Railroad Safety Grants for the Safe Transportation of Energy Products by Rail

Metropolitan Des Moines Track Improvements

Submitted by Iowa Department of Transportation

Appendix C

Statement of Work

STATEMENT OF WORK

Iowa Interstate Railroad

Des Moines/West Des Moines Track Improvements

Railroad Safety Grants for the Safe Transportation of Energy Products by Rail

I. BACKGROUND

The Iowa Department of Transportation submits this Statement of Work as a part of an application in response to the FRA's Notice of Funding Availability for Railroad Safety Grants for the Safe Transportation of Energy Products by Rail Program.

Iowa Interstate Railroad (IAIS) is a regional carrier that traverses the states of Iowa and Illinois, and is heavily vested in providing efficient service in the movement of agricultural commodities for the region. In the past decade, increased production of ethanol and other related items such as corn and dried distillers grain (a high quality animal feed that is an ethanol byproduct) in the region has increased traffic on IAIS. The IAIS route carries much of the ethanol produced in Western Iowa as it travels to destinations throughout the country.

IAIS travels directly through Des Moines and West Des Moines, Iowa. This Statement of Work includes the rehabilitation of two segments of track which will complete the rehabilitation of track in the Greater Des Moines area to increase the safety of transporting energy products. The downtown portion of the IAIS railroad has many grade crossings for both vehicles and pedestrians. With redevelopment of the downtown, many large urban condominiums have been built directly adjacent to the tracks. The West Des Moines portion is adjacent to waterways and completes the movement out of the Metro area. The track connecting these two segments will be rehabilitated in 2016 as a part of IAIS's capital program.

This project will increase the safety of a primary ethanol route that runs directly through the state's most populous metropolitan area, including downtown Des Moines, which is undergoing redevelopment, and West Des Moines, a rapidly growing suburb. The rehabilitation of this approximately 40 year old track structure will reduce the likelihood of track caused derailments in this highly populated and sensitive area.

II. OBJECTIVE

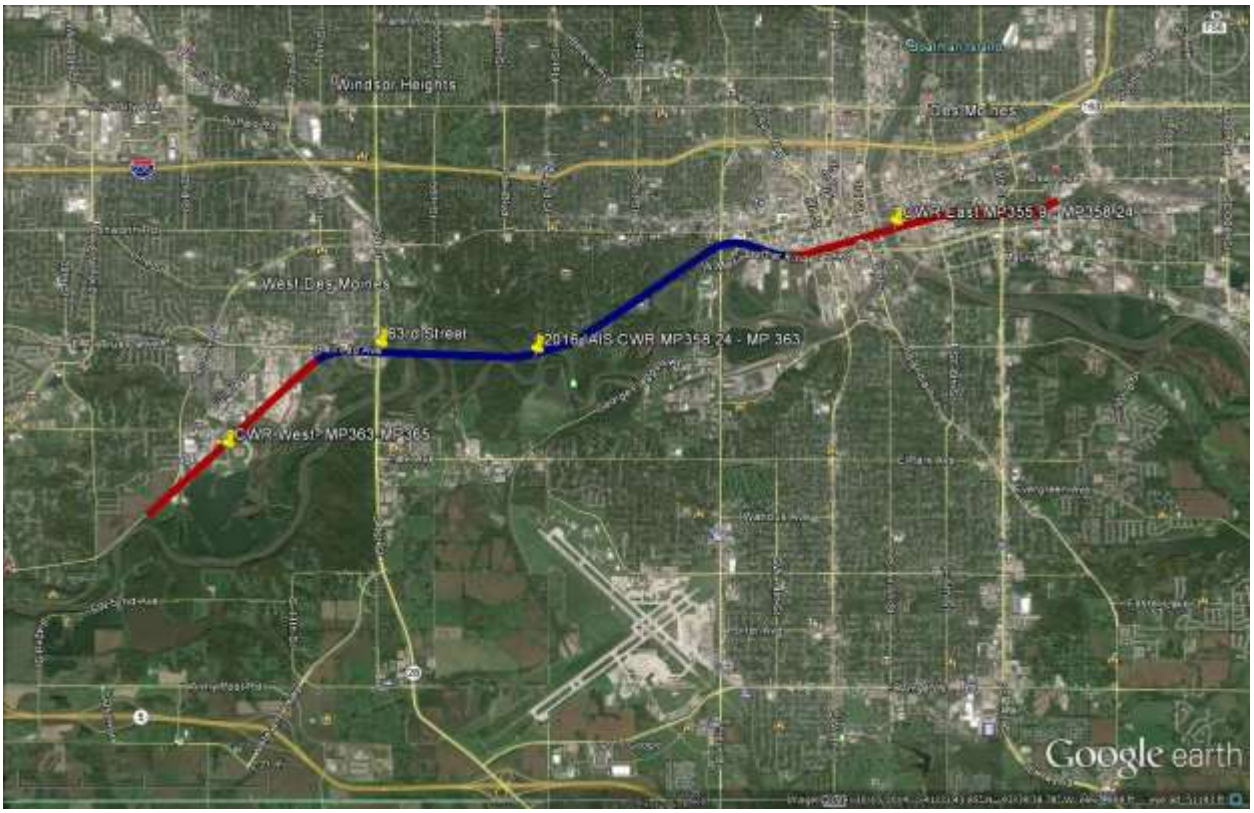
The objective of the project is to fully rehabilitate and reconstruct 4.34 miles of track through downtown Des Moines, and through portions of West Des Moines. This would include the replacement of existing worn rail with new 115# rail, as well as tie replacement, ballast placement, and surfacing.

The end result will be an improved, stronger track structure that is more suited to the transport of large quantities of ethanol. The project will reduce the likelihood of incidents by replacing older, smaller rail sections that are currently in place.

The area is currently limited to a 10 mph speed due to current class of track. The rehabilitation will allow speeds to increase to 25 mph through the area, reducing wait times at crossings as well as subsequent congestion thereby reducing emissions.

III. PROJECT LOCATION

The following exhibit highlights the project area.



The area shown above is through the metropolitan Des Moines area. . The portions of track to be reconstructed are those shown in RED. The western segment of track is located in the growing suburb of West Des Moines. The eastern segment of track is located directly south of downtown Des Moines, a commercial and residential area undergoing redevelopment. The track shown in BLUE is similar work that will be completed by IAIS with its own funds in 2016.

IV. DESCRIPTION OF WORK

The work involves a full reconstruction of the track structure, replacing the currently #112 jointed rail to #115 continuous welded rail (CWR). This work includes the replacement of necessary ties (typically 800 ties/mile), the replacement of steel components (rail, plates, and fasteners, welds), and the placement of new ballast and surfacing work which will provide good track geometry (both alignment and profile).

Reconstruction of the track structure in the project area will also include the reconstruction of some highway –railroad at-grade crossings. This will improve the track structure through the crossings and improve the roadway surface for motorists and pedestrians.

Three turnouts within the project will be replaced as part of the project.

This rehabilitation and reconstruction will result in a continuous corridor of improved track structure through the Greater Des Moines area.

The work will be completed by both IAIS and contractor forces.

Task 1 – Pre-construction

1.1 Prepare cooperative agreements with FRA and sub grantee

1.2 Prepare a detail Project Work Plan, Budget and Schedule

Task 1 Deliverables

- Project agreement with FRA and sub-grantee
- Detailed Project Work Plan, Budget and Schedule

Task 2 – Construction

2.1 Unload CWR from Train - The rail will be unloaded by IAIS forces utilizing a special train that can transport sections of CWR that are 1,600-ft in length. The unloading process requires coordination of rail traffic throughout the railroad, as well as a detailed plan as to where the rail shall be unloaded as it is difficult to move once unloaded.

2.2 Install CWR into Track - The rail will be installed by contractor forces utilizing track equipment not owned by IAIS. This will include equipment such as spike pullers, cribber-adzers, spikers, heaters, and anchor machines. During construction the installation of CWR will be inspected by IAIS to ensure compliance with the IAIS CWR standards and policies.

2.3 Install Ties into Track - After the installation of new rail, new ties will be installed to replace those ties found defective. This will require approximately 1000 ties per mile (typically every 3rd tie) to appropriately strengthen the track in the project area. This work will be performed by contractor forces as special equipment not owned by IAIS will be necessary.

2.4. Install Turnouts - Three turnouts within the project corridor will be replaced as part of the project. These turnouts will be delivered complete and will be installed by a contractor.

2.5 Place Ballast and Surface - After the track has been strengthened with new rail and necessary tie replacement, new ballast will be placed on the track and the track will be surfaced with a production tamper. When surfaced, the track will have a uniform profile and alignment. This work will be performed by IAIS, utilizing the company's tamper.

2.6 Site Clean Up - After completion of the track rebuild, there will be used materials that will be necessary to remove from the site. This includes pieces of scrap steel, used ties, and Other Track Material (OTM – spikes, plates, anchors, bolts, and bars). The goal of IAIS is to complete projects with good housekeeping.

Task 2 Deliverables

- Complete construction activities detailed in task 2.1 through 2.6
- Project reporting

Task 3 – Project Completion

3.1 Final Inspection

3.2 Project Closeout

Task 3 Deliverables

- Certificate of Completion
- Final Performance Report

V. PROJECT SCHEDULE AND DELIVERABLES

The period of performance for all work will be approximately 23 months, from January 2016 to November 2017 (assuming grant awards will be announced in January 2016.) The deliverables associated with this Grant/Cooperative Agreement are listed below. The Grantee must complete these deliverables to FRA's satisfaction in order to be authorized for funding reimbursement and for the Project to be considered complete.

Task #	Deliverable Name	Related Task	Due Date
1.1	Prepare cooperative agreements with FRA and sub grantee		June 2016
1.2	Prepare a detail Project Work Plan, Budget and Schedule		August 2016
2.1	Unload CWR from Train		March 2017
2.2	Install CWR into track		May 2017
2.3	Install Ties (approx. 1000/mile)		June 2017
2.4	Install Turnouts		July 2017
2.5	Place Ballast and Surface		July 2017
2.6	Site Clean Up		August 2017
3.1	Certificate of Completion		September 2017
3.2	Final Performance Report		November 2017

VI. PROJECT ESTIMATE/BUDGET

The total estimated cost of the Project is $2,987,574, for which the FRA grant will contribute up to 80% of the total cost, not to exceed $2,390,203.20. Any additional expense required beyond that provided in this grant to complete the Project shall be borne by the sub-grantee.

Project Estimate by Task

Task #	Task Name	Total Cost
1	Preconstruction activities	$0
2.1	Unload CWR from Train and Other Materials	$1,576,447
2.2	Install CWR into Track	$553,055
2.3	Install Ties	$372,244
2.4	Install Turnouts	$381,000
2.5	Place Ballast and Surface	$77,328
2.6	Site Clean Up	$27,500
3	Project completion	$0
	Total Project Cost	$2,987,574

Project Estimate Contributions

Funding Source	Project Contribution Amount	Percentage of Total Project Cost
FRA Grant	$2,390,059	80%
IAIS Railroad (sub-grantee)	$597,515	20%
Total Project Cost	**$2,987,574**	**100%**

VII. PROJECT COORDINATION

The Grantee shall perform all tasks required for the Project through a coordinated process, which will involve affected railroad owners, operators, and funding partners, including:

- Iowa Interstate Railroad Ltd.
- FRA

VIII. PROJECT MANAGEMENT

The Grantee is responsible for facilitating the coordination of all activities necessary for implementation of the Project. Upon award of the Project, the Grantee will monitor and evaluate the Project's progress through regular meetings scheduled throughout the period of performance. The Applicant/Grantee will:

- Participate in a project kickoff meeting with the FRA and IAIS, the sub-grantee
- In coordination with the grantee and the FRA the sub-grantee will complete necessary steps to hire a qualified consultant/contractor to perform required Project work
- Hold regularly scheduled Project meetings with FRA and IAIS
- Grantee in coordination with IAIS will inspect and approve work as it is completed
- Grantee will review and approve invoices as appropriate and submitted by sub-grantee for completed work
- Grantee in cooperation with IAIS will perform Project close-out audit to ensure contractual compliance and issue close-out report
- Grantee in cooperation with IAIS will submit to FRA all required Project deliverables and documentation on-time and according to schedule, including periodic receipts and invoices
- Grantee in cooperation with IAIS will comply with all FRA Project reporting requirements, including, but not limited to:
    a. Status of project by task breakdown and percent complete
    b. Changes and reason for change in project's scope, schedule and/or budget
    c. Description of unanticipated problems and any resolution since the immediately preceding progress report
    d. Summary of work scheduled for the next progress period
    e. Updated Project schedule