

Construction Project Briefing

October 13, 2011



Today's Presentation

- **Howard Signals Project**
- **Loop Signals Project**



Project Title: Howard Signals Project

Managing Department: Power & Way Construction

Justification of Need:	Restore reliability and improve performance of the Train Control System.
Priority of Project:	High
Total Project Budget:	\$7M
Construction Contract Value:	\$5.5M (Signal); \$355K (JOC); \$555K* (Additional JOC work funded)
Earned to Date:	\$3.7M (Signal); \$355K (JOC); \$500K* (Additional JOC work funded)
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	100% (Signal); 100% (JOC); 100% (Additional JOC)
Funding Source:	CTA Bonds
Estimated Start Date/Estimated Length of Project:	NTP issued August 6, 2009; completion by the third quarter of 2011.
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

Detailed Overview of Scope:

- Upgrade existing Vital Processor Interlocking (VPI) systems at interlockings near the Howard Street Station. Upgrades to communication hardware and software. Also includes replacement of faceplates for Howard Control Panel, new CTC workstation, and new maintainer's overview displays.
- Project also includes supplemental JOC work at Howard Tower. Roof replacement, HVAC replacement, and new fire suppression system is included.
- Additional \$555K in JOC work includes Jarvis wall and abutment repair.

*Additional \$555K JOC work will be paid out of separate funds allocated by Capital Finance department.



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Impact on Customers:	During non-rush periods, reduced train speeds when workers are on the Right-of-Way.
Benefit to System:	Improve signal system at Howard Interlocking to prevent delays to service.
Benefit to Community:	More consistent travel times due to increased reliability.
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	N/A
Customer Communication Need:	<ul style="list-style-type: none"> • Courtesy notification to the Alderman and community about the project. • Train announcements about reduced speeds due to workers on ROW.

Comparable Projects:

- Blue Line Signals Project
- Loop Signals Project



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Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> Printed circuit boards (PCBs) received and installed at Jarvis East, Jarvis West, Howard South, and Howard Tower. Software upgrades for Jarvis East and West completed. Installation of the new control panel completed May 1, 2011. Installation of software upgrades at Howard South started 7/25/2011 and completion forecast for 9/23/11. Installation of software upgrades at Howard North scheduled to start upon completion of Howard South upgrades. 	Ongoing
JOC Construction	<ul style="list-style-type: none"> Wight-Hill started work 6/10/09. HVAC and roof work is substantially complete. 	Close-Out
Additional JOC Construction	<ul style="list-style-type: none"> Paul Borg Construction completed Jarvis Wall Replacement and Abutment Repair. 	Close-Out

Delay Explanation:

- All the DBO boards were returned to Alstom due to a defective component. CTA issued a directive requiring replacement of PCB boards in the fourth quarter of 2010. Delivery of replacement boards is forecast for the first quarter of 2012. The contractor has agreed to replace these boards at no additional cost to the CTA if they receive a time extension to manufacture and test the new boards.
- Contractor has not met project milestone dates and CTA has reviewed a recovery schedule and is working with the contractor to determine an acceptable contract time extension at no cost to the CTA.



Project Title: Loop Signals Project

Managing Department: Power & Way Construction

Justification of Need:	Upgrade towers and interlocking control systems to current technology; Tower 18 past useful life.
Total Project Budget:	\$103.2M
Construction Contract Value:	\$67.9M
Earned to Date:	\$64.7M or 95.2%
Percent Change Orders to Construction Contract:	40.7%
Percent Time Used to Date:	100%
Funding Source:	FTA, RTA and Bond Funds
Estimated Start Date/Estimated Length of Project	NTP 2/21/07; Original completion date 9/2009; Substantial Completion issued 7/2011.
Project Manager:	Barney Gray (GM); Brittany Dyra (PM)

Detailed Overview of Scope:

- New bi-directional cab signal system for the Loop.
- Construction of new control tower at Lake/Wells.
- New control panel with remote controls for Tower 12 and Jefferson.
- Installation of a new signal facility building at Randolph/Wells.
- Installation of a new Tower 12 relay house.
- Installation of new interlocking at Jefferson.



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Phase	Description	Original Completion Date	Revised Completion Date	Actual Completion Date
Milestone 1	Approved Signal Block Design	8/20/07	4/2008	3/18/08
Milestone 2	Approved Cable Plan	9/4/07	5/2008	5/21/08
Milestone 3	Approved Tower 18 Circuit Design	9/19/07	6/2008	12/2/08
Milestone 4	Audio Circuit Cutover	9/2008	N/A	9/14/08
Milestone 5	Tower 18 Relay Room	3/20/09	2/2011	3/25/11
Milestone 6	Tower 18	None Provided	5/25/10	5/28/10
Milestone 7	Tower 18 Interlocking	8/2009	7/2011	7/29/11
Milestone 8	Tower 12 Interlocking	8/2009	7/2011	7/29/11
Milestone 9	Substantial Completion	9/2009	7/2011	7/29/11

