

Very truly yours,

Cheryl Cathey, P.E.  
Chief of Preliminary Engineering  
MWM\c:S:\GEN\WPDOCS\LETTERS\416082.docx  
cc: George F. Ryan (R-2) - Attn: Amy Reed (D-3)  
Debbie Marks- Attn: Project Control  
Michael E. Stead, ICC  
Design & Environment File

Route: **FAP 613 (US 6/34)**  
Section: **09R-3-P1**  
County: **Bureau**  
Project: **RRS-0613(019)**  
Job No: **C-93-005-09**  
Agreement No: **RR309005**  
DOT/AAR NO. **863 568U**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
AGREEMENT  
for  
Railway-Highway Grade Crossing  
Improvements

THIS AGREEMENT made and entered into by and between the STATE OF ILLINOIS, Acting by and through its Department of Transportation, hereinafter referred to as the "STATE", and the **IOWA INTERSTATE RAILROAD, LTD**, hereinafter referred to as the "COMPANY."

WITNESSETH:

WHEREAS, in the interest of public safety the STATE proposes to improve crossing warning signal devices at the location listed on Exhibit A, and as shown on the attached location map; and

WHEREAS, the parties mutually agree to accomplish the proposed improvements through the use of Federal and/or State funds which are provided under applicable Federal or State act, law or appropriation.

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements as hereinafter contained the parties hereto agree as follows:

SECTION 1. The project covered under this agreement shall be subject to all applicable Federal laws, rules, regulations, orders and approvals pertaining to all agreements, specifications, award of contracts, acceptance of work and procedure in general. The STATE and the COMPANY shall be governed by the applicable provisions of the Federal-Aid Policy Guide, Part 646, dated December 9, 1991, and any supplements or amendments thereto hereinafter referred to as the "Policy Guide".

SECTION 2. The COMPANY shall prepare the detailed plans (including surveys and other engineering services), and detailed estimates of cost. The detailed plans shall be submitted to the Illinois Commerce Commission (ICC) in accordance with Section 5 of this agreement and estimates shall be submitted to the STATE for their approval.

SECTION 3. The completed crossing warning devices shall conform to Part VIII of the 2003 Edition of the National Manual on Uniform Traffic Control Devices (MUTCD), including any amendments which may be contained in the Illinois Supplement to the MUTCD. Barrier systems, such as guardrail and impact attenuators should not be used at railroad grade crossings except in extraordinary circumstances. Approval for the erection of any roadside barrier by the COMPANY must be obtained in writing in advance from the STATE.

SECTION 4. All required installation work at the grade crossing(s) shall be performed by the COMPANY with its own forces or in accordance with 23 CFR, part 646.216. In the event the COMPANY intends to use forces other than its own under a continuing contract or contracts, the COMPANY shall provide the Department with a list of the items of work to be accomplished under such contract or contracts and a list of the name of each contractor whose services will be used to perform the work. Such contracts shall be in compliance with the Civil Rights Act of 1964 and implementing regulations applicable to Federal-Aid Projects as well as the Illinois Fair Employment Practices Act and implementing rules and regulations.

SECTION 5. The COMPANY will not begin to work without written authorization from the STATE to proceed. The COMPANY shall file a form 1 or form 3 Petition of Illinois Administrative Code 1535 with the Illinois Commerce Commission (ICC) showing details of the automatic warning devices herein required, and shall receive approval thereof by X-Resolution before commencing with the installation. Upon receipt of authorization from the STATE and the ICC, the COMPANY shall promptly begin the work set forth in the agreement and shall notify in writing the AGENCIES listed on EXHIBIT A before commencing work.

SECTION 6. The COMPANY, for performance of its work as herein specified, may bill the STATE monthly (in sets of two) for the STATE'S 100% share of the cost of materials purchased,

delivered and stored on the COMPANY'S property but not yet installed. The materials will become the property of the STATE and must be designated for exclusive use on the project designated on EXHIBIT A.

In the event of any loss of material after payment, the COMPANY will replace the material at no cost to the STATE. The storage area of such materials shall be available for STATE inspection upon 24-hour notice. The bill shall be accompanied by a voucher from the material supplier indicating payment by the COMPANY. Payment under this paragraph shall not be claimed for any bill totaling less than \$500.

In the event the COMPANY fails to install the stored material within one year of the fully executed agreement date, the State may provide a written notice to the Company, requiring the COMPANY to promptly deliver the stored material to a location indicated in writing by the State. Upon delivery, the STATE shall then take possession of said material for the STATE'S own use. The delivery of the material to the STATE shall in no way serve to terminate this agreement or affect the other provisions of this agreement and in addition shall not affect the COMPANY'S right to claim payment for stockpiled material to replace that taken by the STATE.

SECTION 7. The COMPANY, for performance of its work as herein specified, may bill the STATE monthly (in sets of two) for the STATE'S 100% share of its expense as incurred. These progressive invoices may be rendered on the basis of the estimated percentage of the work completed, plus allowable FHWA approved additives. The STATE after verifying that the bills are reasonable and proper shall promptly reimburse the COMPANY for 100% of the amount billed. Payment under this paragraph shall not be claimed for any bill totaling less than \$500. Upon completion of the project, the COMPANY shall provide the STATE with a written notification of the date of completion. The COMPANY, upon completion of its work, shall submit a complete and detailed final bill of all incurred costs to the STATE no later than one year from the date of completion of the project. Otherwise, previous payments to the COMPANY may be considered final, except as agreed to by the STATE and the COMPANY. After the STATE has checked the final statement and agreed with the COMPANY that the costs are reasonable and

properly set up, insofar as they are able to ascertain, the STATE shall then reimburse the COMPANY an amount, less previous payments, if any, equal to 100% of the amount billed. After the STATE has audited the expenses as incurred by the COMPANY and final inspection of the installation has been made, the STATE shall reimburse the COMPANY for any amount still owed to the COMPANY or bill the COMPANY for any overpayments or items of expense found as not being eligible for reimbursement.

The COMPANY shall maintain, for a minimum of 3 years after the date of the final bill, adequate books, records, and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records, and supporting documents related to the contract, which may be stored on electronic files, shall be available for review and may be audited by the AUDITOR GENERAL. The COMPANY agrees to cooperate fully with any audit conducted by the AUDITOR GENERAL and to provide full access to all relevant materials. Failure to maintain the books, records, and supporting documents required by this section shall establish a presumption in favor of the STATE for the recovery of any funds paid by the STATE under the contract for which adequate books, records, and supporting documentation are not available to support their purported disbursement.

SECTION 8. The crossing warning signal system should be placed in service immediately after the installation is completed. The COMPANY shall notify the STATE in writing of the date of the completed installation. The STATE will perform a final inspection upon receiving the written notification.

SECTION 9. When construction of this project is completed, and so long as State law shall so require, the COMPANY shall maintain at its expense or, by agreement with others, provide for maintenance of the crossing warning signal devices.

SECTION 10. If at any time subsequent to the completion of this improvement, the tracks in the area of the crossing are eliminated for any reason whatsoever, then the said signal system may be removed, relocated and reinstalled at another grade crossing of the COMPANY mutually

designated and agreed to by the parties hereto and subject to the approval of the public authorities having any jurisdiction. The reinstalled signal system shall thereafter be subject to the terms of this agreement.

SECTION 11. In compliance with the Federal-Aid Policy Guide, dated December 9, 1991, Section 646.210, the railroad work as herein contemplated requires no contribution from the COMPANY.

SECTION 12. In the event that delays or difficulties arise in securing necessary federal or state approvals, or in acquiring rights-of way, or in settling damage claims, or for any other cause which in the opinion of the STATE render it impracticable to proceed with the construction of the project, then at any time before construction is started, the STATE may serve formal notice of cancellation upon the COMPANY and this agreement shall thereupon terminate. In the event of cancellation, the STATE shall reimburse the COMPANY for all eligible cost and expense incurred by the COMPANY prior to receipt of notice of cancellation and payment by the STATE.

SECTION 13. The COMPANY, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. The COMPANY shall carry out applicable requirements of 49 CFR part 26 in the award and administration of STATE-assisted contracts. Failure by the COMPANY to carry out these requirements is a material breach of this Agreement, which may result in the termination of this contract or such other remedy as deemed appropriate.

In the event any work is performed by other than COMPANY forces, the provisions of "an act regulating wages of laborers, mechanics and other workers employed in public works by the State, County, City or any public body or any political subdivision or by any one under contract for public works" (Illinois Compiled Statutes, 820 ILCS 130/1) shall apply.

SECTION 14. This agreement shall be binding upon the parties hereto, their successors or assigns.

SECTION 15. The COMPANY shall complete all work or shall be responsible that all work is completed by other forces within one year of the date of the fully executed agreement. In the event that all work cannot be completed within one year, the COMPANY shall notify the STATE in writing the cause for the delay before the one-year deadline has expired. Otherwise, the STATE will consider petitioning the Illinois Commerce Commission to order the work to be completed.

SECTION 16. At the time this Agreement was executed, there were funds available for the project; however, obligations assumed by the STATE under this Agreement shall cease immediately, without penalty or payment beyond that which the COMPANY has already accumulated, should the Illinois General Assembly or the Federal Highway Administration fail to appropriate or otherwise make available funds for the project.

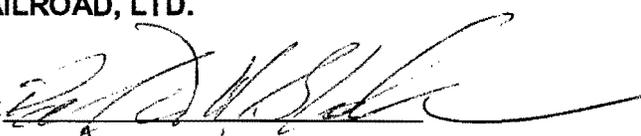
SECTION 17. The "State Required Ethical Standards Governing Contract Procurement" attached hereto as Attachment A, is hereby made a part of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed in triplicate by their duly authorized officers as of the dates below indicated.

By execution of this agreement and under penalties of perjury, the COMPANY certifies that its correct Federal Taxpayer Identification Number (TIN) is **36-3304791** and the COMPANY is doing business as a corporation.

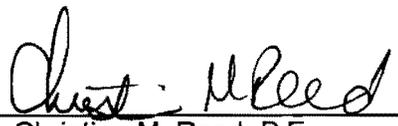
Executed by the COMPANY this 6<sup>th</sup>  
day of April, 2009.

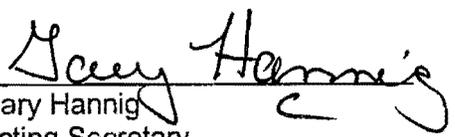
**IOWA INTERSTATE  
RAILROAD, LTD.**

By:   
Name: Pat Sheldon  
Title: VP - Engineering

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

Executed by the STATE this 21<sup>st</sup>  
day of April, 2009.

By:   
Christine M. Reed, P.E.  
Director of Highways  
Chief Engineer  
Date: 4/21/09

By:   
Gary Hannig  
Acting Secretary  
Date: 4/21/09

## ATTACHMENT A

### STATE REQUIRED ETHICAL STANDARDS GOVERNING CONTRACT PROCURMENT

The certifications hereinafter made by the COMPANY are each a material representation of fact. The STATE may terminate the agreement if it is later determined that the COMPANY rendered a false or erroneous certification.

**Bribery.** Section 50-5 of the Illinois Procurement Code provides that: (a) no person or business shall be awarded a contract or subcontract under this Code who: (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business, and: (1) the business has been finally adjudicated not guilty; or (2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

Every bid submitted to and contract executed by the State shall contain a certification by the COMPANY that it is not barred from being awarded a contract or subcontract under this Section. A COMPANY who makes a false statement, material to the certification, commits a Class 3 felony. The COMPANY certifies that it is not barred from being awarded a contract under Section 50-5.

**Educational Loan.** The Educational Loan Default Act provides that no State agency shall contract with an individual for goods or services if that individual is in default, as defined by Section 2 of this Act, on an educational loan. Any contract used by a State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

**Bid Rigging/Bid Rotating.** Section 33E-11 of the Criminal Code of 1961 provides: (a) that every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the COMPANY that it is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of the Code. The state and units of local government shall provide appropriate forms for such certification.

A COMPANY that makes a false statement, material to the certification, commits a Class 3 felony.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation, and: (1) it has been finally adjudicated not guilty, or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer, or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty, or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer, or a high managerial agent in behalf of the corporation.

The COMPANY certifies that it is not barred from contracting with the Department by reason of a violation of either Section 33E-3 or Section 33E-4.

**International Anti-Boycott.** Section 5 of the International Anti-Boycott Certification Act provides that every contract entered into by the State of Illinois for the manufacture, furnishing, or purchasing of supplies, material, or equipment or for the furnishing of work, labor, or services, in an amount exceeding the threshold for small purchases according to the purchasing laws of this State or \$10,000, whichever is less, shall contain certification, as a material condition of the contract, by which the COMPANY agrees that neither it nor any substantially-owned affiliated company is participating or shall participate in an international boycott in violation of the provisions of the U.S. Export Administration Act of 1979 or the regulations of the U.S. Department of Commerce promulgated under that Act. The COMPANY makes the certification set forth in Section 5 of the Act.

**Drug Free Workplace.** The Illinois Drug Free Workplace Act applies to this contract and it is necessary to comply with the provisions of the Act if the COMPANY is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

The COMPANY certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by: (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance, including cannabis, is prohibited in the COMPANY's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction; (b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the COMPANY's policy of maintaining a drug free workplace; any

available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations; (c) Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace; (d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace; (e) Imposing or requiring, within thirty (30) days after receiving such notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance program approved by a federal, state, or local health, law enforcement, or other appropriate agency; (f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place; (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

**Delinquent Payment.** The COMPANY certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency if it, or any affiliate, has failed to collect and remit Illinois Use tax on all sales of tangible property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The COMPANY further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the COMPANY, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

**Felony Convictions.** The COMPANY certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or of a Class 3 or Class 2 felony under the Illinois Security Law of 1953 for a period of five years prior to the date of the AGREEMENT. The COMPANY acknowledges that the DEPARTMENT shall declare the contract void if this certification is false.

**Environmental Protection Act.** The COMPANY certifies in accordance with 30 ILCS 500/50-12 that the COMPANY is not barred from being awarded a contract under this Section. The COMPANY acknowledges that the DEPARTMENT may declare the contract void if this certification is false.

Route **FAP 613 (US 6/34)**  
Section **09R-3-P1**  
County **Bureau**  
Project **RRS-0613(019)**  
Job No **C-93-005-09**  
Agreement No **RR309005**

**EXHIBIT A**

CROSSING IDENTIFICATION:

Railroad: **IOWA INTERSTATE RAILROAD, LTD.**

DOT/AAR # **863 568U** RR M.P.: **136.34**

Roadway : **US ROUTE 6/34**

Location: **Sheffield, Illinois**

EXISTING CONDITIONS:

**Automatic flashing lights and cantilevers.**

DESCRIPTION OF WORK TO BE DONE BY RAILROAD FORCE ACCOUNT:

- 1. Install new circuitry, gate mechanisms, and upgrade cantilevers to LED heads.**
- 2. Provide all Traffic Control necessitated by the project.**
- 3. Incidental work necessary to complete the items hereinabove specified.**

DESCRIPTION OF WORK TO BE DONE BY THE STATE:

- 1. Provide construction engineering**
- 2. Incidental work necessary to complete the items hereinabove specified.**

ATTACHMENTS:

**Location Map; COMPANY's Estimate**

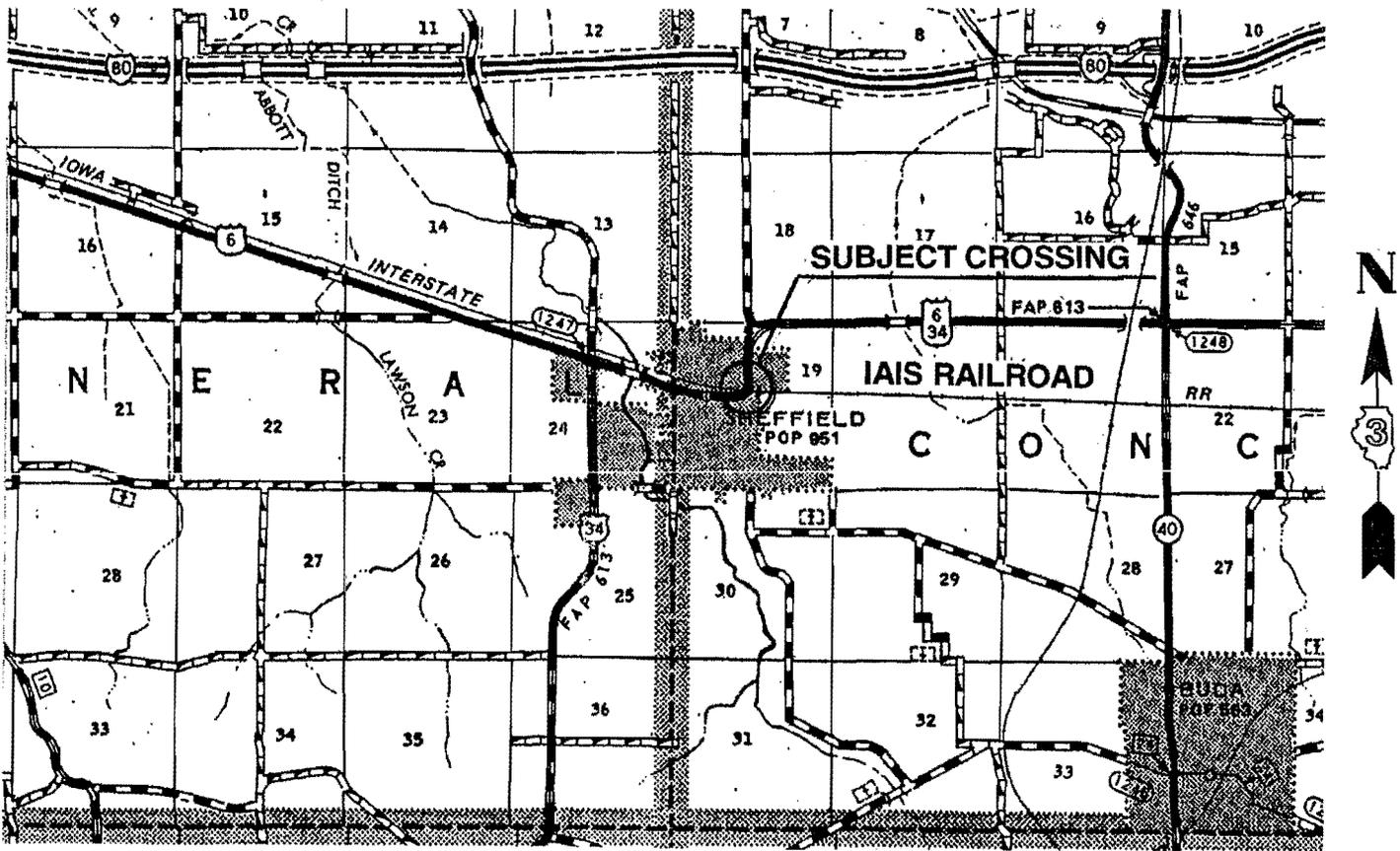
RAILROAD ESTIMATED COST: \$ **162,203.23**  
100% Federal participation

AGENCIES TO BE NOTIFIED BEFORE COMMENCING WORK:

**Mr. Steve Klein (815) 434-8429**  
**IDOT – District 3**  
**700 East Norris Drive**  
**Ottawa, IL 61350**

SUBMIT ALL BILLS FOR THE STATE'S 100% SHARE TO:

**SAME AS ABOVE**



**US 6 & 34 - IAIS RAILROAD**  
**GRADE CROSSING**  
**SECTION 09R-3-P1**  
**JOB NO. C-93-005-09**  
**SHEFFIELD, IL**  
**DOT/AAR NO. 863 586 U**

# Balfour Beatty

## Rail

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Balfour Beatty Rail Inc.  
Courthouse Square towers  
216 North River St.  
Suite 310  
Wilkes Barre, PA 18702  
Tel 570-822-2203  
Fax 570-822-2204

### Via email

April 3, 2009

Mr. Tom Klemm  
Iowa Interstate Railroad  
5900 6<sup>th</sup> Street SW  
Cedar Rapids, IA 52404

RE: US6/34 – Warning System Proposal.

Dear Tom:

Balfour Beatty Rail Inc. (BBRI) appreciates the opportunity to provide you with our cost estimate based on cost plus for the installation of Crossing Warning Devices at the above referenced location. Our price for the design, procurement, assembly, shop wiring and field installation is \$162, 203.23.

Our cost estimate was compiled without any general specifications and includes only the materials noted on the bill of materials. Our cost estimate includes freight charges for job site delivery and the applicable sales tax. Price quoted is good for a period of 90 days and assume the following:

- ◆ Costs for material and labor to install conduit for cable to traffic signal by others.
- ◆ Costs for Police Traffic Control, if required, by others.
- ◆ All flagging costs by others.
- ◆ Normal site and soil conditions.
- ◆ No sidewalk, street or structure rebuilding except to repair damage done by BBRI.
- ◆ BBRI to contact Dig Safe.
- ◆ BBRI accepts responsibility for any environmental compliance hazard for which we are directly responsible. BBRI does not accept responsibility for any preexisting environmental hazards or compliance issues.
- ◆ BBRI will perform all work in a reasonable, safe and expeditious way.
- ◆ BBRI will perform the work with our own crews at their usual rates of pay.

- ◆ No prevailing wages.
- ◆ BBRI crews work a session, which is eights days at ten hours a day with 6 days off.
- ◆ Power service source is assumed to be available from the general quadrant and the cost estimate is based on that assumption.
- ◆ This proposal includes no track work.
- ◆ Roadway pavement marking and signage is not included in this proposal, if required, by others.
- ◆ This proposal includes the installation of two gate flashing LED signals (on gate arms only, none on mast), no bells, new 6X6 House and CWT circuitry.

Balfour Beatty Rail Inc. looks forward to the opportunity to work with Iowa Interstate Railroad on this project. If you have any questions or concerns, please contact me at 570-822-2203.

Sincerely,  
BALFOUR BEATTY RAIL, INC.



Jamie Youren  
Director of Operations C&S

Enclosure.

cc: File – Project File

Joe Slatter  
Mike Gregoris

# Balfour Beatty Rail Systems, Inc.

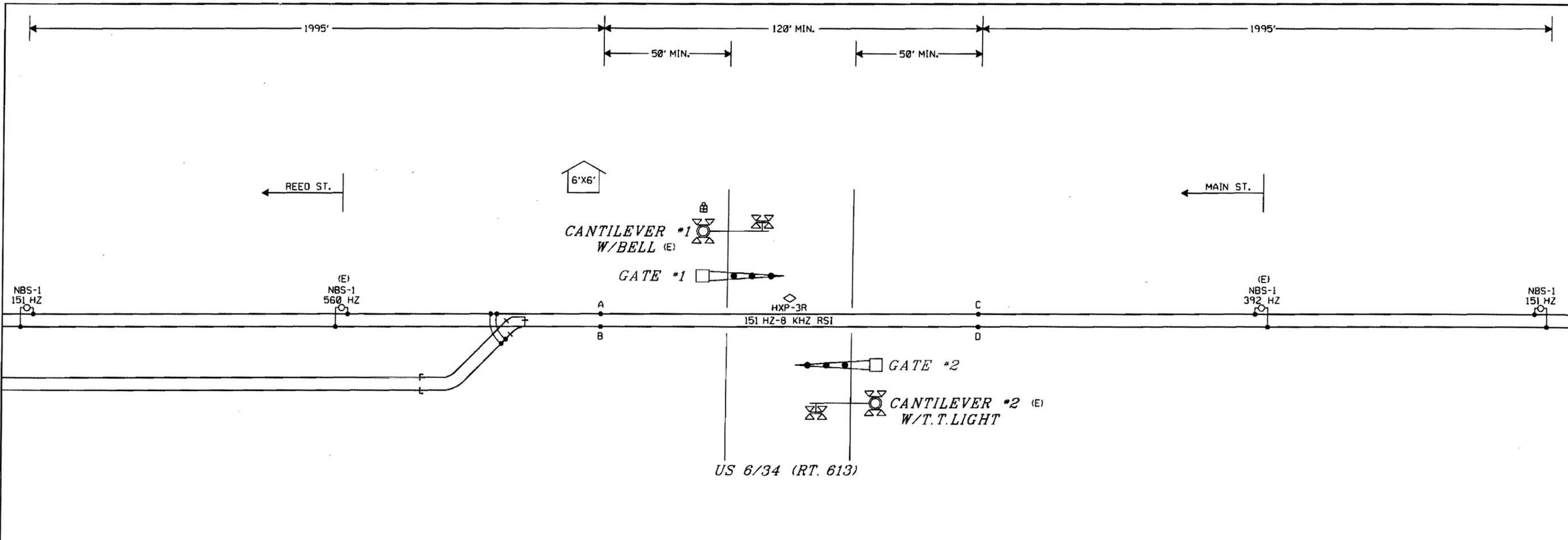
**Bid As:** Cost Plus      **Customer:** Iowa Interstate Railroad  
**Project Name:** US88/34 Sheffield, IL  
**Billing Address:** 800 Webster Street, Iowa City, IA 52240  
**Job Number:** Phone:  
  
**Project Address:**                      **Contact:** Tom Klemm

**Total Cost**

<b>MATERIAL</b>					<b>\$78,302.08</b>
<b>SALES TAX ON MATERIAL</b>		6.25%			<b>\$4,893.88</b>
<b>FREIGHT</b>					<b>\$2,353.00</b>
<b>TOTAL DIRECT LABOR</b>					<b>\$15,068.40</b>
<b>G &amp; A ADDITIVE</b>	120.44%		OF TOTAL DIRECT LABOR		<b>\$18,145.97</b>
<i>Includes Direct Labor Overhead, G&amp;A</i>					
<b>Equipment</b>					<b>\$4,216.00</b>
<b>EMPLOYEE PER DIEM</b>	32	day(s) @	\$97.00		<b>\$3,104.00</b>
<b>TRAVEL COSTS</b>					
<i>Air Fare (travel for construction crew and FRA compliance)</i>					
	4	Men @	\$600.00	\$2,400.00	
<i>Travel Costs 1 travel day for each cnst crew member per session</i>					
	4	Men @	\$75.00	\$300.00	
<i>Travel Perdiem 1 day for each cnst crew member per session</i>					
	4	Days @	\$97.00	\$388.00	
				<u>\$3,088.00</u>	<b>\$3,088.00</b>
					<b>SUB TOTAL \$129,169.33</b>
<b>MARK UP</b>	10%	X	\$129,169.33	=	<b>\$12,082.43</b>
<i>*on Labor, G&amp;A Additive, Material, Freight and Equipment</i>					
<b>RAILROAD COSTS</b>	5%	X	\$129,169.33	=	<b>\$6,458.47</b>
<i>*on Labor, G&amp;A Additive, Material, Frsight, Sales Tax, Employee Per Diem, Travel Costs, Equipment</i>					
<b>ENGINEERING</b>					<b>\$7,352.00</b>
<b>POWER SERVICES (if required)</b>					<b>\$2,661.00</b>
<b>DIRECTIONAL BORING</b>					<b>\$4,500.00</b>
					<hr/>
					<b>TOTAL PROJECT COST \$162,203.23</b>

Iowa Interstate RR - US 6/34	QTY		Unit Price	Ext. Price	PN
<b>House Material</b>					
RES ADJ WW 15W 12.5 OHM 5% PNL	2	EA	\$57.75	\$115.50	002014-021
HEAT SHRINK TUBING 3/4 BLK	6	EA	\$1.17	\$7.02	01030071
WIRE WRAP SPIRAL BLK 1/2"	25	FT	\$1.25	\$31.25	005969-000
THERMOSTAT SPDT REMOTE BULB 6A	1	EA	\$65.37	\$65.37	009186-004
DIODE MR756 RECT 600V 6A	4	EA	\$0.52	\$2.08	011144-001
WIRE 10AWG/19 TC EPR/PVC BLU	700	FT	\$0.65	\$455.00	012092-000
WIRE 16AWG/19 TC EPR/PVC BLU	800	FT	\$0.45	\$360.00	012092-002
WIRE 6AWG/19THHN BLK	125	FT	\$0.83	\$103.75	012253-000
WIRE 6AWG/19 THHN GRN	25	FT	\$0.87	\$21.75	012253-002
WIRE 6AWG/19 THHN RED	125	FT	\$0.81	\$101.25	012253-003
CABLE RAW 3/14AWG PWR 300V	12	FT	\$0.82	\$9.84	012690-010
NUT INSULATED HARMON	24	EA	\$3.00	\$72.00	013986-000
XFMR 115-230VPRI/16VCT 5A 80VA	1	EA	\$20.49	\$20.49	016206-105
CHARGER 20A 12V CRAGG 20ETC12V	1	EA	\$539.43	\$539.43	017061-201
CHARGER 40A 12V CRAGG 40ETC12V	1	EA	\$699.48	\$699.48	017061-203
HSE 6X6 AL S/L SKR101 L/KEY SW	1	EA	\$7,397.94	\$7,397.94	028633-003
TEST LINK W/PLT & INSUL	62	EA	\$2.00	\$164.00	032257-002
TEST LINK 2.375" CNTR FL INSUL	1	EA	\$39.00	\$39.00	032258-003
WRENCH AAR TERMINAL	1	EA	\$15.53	\$15.53	095905-000
GROUND POST P5-162	5	EA	\$26.37	\$131.85	113047-000
LABEL RK PNL-MAINTAINER TST SW	1	EA	\$4.93	\$4.93	125372-000
CONN PLUG L6-15 250V 15A 2P3W	2	EA	\$11.56	\$23.12	132286-001
KIT APRVD SM PARTS/SL XING	1	EA	\$1,071.43	\$1,071.43	180394-590
ASSY LIGHT PO EXT-GEMS	1	EA	\$53.54	\$53.54	201744-001
ASSY AGA-1	44	EA	\$20.00	\$880.00	202216-001
ASSY AGE-1	2	EA	\$21.00	\$42.00	202217-000
ASSY 2WAY TERM BLK W/AAR HARD	7	EA	\$16.00	\$112.00	202810-000
ASSEMBLY, 4 POST TERMINALBLOCK	40	EA	\$44.00	\$1,760.00	203032-000
ASSEMBLY LAMP RESISTOR PANEL	1	EA	\$730.00	\$730.00	227217-000
ASSY SINGLE ROW TERM 12 POST	6	EA	\$25.00	\$150.00	250084-212
ASSY TERM STRIP DBL POST 12	8	EA	\$20.00	\$160.00	250094-300
ASSY MDSA-1	1	EA	\$266.40	\$266.40	250204-001C
ASSY VITAL RELAY DRIVER	1	EA	\$741.60	\$741.60	250651-000
ASSY HXP-3R FNL W/IDK/RSI/RMM	1	EA	\$17,739.00	\$17,739.00	250811-2201
ASSY VLG 2 INPUTS 12S DLY DRV	1	EA	\$541.80	\$541.80	250948-020
ASSY XLC TOP LEVEL	2	EA	\$909.00	\$1,818.00	250991-000
ASSY BASE VLG W/RL DR	1	EA	\$72.90	\$72.90	251071-010
ASSY PLUGBOARD XLC	2	EA	\$85.50	\$171.00	251071-100
ASSY HAWK REC CDU 4M	1	EA	\$2,167.20	\$2,167.20	251210-00011
HOUSE ID SIGN	1	EA	\$287.50	\$287.50	SIGN
LABEL, DANGER 240 V, 1.75 X 2.	1	EA	\$3.43	\$3.43	SQS109
BUNGLAOW WIRING AND TEST	1	LT	\$6,756.00	\$6,756.00	WIRING
<b>Field Material</b>					
CABLE TIE 14-1/2L NAT	20	EA	\$0.20	\$4.00	005019-022
HOSE RUBBER 3/4"	60	EA	\$1.96	\$117.60	005360-015

CADWELD ONESHOT 3/4" NX TYPE	4	EA	\$13.32	\$53.28	005755-008
CADWELD ONESHOT 3/4" GR 1 WIR	2	EA	\$9.35	\$18.70	005755-011
WIRE DIESEL 6AWG 600V	50	EA	\$1.22	\$61.00	012033-001
PADLOCK SIGNAL CASE	5	EA	\$36.14	\$180.70	013043-000
NUT INSULATED HARMON	8	EA	\$3.00	\$24.00	013986-000
HEATER GATE MECH 115VAC WCH	2	EA	\$98.90	\$197.80	017155-006
LUG RNG 1/4" 6AWG AMP ONLY	10	EA	\$0.01	\$0.10	032063-005
LUG RNG 1/4" 12-10AWG INS BLK	55	EA	\$0.01	\$0.55	032114-008
GATE ASSY 3597 W/CTWT KIT 32'	2	EA	\$4,889.80	\$9,779.60	076037-013
GATE ARM 16-32' UHI LED LGHTS	2	EA	\$747.50	\$1,495.00	076045-014
DIODE GATEARM TIP LIGHT REC	2	EA	\$63.25	\$126.50	076045-300
WRENCH TORQUE WCH 3590-K-9	1	EA	\$257.73	\$257.73	095936-001
CABLE UG 7 COND #6 AWG SOLID COPPER OK	400	FT	\$3.76	\$1,504.00	1077-05
CABLE UG 3 COND #9 AWG SOLID	350	FT	\$1.74	\$609.00	1078-02
CABLE UG 7 COND #9 AWG SOLID COPPER OK	350	FT	\$2.20	\$770.00	1080-05
BRACKET CONVERSION W/CAST ADPTNEG 385102	2	EA	\$294.40	\$588.80	1082-01
WIRE UG TRK #6 AWG DUPLEX	350	FT	\$1.19	\$416.50	1094-05
CLIP TRACK WIRE RETAINER - ERICO #SBA	8	EA	\$1.89	\$15.92	1118-01
STAPLE GROUND WIRE 1-1/16"X3"	12	EA	\$0.33	\$3.96	113005-000
ROD 3/4 X 8 NON-SECT COP GRND COPPERWELD	6	EA	\$25.42	\$152.52	1132-01
SLEEVE NICO 3/16" #6 AWG REDUC#2363-J	5	EA	\$0.90	\$4.50	1145-01
STAPLE COPPERWELD 3/8 X 1-3/4 144 IN. RO	50	EA	\$0.26	\$13.00	1148-01
COMPOUND DUCT SEAL 5 LB PLUG PERMAGUM #	4	PK	\$9.66	\$38.64	1179-01
TAPE ELECTRICAL 3M #33+ 3/4" PLASTIC	4	RL	\$3.66	\$14.64	1190-01
TAPE CAUTION YELLOW	1	EA	\$22.54	\$22.54	11923-01
TAPE ELECTRICAL 3M #130-C LINERLESS	4	RL	\$8.34	\$33.36	1321-01
SLEEVE 4 ALUMINUM REC #92958	2	EA	\$44.85	\$89.70	14187-01
WIRE #6 SOFT BARE COPPER	50	FT	\$0.53	\$26.50	1436-01
FND SIGNAL 32 X 32 X 60	2	EA	\$931.00	\$1,862.00	17190-4
KIT FOUNDATION LEVEL BOLT	8	EA	\$28.84	\$230.72	180554-000
GREASE RUST PREVENTIVE NO OXID'A SPECIAL	2	EA	\$9.95	\$19.90	1906-01
SCREW LAG 3/4" X 6" BLACK GRIMLET PO	8	EA	\$0.82	\$6.56	2000-01
BASE 5" JCT BOX 1 1/2" CAP	2	EA	\$684.00	\$1,368.00	20923-02
WIRE DIESEL 10AWG 2000 VOLTS	350	FT	\$0.47	\$164.50	2125-01
ASSY NBS-1 W/10' LEADS 151HZ	2	EA	\$326.70	\$653.40	250250-J01B
BATTERY GNB 50A13 320 AH	6	EA	\$491.51	\$2,949.06	3424-01
BATTERY GNB 50A11 265 AH	7	EA	\$421.29	\$2,949.03	3426-01
BOOTLEG BOND W/COUPLER KIT 1EA SBTBBU4A	10	EA	\$4.23	\$42.30	3522-01
CLAMP ASSY GRND/MAST 3 1/2-8" SBB852A8C1	2	EA	\$78.56	\$157.12	4098-01
COMPOUND INSULATING ELECTRICALSKOTCHKOT	1	EA	\$24.47	\$24.47	4123-01
TIE CABLE .184 X 7.31" HIG TEMSELF LOCKI	20	EA	\$0.04	\$0.80	4125-01
BOND STRAND 8-STR 3/16" TINNEDSBS8TINSUL	60	FT	\$1.22	\$73.20	4133-01
CABLE 3 COND 4 AWG 206-11-637	100	FT	\$7.31	\$731.00	5192-02
MAST AL 5X6 SCH40 B@0 NO/MST	2	EA	\$507.00	\$1,014.00	51976-01
PLATE SHUNT 24"X26"X1/4" GALV.	2	EA	\$79.35	\$158.70	6193-01
TRAY PVC BATTERY FOR RELAY CSEFIBER-CO #	2	EA	\$47.15	\$94.30	9549-01
MAST SIGN	2	EA	\$86.25	\$172.50	Sign-Mast
SIGNAL WIRING AND TEST	1	LT	\$1,606.00	\$1,606.00	WIRING
STONE	1	LT	\$1,000.00	\$1,000.00	STN
FOREMANS KIT	1	EA	\$500.00	\$500.00	FRMNKT
TOTAL MATERIAL PRICE				\$78,302.08	
APPLICATION ENGINEERING				\$7,352.00	
FREIGHT				\$2,353.00	
SALES TAX			6.25%	\$4,893.88	
<b>TOTAL PROJECT PRICE</b>				<b>\$92,900.96</b>	



APPROACH CIRCUIT DISTANCE CALCULATION	
	TRACK 1
BASE WARNING TIME	30 SEC
PLUS TIME FOR CLEARANCE DISTANCE > 35'	0 SEC
EQUALS PLANNED WARNING TIME	30 SEC
PLUS TIME FOR EQUIPMENT RESPONSE	4 SEC
PLUS TIME FOR TRAFFIC PRE-EMPTION	0 SEC
EQUALS CIRCUIT APPROACH TIME	34 SEC
TIMES MAXIMUM PLANNED TRAIN SPEED	40 MPH
TIMES RATIO OF FEET PER SECOND TO MILE PER HOUR	22/15
EQUALS APPROACH CIRCUIT DISTANCE WITH ANY FRACTIONAL VALUE INCREASED TO FULL UNIT	1995 FT

**SCOPE OF WORK:**

1. INSTALL NEW GATES WITH LED ARM LIGHTS.
2. INSTALL NEW HXP-3R AND CONTROL CIRCUITRY IN NEW HOUSE.
3. REUSE EXISTING CANTILEVERS AND THEIR LED LIGHTS.
4. INSTALL NEW CABLES.

**NOTES:**

1. ALL WIRING IN THE BUNGALOW IS #16 AWG FLEX UNLESS OTHERWISE NOTED.
2. SEE APPROACH CIRCUIT DISTANCE CALCULATION TABLE FOR PLANNED WARNING TIME AND TRAIN SPEED PER TRACK.
3. TRANSMITTER WIRE T1 AND T2 MUST BE RUN TO THE TRACK BUNGALOW SIDE OF CROSSING.
4. APPROACH DISTANCES ARE TO BE MEASURED FROM THE CIRCUIT FEED POINTS.

**LEGEND:**

- ⊗ -TEST TERMINAL
- △ -EQUALIZER
- ∟ -ARRESTER TO GROUND
- ⊕ -TWISTED WIRE 2 TURNS PER FOOT
- (E) -EXISTING

**REVISIONS**

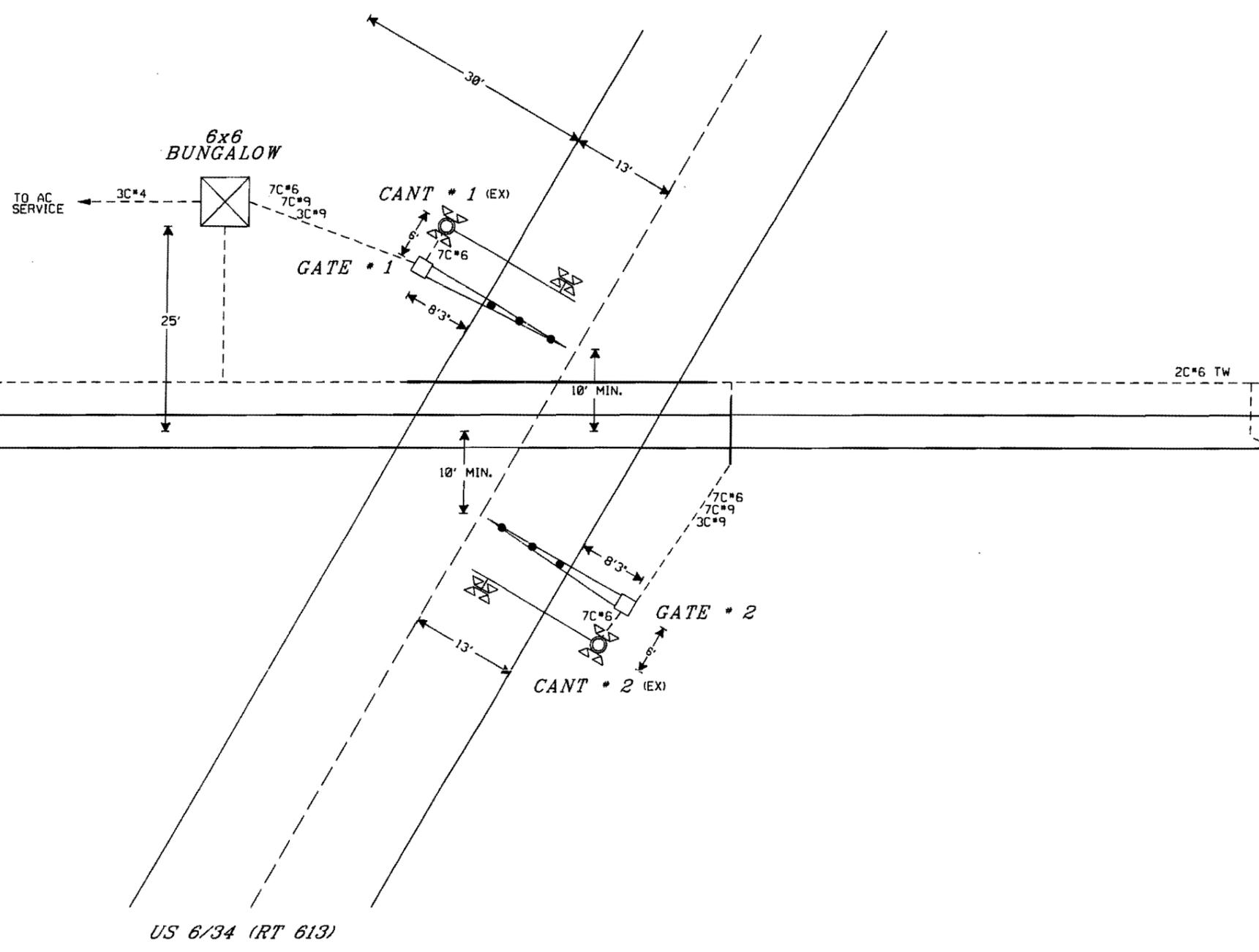
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THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



**IOWA INTERSTATE**

DRAWN: SAT DESIGNED: D.M.R. CHECKED: PREL DATE: 03-26-09	CROSSING TRACK PLAN US 6/34 (RT. 613) SHEFFIELD, ILLINOIS DOT #863 568U MILEPOST #136.34	DRAWING NO. PREL SHEET 1 OF 2
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US 6/34 (RT 613)

LEGEND:  
 ——— RIGID CONDUIT  
 - - - - - UNDERGROUND CABLE

REVISIONS

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THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM, SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



IOWA INTERSTATE

DRAWN: SAT DESIGNED: D.M.R. CHECKED: PREL DATE: 03-26-09	CABLE & FOUNDATION PLAN US 6/34 (RT. 613) SHEFFIELD, ILLINOIS OOT #863 568U MILEPOST #136.34	DRAWING NO. PREL SHEET 2 OF 2
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