

Phase 2 Exposition Metro Line Project

Monthly Project Status Report

December 2014





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PHASE 2 EXPO LINE PROJECT STATUS

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Phase 2 Exposition Metro Line Construction Authority Project Description

The Expo Phase 2 Project is located in the Westside of Los Angeles, extending approximately seven miles from the Expo Phase 1 terminus at Culver City Station to Santa Monica. The Phase 2 alignment begins at the terminus of Expo Phase 1 and utilizes the existing Exposition Right-of-Way (ROW), then diverges from the Exposition ROW and enters onto Colorado Avenue east of 17th Street. The alignment follows the center of Colorado Avenue to the proposed terminus in downtown Santa Monica in the vicinity of the intersection of 4th Street and Colorado Avenue.



Figure 1: Exposition Metro Line Construction Authority Phase 2 Alignment



Phase 2 Exposition Metro Line Construction Authority Culver City to Santa Monica Segment

Project Management Issues

Mainline Schedule

The latest Skanska/Rados Joint Venture (SRJV) progress schedule shows Substantial Completion in mid-November, which is approximately 4 months beyond the contractual Substantial Completion date. The latest progress schedule includes a conservative 30 day review cycle for final approval of test results and a 45 day rain allowance. The Authority anticipates a significant reduction in the duration of these activities. The delay is due to several factors, which include delayed site turnover to the track installation subcontractor, delayed ductbank installation, and vibration mitigation design and construction. The contractor and the Authority are working on a mitigation plan to minimize these delays. This latest schedule is still within the schedule contingency allocation, and should therefore not impact the overall revenue operations date.

Utility Relocations

The Authority worked closely with the Los Angeles Department of Water and Power (LADWP) and Southern California Edison (SCE) to complete the remaining new power service designs. Ongoing critical work includes energizing the remaining two Traction Power Substations (TPSS), installing meters, pulling cable and installation of new power services by the contractor's need date for testing purposes.

City of Los Angeles

In the City of Los Angeles (COLA), schedule critical activities include temporary traffic handling to support roadway work. The Authority is collaborating with the various COLA departments to gain approval of the last few design drawings of the Bundy Station Metro Parking reconfiguration and related street restriping requested by Los Angeles Department of Transportation (LADOT).

City of Santa Monica

Terminus property condemnation has been filed with the court, the hearing date has not yet been set. Lighting betterments need to be finalized.

Operations and Maintenance Facility (OMF)

The current project schedule shows Substantial Completion of the OMF in August 2015, which is three (3) months later than the current Substantial Completion date of May 2015. The project's latest slip is due to the damage to the train control laterals as well as delays to the procurement of long-lead electrical equipment. The OMF contractor is looking at recovery options.



Key Activities Completed This Period

Phase 2 Design-Build contractor, Skanska/Rados (SRJV)

- SRJV advanced remaining design elements. Staff worked with SRJV to resolve open issues.
- SRJV continued construction activities:
 - o advanced OCS poles and wire;
 - o advanced station platforms and C/S rooms;
 - o advanced support poles for canopies/artwork and pavers at stations;
 - o continued ballasted special trackwork, embedded trackwork (Colorado) and direct fixation trackwork on bridges and floating (GERB) slabs near Stewart and Barrington;
 - o advanced soundwalls;
 - o advanced TPSS site work (TPSS6 and TPSS7);
 - o advanced street improvements including street lighting and traffic signal installation; and
 - o continued train control installation.
- SRJV advanced construction submittals and requests for information; Authority staff reviewed and collaborated to resolve previously rejected submittals.
- SCE, DWP, and communications providers continued to relocate facilities and provide new service.
- Commenced Local Field Acceptance Testing (LFATs) for systems and train control.

Venice Boulevard Underpass Design-Build contractor

- The Expo Phase 2 contractor (SRJV) continued construction of the roadway widening along the north side of Venice Boulevard.

Operations and Maintenance Facility, Kiewit Building Group (KBG)

- Track and Site Work:
 - o continued installation of dry and wet utilities, under drains, and OCS foundations;
 - o installed ballast west yard, begin sub-ballast grading in north yard, continued special trackwork layout west yard, rough grade east yard;
 - o drilled groundwater monitoring wells;
 - o continued installation of OCS pole foundations.
- Main and Secondary Building:
 - o placed concrete slab on grade, slab on metal deck, raised floors and plenum lids;
 - o continued main bldg. roofing;
 - o installed bracing at CMUs;
 - o commenced installation of glazing.
- Wash Building & Cleaning Platform:
 - o formed and placed concrete for the spread footings and upper trench;
 - o installed precast panels.
- TPSS:
 - o Delivered and set the TPSS.

Bikeway

- SRJV advanced final Bikeway design. Bikeway Contractor worked with the COLA to resolve final comments. COLA approved most of the design drawings. Right of Way / Lease modifications and utility relocations nearing completion.
- Soil mitigation completed, final confirmation sampling pending.
- Grading, drainage, and electrical conduit installation in process.



Key Future Activities

Phase 2 Design-Build contractor, Skanska/Rados (SRJV)

- SRJV advance remaining design elements. Metro, Authority, and third party staff will continue to work with SRJV to resolve comments and open issues.
- SRJV will continue the following construction activities:
 - o advance stations;
 - o advance OCS poles and wire installation;
 - o install guideway lighting;
 - o advance canopy poles and station paver installation;
 - o advance ballasted special trackwork and embedded trackwork (Colorado);
 - o advance street improvements;
 - o SCE, DWP, and communication providers to finalize relocations and continue providing service to the remaining low voltage meters and TPSS;
 - o continue LFATs for systems and train control.

Venice Boulevard Underpass

- Processing roadway and Culver City Plaza design revision and obtain third party approval.
- Expo Phase 2 Contractor (SRJV) will continue work on the Venice Blvd roadway widening.
- LADWP to check calculations for design relocation of guy wire at the corner of Roberston/Venice.

Operations and Maintenance Facility contractor, Kiewit Building Group

- Continue Construction Safety Certification.
- Complete slab on grade (main building).
- Continue Glazing.
- Set TPSS.
- Set HVAC equipment.
- Set electrical switchgear for TPSS and Main Building.

Bikeway

- SRJV obtain complete COLA approval.
- Right of Way activities.
- Negotiate Metro/COLA license agreements.

General

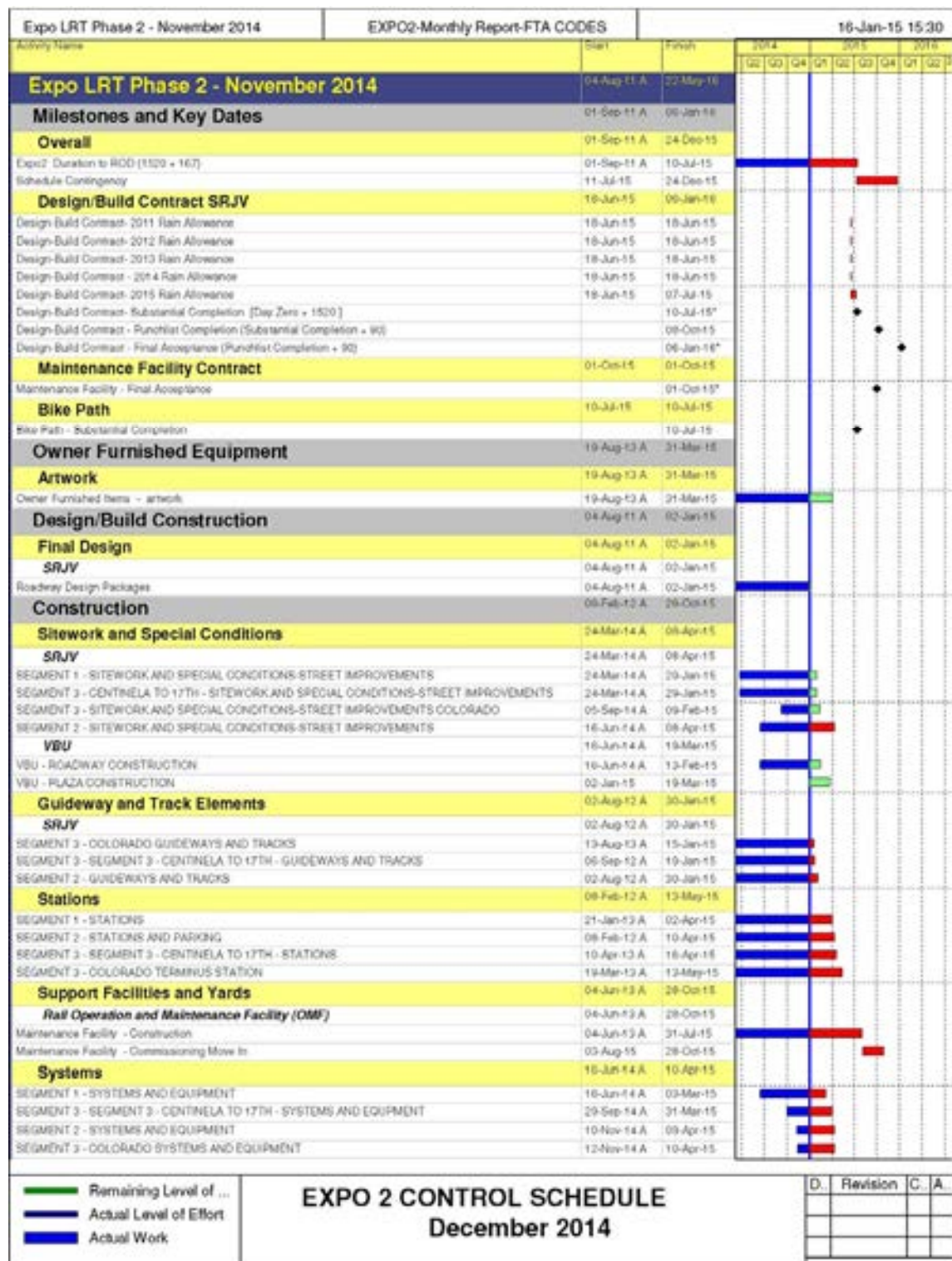
- Continue coordination with the COLA, CSM, Metro, and Caltrans.
- Facilitate Fire Life Safety Committee meetings.
- Continue FEIR mitigation measures.

**EXPOSITION METRO LINE
CONSTRUCTION AUTHORITY**
Monthly Phase 2 Project Status Report
Period Ending – December 31, 2014



Phase 2 Exposition Metro Line Construction Authority Schedule Status

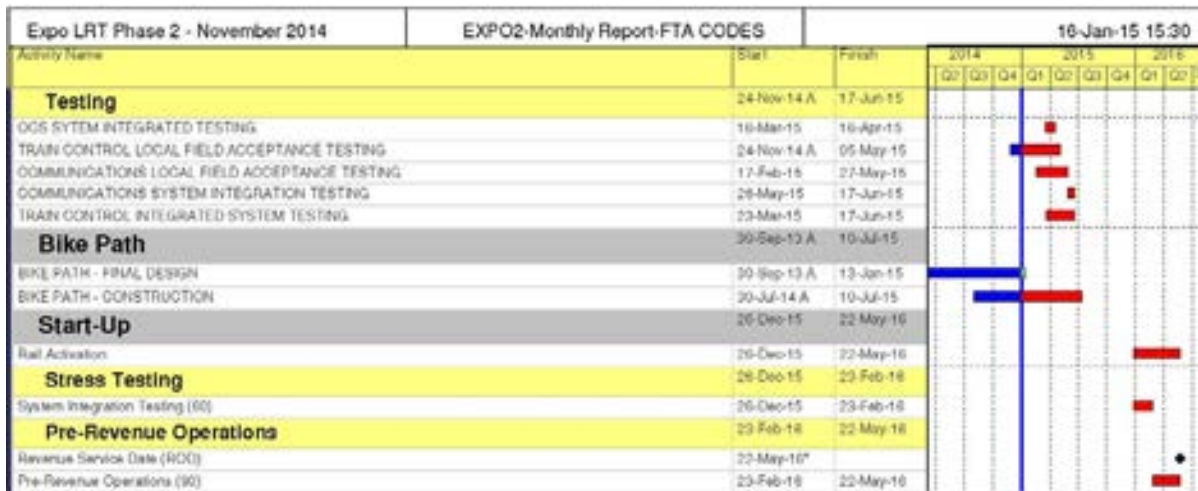
Critical Path Schedule, Period Ending December 31, 2014



**EXPOSITION METRO LINE
CONSTRUCTION AUTHORITY**
Monthly Phase 2 Project Status Report
Period Ending – December 31, 2014



Critical Path Schedule Continued



Remaining Level of ...
 Actual Level of Effort
 Actual Work

**EXPO 2 CONTROL SCHEDULE
December 2014**

D.	Revision	C.	A.



Schedule Narrative

Critical and Near-Critical Path Analysis

The Critical Path runs through the completion of the train control system installation and Local Field Acceptance Tests (LFATs) from Venice to Military. It continues through the LFAT testing west of Military and concludes with the dynamic train control testing. The installation of traffic signals from Venice to Military is near critical and drives the completion of the train control LFAT testing and the start of the dynamic testing. The completion of the track installation at few remaining locations (Terminus Station, Stewart and Barrington), followed by the Overhead Catenary System (OCS) wire installation and testing at the corresponding wire runs, is near critical and drives the start of train control dynamic testing.

The coordination with third party utility owners is ongoing in order to provide power service to the project and support the systems testing phase which started in November 2014.

Project Float/ Schedule Contingency

On January 5, 2012, the Board of Directors authorized the Authority to include schedule contingency in accordance with Metro's Project Contingency procedure. At the January 9, 2014 Board Meeting half of the contingency was released. If all the remaining Schedule Contingency were needed, the projected Revenue Operation Date would be May 22, 2016.

	Original Duration (days)	Days Released	Current Duration (days)
Schedule Contingency	334	167	167

**EXPOSITION METRO LINE
CONSTRUCTION AUTHORITY**
Monthly Phase 2 Project Status Report
Period Ending – December 31, 2014



Phase 2 Exposition Metro Line Construction Authority Financial Status

**Project Cost Status and Analysis
Expo/Metro Baseline**

COST REPORT BY ELEMENT
UNITS IN MILLIONS

Element	Description	Original Budget	Current Budget	Commitments	Expenditures	Current Forecast	Forecast Variance Over/<Under>
C	CONSTRUCTION	766.3	759.8	680.9	498.8	759.8	-
R	RIGHT-OF-WAY	265.0	257.6	115.2	113.5	257.6	-
V	VEHICLES	202.1	202.1	202.1	77.7	202.1	-
P	PROFESSIONAL SERVICES	148.2	149.7	107.3	95.0	149.7	-
SC	SPECIAL CONDITIONS	63.6	81.9	66.4	53.2	81.9	-
PR	PROJECT RESERVE	66.0	60.1	-	-	60.1	-
TOTAL		1,511.2	1,511.2	1,171.8	838.2	1,511.2	-

NOTE: Expenditures are Paid-to-Date through 11/30/14

Original Budget and Current Budget:

The Life of Project Budget for the Phase 2 Exposition Metro Line Project was adopted in March 2011 for a value of \$1.511 billion.

Current Forecast:

The total project forecast at completion remains the same as the current budget of \$1.511 billion.



Project Operating Budget Summary in Millions of Dollars



Expo

Sources & Uses of Funds - Phase 2

Status as of December 31, 2014

Metro / Expo Baseline Activities

Sources of Funds (millions)

A

B

C = A - B

Source	Budget	Funding Committed	Uncommitted
Prop A 35%	\$ 224.0	\$ 170.3	\$ 53.7
Prop C 25%	\$ 5.8	\$ 2.6	\$ 3.2
Measure R	\$ 908.9	\$ 631.3	\$ 277.6
Prop 1B Bonds - PTMISEA	\$ 48.9	\$ 15.2	\$ 33.7
Prop 1B Bonds - SLPP	\$ 28.3	\$ 28.3	\$ -
Regional Improvement Program (State)	\$ 47.8	\$ 47.8	\$ 0.0
Local Agency Contribution	\$ 45.3	\$ 45.3	\$ 0.0
	\$ 1,309.1	\$ 940.8	\$ 368.3
Total Sources:	\$ 1,309.1	\$ 940.8	\$ 368.3

Uses of Funds by Element (millions)

A

B

C

D = A - B

Element	Budget	Committed	Paid	Uncommitted
Design-Build Corridor	\$ 594.5	\$ 556.8	\$ 424.7	\$ 37.7
Other Construction Elements	\$ 165.4	\$ 124.0	\$ 74.0	\$ 41.3
Right-of-Way	\$ 257.6	\$ 115.2	\$ 113.6	\$ 142.4
Professional Services	\$ 149.7	\$ 107.3	\$ 95.0	\$ 42.4
Special Conditions	\$ 81.9	\$ 66.4	\$ 53.2	\$ 15.5
Project Reserve	\$ 60.1	\$ -	\$ -	\$ 60.1
Total Uses:	\$ 1,309.1	\$ 969.7	\$ 760.5	\$ 339.4

Paid-to-Date through 11/30/14



Project Operating Budget Summary in Millions of Dollars



Expo

Sources & Uses of Funds - Phase 2

Status as of December 31, 2014

Metro / Expo Baseline Activities - Vehicles

Sources of Funds (millions)

A

B

C = A - B

Source	Budget	Funding Committed	Uncommitted
RSTP (Federal) for LRVs	\$ 7.7	\$ 7.7	\$ -
CMAQ (Federal) for LRVs	\$ 41.3	\$ 41.3	\$ -
Reg. Imp. Prog. (Federal) for LRVs	\$ 153.1	\$ 153.1	\$ -
	\$ 202.1	\$ 202.1	\$ -
Total Sources:	\$ 202.1	\$ 202.1	\$ -

Uses of Funds by Element (millions)

A

B

C

D = A - B

Element	Budget	Committed	Paid	Uncommitted
Vehicles	\$ 202.1	\$ 202.1	\$ 77.7	\$ -
Total Uses:	\$ 202.1	\$ 202.1	\$ 77.7	\$ -

Paid-to-Date through 11/30/14



Project Operating Budget Summary in Millions of Dollars

Expo

Sources & Uses of Funds - Phase 2

Status as of December 31, 2014

Non - Baseline Activities

Sources of Funds (millions)

	A	B	C = A - B
Source	Budget	Funding Committed	Uncommitted
Project Revenue: City of LA Betterment	\$ 5.4	\$ 5.4	\$ -
Project Revenue: Metro	\$ 3.9	\$ 3.9	\$ -
Project Revenue: City of Santa Monica Betterment	\$ 20.6	\$ 20.6	\$ -
Total Sources:	\$ 29.8	\$ 29.8	\$ -

Uses of Funds by Element (millions)

	A	B	C	D = A - B
Element	Budget	Committed	Paid	Uncommitted
Design-Build Betterments				
COLA - Sepulveda Blvd Bridge & Aerial Station (Diff.)	\$ 5.3	\$ 5.3	\$ 3.6	\$ -
COLA - Greenway Project Culvert	\$ 0.1	\$ 0.1	\$ -	\$ -
Metro - Various Betterments (Metro Board Approved 4/17/14)	\$ 3.9	\$ 1.7	\$ -	\$ 2.3
City of Santa Monica Water System Betterments	\$ 1.5	\$ 1.4	\$ 1.4	\$ 0.1
City of Santa Monica PCC Funding Agreement	\$ 0.5	\$ 0.4	\$ -	\$ 0.1
City of Santa Monica Storm Drain Laterals	\$ 0.3	\$ 0.3	\$ 0.2	\$ -
26th Street & 17th Street Station Betterments P.E.	\$ 0.4	\$ 0.4	\$ 0.4	\$ -
26th Street & 17th Street Station Betterments Construction	\$ 7.7	\$ 5.5	\$ 5.5	\$ 2.2
4th Street Terminus Station P.E.	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.1
4th Street Terminus Station Construction	\$ 8.0	\$ 5.6	\$ 5.1	\$ 2.4
CSM Cont. Release - Jacob Guard Rails, Pavers & Landscaping	\$ 1.8	\$ -	\$ -	\$ 1.8
Total Uses:	\$ 29.8	\$ 20.9	\$ 16.6	\$ 8.9

Paid-to-Date through 11/30/14



Phase 2 Exposition Metro Line Construction Authority Contract Status

Expo Phase 2 Design-Build Contract Status

Expo Phase 2 Contractor: Skanska/Rados	Contract No.: XP8902-002 Status as of: 31-Dec-14																													
Progress/Work Completed: See Page 6 Areas of Concern: See Pages 4 and 5	Major Activities (In Progress): See Page 5 and 6 Major Activities Next Period: See Page 6																													
		Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs																								
	Substantial Completion	07/10/15	0	07/10/15	07/10/15	0																								
	Contract Completion	01/08/16	0	01/08/16	01/08/16	0																								
<u>Schedule Summary:</u> Date of Award: 05/13/11 Limited Notice to Proceed: 05/19/11 Original Contract Duration: 1700 Current Contract Duration: 1700 Elapsed Time from NTP: 1,323	<u>Cost Summary:</u> <table><tr><td></td><td colspan="2"><u>\$ In 000's</u></td></tr><tr><td></td><td>Baseline Project</td><td>Betterments/ Modifications</td></tr><tr><td>1. Award Value:</td><td>541,651.27</td><td>5,278.94</td></tr><tr><td>2. Executed Modifications:</td><td></td><td>51,215.37</td></tr><tr><td>3. Approved Change Orders:</td><td>3876.98</td><td></td></tr><tr><td>4. Current Contract Value (1 + 2 + 3):</td><td>545,528.25</td><td>56,494.30</td></tr><tr><td>5. Pending Changes:</td><td>205.94</td><td>1,655.66</td></tr><tr><td>6. Incurred Cost:</td><td>431,791.29</td><td>42,764.10</td></tr></table>							<u>\$ In 000's</u>			Baseline Project	Betterments/ Modifications	1. Award Value:	541,651.27	5,278.94	2. Executed Modifications:		51,215.37	3. Approved Change Orders:	3876.98		4. Current Contract Value (1 + 2 + 3):	545,528.25	56,494.30	5. Pending Changes:	205.94	1,655.66	6. Incurred Cost:	431,791.29	42,764.10
	<u>\$ In 000's</u>																													
	Baseline Project	Betterments/ Modifications																												
1. Award Value:	541,651.27	5,278.94																												
2. Executed Modifications:		51,215.37																												
3. Approved Change Orders:	3876.98																													
4. Current Contract Value (1 + 2 + 3):	545,528.25	56,494.30																												
5. Pending Changes:	205.94	1,655.66																												
6. Incurred Cost:	431,791.29	42,764.10																												



Expo Phase 2 VBU Design-Build Contract Status

Expo Phase 2 Contractor: Balfour Beatty Infrastructure, Inc.	Contract No.: XP8901-828 Status as of: 31-Dec-14																													
Progress/Work Completed: See Page 6 Areas of Concern: See Pages 4 and 5	Major Activities (In Progress): See Page 5 and 6 Major Activities Next Period: See Page 6																													
		Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs																								
	Substantial Completion	07/12/13	262	03/31/14	03/31/14	0																								
<u>Schedule Summary:</u> Date of Award: 08/04/11 Limited Notice to Proceed: 09/01/11 Original Contract Duration: 680 Current Contract Duration: 796 Elapsed Time from NTP: 1,218	<u>Cost Summary:</u> <table><tr><td></td><td colspan="2"><u>\$ In 000's</u></td></tr><tr><td></td><td>Baseline Project</td><td>Betterments/ Modifications</td></tr><tr><td>1. Award Value:</td><td>15,675.00</td><td></td></tr><tr><td>2. Executed Modifications:</td><td>(1,640.84)</td><td>1,277.00</td></tr><tr><td>3. Approved Change Orders:</td><td>1,219.89</td><td>-</td></tr><tr><td>4. Current Contract Value (1 + 2 + 3):</td><td>15,254.05</td><td>1,277.00</td></tr><tr><td>5. Pending Changes:</td><td>-</td><td></td></tr><tr><td>6. Incurred Cost:</td><td>14,943.83</td><td>1,551.90</td></tr></table>							<u>\$ In 000's</u>			Baseline Project	Betterments/ Modifications	1. Award Value:	15,675.00		2. Executed Modifications:	(1,640.84)	1,277.00	3. Approved Change Orders:	1,219.89	-	4. Current Contract Value (1 + 2 + 3):	15,254.05	1,277.00	5. Pending Changes:	-		6. Incurred Cost:	14,943.83	1,551.90
	<u>\$ In 000's</u>																													
	Baseline Project	Betterments/ Modifications																												
1. Award Value:	15,675.00																													
2. Executed Modifications:	(1,640.84)	1,277.00																												
3. Approved Change Orders:	1,219.89	-																												
4. Current Contract Value (1 + 2 + 3):	15,254.05	1,277.00																												
5. Pending Changes:	-																													
6. Incurred Cost:	14,943.83	1,551.90																												



Expo Phase 2 OMF Contract Status

Expo Phase 2 Contractor: Kiewit Building Group O&M Facility		Contract No.: XP8902-016 Status as of: 31-Dec-14																																	
Progress/Work Completed: See Page 6 Areas of Concern: See Pages 4 and 5		Major Activities (In Progress): See Page 5 and 6 Major Activities Next Period: See Page 6																																	
			Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs																												
		Substantial Completion	11/25/14	157	05/01/15	05/01/15	0																												
Schedule Summary:		Cost Summary: \$ In 000's <table><tr><td></td><td></td><td>Baseline Project</td><td>Betterments/ Modifications</td></tr><tr><td>1. Award Value:</td><td></td><td>99,930.56</td><td></td></tr><tr><td>2. Executed Modifications:</td><td></td><td></td><td>(72.55)</td></tr><tr><td>3. Approved Change Orders:</td><td></td><td>571.54</td><td>-</td></tr><tr><td>4. Current Contract Value (1 + 2 + 3):</td><td></td><td>100,502.10</td><td>(72.55)</td></tr><tr><td>5. Pending Changes:</td><td></td><td>1,560.69</td><td>13.10</td></tr><tr><td>6. Incurred Cost:</td><td></td><td>59,292.02</td><td>(107.40)</td></tr></table>								Baseline Project	Betterments/ Modifications	1. Award Value:		99,930.56		2. Executed Modifications:			(72.55)	3. Approved Change Orders:		571.54	-	4. Current Contract Value (1 + 2 + 3):		100,502.10	(72.55)	5. Pending Changes:		1,560.69	13.10	6. Incurred Cost:		59,292.02	(107.40)
		Baseline Project	Betterments/ Modifications																																
1. Award Value:		99,930.56																																	
2. Executed Modifications:			(72.55)																																
3. Approved Change Orders:		571.54	-																																
4. Current Contract Value (1 + 2 + 3):		100,502.10	(72.55)																																
5. Pending Changes:		1,560.69	13.10																																
6. Incurred Cost:		59,292.02	(107.40)																																
Date of Award:	05/03/13																																		
Limited Notice to Proceed:	06/03/13																																		
Original Contract Duration:	540																																		
Current Contract Duration:	540																																		
Elapsed Time from NTP:	577																																		



Expo Phase 2 Bikeway Contract Status

Expo Phase 2 Contractor: Skanska/Rados Bikeway Project		Contract No.: XP8903-01 Status as of: 31-Dec-14						
Progress/Work Completed: See Page 6 Areas of Concern: See Pages 4 and 5		Major Activities (In Progress): See Page 5 and 6 Major Activities Next Period: See Page 6						
			Original Contract Dates	Time Extension	Current Contract	Forecast	Variance CDs	
		Substantial Completion	07/10/15	0	07/10/15	07/10/15	0	
<u>Schedule Summary:</u>		<u>Cost Summary:</u>						
							<u>\$ In 000's</u>	
							Baseline Project	Betterments/ Modifications
Date of Award: 01/27/12		1. Award Value:					11,041.06	
Limited Notice to Proceed: 08/28/13		2. Executed Modifications:					884.94	
Original Contract Duration: 681		3. Approved Change Orders:					112.88	-
Current Contract Duration: 681		4. Current Contract Value (1 + 2 + 3):					12,038.89	-
Elapsed Time from NTP: 491		5. Pending Changes:					-	
		6. Incurred Cost:					3,952.41	-