

# **Construction Project Briefing**

**April 13, 2012**



# Today's Presentation

- **Howard Signals Project**
- **Loop Track**
- **Purple Line Viaducts**



# 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 second quarter of 2012.
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"> <li>• Courtesy notification to the Alderman and community about the project.</li> <li>• Train announcements about reduced speeds due to workers on ROW.</li> </ul>

<b>Comparable Projects:</b>
<ul style="list-style-type: none"> <li>• Blue Line Signals Project</li> <li>• Loop Signals Project</li> </ul>



# Project Title: Howard Signals Project

## Managing Department: Power & Way Construction

### Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> <li>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 5/1/2011. Installation of software upgrades at Howard South completed 9/23/2011. Installation of software upgrades at Howard North started completed 12/23/2011. Contractor achieved substantial completion of Milestone 1 on February 9, 2012 with the exception of minor software upgrades for Chicago Diamond. This work and other minor remaining items are included on the Punch List issued to the contractor. CTA Signal Maintenance continues with limited testing and installation of processor boards, and other minor cabling improvements.</li> </ul>	Ongoing
JOC Construction	<ul style="list-style-type: none"> <li>Wight-Hill started work 6/10/09. HVAC and roof work is substantially complete.</li> </ul>	Close-Out
Additional JOC Construction	<ul style="list-style-type: none"> <li>Paul Borg Construction completed Jarvis Wall Replacement and Abutment Repair.</li> </ul>	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 Track Renewal Project

## Managing Department: Power & Way Construction

Justification of Need:	The existing track system and the components are beyond their useful life.
Priority of Project:	High
Total Project Budget:	\$53,026,306
Construction Contract Value:	\$33,798,984
Earned to Date:	\$0.0M
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	38%
Funding Source:	2010 State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued September 14, 2011, 476 days to Substantial Completion
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

**Detailed Overview of Scope:**

- The project consists of renewal of track on the Wells/Van Buren legs of the Loop, including Tower 18 and Tower 12 Junctions, and Hubbard Curve on the Brown Line.
- New components shall include ties, running rail, rail fasteners, guard rail, restraining rail, other track material, contact rail, contact rail insulators and anchors, footwalk, track access stairs, control panels, switch machines, rail lubricators, traction power and signal cabling.
- Special Track Work includes Tower 12 Junction, Tower 18 Junction, new double crossover near Washington/Wells and replacement of Left Hand & Right Hand crossovers near Adams/Wabash.



# Project Title: Loop Track Renewal Project

## Managing Department: Power & Way Construction

Impact on Customers:	16 Weekend line cuts and reroutes. 14 Nightly single tracks and reroutes.
Benefit to System:	Reduced maintenance costs, improved headways for revenue service, and improved safety.
Benefit to Community:	Improved headways for revenue service and improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	140
Customer Communication Need:	Construction Activity Notices will be needed to alert businesses and residents to weekend and night work. Station signage and Customer Assistants will be needed to direct customers during weekend and night work.

<b>Comparable Projects:</b>
<ul style="list-style-type: none"> <li>• Dearborn Track Renewal</li> <li>• Ravenswood and North Main Line Tie Renewal</li> <li>• Loop Signal Project (Track Renewal on Lake and Wabash)</li> </ul>



# Project Title: Loop Track Renewal Project

## Managing Department: Power & Way Construction

### Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"><li>NTP was issued September 14, 2011. Survey started 11/21/11 and was completed 12/23/11. Shop Drawings for Washington/Wells Crossover, Jackson Crossovers, and Tower 12 North section have been approved. First scheduled weekend reroute for work is 4/20/2012.</li></ul>	Ongoing

#### Delay Explanation:

- None





# Project Title: Purple Line Viaducts

## Managing Department: Facilities Construction

Justification of Need:	Existing deteriorated viaducts are past their useful life and require slow zones. Shoring towers exist in street and sidewalks under viaducts.
Priority of Project:	High
Total Project Budget:	\$15.3M
Construction Contract Value:	\$10.3M
Earned to Date:	\$3.2M
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	31%
Funding Source:	2010 State Capital Program
Start Date/Length of Project:	NTP issued August 18, 2011; Substantial Completion: May 2013
Project Manager:	Bob Wittmann (GM); John Titzer (PM)

### Detailed Overview of Scope:

- Replacement of existing concrete viaducts at Greenleaf, Dempster, and Grove, with a new, longer steel bridge span. New bridge to include new ties, rail and ballast along with new drainage systems.
- New sidewalk, fencing, and landscaping at each viaduct.
- Replace 320 foot long timber retaining wall north of Greenleaf with new pre-cast concrete wall.
- Rehabilitation of existing retaining walls along Chicago Avenue, and adjacent to Greenleaf Viaduct (2,064 feet of wall repairs).



# Project Title: Purple Line Viaducts

## Managing Department: Facilities Construction

Impact on Customers:	During non-rush periods, reduced train speeds when workers are on the Right-of-Way. Bus Shuttles to replace rail service during weekend line cuts for bridge roll-ins (2).
Benefit to System:	Reduce Purple Line slow zones and upgrade aging infrastructure.
Benefit to Community:	Faster Purple Line service, improved traffic flow through viaduct, and improved aesthetics.
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	40
Customer Communication Need:	<ul style="list-style-type: none"> <li>• Courtesy notifications to the local Evanston Alderman and community about the project.</li> </ul>

<b>Comparable Projects:</b>
<ul style="list-style-type: none"> <li>• Church and Main Street Viaduct Replacement Projects</li> </ul>



# Project Title: Purple Line Viaducts

## Managing Department: Facilities Construction

### Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"> <li>Retaining wall fence and signage installation will begin in mid March</li> </ul>	Ongoing
	<ul style="list-style-type: none"> <li>One Caisson remains to be completed at Dempster. Final caisson will be completed the third weekend in March 2012.</li> </ul>	Ongoing
	<ul style="list-style-type: none"> <li>GC will secure staging area at Greenleaf in March 2012. Grove and Dempster Staging areas will be taken in April.</li> </ul>	Ongoing
	<ul style="list-style-type: none"> <li>Bridge steel scheduled to be delivered to Greenleaf staging area in March. Steel delivery for both Grove and Dempster bridges scheduled in April 2012.</li> </ul>	Ongoing
	<ul style="list-style-type: none"> <li>New bridges scheduled for installation in the second quarter of 2012.</li> </ul>	Tentative

<b>Delay Explanation:</b>
No current delays



# Project Title: Purple Line Viaducts

## Managing Department: Facilities Construction



**Installing Lighting Conduit at Chicago Retaining Wall**