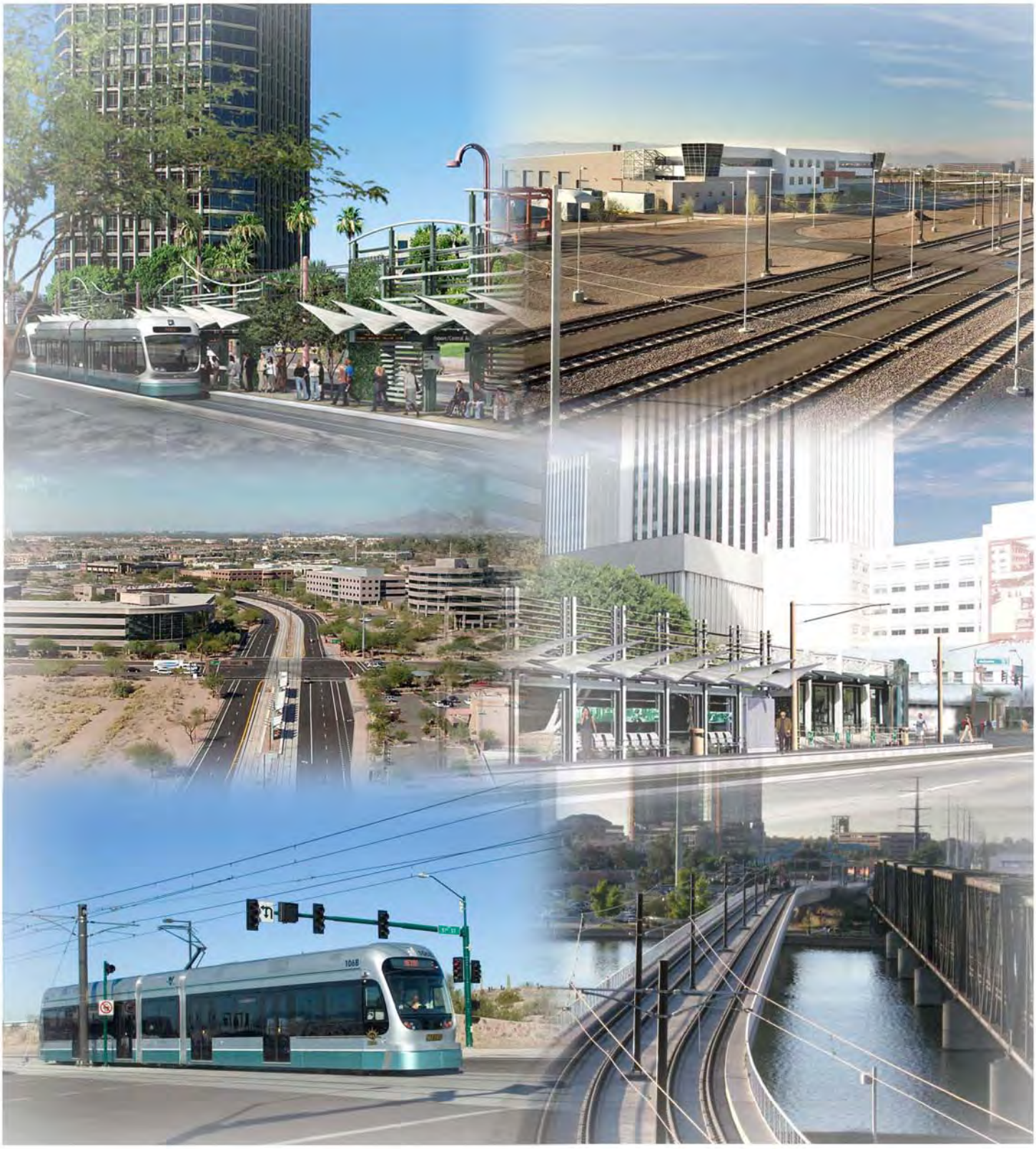
NOVEMBER 2008

METRO

LIGHT RAIL PROGRESS REPORT

Central Phoenix/East Valley Light Rail Transit Project



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1. Executive Summary

The Central Phoenix/East Valley (CP/EV) Light Rail Transit Project includes the design and construction of a 19.6 mile, double track, Minimum Operable Segment that extends from 19th Avenue near Bethany Home Road in North Central Phoenix through the downtown area to and through the City of Tempe, then crosses into the City of Mesa where the project terminates at Main Street and Sycamore. The track alignment is mostly in-street median and includes 27 passenger stations and eight surface parking lots, seven of which are newly constructed, and one existing lot owned by the City of Tempe near an LRT station site that will be dedicated to transit use at no cost to the Project. An initial fleet of 36 LRVs is part of the Project. The Project also includes an Operations and Maintenance Center (formally known as the Maintenance and Storage Facility) to support the 36 light rail vehicles located South of Washington Street and East of 48th Street in Phoenix. Propulsion power for the LRVs will be delivered by a Traction Electrification System consisting of wayside substations distributing propulsion power through an Overhead Catenary System (OCS). The Project will also include a Signals and Communications System consisting of both wayside and traffic signals. The entity responsible for project delivery, Valley Metro Rail (METRO), is a sub-recipient to the grantee, the City of Phoenix. The Project has a budget of $1,412,000,000, with a Revenue Operations Date of December 2008.

During the month of November the project continued to progress and surpassed 95 percent completion of construction. The Park-and-Ride contracts completed civil work and station finishes continued to work on punchlist items. Ninety-one of ninety-five ticket vending machines have been installed at the station platforms and testing continues on the fare collection system.

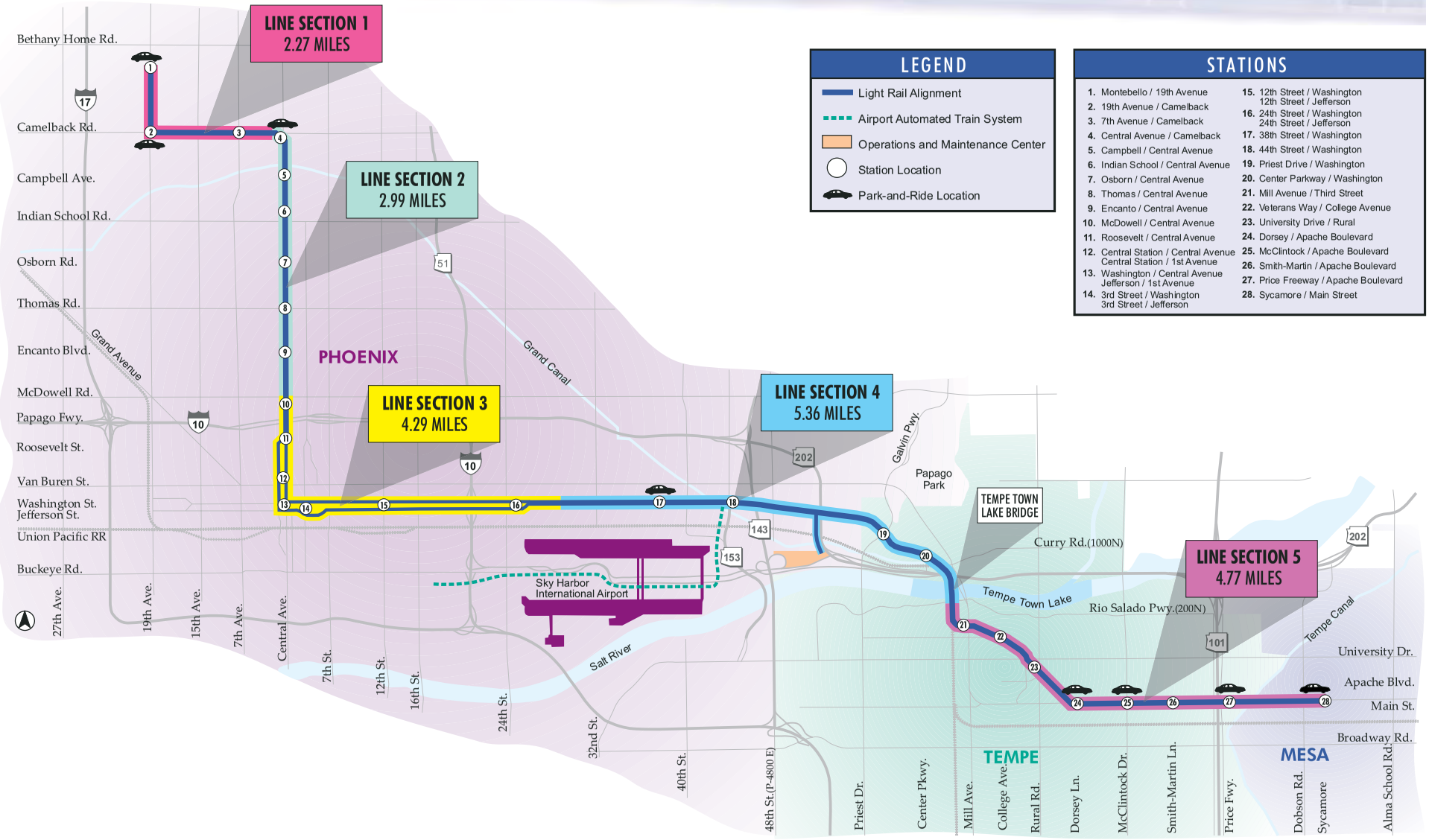
Vehicle assembly and testing continue to progress on schedule. All fifty LRV's have been accepted as delivered. Multiple vehicles including two and three car trains can be seen along the entire alignment on a daily basis. The Operations Control Center continues to be outfitted with software and computer equipment and testing continues from the Operations Control Center to various wayside elements along with the light rail vehicle. Major software upgrades have been made during the month of November to work out issues found during initial testing.

With construction activities winding down and operations and testing commencing, operator hiring and training has begun. All operator training classes have been held and operators are beginning their runs and preparing for revenue service operations.

Public involvement continued with outreach efforts related to safety and how to ride the system. Two platform training classes were held with the ADA community to show how to ride METRO and to receive any feedback. Staff also worked with the Central High school to conduct a show and tell on the train and to promote safety around light rail.

The project remains on schedule for a December 27, 2008 opening.

METRO LIGHT RAIL STARTER LINE



CONTRACT LOG - NOVEMBER 2008

ITEM	CONTRACT NUMBER	CONTRACT DESCRIPTION	CONTRACTOR
1. PROGRAM MANAGEMENT & ENGINEERING			
1	LRT-99-001	GEC - DEIS/FEIS/PE	PB Americas, Inc.
2	LRT-02-001	GEC - Final Design	PB Americas, Inc.
3	LRT-02-001	GEC - DSDC	PB Americas, Inc.
4	LRT-98-001-PMC	Project Management Consultant	HDR, Inc. and Parsons Transportation Group, Inc., a Joint Venture
5	LRT-03-005-CAC	Construction Administration Services	Post, Buckley, Schuh & Jernigan, Inc., and PGH Wong Engineering, Inc., a Joint Venture
2. CONSTRUCTION			
6	LRT-03-007-B48	48th Street Bridge Replacement	FNF Construction, Inc.
7	LRT-04-017-MSF	Maintenance & Storage Facility (MSF)	Sundt/Stacy & Witbeck, Joint Venture
8	LRT-04-020-LS1	Line Section 1	Kiewit Western Co
9	LRT-04-019-LS2	Line Section 2	Herzog Contracting Corp
10	LRT-04-021-LS3	Line Section 3	Archer Western Contractors
11	LRT-04-018-LS4	Line Section 4	Sundt/Stacy & Witbeck, Joint Venture
12	LRT-04-022-LS5	Line Section 5	Sundt/Stacy & Witbeck, Joint Venture
13	LRT-05-042-PNR	Park and Rides Montebello & 19th Avenue 19th Avenue & Camelback Central & Camelback 38th St. & Washington	 Kiewit Western Company Kiewit Western Co. MRM Construction Services MRM Construction Services
14	LRT-05-042-PNR-RB	Park and Rides (Re-Bid) Price & Apache Sycamore & Main	Sundt / Stacy and Witbeck, Joint Venture
15	LRT-04-028-SF	Station Finishes	Archer Western Contractors
16	LRT-04-040-TLB	Town Lake Bridge	PCL Civil Constructors, Inc.
17	LRT-05-036-WPM	Wheel Profiling Machine	Simmons Machine Tool Corp
3. SYSTEM ELEMENTS			
18	LRT-03-001	Light Rail Vehicles (LRV)	Kinkisharyo International, L.L.C. and Mitsui & Co. (U.S.A), Inc., CPEV Joint Venture
19	LRT-04-039-S&C	Signals and Communications	Mass Electric Corp.
20	LRT-04-014-TES	Traction Electrification System	Mass Electric Corp.
21	LRT-06-053-FCS	Fare Collection System	Scheidt & Bachmann USA, Inc.
22	LRT-06-071-LCM	Light Rail Car Mover	Brandt Road Rail Corp
23	LRT-07-076-MSFF	Modular Furniture for MSF	Southwest Business Furnishings
24	LRT-06-060-MMIS	Maintenance Management Information System	Mincom, Inc.
4. PUBLIC ART			
25	02-002-04	LS4 Design Team Artist/Station Artist	Laurie Lundquist
26	02-002-03	LS2 Design Team Artist/Station Artist	Ilan Averbuch
27	02-002-04	LS1 Design Team Artist/Station Artist	Robert Adams
28	02-002-05	LS5 Design Team Artist/Station Artist	Norie Sato/Bill Will
29	02-002-01	LS3 Design Team Artist	Janet Zweig
30	05-041-ART	Bridge Design Team Artist	Buster Simpson
31	02-002-07	LS3 Design Team Artist	Laurie Lundquist
32	02-002-08	LS3 Design Team Artist	Robert Adams
33	02-002-09	44th Street Station Artist	Mona Higuchi
34	02-002-10	38th Street Station Artist	Stuart Keeler/Michael Machnic
35	02-002-11	Central / Roosevel Station Artist	Peter Richards
36	02-002-12	Central / McDowell Station Artist	Michael Maglich
37	02-002-13	First Street Station Artist	Stephen Farley
38	02-002-14	Third Street Station Artist	Cliff Garten
39	02-002-15	Central Station, Station Artist	Ries Niemi
40	02-002-16	12th Street Station Artist	Victor Zaballa
41	02-002-17	Fifth Street / College Station Artist	Tad Savinar
42	02-002-18	Central / Campbell Station Artist	Al Price
43	02-002-19	Central / Indian School Station Artist	Mary Lucking
44	02-002-20	Central / Osborn Station Artist	Thomas Sayre
45	02-002-21	Central / Thomas Station Artist	Brian Goldbloom
46	02-002-23	Third Street / Mill Station Artist	Catherine Widgery
47	02-002-24	Apache Stations - Lighting Artist	Dan Corson
48	02-002-25	Apache Stations - Cultural Weave Artist	Christine Bourdette
49	02-002-26	Apache Stations - Vertical Objects Artist	Suikang Zhao
50	02-002-27	Apache Stations - Paving Artist	Benson Shaw

CONTRACT LOG - NOVEMBER 2008

ITEM	CONTRACT NUMBER	CONTRACT DESCRIPTION	CONTRACTOR
51	02-002-28	Longmore Station Artist	Brad Konick
52	02-002-29	19th Avenue / Camelback Station Artist	Josh Garber
53	02-002-30	7th Avenue / Camelback Station Artist	Nubia Owens
54	02-002-31	24th Street Station Artist	Kevin Berry
55	02-002-32	Central / Encanto Station Artist	Jamex & Einar de la Torre
5. MISC. CONSTRUCTION & SERVICES			
56	LRT-05-046-ERS	Environmental Remediation Service	Environmental Response Inc
57	LRT-04-031-PCS	Power Consulting Services	RW Beck
58	LRT-06-052-MF	Modular Furniture	Facilitec, Inc.
59	LRT-06-065-TCS	Telecom Carrier Services	Time Warner Telecom
60	LRT-06-057-WLI	WAN/LAN and IPT Voice Sys Equipment	Calence, Inc.
61	LRT-04-034-SPC	Strategic Planning Consulting Services	Davis Consulting
62	LRT-05-045-DCS	Document Control Services	LKG-CMC, Inc
63	LRT-05-037-ACS	Audit Consulting Services	Clifton Gunderson LLP
64	LRT-05-038-RMS	Risk Management Services	Ashton Tiffany, LLC
65	LRT-06-069-SSC	Safety & Security Certification Services	Booz Allen Hamilton, Inc.
66	LRT-06-067-ITS	Info Technology-Office Network Support	World Wide Technology, Inc.
67	LRT-07-082-TCS	Telecommunications Services for MSF	Qwest Communications
68	LRT-07-073-TS	Transportation Services	Alternate Concepts, Inc.
69	LRT-07-086-MSFM	Interim Maintenance Services for MSF	DMS Facility Services
70	LRT-07-088-PALS	Policy and Advisory Legal Services	Thompson Coburn, LLP
71	LRT-07-095-MAC	Marketing & Advertising Consulting Services	Park & Co.
72	LRT-08-096-EPGO	Grand Opening Event Planning Consulting Services	Entertainment Solutions, Inc.
73	LRT-08-104-ORS	Offsite Records Storage Services	Archive Systems, Inc.
74	LRT-08-108-ARM	Armored Car & Cash Processing Services	Brink's U.S.
75	LRT-08-109-FMSO	Facilities Maintenance Services	DMS Facility Services
76	LRT-08-110-SS	Security Services	The Wackenhut Corporation
77	LRT-08-111-FMCL	Cleaning Services	DMS Facility Services
78	LRT-08-112-FMLK	Lands Keeping Services	DMS Facility Services
6. OWNER FURNISHED MATERIALS			
79	LRT-04-009-MP1	Rail (MP1)	Progress Rail Corporation
80	LRT-04-010-MP2	Concrete Crossties (MP2)	CXT Inc
81	LRT-04-030-MP5	Ballasted Special Trackwork (MP5)	VAE Nortrak North America Inc
82	LRT-04-032-MP8	Girder Rail (MP8)	VAE Nortrak North America Inc
83	LRT-04-033-MP9	Girder Rail Special Trackwork (MP9)	VAE Nortrak North America Inc
84	LRT-04-015-MP3	Traffic Signal Hardware (MP3)	Various
85	LRT-06-072-SE	Shop Equipment for Maintenance Facility	Wissota Supply Company, Inc
86	LRT-07-078-MLE	Spray Paint Booth Manlifts at MSF	MGM Equipment Source
87	LRT-08-108-ADV	Aerial Device Vehicles	Altec Industries, Inc.
7. FUTURE LIGHT RAIL EXTENSIONS			
88	LRT-06-050-DCS	Design Criteria & Standards	Stantec Consulting
89	LRT-06-055-PSS	Planning Support Services	HDR Engineering, Inc.
90	LRT-07-077-PCES	Planning, Conceptual Engineering & Environmental Studies for Future Light Rail Extensions - Mesa-Tempe	HDR / S.R. Beard & Associates
91	LRT-07-077-PCES	Planning, Conceptual Engineering & Environmental Studies for Future Light Rail Extensions - I-10/Glendale	URS Corporation
92	LRT-07-075-PENW	Northwest LRT Extension Engineering Services	DMJM+Harris, Inc.
93	LRT-07-091-PICS-HDR	On-Call Public Involvement Consulting Services	HDR, Inc.
94	LRT-07-087D-CMNW	Northwest LRT Extension Construction Manager at Risk Design Phase Services	Sundt/Stacy & Witbeck, Joint Venture
95	LRT-07-089-NWA	Northwest LRT Extension Public Art for Glendale Station	Merge Conceptual Design, LLC
96	LRT-07-089-NWA	Northwest LRT Extension Public Art for Northern Station	Deborah Mersky
97	LRT-07-089-NWA	Northwest LRT Extension Public Art for Dunlap Parking	PhenomenArts, Inc.
98	LRT-07-089-NWA	Northwest LRT Extension Public Art for Dunlap Station	Colab Studio, LLC
99	LRT-08-102-GIS	On-Call Geographic Information Systems Consulting Services	Jacobs Carter Burgess

2. Cost Overview

The project budget for the Federal 5309 program is $1,412,125,346. Known pending and executed change orders are valued at $99,794,764 of the available $108,584,774 planned contingency.

Including Project Reserve, this leaves $9,861,603 of budgeted contingency funds available to the project.

The project is 94.5 percent complete, which is a 1.0 percent increase from the last reporting period. Construction is 95.3 percent complete, which is a 1.2 percent increase.

Program Management and Administration

Forecast is within budget.

Program Management Consultant

Staffing plan for fiscal year 2009 has been incorporated within the overall forecast of this contract unit; the forecast is projecting and under-run to the budget.

City Administration

Forecasts are per agreements with the cities.

Right of Way Acquisition

Forecast and budget are currently at $126,500,000.

PE/FEIS Engineering

Activity is complete.

Engineering

Forecast for the remaining work is slightly above the budget. The costs are being monitored.

Owner Furnished Equipment/Materials

Forecasts are within budget.

Light Rail Vehicles

Contingency appears to be sufficient to fund the remaining work.

Facilities

Facilities work is 97.6 percent complete, a 3.2 percent increase from the previous reporting period. Executed and pending change orders are expected to utilize $70,279,886 of the $77,626,400 available contingency.

Systems

Systems work is 83.0 percent complete, an increase of 2.2 percent since the last period. Executed and pending change orders are expected to utilize $12,601,558 of the $13,139,720 available contingency.

Construction Administration Services

Forecast has been increased consistent with the pending December Board action to extend selected individuals for contract close-out purposes.

Testing and Startup

Forecast appears sufficient to complete the work. Current detail expenditures are tracking favorably with annual budget and forecast.

Art Program

Forecast appears sufficient to complete the work.

Unallocated Design Contingency

Budget was utilized to fund variances between bid amounts and original budgets.

Project Reserve

The budget is currently at $1,100,000.

Financing Costs

The budget and forecast are $118,400,000.

Concurrent Non Project Activities Project

The budget for Concurrent Non Project Activities is $121,347,000, based on the Valley Metro Rail Board approved amount contained in the Five Year Capital Program and Operating Forecast document.

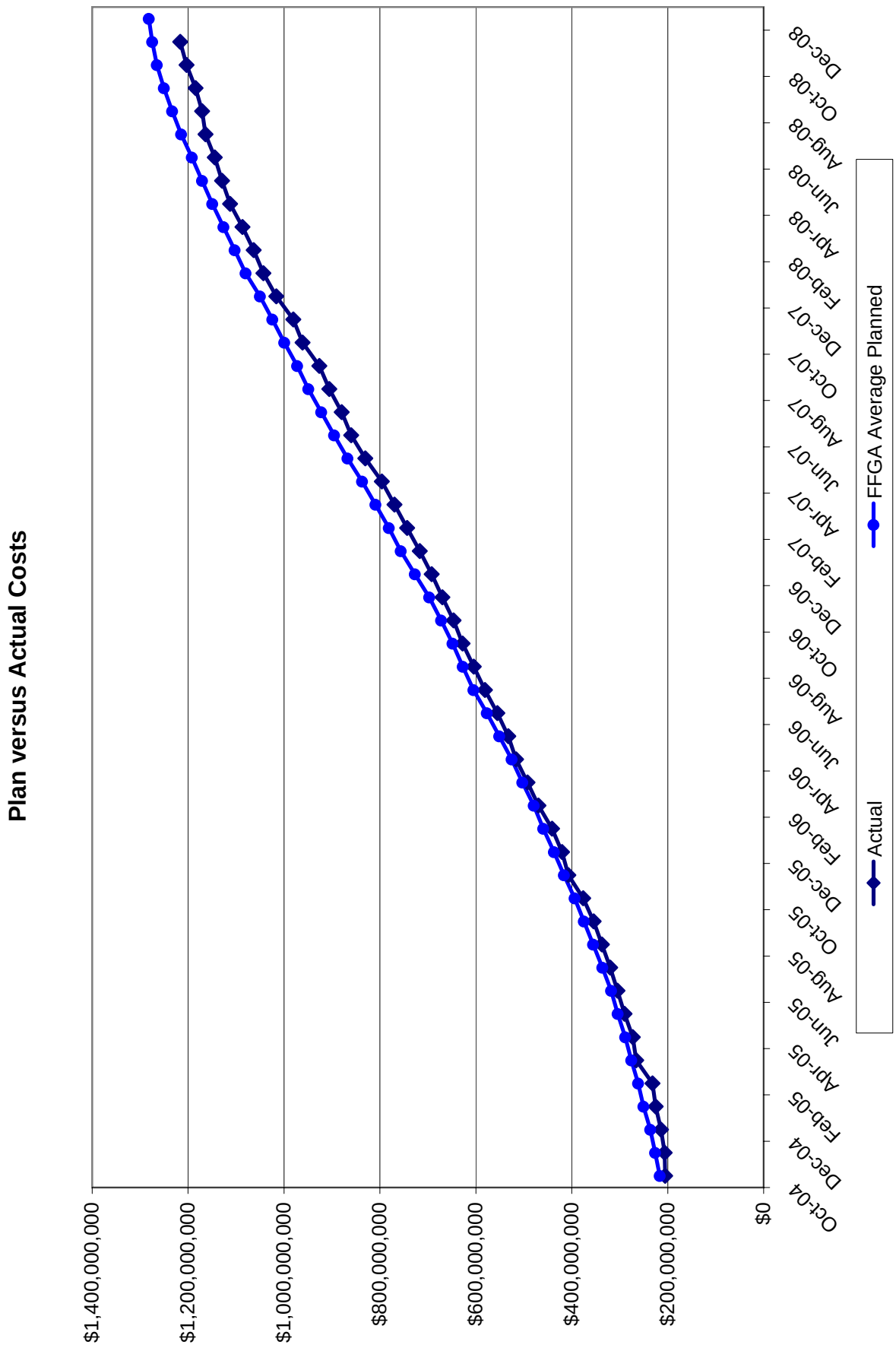
Close out of contract packages continues, resulting in final adjustments to the scope of work and costs.

Valley Metro Rail Program Control
CP/EV LRT Project
Project Budget Status
Federal 5309 Project

Element	Description	FFGA Attachment 3	Board Revised Budget	Current Actual $ (To Date)	Forecast	Variance
50	LS1 19th Ave/Bethany - Camelback/Central	$27,130,856	$48,694,653	$45,309,849	$48,681,272	$13,381
51	LS2 Camelback/Central - McDowell Road	$38,004,059	$53,593,930	$52,315,508	$53,677,852	($83,922)
52	LS3 McDowell Road - 28th Street	$63,981,654	$101,406,914	$101,166,359	$102,473,187	($1,066,273)
53	LS4 28th Street - N Approach to Town Lake	$46,622,020	$52,948,076	$52,350,356	$52,350,356	$597,720
54	LS5 1st Street - Sycamore	$49,680,435	$79,694,764	$78,904,895	$79,821,451	($126,687)
55	Station Finishes	$38,701,950	$53,176,103	$52,608,980	$53,176,102	$1
56	Park and Ride Facilities	$15,104,339	$22,667,172	$21,689,767	$22,667,172	$0
57	Miscellaneous Construction	$7,505,200	$850,659	$485,402	$850,659	$0
5K	Archaeological Investigations/Hazardous Material Removal	$0	$7,572,689	$5,601,369	$7,362,309	$210,380
58	MSF Construction/Equipment Installation	$57,637,721	$65,400,000	$65,400,000	$65,400,000	$0
5G	MSF Underfloor Wheel Profiling System	$0	$989,232	$967,069	$976,194	$13,038
59	48th Street Bridge Restoration	$2,014,013	$2,824,232	$2,837,136	$2,837,136	($12,904)
5A	Town Lake Bridge	$15,529,600	$21,759,753	$21,759,751	$21,759,751	$2
5B	Prior Rights Utility Relocations	$22,938,000	$25,739,684	$28,613,848	$30,893,519	($5,153,835)
81	Contingency	$37,491,841	$10,924,646	$0	$671,070	$10,253,576
	Facilities	**$422,341,688**	**$548,242,507**	**$530,010,289**	**$543,598,030**	**$4,644,477**
4A	Rail Procurement	$1,306,200	$1,273,506	$1,279,492	$1,279,492	($5,986)
4B	Concrete Crosstie Procurement	$900,000	$903,395	$870,575	$870,575	$32,820
4C	Traffic Signal Hardware	$8,060,100	$8,463,100	$8,492,509	$8,508,511	($45,411)
4D	Ballasted Special Trackwork Procurement	$2,532,414	$2,291,497	$2,257,456	$2,257,456	$34,041
4E	Crossing Panel Procurement	$380,100	$0	$0	$0	$0
4F	Girder Rail Procurement	$15,079,742	$14,725,878	$14,710,119	$14,724,278	$1,600
4G	Girder Rail Special Trackwork Procurement	$0	$5,712,656	$5,628,848	$5,712,656	$0
81	Contingency	$1,412,863	$90,072	$0	$0	$90,072
	Owner Furnished Materials/Equipment	**$29,671,419**	**$33,460,104**	**$33,238,999**	**$33,352,968**	**$107,136**
5D	Automated Fare Collection System	$10,755,800	$7,764,571	$1,857,078	$7,764,571	$0
5E	Traction Power Substations/Overhead Catenary System	$62,141,100	$61,327,643	$56,613,521	$61,331,081	($3,438)
5F	Communications/Signals	$38,220,002	$43,509,104	$35,830,593	$43,777,497	($268,393)
81	Contingency	$8,674,000	$809,994	$0	$806,555	$3,439
	Systems	**$119,790,902**	**$113,411,312**	**$94,301,192**	**$113,679,704**	**($268,392)**
	Sub Total, Construction	**$571,804,009**	**$695,113,923**	**$657,550,480**	**$690,630,702**	**$4,483,221**
4K	Vehicle Contract	$115,501,823	$118,391,301	$99,904,323	$118,391,301	$0
4N	LRT Vehicle Contract Contingency	$5,775,001	$31,264	$0	$31,264	$0
	LRT Vehicles	**$121,276,824**	**$118,422,565**	**$99,904,323**	**$118,422,565**	**$0**
22	ROW Acquisition	$116,214,150	$117,181,379	$125,222,116	$126,500,000	($9,318,621)
23	ROW Contingency	$20,081,000	$9,318,621	$0	$0	$9,318,621
20	**ROW**	**$136,295,150**	**$126,500,000**	**$125,222,116**	**$126,500,000**	**$0**

Valley Metro Rail Program Control
CP/EV LRT Project
Project Budget Status
Federal 5309 Project

Element	Description	FFGA Attachment 3	Board Revised Budget	Current Actual $ (To Date)	Forecast	Variance
30	**PE/FEIS Engineering**	**$25,054,938**	**$25,054,938**	**$25,169,700**	**$25,169,700**	**($114,762)**
31	Engineering	$76,780,935	$76,346,255	$77,248,280	$77,321,047	($974,792)
4L	Vehicle Engineering	$5,432,358	$7,305,671	$6,094,268	$6,313,404	$992,267
20	ROW Engineering	$1,016,370	$1,321,163	$1,266,226	$1,266,226	$54,937
32	Design Services During Construction	$14,160,426	$22,674,151	$22,112,068	$23,368,803	($694,652)
33	Engineering Contingency	$0	$0	$0	$0	$0
34	DSDC Contingency	$0	$0	$0	$0	$0
	Engineering	**$97,390,089**	**$107,647,240**	**$106,720,842**	**$108,269,480**	**($622,240)**
60	Construction Administration Services	$37,759,127	$54,311,124	$53,204,034	$56,255,549	($1,944,425)
61	CAC Contingency	$15,244,622	$0	$0	$0	$0
	Construction Administration Services	**$53,003,749**	**$54,311,124**	**$53,204,034**	**$56,255,549**	**($1,944,425)**
10	PE Administrative/Management Costs	$4,363,526	$4,363,526	$8,388,002	$8,388,002	($4,024,476)
11	Administrative/Management - VMR	$43,915,047	$42,729,717	$34,764,484	$37,713,871	$5,015,846
62	Construction Administration Services - VMR	$1,697,232	$2,067,564	$1,736,556	$1,910,468	$157,096
67	CAB Program	$0	$2,500,000	$2,486,057	$2,500,000	$0
21	Administrative ROW Costs	$696,712	$557,660	$695,090	$736,330	($178,670)
76	Administrative/Management Art Program Costs	$414,632	$414,632	$0	$414,632	$0
16	Administrative/Management - ADOT	$420,000	$1,087,676	$623,342	$708,342	$379,334
17	Agency Insurance Cost	$7,000,000	$7,000,000	$7,308,919	$7,500,000	($500,000)
18	Administrative/Management Contingency		$388,523	$0	$1,237,653	($849,130)
	Program Management	**$58,507,149**	**$61,109,298**	**$56,002,450**	**$61,109,298**	**$0**
10	PE Administrative/Management Costs	$12,832,472	$12,832,472	$12,255,028	$12,255,028	$577,444
21	Administrative ROW Costs	$1,016,571	$828,502	$791,139	$791,139	$37,363
76	Administrative/Management Art Program Costs	$549,061	$464,266	$255,988	$255,988	$208,278
12	Administrative/Management - PMC	$32,736,326	$32,115,900	$31,471,468	$33,236,784	($1,120,884)
4M	Administrative Vehicle Costs	$1,337,322	$561,908	$553,400	$553,400	$8,508
63	Construction Administration Services - PMC	$4,581,527	$6,250,231	$4,423,276	$5,407,661	$842,570
	Program Management Consultant	**$53,053,279**	**$53,053,279**	**$49,750,299**	**$52,500,000**	**$553,279**
10	PE Administrative/Management Costs	$3,158,439	$3,158,439	$2,331,563	$2,492,799	$665,640
13	Administrative/Management - COP	$2,986,000	$5,448,000	$4,047,918	$4,047,918	$1,400,082
64	Construction Administration Services - COP	$8,347,000	$5,885,000	$7,950,722	$7,950,722	($2,065,722)
14	Administrative/Management - COT	$6,797,000	$6,797,000	$6,797,000	$6,797,000	$0
15	Administrative/Management - COM	$897,000	$897,000	$552,458	$897,000	$0
	City Administration	**$22,185,439**	**$22,185,439**	**$21,679,661**	**$22,185,439**	**$0**
75	Public Art Contracts	$5,284,133	$6,213,049	$5,180,659	$6,213,049	$0
77	Art Program Contingency	$999,000	$70,084	$0	$70,084	$0
	Public Art	**$6,283,133**	**$6,283,133**	**$5,180,659**	**$6,283,133**	**$0**
70	**Start-Up and Testing**	**$31,000,000**	**$23,000,000**	**$15,990,737**	**$23,000,000**	**$0**
80	**Unallocated Design Contingency**	**$7,575,241**	**$0**	**$0**	**$0**	**$0**
85	**Project Reserve**	**$69,829,000**	**$1,071,593**	**$0**	**$3,426,666**	**($2,355,073)**
	SUBTOTAL	**$1,253,258,000**	**$1,293,752,532**	**$1,216,375,301**	**$1,293,752,532**	**$0**
90	**Financing Costs**	**$158,867,346**	**$118,372,814**	**$49,018,379**	**$118,372,814**	**$0**
	TOTAL CP/EV PROJECT	**$1,412,125,346**	**$1,412,125,346**	**$1,265,393,680**	**$1,412,125,346**	**$0**


Plan versus Actual Costs
$1,400,000,000
$1,200,000,000
$1,000,000,000
$800,000,000
$600,000,000
$400,000,000
$200,000,000
$0
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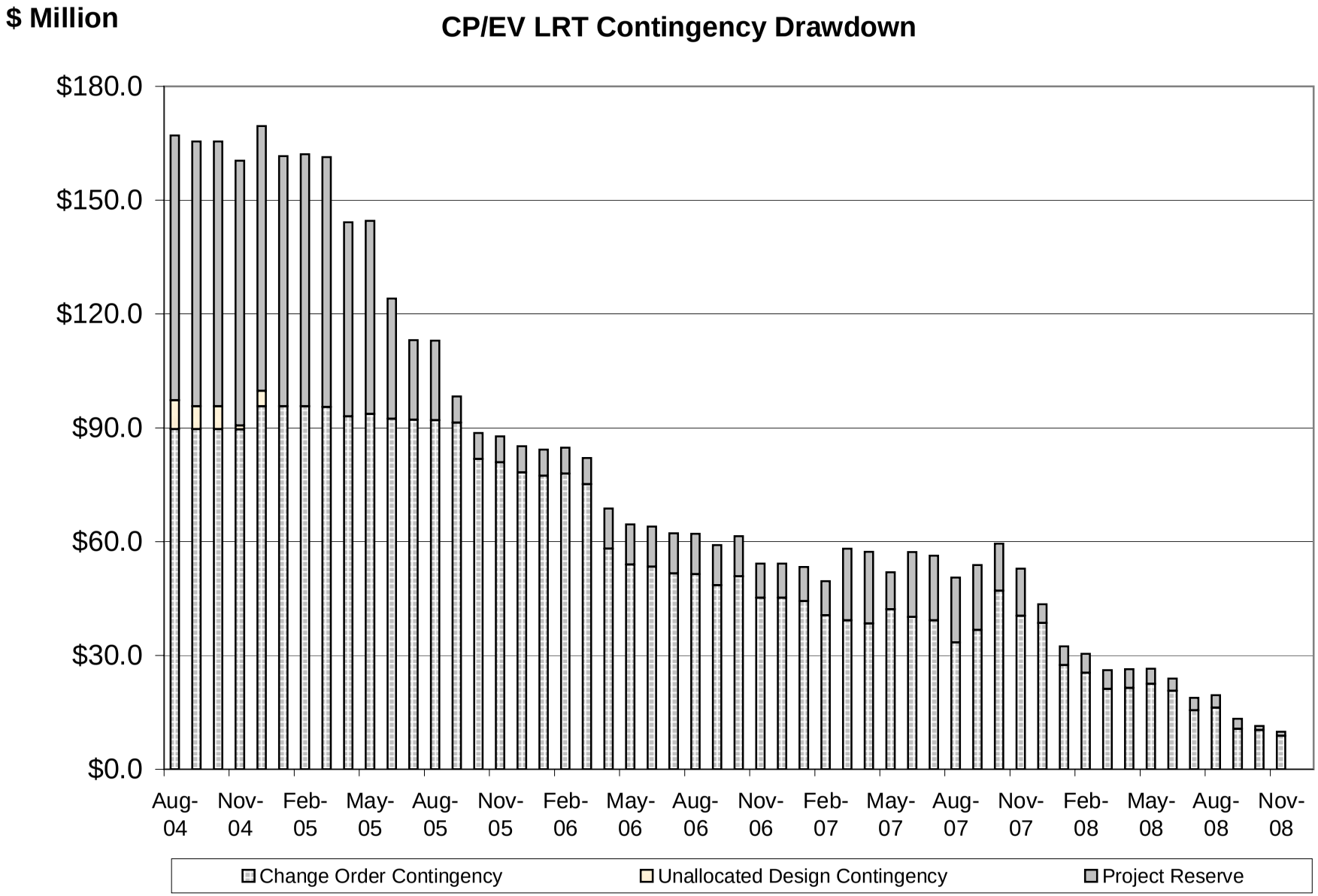
Actual
FFGA Average Planned


$ Million
CP/EV LRT Contingency Drawdown
$180.0
$150.0
$120.0
$90.0
$60.0
$30.0
$0.0
Aug-04
Nov-04
Feb-05
May-05
Aug-05
Nov-05
Feb-06
May-06
Aug-06
Nov-06
Feb-07
May-07
Aug-07
Nov-07
Feb-08
May-08
Aug-08
Nov-08
Change Order Contingency
Unallocated Design Contingency
Project Reserve

Valley Metro Rail Program Control
CP/EV LRT Project
Project Budget Status
CNPA Project

	Element	Description	Board Approved Total	Revised Budget/Estimate	Current Actual $ (To Date)	Forecast	Variance
Phoenix Public Transit	A1	Bus Bays (LS2)	$985,000	$984,756	$642,568	$944,464	$40,292
	A2	Phoenix Art Museum Left Turn Signal	$99,000	$99,083	$66,442	$99,083	$0
	A5	19th/Montebello Transit Center (SF)	$6,317,000	$6,250,345	$5,840,634	$6,250,345	$0
	A6	117 Central/Camelback Transit Center (SF)	$7,101,000	$7,174,904	$9,103,578	$9,532,249	($2,357,345)
	A7	44th Street/Washington Transit Center Real Estate	$4,650,000	$4,649,580	$4,467,450	$4,649,580	$0
	B1	Washington Street Bike Lane (LS4)	$867,000	$834,912	$789,522	$842,830	($7,918)
	F4	Civic Plaza Track Support System	$340,000	$340,044	$340,045	$340,045	($1)
	F5	Additional Water Services to the Pueblo Grande Museum - LS4	$82,000	$89,285	$81,792	$81,792	$7,493
	F6	Central/Camelback Bus Bays Relocation	$180,000	$180,435	$62,357	$171,435	$9,000
	F7	COP Landscape Irrigation Restoration Central Ave	$92,000	$93,413	$91,807	$91,807	$1,606
	H2	Fiber Optic COP	$490,000	$440,926	$388,293	$541,824	($100,898)
	J6	Washington/Jefferson 16th to 26th Street, Property Access	$3,559,000	$3,290,749	$2,372,458	$2,521,427	$769,322
	K7	11th Street Loop Track	$4,652,000	$5,122,370	$3,819,184	$5,118,259	$4,111
	L8	PPT CNPA-3rd St/Washington APD Medallions	$0	$6,850	$6,782	$6,850	$0
	G8	PPT CNPA Additional Point of Interest Signs		$67,245	$67,245	$67,245	$0
		Sub Total Public Transit Department	**$29,414,000**	**$29,624,897**	**$28,140,157**	**$31,259,235**	**($1,634,338)**
Phoenix Streets	A3	6th Lane - Camelback (LS1)	$8,955,000	$8,954,921	$8,520,684	$8,954,921	$0
	D1	Additional Street/Pedestrian Lighting (LS3)	$540,000	$521,724	$514,091	$540,330	($18,606)
	E3	Seal Coat versus Rubber Overlay (LS 1)	$264,000	$264,342	$218,964	$244,342	$20,000
	E4	Seal Coat versus Rubber Overlay (LS 3)	$1,607,000	$1,595,287	$1,544,073	$1,556,530	$38,757
	E5	Seal Coat versus Rubber Overlay (LS 4)	$380,000	$430,896	$378,590	$380,003	$50,893
	G9	3/8" AC Leveling Course		$166,000	$166,000	$166,000	$0
	K3	Red Light Enforcement	$61,000	$59,753	$49,782	$59,753	$0
	M1	Removable Steel Curb at 7th/Jefferson	$6,000	$5,989	$5,989	$5,989	$0
		Sub Total Streets Department	**$11,813,000**	**$11,998,912**	**$11,398,173**	**$11,907,868**	**$91,044**
Phoenix Aviation	A7	44th Street/Washington Transit Center (SF)	$3,019,000	$3,016,433	$2,932,805	$3,070,132	($53,699)
	C6	APM Utility Connections	$23,000	$22,717	$22,717	$22,717	$0
	D2	44th Street Station People Mover Foundation (LS4)	$756,000	$783,003	$756,400	$756,400	$26,603
	D6	People Mover - APS Duct Bank @ 40th Place	$327,000	$326,527	$356,944	$356,944	($30,417)
	E9	10" Water Line at 42nd/Washington LS 4	$57,000	$61,159	$57,389	$57,389	$3,770
	F3	Archaeological/Hazardous Material Testing (CAC)	$60,000	$60,000	$57,471	$60,000	$0
		Sub Total Aviation Department	**$4,242,000**	**$4,269,839**	**$4,183,726**	**$4,323,582**	**($53,743)**
Phoenix Water	B3	LS 1 Water/Sanitary Sewer	$14,354,000	$13,821,778	$9,158,685	$13,852,581	($30,803)
	B4	LS 2 Water/Sanitary Sewer	$8,647,000	$8,640,407	$4,882,560	$8,163,811	$476,596
	B5	LS 3 Water/Sanitary Sewer	$20,602,000	$20,943,058	$18,109,555	$20,949,505	($6,447)
	B6	LS 4 Water/Sanitary Sewer	$7,208,000	$6,962,340	$6,962,341	$6,962,341	($1)
	B7	Water and Sanitary Sewer Lines - 48th St. Bridge Replacement	$156,000	$155,767	$142,862	$155,767	$0
	J1	Cathodic Protection for Waterlines LS1	$744,000	$743,645	$480,199	$743,645	$0
	J2	Cathodic Protection for Waterlines LS2	$505,000	$504,657	$385,368	$504,657	$0
	J3	Cathodic Protection for Waterlines LS3	$29,000	$0	$0	$29,192	($29,192)
	J5	Cathodic Protection for Waterlines LS4	$350,000	$85,620	$85,620	$85,620	$0
		Sub Total Water Services Department	**$52,595,000**	**$51,857,272**	**$40,207,190**	**$51,447,119**	**$410,153**
		Total - Phoenix	**$98,064,000**	**$97,750,920**	**$83,929,246**	**$98,937,804**	**($1,186,884)**

Valley Metro Rail Program Control
CP/EV LRT Project
Project Budget Status
CNPA Project

	Element	Description	Board Approved Total	Revised Budget/Estimate	Current Actual $ (To Date)	Forecast	Variance
Tempe	A8	5th/College Transit Center	$635,000	$630,730	$622,657	$630,730	$0
	AA	COT SRP Prior Rights TC Relocation	$232,000	$235,400	$20,000	$235,400	$0
	B8	Terrace / Apache Waterline Coordination (Design Only)	$35,000	$35,611	$35,295	$47,997	($12,386)
	C1	Additional Communications Conduits	$28,000	$32,499	$27,775	$27,775	$4,724
	C2	COT ASU Pedestrian Signal	$122,000	$122,000	$107,754	$122,000	$0
	C7	Parking Facility 5th/Farmer	$112,000	$110,701	$85,740	$112,187	($1,486)
	C8	COT Waterline @ Cremery Route	$82,000	$94,081	$82,061	$82,061	$12,020
	D4	COT Additional Street Lighting (LS5)	$280,000	$325,994	$279,956	$282,056	$43,938
	D7	COT Additional Conduit @ McClintock/Apache	$8,000	$7,990	$7,990	$7,990	$0
	E6	Rubberized Asphalt LS5	$625,000	$633,406	$537,949	$633,406	$0
	F2	McClintock / Apache Storm Drain	$116,000	$123,153	$114,689	$114,689	$8,464
	F9	Rubber Asphalt - Tempe	$489,000	$522,165	$464,026	$487,911	$34,254
	G1	McClintock Park and Ride - CNPA	$5,581,000	$5,580,729	$5,580,729	$5,580,729	$0
	G3	Tempe Admin Costs	$723,000	$0	$722,808	$722,808	($722,808)
	G5	Misc Changes directed by COT	$0	$15,690	$0	$15,690	$0
	G7	Apache/McClintock Par & Ride Garage	$176,000	$466,033	$0	$466,033	$0
	H3	Fiber Optic COT	$397,000	$430,827	$361,652	$428,261	$2,566
	J4	Cathodic Protection of Waterline LS4 CO#15	$140,000	$158,638	$139,620	$139,620	$19,018
	J9	University Drive Station Bus Interface	$0	$0	$0	$0	$0
	K1	Veteran's Way- 5th/College TC	$8,000	$7,645	$6,772	$6,772	$873
	K2	Bus Shelter Electrification	$10,000	$11,076	$9,766	$9,766	$1,310
	K4	Washington/Center Parkway Station	$4,734,000	$4,694,112	$4,005,849	$4,664,378	$29,734
	L1	TLB 4th of July Electrical	$25,000	$19,350	$12,089	$19,350	$0
	L2	COT CNPA - Additional Mill/Overlay	$466,000	$574,377	$521,935	$574,377	$0
	L3	Price.Apace PnR Modifications (PnR-RB)	$0	$57,743	$57,743	$57,743	$0
	L5	COT McClintock Park & Ride (see G7)	$0	$0	$0	$0	$0
	L7	COT CNPA Prince/Apache PnR Waterline	$0	$116,844	$102,480	$116,844	$0
	L9	Landscape Island at Terrace/Apaxhe	$0	$7,776	$0	$7,776	$0
	N1	Replace Bougainvilleas on Stadium Drive	$0	$21,771	$0	$21,771	$0
	N4	Tempe Market Analysis	$44,000	$44,378	$43,728	$43,728	$650
	XX	Tempe Miscellaneous Force Account Work LS5	$21,000	$20,000	$20,000	$41,480	($21,480)
		Sub Total Tempe	**$15,089,000**	**$15,100,719**	**$13,971,063**	**$15,701,328**	**($600,609)**
Mesa	A9	Main Sycamore Transit Center	$5,355,000	$5,384,431	$4,426,894	$5,341,439	$42,992
	H4	Fiber Optic Backbone LS-4 (Mesa portion)	$879,000	$808,175	$722,088	$863,188	($55,013)
	M2	Mesa Additional Grind & Overlay	$281,000	$281,383	$246,792	$281,383	$0
	M3	Mesa Additional Grind & Overlay on Dobson	$233,000	$232,677	$204,073	$232,677	$0
	N3	Mesa Market Analysis	$19,000	$18,542	$18,542	$18,542	$0
	XX	Mesa Miscellaneous Force Account Work LS5	$5,000	$5,000	$4,399	$5,000	$0
		Sub Total Mesa	**$6,772,000**	**$6,730,208**	**$5,622,788**	**$6,742,229**	**($12,021)**
Various	C9	ASU Logo Additions	$73,000	$72,010	$72,010	$72,010	$0
	E2	ASU Steam Line	$8,000	$8,189	$8,189	$8,189	$0
	H1	Fiber Optic ASU	$1,182,000	$1,105,593	$961,562	$1,121,970	($16,377)
		Sub Total ASU	**$1,263,000**	**$1,185,792**	**$1,041,761**	**$1,202,169**	**($16,377)**
	AB	Cityscape CNPA in LS3	$5,000	$27,543	$23,846	$27,543	$0
	E1	(APS) Duct Bank at 48th St. Utility Bridge, Archaeological Support	$72,000	$76,309	$57,870	$57,870	$18,439
	F8	Rojo Lofts Property	$82,000	$81,998	$20,185	$81,998	$0
		Sub Total Other	**$159,000**	**$185,850**	**$101,901**	**$167,411**	**$18,439**
		Grand Total CNPA	**$121,347,000**	**$120,953,489**	**$104,666,759**	**$122,750,941**	**($1,797,452)**

3. Schedule Overview

The current Status of the Master Schedule is based on a data date of November 1, 2008. The current forecast continues to be an on-time Program completion date of Saturday, December 27, 2008.

Design and Construction continues to work with METRO Operations and Mass Electric to accelerate completion and testing activities in the Signals and Communications contract in an effort to minimize the impact to METRO Operations Integrated Startup.

Track Installation							
Line Section	Bid Quantity		Installed		Remaining		% Complete
	LF	Miles	LF	Miles	LF	Miles	
Total	224,968	42.61	224,968	42.61	0	0.00	100.0%

OCS Pole and Down Guy Anchor Foundations							
Line Section	Bid Quantity		Installed		Remaining		% Complete
	LF	Miles	LF	Miles	LF	Miles	
Total	1,400		1,400		0		100.0%

Station Finishes				
Stations to S&C	Bid Quantity	Complete	Remaining	% Complete
Total	33	33	0	100.0%

Traction Electrification					
Area	Description	U/M	Bid Quantity	Installed	% Complete
TPSS # 1 Thru 15	Feeders & Negative Returns	LF	135,580	135,580	100.0%
Yard	500 kcmil Feeder Cable	LF	2,175	2,175	100.0%
Line Sections/Yard	OCS Pole Assemblies	EA	1,478	1,478	100.0%
Line Sections/Yard	OCS Wire	LF	259,790	259,790	100.0%
Line Sections/Yard	OCS Cantilever Assemblies	EA	2,027	2,027	100.0%

Signals and Communications					
Area	Description	U/M	Bid Quantity	Installed	% Complete
Stations	Local Wire Installed	EA	33	33	100.0%
Stations	Communications Cabinet Equipment Installed	EA	33	33	100.0%
Stations	Communications Device Kits	EA	33	33	100.0%
Stations	Terminate Devices	EA	33	33	100.0%
Line Sections	Backbone Fiber	LF	262,873	262,873	100.0%
Line Sections	Street Traffic Fiber	LF	159,803	159,803	100.0%
Line Sections	City Use Fiber	LF	245,991	245,991	100.0%

Major Milestones

Civil:

Line Section 1 Completion	October 2008
Line Section 2 Completion	October 2008
Line Section 3 Completion	October 2008
Line Section 4 Completion (Complete)	December 2007
Line Section 5 Completion (Complete)	March 2008
Station Finishes	December 2008
Park and Ride	December 2008

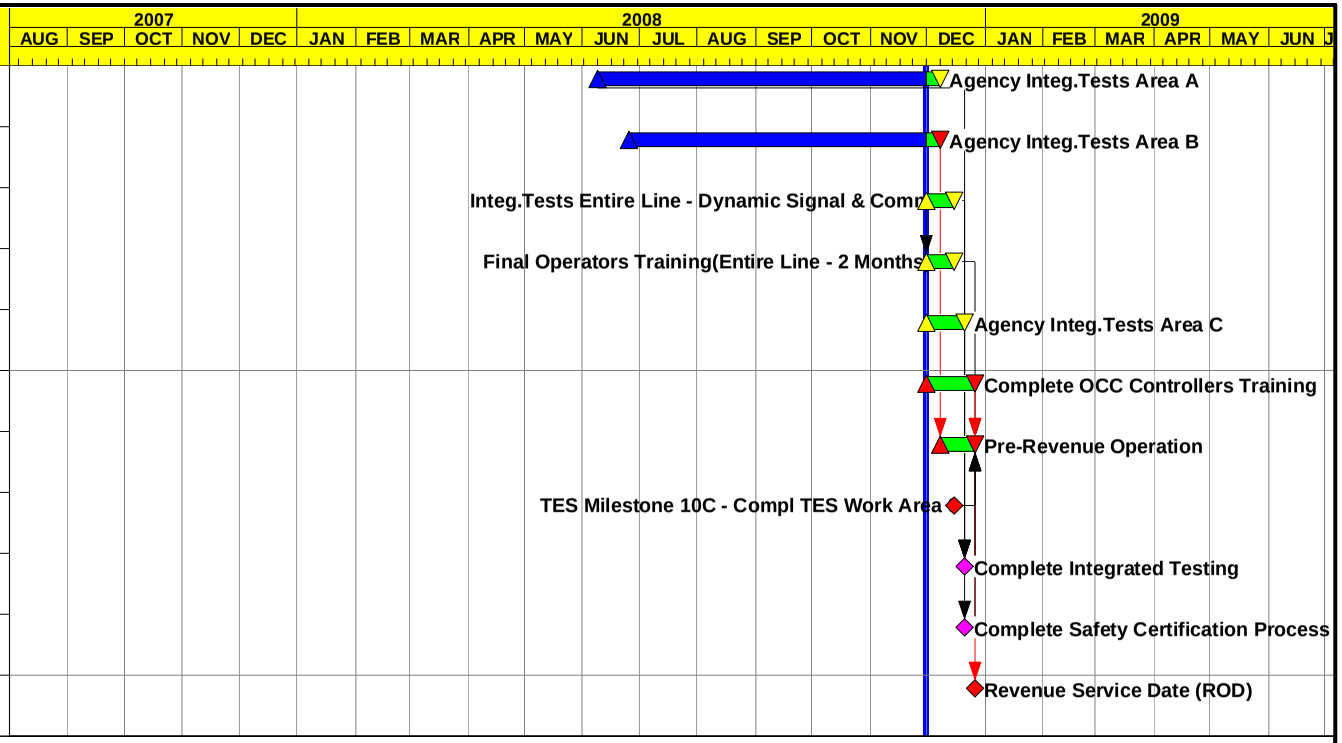
Systems:

Signals and Communications	December 2008
Fare Collection	December 2008
Traction Electrification	December 2008

Startup:

Start Int. Testing Area 1 (24th Street to the Mill Pocket Track)	May 2008
Start Int. Testing Area 2 (LS3 and Balance of LS5)	October 2008
Start Integrated Testing Area 3 (All of LS2 and LS1)	November 2008

Activity ID	Orig Dur	Rem Dur	Start	Finish
INTTESTA_2	182*	7*	09JUN08A	07DEC08
INTTESTB_2	165*	7*	26JUN08A	07DEC08
INTTESTD_2	15	15	01DEC08	15DEC08
OPTTR4_2	15	15	01DEC08	15DEC08
INTTESTC_2	20	20	01DEC08*	20DEC08
OPTTR6_2	26	26	01DEC08	26DEC08
PREREV_2	19	19	08DEC08	26DEC08
TESM10C_2	0	0		15DEC08
INTTESTC_C	0	0		20DEC08
SFTYCERT_2	0	0		20DEC08
PREREVC_2	0	0	27DEC08	



Start Date	01AUG04
Finish Date	26DEC08
Data Date	01DEC08
Run Date	01DEC08 07:20

Early Bar
Progress Bar
Critical Activity

8012 Sheet 1 of 1

Valley Metro Rail

Central Phoenix/East Valley LRT

Critical Path

Procurement Status as of 11/27/08					
Title	**Issue Date**	**Pre-Bid Conf**	**Bid Opening**	**Board Award**	**NTP (Anticipated)**
PART I – CP/EV LRT PROJECTS					
Insurance Brokers Services	TBD	NA	TBD	TBD	TBD
Sponsorship Opportunity	9/7/08	NA	10/2/08	12/17/08	TBD
Electrical Supply Agreement	TBD	NA	TBD	NA	TBD
PART II – LONG RANGE DEVELOPMENT PROJECTS					
Architectural/Engineering On-Call Consultant Services - Future Extension Projects	1/21/08	2/12/08	3/17/08	**Reactivated** (Evaluations Complete)	**Reactivated** (Evaluations Complete)

4. Quality Assurance

Description

The METRO Quality Assurance Manager is responsible for the establishment and implementation of a Quality Assurance Program for the Valley Metro Rail organization that meets the requirements of the Federal Transit Administration and provides adequate confidence that procured materials and services meet the technical and quality requirements of the project. The METRO Quality Assurance Manager is assisted by the Quality Assurance Managers for the GEC for design, the GEC for LRT Vehicle procurement and the CAC for construction, installation, inspection and testing.

Individually and collectively, the Quality Assurance Managers are responsible for ensuring the effective implementation of the Quality Assurance Programs for their respective organizations and contractors. The Quality Assurance Managers are responsible for approval of quality programs, assessment of compliance with quality programs through inspections, audits and surveillances and for identifying nonconforming materials, parts and services and assuring effective corrective action.

Progress

Closeout Activities

- The Quality Assurance Department is in the process of final organization of files for packaging and handover of required files to Document Control.

General

- Attended weekly Resident Engineer meetings.
- Continued review of quality related submittals as required.
- Installation of the 11th Street crossover track is completed. All thermite welds have been inspected and accepted. This work completed as planned on November 15, 2008.
- Installation of remaining three super-elevation tags was finished at the Deck Park Bridge thereby completing all work required per contract.

NCR and QAR Logs show all NCR's and QAR's for all contracts, including Material Procurement contracts, presently open. Columns for "New" and "Closed" represent changes in quantity(s) for this months report. Mass Electric has one remaining NCR open on subcontractor work for the TES contract and none on the S&C contract.

CAC Nonconformance Report Log (NCR)

Total NCR's Written	New NCR's	Closed NCR's	Remaining NCR's	NCR's Projected to be Closed in November
224	1	11	12	12

CAC Quality Action Request Log (QAR)

Total QAR's Written	New QAR's	Closed QAR's	Remaining QAR's	QAR's Projected to be Closed in November
38	0	8	5	5

Cost and Schedule – Variance Analysis

- Quality Assurance activities remain within budget and on schedule.

Issues and Solutions

- Discrepancies regarding track switch machines have been addressed by MEC, Nortrak, and Contec. No recent report of switch problems has been initiated by the METRO testing personnel.

- Punch list items continue to be addressed at the Station Finishes, TES, S&C and Park-and-Ride contracts.

5. Public Involvement

Description

The Public Involvement Section is responsible for sharing information on the Project with stakeholders along the light rail alignment, documenting questions and concerns expressed by these stakeholders and ensuring that appropriate Project staff addresses them, and providing answers and feedback to those stakeholders on the outcome. At this stage of the Project, PI Area Coordinators are working with stakeholders in their respective line sections to provide the latest information on construction status, traffic circulation, landscaping finishes, and follow-on contract progress/impacts. They are also sharing information on business assistance programs with the owners and managers of businesses located along the light rail corridor.

Progress

- Public Involvement Staff is conducting training sessions for the Grand Opening Volunteers. Volunteers include the general public, businesses, neighborhood associations and non-profit organizations. Training was held the week of December 1st and additional training sessions are scheduled for the week of December 8th. Approximately 400 volunteers have been trained to date.

- Post Grand Opening Training for internal METRO staff is being scheduled. METRO ambassadors are needed to be present at the stations in order to assist the public in the use of the fare boxes, understanding the signage, boarding and exiting the trains and be of general assistance in answering questions.

- Public Involvement Staff conducted platform training for the ADA Community. Feedback from these training sessions will be presented to METRO Staff on December 12th at an internal meeting. The attendance was 75 with 40 participants in the mobility professionals training and 35 at the general public outreach events.

- Public Involvement staff continues to promote the safety and light rail campaign. There were safety presentations to neighborhood groups, schools and businesses in along the CP/EV alignment and the surrounding metropolitan area.

- On November 13th, METRO coordinated a Central High School training exercise. Three vehicles were parked for students to access during the training seminar. Approximately 500 students and administrative staff took the opportunity to board the vehicles and ask

questions. METRO communicated general safety messages on how to ride the system through the PA system throughout the exercise. Central High School administrative staff communicated they were pleased with the outcome and the opportunity for students to participate.

- The Mesa Fall Transit Fest Event was held at the Sycamore/Main Station on November 22, 2008. Speakers included Mayor Scott Smith, Councilman Dennis Cavanaugh, Councilman Kyle Jones, RPTA/Valley METRO CEO, Dave Boggs, and METRO Director of Government Affairs and Community Relations, John Farry. Speakers expressed their gratitude to the community for their support and patience during construction. METRO staff provided support for the event, including vehicle tours, light features, using the park-and-ride and safety.

Schedule Status

- Public Involvement activities remain on schedule.

Issues and Solutions

- None.

6. Disadvantaged Business Enterprise Program

Description

It is the Disadvantaged Business Enterprise (DBE) Program Section's responsibility to administer the DBE participation requirements mandated by the Federal Government as a condition of the receipt of funding. These participation requirements are established by the City of Phoenix Equal Opportunity Department through the DBE Program Plan and are conveyed to Valley Metro Rail, as a sub-recipient, through the Civil Rights Office of the Public Transit Department.

The DBE Program Section is responsible for ensuring that procurement and contract language, specific to the program, accurately reflects current requirements. During the procurement process, the DBE Program Section is responsible for responding to Requests for Information, presenting the DBE documentation requirements at pre-bid conferences, and conducting contractor and DBE subcontractor training sessions. At Bid Opening, the accuracy of DBE documentation submitted with each bid must be verified and each bidder must be found either responsive or non-responsive. Upon contract execution, pre-construction meetings are held and reporting/compliance requirements are addressed in more detail. Monthly utilization reports are submitted by each prime contractor and are reviewed by the DBE Program Section. Field issues and variances in the planned utilization are addressed on an on-going/as-needed basis. In order to ensure adequate DBE participation and the availability of DBE contractors, on-going outreach activities are also conducted to facilitate networking of DBEs with prime contractors and to encourage DBE certification of non-certified small businesses.

Progress

- Overall DBE participation is unchanged from the last reporting period. Based on amounts originally awarded is 14.44 percent, participation including change order work is at 15.16 percent and DBE's have been paid 15.20 percent of construction dollars to date.

Procurement Activities

- There were no DBE related procurement activities this period.

Contract Compliance

The summary below does not include DBE participation for professional services contracts related to future extensions or METRO's DBE vendors. Very little change is occurring at this point in the project. While some DBE activity is occurring it is limited to wrap-up activities or addressing punch-list items. Final participation will be calculated as each contract is closed out, audited, and final payments issued.

- Line Section 1 - Kiewit Western Contractors
    - 12.10 percent Minimum DBE Participation
    - 13.77 percent Committed at Bid
    - 15.81 percent Current DBE Participation (adjusted contract amounts)
    - $9,185,101 Total DBE Subcontracted Amount

  - Currently processing final contract closeout. Outstanding Labor Compliance issues need to be addressed before this can be completed.

- Line Section 2 - Herzog
  - 12.10 percent Minimum DBE Participation
  - 15.69 percent Committed at Bid
  - 19.79 percent Current DBE Participation (adjusted contract amounts)
  - $11,845,156 Total DBE Subcontracted Amount
- Line Section 3 - Archer Western Contractors
  - 12.30 percent Minimum DBE Participation
  - 13.59 percent Committed at Bid
  - 15.99 percent Current DBE Participation (adjusted contract amounts)
  - $16,543,403 Total DBE Subcontracted Amount
- Line Section 4 - Sundt/Stacy and Witbeck
  - 11.50 percent Minimum DBE Participation / 12.03 percent Committed at Bid
  - 12.32 percent Final DBE Participation
  - $7,776,591 Total DBE Subcontracted Amount
  - Contract Closed
- Line Section 5 - Sundt/Stacy and Witbeck
  - 14.90 percent Minimum DBE Participation / 16.73 percent Committed at Bid
  - 17.64 percent Final DBE Participation (adjusted contract amounts)
  - $13,990,411 Total DBE Subcontracted Amount
- Station Finishes - Archer Western Contractors
  - 12.20 percent Minimum DBE Participation
  - 12.98 percent Committed at Bid
  - 14.45 percent Current DBE Participation (adjusted contract amounts)
  - $9,501,543 Total DBE Subcontracted Amount

- Operations and Maintenance Center – Sundt/Stacy and Witbeck (Contract Closed)
  - 7.34 percent Minimum DBE Participation
  - 7.54 percent Committed at Bid
  - 8.21 percent Current DBE Participation (adjusted contract amounts)
  - $4,973,643 Total DBE Subcontracted Amount
- Traction Electrification - Mass Electric
  - 10.00 percent Minimum DBE Participation
  - 11.17 percent Committed at Bid
  - 11.05 percent Current DBE Participation (adjusted contract amounts)
  - $6,421,080 Total DBE Subcontracted Amount
- Signals and Communications - Mass Electric
  - 11.00 percent Minimum DBE Participation
  - 11.67 percent Committed at Bid
  - 11.05 percent Current DBE Participation (adjusted contract amounts)
  - $4,524,834 Total DBE Subcontracted Amount
- Construction Administration Consultant - PBS&J/PGH Wong Joint Venture
  - 21.00 percent Minimum DBE Participation
  - 25.35 percent Committed at Bid
  - 32.29 percent Current DBE Participation (adjusted contract amounts)
  - $12,288,109 Total DBE Subcontracted Amount
- Program Management Consultant - SRBA/Parsons Joint Venture
  - 1.5 percent Minimum DBE Participation (established post contract award)
  - 0 percent Committed at Bid
  - 4.25 percent Current DBE Participation (based on adjusted contract amounts)
  - $1,704,758 Total DBE Subcontracted Amount

- General Engineering Consultant - Parsons Brinckerhoff
  - 13.00 percent Minimum DBE Participation
  - 13.89 percent Committed at Bid
  - 16.06 percent Current DBE Participation (adjusted contract amounts)
  - $11,392,061 Total DBE Subcontracted Amount
- Fare Collection System - Scheidt Bachmann
  - 8.20 percent Minimum DBE Participation
  - 8.39 percent Committed at Bid
  - 8.39 percent Current DBE Participation (adjusted contract amounts)
  - $627,000 Total DBE Subcontracted Amount
- Material Procurements - Multiple Suppliers
  - 3.00 percent Minimum DBE Participation
  - 3.00 percent Committed at Bid
  - 3.00 percent Current DBE Participation (adjusted contract amounts)
  - $1,770,322.77 Total DBE Subcontracted Amount
- Tempe Town Lake Bridge - PCL Civil Constructors – Contract Closed Out
  - Final Participation 20.80 percent (adjusted contract amounts)
  - $4,559.765.58 Total DBE Subcontracted Amount
- Archaeological Services; DBE Prime, Archaeological Consulting Services Inc.
  - $3,240,597 Total DBE Amount
- Park-and-Rides; DBE Prime, MRM Construction
  - 20.50 percent Minimum DBE Participation
  - 53.00 percent Committed at Bid
  - 70.21 percent Current DBE Participation (adjusted contract amounts)
  - $3,913,359 Total DBE Subcontracted Amount
- Park-and-Rides; Kiewit Western Contractors
  - 20.50 percent Minimum DBE Participation
  - 23.68 percent Committed at Bid

  - 23.68 percent Current DBE Participation (adjusted contract amounts)
  - $1,850,777 Total DBE Subcontracted Amount
- Park-and-Rides; Sundt, Stacy and Witbeck
  - 20.50 percent Minimum DBE Participation
  - 31.79 percent Committed at Bid
  - 32.28 percent Current DBE Participation (adjusted contract amounts)
  - $2,860,170 Total DBE Subcontracted Amount

Outreach Activities

- On November 20, 2008, METRO hosted its third annual Profiles in Diversity event. The 2008 event highlighted the contributions that the DBE sub-consultants and subcontractors have made to the 20-mile Central Phoenix/East Valley project. 2009 Commemorative Calendars were provided to program participants. Approximately 100 people were in attendance.
- METRO staff met with the current DBE Outreach Advisory Committee Chair and Vice Chair to discuss the transition for the following term. Patti Tellez with the United Latino Business Coalition will assume the role of Committee Chair January 1, 2009. METRO is pursuing the appointment of Jesus Borboa with APS as the Vice Chair.
- On December 16, 2008, a DBE Outreach Advisory Committee meeting will be held to discuss the goals and objectives over the next two-year period. At the January meeting this information will be presented to Rick Simonetta and Mike Ladino for discussion and concurrence.
- The composition of the DBE Outreach Advisory Committee is being revisited to reflect the changing emphasis from heavy construction to planning and design. To that end, Kammy Horne, with URS Corporation, has been appointed to the committee to represent the professional services perspective.

Cost and Schedule – Variance Analysis

- DBE activities remain within budget and on schedule.

Profiles in Diversity Photographs

Group Photo in front of Chase Field

Line Section 1 and Park-and-Ride

Line Section 2

Line Section 3

Line Section 4

Line Section 5

MRM – Park-and-Rides

Operations and Maintenance Center
Sundt, Stacy & Witbeck

7. System Safety and Security

Description

The System Safety and Security Department is responsible for establishing requirements for the identification, evaluation, and minimization of safety and security risks throughout all phases of the project, including revenue operations.

The Section has developed and is administering provisions of the System Safety Program Plan, the System Security Program Plan, and the Safety and Security Certification Plan.

Progress

- Seventy-eight METRO, consultant, contractor, utility company, and City personnel received track access safety training.
- Participating in the ongoing planning for the Grand Opening.
- Completed and distributed the Safety & Security Certification Plan, Revision No. 2.
- Continued working with the Tempe and Mesa Police Departments and Wackenhut to develop training programs, procedures, post orders, etc. for fare inspection, patrol and park-and-ride security in Tempe and Mesa.
- Participated in planning and conducting safety training for Central High School students.
- Assisted in METRO mobility training of instructors for the visually impaired, and open houses at two METRO stations for handicapped passengers.
- Observed various tests, inspections, etc. in preparation for revenue service.
- Participated in the three-day ADOT State Safety Oversight safety and security audit.
- Observed the erection of the “Hands” sculpture at the Dorsey Station.
- Conducted light rail vehicle familiarization training program for the Phoenix Fire Department. Twenty seven sessions were conducted.
- The November Fire/Life Safety and Security Committee, and Safety and Security Certification Review Committee meetings were cancelled due to the Thanksgiving holiday.

Safety & Security Certification Status

Contract	# of Checklist Items	# of Checklist Items Complete	% Complete	Estimated Certification Date	Comments
Town Lake Bridge	41	41	100%	Aug 2006	**CLOSED**. Certificate of Compliance is completed.
Operations and Maintenance Center	353	353	100%	Sept 2007	**CLOSED**. Certification is completed. Supplemental report submitted by RE.
Line Section 1	121	110	91%	Oct 2008	**CLOSED**. Certificate of Compliance approved at the October 2008 SSCRC Meeting. Supplemental report for remaining items will be submitted by RE.
Line Section 2	127	115	90%	Oct 2008	**CLOSED**. Certificate of Compliance approved at the October 2008 SSCRC Meeting. Supplemental report for remaining items will be submitted by RE.
Line Section 3	214	192	95%	Dec 2008	Verification of items is continuing. Scheduled for certification at the December 4, 2008 SSCRC meeting. 11th Street loop certification will be completed separately.
Line Section 4	125	125	100%	May 2008	**CLOSED**. Certificate of Compliance approved at the May 2008 SSCRC Meeting.
Line Section 5	107	105	98%	Aug 2008	**CLOSED**. Certification is completed. Supplemental report for remaining two items will be submitted by RE.
LRV	205	175	90%	Dec 2008	Verification of items continues. Scheduled for certification at the December 18, 2008 SSCRC meeting.
Ticket Vending Machines	38	17	45%	Dec 2008	Verification of items is continuing. Scheduled for certification at the December 18, 2008 SSCRC meeting.
Station Finishes	55	50	90%	Dec 2008	Verification and documentation of items is continuing. Scheduled for certification at the December 4, 2008 SSCRC meeting.
Signals & Communications	254	227	89%	Dec 2008	Signal system acceptance test reports submitted and under review. Verification of items continuing. Substantial completion scheduled for December 15, 2008.
Traction Electrification System	233	210	90%	Dec 2008	Final test reports are being reviewed and will close out majority of remaining items. Scheduled for certification at the December 18, 2008 SSCRC meeting.
Park & Ride PNR1	43	24	55%	Dec 2008	Verification of items continues. Scheduled for certification at the December 18, 2008 SSCRC meeting.
Park & Ride PNR2	42	38	90%	Dec 2008	Verification of items continues. Scheduled for certification at the December 18, 2008 SSCRC meeting.
Park & Ride PNR-RB	43	24	55%	Dec 2008	Verification of items continues. Scheduled for certification at the December 18, 2008 SSCRC meeting.
Wheel Truing Machine				Oct 2008	**CLOSED**. Certification letter is under development.
Art Contracts	Twenty-one of twenty-eight stations have their art pieces completely installed. Art contracts will be certified on a case by case basis after each piece is installed.				

Construction Accident Data

METRO Construction Incident Rate	August 2008	Previous 12 Month Average
	0	1.95
OSHA National Construction Incident Rate = 5.30		

METRO Construction Lost Time Rate	August 2008	Previous 12 Month Average
	0	0.13
OSHA National Construction Lost time Rate = 2.20		

Total Hours Worked, August 2008 – 91,252

Issues and Solutions

- None.

8. Environmental Management

During design and construction, the Environmental Manager is responsible for overseeing the compliance with federal and State environmental laws/regulations, the Project's environmental/historic preservation obligations, implementing the requirements of the Final Environmental Impact Statement (FEIS), Record of Decision (ROD), and Section 106 Memorandum of Agreement.

The Environmental Manager is also responsible for review of all proposed Project changes to determine if the proposed change is consistent with the Project Definition as stated in the FEIS and to determine if the change presents any environmental impact not addressed in the FEIS/ROD. If a proposed change results in potential new impacts, the Manager shall document those impacts and secure FTA concurrence with the change, definition of impacts and proposed mitigation.

Progress

Archaeology Monitoring

- Monitoring and data recovery is complete and closed.

Archaeology Testing and Analyses

- Pueblo Grande/La Plaza
    - Bioarchaeology Mortuary feature descriptions are in progress. Data entry into the osteology database is in progress. We anticipate completion of this data entry by mid-December 2008. This will be followed by analyses and discussion of pathologies and spatial distribution of the remains.
    - Lithics Analysis (Chipped stone, ground and pecked stone, miscellaneous stone objects). The total of 66 lithics were analyzed in November. The total lithics analyzed to date, including critical and non-critical, is 17,597. This is 100 percent of the Pueblo Grande and La Plaza collections. The draft report on the stone tools and manufacturing waste materials is in progress.
    - Ceramics Analysis - The total ceramics analyzed in November was 4,110. This includes 1,679 from Pueblo Grande and 2,431 from La Plaza. The pottery sherds remaining to be analyzed includes: 98 from Pueblo Grande, 17,219 from La Plaza, and 2 from Dutch Canal Ruin. The La Plaza ceramics to be analyzed has actually increased because of inaccuracies in the field counts. We have scheduled the ceramic analysis to be complete by mid-January 2009.
    - Faunal and Shell Analysis - Faunal remains and shell artifact remains are in progress. All of the shell specimens from Pueblo Grande and La Plaza have been analyzed. At total of 10,359 specimens from both sites has been analyzed. This includes 3,686 from Pueblo Grande and 6,633 from La Plaza. The analysis is scheduled to be complete by mid-December 2008.
- Archaeobotanical Analysis
    - Processing: Two pollen samples were sent to Texas A&M Palynology Lab for analyses in November, bringing the total samples submitted to 345. Seven

macrobotanical samples were floated by the lab staff in November, bringing the total to 339. All of the selected samples have been floated.

- Analysis: Twenty-three pollen samples were counted, 45 pollen samples were scanned, and 59 flotation samples were analyzed.
- Summary:
  - Two hundred sixty pollen samples counted; 85 pollen samples remain to be counted
  - Two hundred fifty-five pollen samples scanned; 90 pollen samples remain to be scanned
  - Ninety-eight flotation samples remain to be analyzed
  - Seventy-four percent of the pollen analysis and 69 percent of the flotation analysis are complete. Seventy-one percent of the paleoethnobotanical analysis is completed.

- Water Control (canals, reservoirs, etc.)
  - The water control analysis and chapter is in progress. With the exception of the canals at Las Acequias, which includes approximately 40 canals, the canals in Line Sections 1, 2, 3, 4, and 5 have been documented and described. The alignment of the historic canals we in Phoenix and Tempe have been in compared with the 1903 Bureau of Reclamation maps. As a result we have positively identified that we have the Salt River Valley canal alignment and not the Swilling alignment.
- Contaminated and Hazardous Materials
  - No activity.
- Regulatory Compliance
  - No activity.

Cost and Schedule – Variance Analysis

Archaeology Monitoring FY'08	
Task Order 2 – Cost +Fee construction monitoring FY'08	$227, 906
Billed as of April 30, 2008	($228,772)
Balance available	($0)
Disallowed fee	$1,866
Agency reserve for data recovery through end of construction	$0
Archaeology Testing and Analyses	
Contract Value	$2,697,095
Invoiced Through November 30, 2008	($1,395,035)
Hazardous Materials Assessment (CAC)	
Original Contract Value	$499,488
Contract Value to date	$499,488
Invoiced through February 29, 2008	($486,967)
Task orders open	($0)
Expended and Committed	$486,967
Estimated cost to complete	$487,000
Remediation and Treatment Fund (METRO)	
Budget	$1,004,000
Expended	($96,811)
ERI invoiced to date	($96,811)
Open Task orders	($0)
Transferred to Archaeology Monitoring-Data Recovery	($650,000)
Funds Available	$257,189
Estimated cost to complete	$98,811

Issues and Solutions

- None.

9. Real Estate

Description

The LRT Project travels down main business arterials in the cities of Phoenix, Tempe and Mesa and approximately 769 parcels of property are affected. The number of right-of-way certifications required within this 20-mile corridor is in excess of 2,500. This number includes all easements required by the project, such as utility, irrigation, sidewalk, traffic, slope, landscape and temporary construction, as well as all of the normal fee acquisitions. Real Estate staffs from the project cities are responsible for obtaining all of the necessary property rights required to construct and operate the LRT system. Oversight and coordination of the cities' activities is provided by the METRO Real Estate Manager.

Progress

- Presently, all of the required properties are under City control and are available for construction. Extensive coordination between METRO and City staff has enabled the project to obtain these properties in a manner sufficient to support construction.

- In Line Section 1, all 183 relocations have been completed. All 149 parcels are under City control and are available for construction.

- In Line Section 2, all 29 relocations have been completed. All 92 parcels are under City control and are available for construction.

- In Line Section 3, all 36 relocations have been completed. All 254 parcels are under City control and are available for construction.

- In Line Section 4, all 28 relocations have been completed. All 108 parcels are under City control and are available for construction.

- In Line Section 5, all 41 relocations have been completed. All 162 parcels are under City control and are available for construction.

- Project-wide, twenty building cut and re-faces were identified; all twenty building cut and re-faces have been completed. These building modifications required structural engineering analysis, architectural and utility modifications, procurement of relevant contractors, and extensive permitting processes.

- The FTA Real Estate Program Compliance Review cited nine areas of noncompliance. Presently, all citations have been adequately addressed and the FTA has rendered a final decision as of November 8, 2007. All issues have been resolved and all FTA decisions have been accepted by the Project. The FTA reserves the right to review legal settlements at a future date.

- An updated Real Estate Acquisition Summary table is included at the end of this section.

Cost and Schedule – Variance Analysis

- A focused real estate effort was initiated to accelerate the acquisition process and thus eliminate a negative impact to the project schedule. The Cities worked diligently with METRO to improve and streamline processes wherever possible.
- The overall real estate forecast is still within the budget and actual costs are within the budget plus contingency for the real estate contract unit.

Issues and Solutions

- Efforts continue to be focused on completing cost-to-cure work. No parcels are impeding construction work.

CENTRAL PHOENIX / EAST VALLEY LIGHT RAIL TRANSIT PROJECT

REAL ESTATE ACQUISITION SUMMARY

November 30, 2008

ACTIVITY								
	1 PHX	**2 PHX**	**3 PHX**	**4 PHX**	**4 TEMPE**	**5 TEMPE**	**5 MESA**	**Totals**
Full Takes	40	0	11	2	0	16	0	**69**
Partial Takes	109	92	243	105	1	102	44	**696**
Total Affected Parcels	**149**	**92**	**254**	**107**	**1**	**118**	**44**	**765**
Offers Accepted	136	86	251	103	1	116	44	**737**
Escrow Closed Acquisition Complete	**136**	**86**	**251**	**103**	**1**	**116**	**44**	**737**
In Condemnation	13	6	3	3	0	1	0	**26**
In Negotiations	0	0	0	1	0	1	0	**2**

10. Utilities

Description

The METRO Utility Manager is responsible for managing and overseeing the relocation of all privately owned utilities (irrigation, natural gas, nitrogen lines, fiber optics, power, private force mains, private communication lines, private irrigation lines, cable television, and telecommunications) necessary to allow LRT construction, including those with and without prior rights. Utilities with prior rights include SRP Power, SRP Irrigation, Qwest (local and long distance), Southwest Gas, WilTel, MCI and APS. Relocation of privately owned utilities is performed by private utility companies and their contractors, preferably prior to beginning LRT construction. Relocation of publicly-owned utilities is accomplished within the civil construction contracts by METRO contractors.

Progress

- There are no major utility conflicts or coordination issues within any of the Line Sections.
- There are no major utility conflicts or coordination issues within any of the Park-and-Ride locations.
- No major utility conflicts or coordination issues exist at the Transit Centers.
- All Traction Power Substations (TPSS) and Stations Platforms are energized.
- All Station Finishes (Platforms) are energized.
- SRP 230 kV over Town Lake Bridge
- Induced Voltage.
    - SRP has completed rotation - phases on their 230 kV power line that crosses over the LRT tracks at Tempe Town Lake. This will help mitigate the problem until a more permanent solution is developed.
    - APS and SRP Electrical engineers are willing to provide assistance to help METRO; however, the source of the problem first needs to be identified (is it electromagnetic or electrostatic issues causing the induced voltage).
        - Stray Current – Phoenix Light Rail Stray Current and Corrosion Control Correlating Committee meeting was held November 20, 2008 at SWG Office. Representatives from METRO, PEC, SWG, City of Phoenix, AECOM and other agencies were present. One of the topics was stray current; SWG has detected Stray Current at various locations along the light rail alignment. SWG explains that stray current phenomena were unexplainable. GEC has hired a consultant to perform various site surveys, and will be working with SWG, METRO and others to better understand or explain what may be causing stray current. The matter is under investigation.

Cost and Schedule – Variance Analysis

- Costs incurred to date for prior rights utilities are within the Utility Budget.

Issues and Solutions

- Induced voltage and stray current – pending measures to identify the source of the problem.

11. Architecture

Public Art

Description

Public art projects will be a part of all Station Finishes listed in Section 4.1.3 with the exception of the platform at 19th Avenue and Camelback. Additional artworks will be placed at the 19th Avenue and Camelback Park-and-Ride and at the Tempe Town Lake Bridge. Artworks will include stand alone sculptures, integrated architectural finishes, entryway canopies, lighting, paving and landscaping elements. Artists will install their work in conjunction with the Station Finishes, Park-and-Ride, and Town Lake Bridge construction schedule.

Progress

- Line Section 1
  - Montebello: Installed.
  - 19th Avenue/Camelback: Installed.
  - Camelback/7th Avenue: Installed.
- Line Section 2
  - Camelback: Installed. Need additional decomposed granite to cover the base of the sculpture.
  - Campbell: Installed
  - Osborn: Installed.

- Indian School: Installed.
- Thomas: Installed.
- Encanto: Installed.

- Line Section 3
  - McDowell: Four of the bronze sculptures have been installed. One more has been fabricated and will be installed in December; three more will be fabricated and installed in the spring.
  - Roosevelt: Installed.
  - Van Buren: Installed.
  - Central/Washington – Installed.
  - Third Street: Artwork and lighting have been installed however some additional rewiring and programming is required.
  - Twelfth Street: Artwork and lighting have been installed however some additional rewiring and programming is required.
  - Twenty-Fourth Street: installed.
- Line Section 4
  - 38th Street: artwork installed. Bronze pavers insert locations being marked in every month for partial install in December 2008 and completion (last five) in February 2009.
  - Forty-Fourth Street: Artwork is installed, working through grounding issues for art columns.
  - Priest/Washington: artwork is installed, waiting for Archer Western Contractors to install the lighting.
- Tempe Town Lake
  - Artwork has been completed except for the final programming of the bridge lighting.
- Line Section 5
  - Mill/3rd Avenue: Installed.
  - College/5th Avenue: installed
  - Apache Boulevard Stations
    - Sculpture: Installed.
    - Paving: Installed.
    - Trellis boxes: Installed.

  - Lighting: Neon Cactus has been installed at Dorsey, Text Lights have been installed at Smith Martin. Water Bottles have been installed with the neon lights but need to work with Archer Western regarding conduit that was not installed. Neon Louvers are scheduled to be installed in December.

- Sycamore/Main: installed

- General Progress
  - Working with Archer Western Contractors (AWC) to resolve the installation and scheduling issues.

Cost and Schedule – Variance Analysis

- Working with AWC to install artwork at the Dorsey/Apache station, this is out of sequence with their construction schedule due to art fabrication delays. Public Art activities remain within budget.

Issues and Solutions

- Continuing to monitor contract schedule issues. Except for the stations noted above, artwork installation is on schedule within the latest AWC construction schedule.

Construction Photographs

Dorsey/Apache Station “Hands”
By Suikang Zhao

Station Finishes

Description

The METRO Station Finishes (SF) Contract includes twenty-eight stations, four transit centers and installation of art pieces by twenty-seven artists. Amenities within the fully accessible stations include shading trellises with overhead canopies, irrigated trees and landscape, patron seating and leaning rails, drinking fountains, map cases, directional signage and trash receptacles. Types of art pieces include stand-alone sculptures, paving treatments, lighting treatments and integrated art within the station structures.

The Station Finishes architects prepared the construction drawings in five separate packages that correspond to each civil line section. These documents along with an art reference volume have been combined together and are currently under construction by Archer Western Contractors, the METRO Station Finishes Contractor.

System elements that are located in the station areas include surveillance cameras (CCTV), a public address system (PA), emergency call boxes (ECB), variable message boards (VMB) automated ticket vending machines (TVM) and Stand-alone Validators (SAV).

Progress

- Montebello and 19th Avenue Transit Center: Work continues intermittently. The contractor is finalizing completed utility work and other site improvements, and has completed structural steel and canopy installation.

- Work on underground utilities is completed and structural steel installation is completed at the Central Avenue and Camelback Transit Center. Construction of site screen walls

is completed. Canopy installation is completed. Artwork installation is completed. The brick paver sidewalk is completed. The contractor completed the Mariposa Cul De Sac and associated driveways and the main driveway entrance paving.

- Washington and 44th Street Transit Center: Installation of Interior wall assemblies and miscellaneous finishes continue intermittently at Operator Facility Building (OPF3).

- Sycamore and Main Street Transit Center: Landscaping work is completed. Installation of interior finishes continues intermittently at Operator Facility Building (OPF4).

- Contractor completed constructing the foundation, and the masonry for Operator Facility Building north of the Montebello/19th Avenue Station (OPF1) roofing installation is complete. Work continues intermittently on miscellaneous finishes.

- Stations:

  - Canopy Installation has been completed for 33 Stations. This completes canopy installation for all stations.

  - Louver Installation is completed for 33 stations. This completes canopy installation for all stations.

  - Electrical/Communications Cabinet Installations have been completed for 33 Stations. This completes electrical / communications cabinet installation for all stations.

  - Paver installation has been completed for 33 Stations.

  - The contractor is completing handrail installation, painting and sealing, and miscellaneous contract and change order work at all of the stations.

  - Punchlists have been developed for 31 stations. Additional requests for substantial completion have been submitted for two stations and one transit center. Punchlists are being developed for these.

  - Work is ongoing at 33 Stations.

- The Signals and Communications contractor has access to 33 station platforms.

Cost and Schedule – Variance Analysis

- Substantial completion has been granted for twelve stations. Punchlist work for all of the stations.

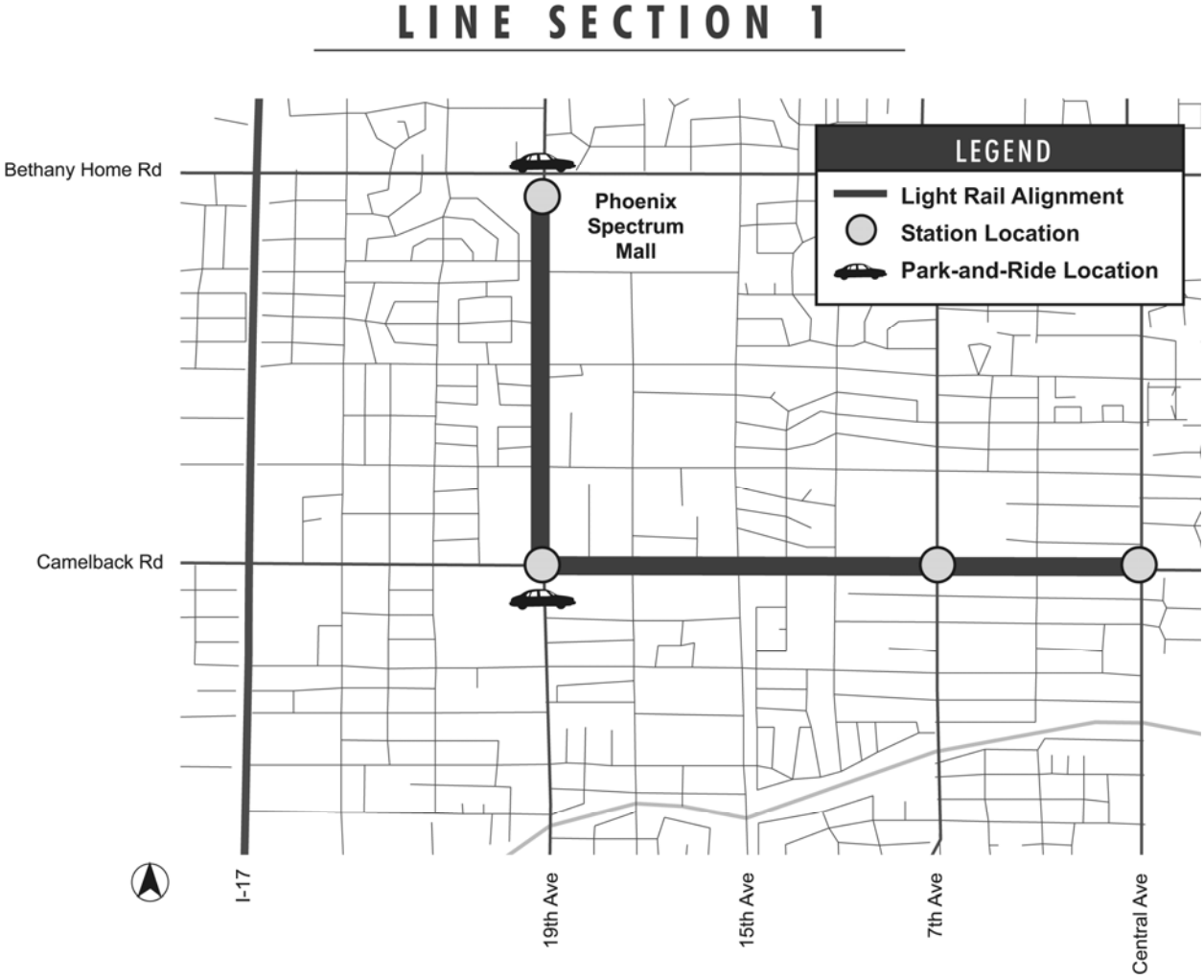
- Contractor has submitted a Request for Equitable Adjustment in the amount of $4,800,000. The REA is currently under review.

Issues and Solutions

- Replacement seating to replace defective seating will not be delivered in time for opening. Contractor will install repaired seating in the interim.
- Some electrical issues are necessary to be resolved prior to DSD granting Certificates of Occupancy. Those issues include UL listings for Emergency Call Boxes, and Ticket Vending Machines, as well as sign off by a registered electrical engineer on all the changes at the stations in Phoenix. Follow-up with contractors and other appropriate personnel to resolve these issues is ongoing.

12. Facilities

Line Section 1



Description

Line Section 1 is 2.27 miles in length, and begins on 19th Avenue south of Bethany Home Road to a point west of the Central Avenue and Camelback Road Station. The construction work in this contract includes demolition, relocation of public utilities, roadway and drainage modifications, systems ductbank installation to the substation site interface, station foundations, signing and marking, irrigation, landscaping, et cetera.

There are three stations in Line Section 1. They are at 19th Avenue and Montebello, 19th Avenue and Camelback Road, and 7th Avenue and Camelback Road.

Progress

- The Contractor was granted Substantial Completion on Milestone E (Final Completion) on July 18, 2008.

- The Contractor has completed all items shown on the Substantial Completion punchlist. However, several new issues, arising since the punchlist was published, have necessitated continued construction activity by the Contractor.

- All track milestones are substantially complete. However, issues noted during post-construction rail resistance testing have necessitated demolition and reconstruction of rail in several locations. Work to resolve these issues still continues.

- All Contract utility work is substantially complete. However, conformance issues on two sanitary sewer laterals on 19th Avenue will require redesign and rework, to be addressed as warranty issues.

- Final rubber asphalt placement and striping has been completed. However, quality issues subsequently noted in the 19th Avenue and Camelback Road intersection will require repaving or surface rework.

- All new traffic signal systems in the Line Section 1 alignment have been accepted by the City of Phoenix.

- The Contractor continues to coordinate with follow on contractors working within the guideway.

Cost and Schedule – Variance Analysis

- A revised schedule has been developed to reflect re-sequencing the work to support overall Program Milestones. Milestone D was completed April 22nd, and Milestone E (final project milestone) was substantially complete July 18, 2008. Final acceptance is pending completion of all punchlist items, resolution of three quality issues, resolution of payroll issues, and final settlement on bid item quantities and changes.

Issues and Solutions

- Three quality issues remain, which currently are being tracked by nonconformance reports. The Contractor has requested to track these issues as warranty items to facilitate closing the contract. The Agency has approved this action for the sanitary sewer laterals on 19th Avenue, and for a small area of track at 7th Avenue that is out of specification for track gauge. However, the Agency is requiring the repair of nonconforming asphalt at the 19th Avenue and Camelback Road intersection prior to closing out the Contract.

- Project Specifications require a one-year landscaping maintenance period, beginning at final acceptance. However, there is no funding for this maintenance in the Contract bid items, as in other line section contracts. Rather than extend the Contractor's maintenance coverage at the same monthly rate as for the three-month plant establishment/maintenance period, the Agency has determined to delete it from the Line Section 1 contract.

- Change Order 90 revised the Contractual Milestone Dates (see chart below). One more Change Order will need to be issued in order to bring the final completion dates in line.

Milestone Number	Description	Original Contract Milestone Dates	CO No. 26 Revised MS Dates	CO No. 90 Revised MS Dates
A1	7th Avenue Station	27-Nov-06	26-Jan-07	2-Apr-07
A2	Camelback Station	27-Nov-06	9-Feb-07	22-Jun-07
A3	Montebello Station	5-Jul-07	31-May-07	27-Aug-07
B	Rail Access Camelback	3-May-07	22-Aug-07	22-Aug-07
D	Rail Access 19th Avenue	5-Jul-07	10-Jan-08	10-Jan-08
E	Final Completion	1-Nov-07	26-Mar-08	25-Jul-08

Line Section 2

Description

Line Section 2 begins at a point on Camelback Road just west of the Central Avenue/Camelback Road Station, and continues south on Central Avenue to a point approximately 200 feet north of the Central Avenue/McDowell Road intersection. The construction work in this contract includes demolition, relocation of public utilities, roadway improvements, drainage modifications, systems ductbank installations, station foundations, installation of systems ductbank and conduits, streetlights, traffic signals, OCS pole foundations, preparation of trackbed, and installation of embedded track. It also includes replacement of the Grand Canal Bridge on Central Avenue.

This Line Section will have six stations at the following locations: Central/Camelback, Central/Campbell, Central/Indian School, Central/Osborn, Central/Thomas and Central/Encanto.

Progress

- Herzog has completed all contract and Change Order work related to infrastructure on the project and continues to work on punch out issues.
- Herzog has completed installation of the guideway and turn over to follow-on contractors.
- Herzog has completed all the Station foundations and turned over to follow-on Contractors.
- Herzog has completed 98 percent of punch list activities.
- Herzog has completed final AC Rubber Paving, and thermo plastic traffic striping. Pavement marking installation continues.
- Herzog's sub contractor punching Traffic Signals with COP/GEC and completed installation of Traffic Controller in the Cabinets.

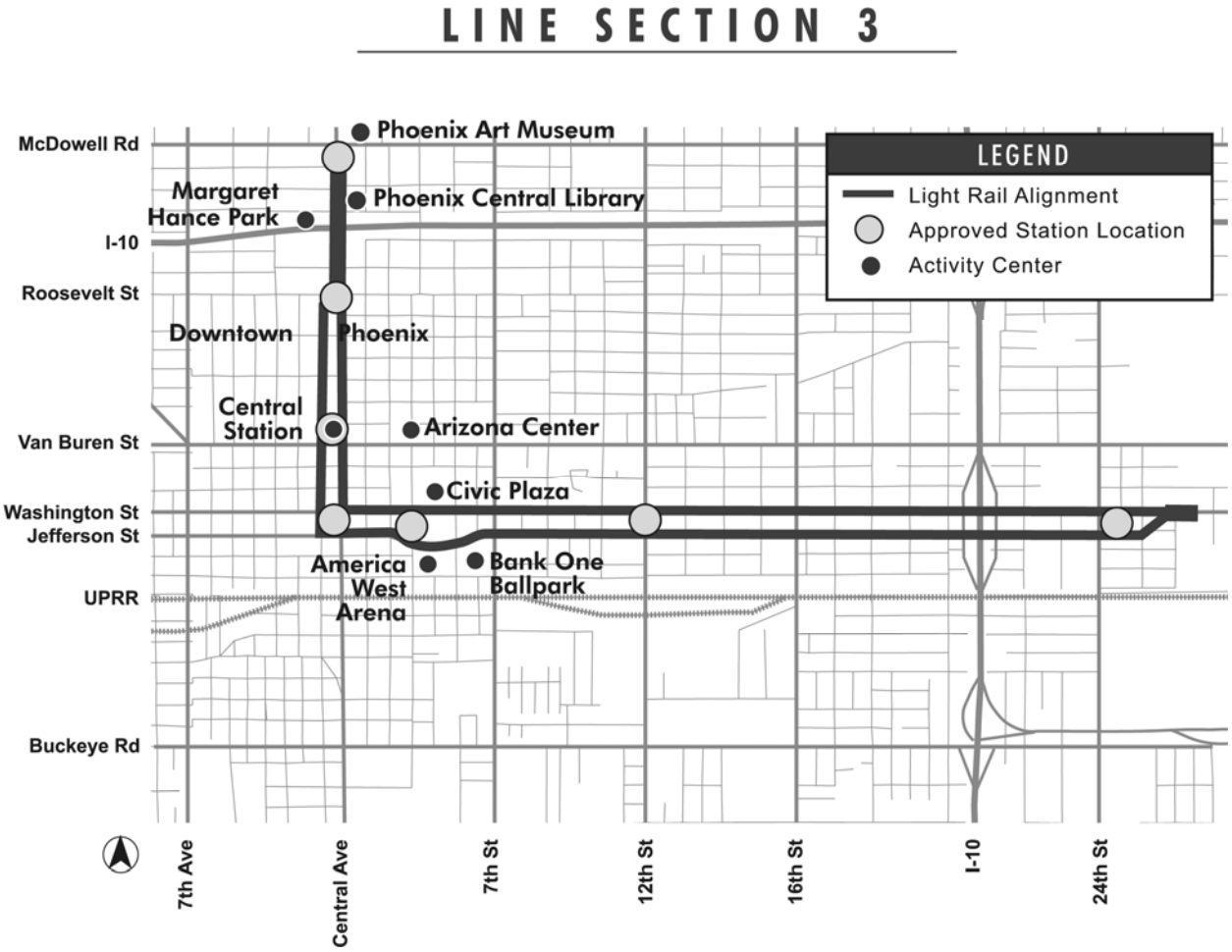
Cost and Schedule – Variance Analysis

- The contractor has developed a new schedule to reflect re-sequencing the work to support overall Program Milestones. There are no impacts to follow-on contractors, TES installed final poles and began overhead cantinary wire installation in mid-June.

Issues and Solutions

- None.

Line Section 3



Description

Line Section 3 is 4.29 miles in length with approximately eight miles of in-street track. It begins at Central Avenue and McDowell Road and extends south on Central Avenue to Portland Avenue where the line splits into single-track alignment on the one-way streets of Central Avenue and 1st Avenue. It continues south on one-way 1st Avenue to Jefferson Street and then east on one-way Jefferson Street to its end at 26th Street. It continues on one-way Central Avenue to Washington Street and then east on one-way Washington Street to 26th Street. The eastbound leg is on 1st Avenue and Jefferson Street and the westbound leg is on Washington Street and Central Avenue. The Section traverses downtown Phoenix crossing the Deck Park Bridge and passes near America West Arena, Bank One Ballpark, the Symphony Hall, Civic Plaza and Arizona Science Center.

The work anticipated in this construction contract includes demolition, relocation of public utilities, corrosion control facilities, roadway and drainage modifications, station platform foundations, installation of systems duct bank and conduits, streetlights, traffic signals, OCS pole foundations, irrigation, landscaping, traffic signing, pavement marking, preparation of track bed and installation of embedded track. It also includes modifications of existing structures at

the Deck Park Bridge, Renaissance II Garage, Arizona Science Center/CPEG Pedestrian Bridge and ADOT I-10 Washington-Jefferson Interchange.

The seven stations with 13 platforms located within Line Section 3 are McDowell Road/Central Avenue, Roosevelt Street/Central Avenue, Roosevelt Street/1st Avenue, Van Buren Street/Central Avenue, Van Buren Street/1st Avenue, Washington Street/Central Avenue, Jefferson Street/1st Avenue, 3rd Street/Washington Street, 3rd Street/Jefferson Street, 12th Street/Washington Street, 12th Street/Jefferson Street, 24th Street/Washington Street and 24th Street/Jefferson Street.

For Right-of-Way availability and order of construction or sequencing, Line Section 3 has been divided into 15 segments. The segments are paired on the one-way street couplets with Segments 1 and 2 extending from Polk to Washington on Central and 1st Avenue, 3 and 4 from 1st Avenue to 3rd Street on Washington and Jefferson, 5 and 6 from 3rd Street to 9th Street on Washington and Jefferson, 7 and 8 from Portland to Polk on Central and 1st Avenue, 9 and 10 from 9th Street to 14th Street on Washington and Jefferson, 11 and 12 from 14th to 20th Street on Washington and Jefferson, 13 and 14 from 20th to 26th Street on Washington and Jefferson, and Segment 15 on Central Avenue from McDowell to Portland.

Progress

- Archer Western Contractors (AWC) completed paving for the 11th Street Loop and is on schedule to meet the December 15, 2008 completion date.
- AWC is in the process of completing all punch list items for final close out of the Contract.

Cost and Schedule – Variance Analysis

- AWC has completed approximately 99 percent of the Contract.

Issues and Solutions

- AWC has turned over all of LS3 to follow-on contractors to complete any necessary work.

Construction Photographs

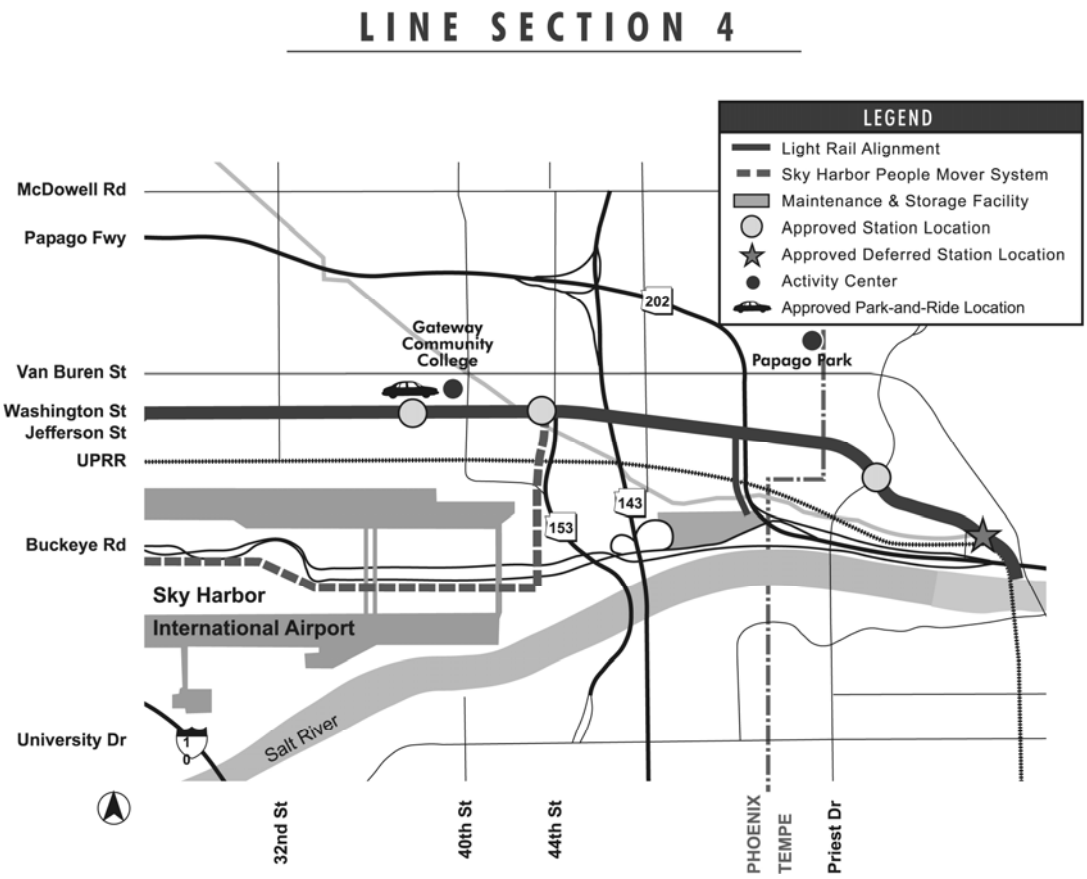
Concrete Placement at
11th St. Loop Equilateral Bathtub

11th St. Loop Guideway Placement

Punch List Pavement Repair at Trench

Punch List Curb and Gutter Replacement

Line Section 4



Description

Line Section 4 guideway is approximately 5.4 miles from 26th and Washington Street to the northern limit of Tempe Town Lake. The work includes demolition, relocation of water and sewer lines, roadway improvements, drainage modifications, sidewalk and landscaping, streetlights, installation of traffic control signals, LRT station platform foundations, systems duct bank and conduits, OCS pole foundations, preparation of the tracked and sub drains, installations of track and special trackwork including the portion of the LRT Tempe Town Lake Bridge, and replacement of the Washington Street Bridge over the Grand Canal. There are three light rail stations located on Washington Street at 38th Street, 44th Street and Priest Drive.

Progress

- The work is complete.

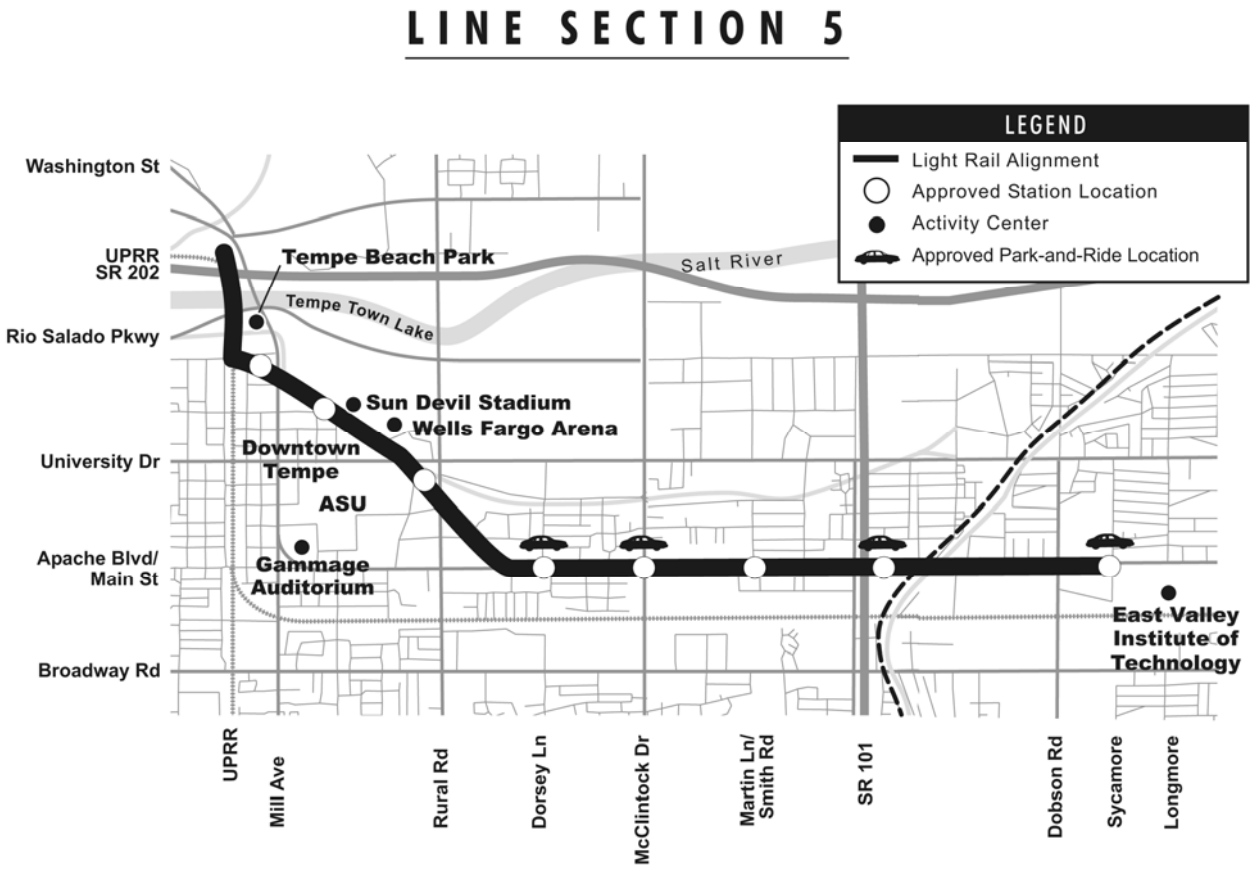
Cost and Schedule – Variance Analysis

- The contract is in the progress of being closed.

Issues and Solutions

- None.

Line Section 5



Description

Line Section 5 is 4.7 miles in length, beginning at the 1st Street grade crossing in Tempe and progressing down the former Creamery Branch of the UPRR in Tempe, across Mill Avenue, and behind the Mission Palms resort. From there, it runs along Stadium Drive across Rural Road down Terrace Road to Apache Boulevard. It then proceeds east on Apache Boulevard and enters the City of Mesa, where it terminates in the vicinity of Main Street and Sycamore near the Tri-city Mall property.

The construction work in this contract includes demolition, relocation of public utilities, roadway and drainage modifications, station platform foundations, installation of systems duct bank and conduits, street lights, traffic signals, OCS pole foundations, preparation of track bed, and installation of embedded track. Stations are located in Tempe at 3rd and Mill, 5th and College, University and Rural, Apache and Dorsey, Apache and McClintock, Apache and Smith-Martin, Apache and Price Freeway; and in Mesa at Main and Sycamore.

Progress

- The Contractor has substantially completed all track milestones, station platforms, street widening and roadway paving, sidewalks, curbs and gutters, landscaping, and the ASU Promenade. Substantial completion has been granted for Milestone H. ASU has given its final acceptance for the Promenade, and acceptance for all civil work has verbally been given by Cities of Tempe and Mesa.

- The Contractor has continued coordinating with follow-on contractors in various locations in Milestones A through F since Line Section 5 substantial completion.

- All traffic signals have been activated and accepted throughout Tempe and Mesa.

- The Contractor completed all change work throughout Tempe and Mesa, and has finished punch list work. The Contractor responded to several warranty issue calls during this month.

- Testing of the light rail vehicle continues all the way to the end of the guideway east of Sycamore, without any noted rail issues.

- Contract closeout administration continues. Approval of a final contract price by the Board of Directors made funding available for payment of changes previously initiated, but not executed. The RE is currently processing these changes as agreed to in the final settlement. The Contractor is currently finalizing as-built drawings and final submittals required by the Contract. The RE will process these as they are received. The Safety Security Checklist for Line Section 5 has been submitted and approved.

Cost and Schedule – Variance Analysis

- Milestones A2 through F2 are substantially complete, as are all eight station platforms. Though Milestones C2 through F2 were challenged by utility relocation delays, the Contractor has met these milestones as set in Change Order 83 for acceleration. Additional contract changes after substantial completion extended the contract work. A settlement for final project cost has been negotiated, and approved by the Board.

Issues and Solutions

- None.

48th Street Bridge Replacement

Description

The 48th Street Bridge Replacement Contract consists of the replacement of one concrete vehicular and one utility bridge over the SRP Grand Canal, construction of underground utilities including water mains and APS ductbanks, jack and bored utility pipe casings under UPRR railroad track, curb and gutter, sidewalk and driveways, grading and fencing of the METRO rail material storage yard, and removal and replacement of asphalt concrete pavement.

Progress

- The remaining work was completed and accepted by METRO and the City of Phoenix in May 2007.

Cost and Schedule – Variance Analysis

- This contract was closed out after final completion, final acceptance and final payment.

Issues and Solutions

- None.

Town Lake Bridge

Description

The Town Lake Bridge consists of an 11-span structure with concrete deck and steel deck truss superstructure on concrete piers. The structure has an overall length of 1,546 feet. The North and South approaches to the bridge are of retained earth fill and are approximately 1,654 feet in total length. The construction work includes cast-in-place drilled shaft pier foundations to bedrock, cast-in-place concrete pier caps, concrete abutments, concrete retaining walls, a steel truss superstructure, cast-in-place concrete deck, specialty lighting, demolition, relocation of public utilities, roadway and drainage modifications, systems duct bank conduits, streetlights, OCS pole foundations, preparation of track embankment and installation of concrete track slab. Installation of direct fixation rail for both the approaches and the bridge is included in Line Section 4 contract.

Progress

- The Project is complete and the Contract has been closed as of March 2007.

Cost and Schedule – Variance Analysis

- This Contract has been closed.

Issues and Solutions

- None.

Operations and Maintenance Center

Description

The Operations and Maintenance Center (OMC) contract includes construction of Maintenance of Equipment (MOE) building, Maintenance of Way (MOW) building, Car Wash facility, Service and Cleaning facility, maintenance equipment and tools, entry station, track installation in the yard and shop areas, construction of yard lead track from the LRT mainline in Washington Street to the OMC site including a bridge over the UPRR railroad track and SRP Grand Canal, retaining walls and embankment, fill materials for site preparation, grading and drainage, drain channel and swales, culverts and underground drainage pipes, roadways, parking lots, landscaping, fencing, water mains for fire protection and domestic services, utility services, electrical ductbanks, OCS pole foundations, and systems ductbanks.

Progress

- The contract is complete.

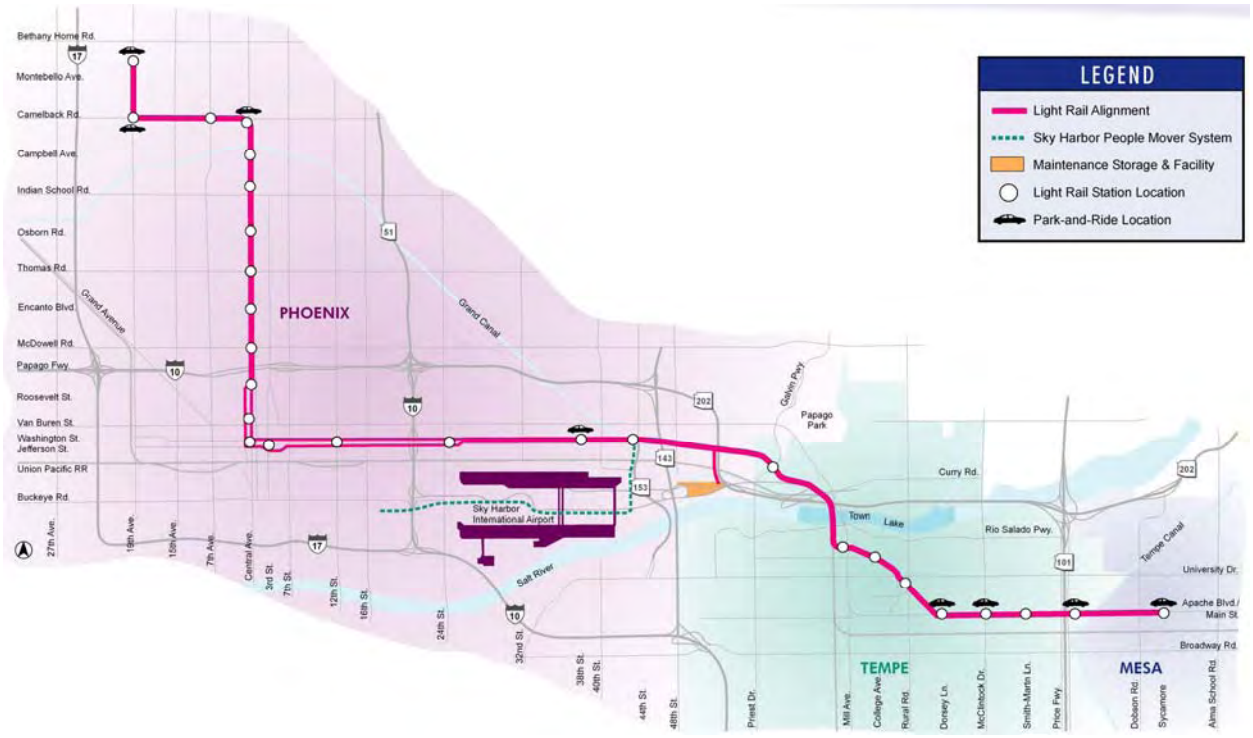
Cost and Schedule – Variance Analysis

- This Contract has been closed.

Issues and Solutions

- None.

Park-and-Ride



Description

Surface Park-and-Rides (PNR) are proposed at eight sites along the alignment, 3,513 spaces are currently provided. Sites are located at 19th Avenue and Montebello, 19th Avenue and Camelback Road, Central Avenue and Camelback Road, 38th Street and Washington Street, Dorsey Lane and Apache Boulevard, McClintock Road and Apache Boulevard, Price Freeway and Apache Boulevard, and Sycamore Drive and Main Street. The lots are adjacent to Transit Centers at 19th Street and Montebello, Central and Camelback and Sycamore and Main Street. On site security buildings are provided at 19th Avenue and Montebello, 19th Avenue and Camelback Road, McClintock Road and Apache Boulevard, Price Freeway and Apache Boulevard, and Sycamore Drive and Main Street.

The PNR construction package includes work for demolition, grading, drainage, concrete curbs, concrete sidewalks, asphalt concrete pavement, lighting, irrigation, landscaping, a security building, signing and pavement marking. CCTV security cameras and emergency telephones will be installed under the Signals and Communication construction package.

Progress

- Kiewit worked on completing punchlist items identified in the “pre-final inspection” for the 19th Avenue and Montebello Park and Ride Facility.
- During the month of November, Kiewit worked on the punchlist for 19th Avenue / Camelback Road Park and Ride Site.
- MRM Construction is working on punch list items for the 38th Street/Washington site.

- At the Central and Camelback, MRM Construction is working on punch list items.
- During the month of November, Sundt, Stacy & Witbeck worked on the punchlist for Price Freeway/Apache Boulevard Park and Ride Site.
- At the Sycamore and Main Park and Ride site a "pre-final inspection" was performed and a punchlist was generated. Sundt, Stacy & Witbeck have been working on the punchlist for this site.
- The Developer for the McClintock/Apache site provided a turnover to the City of Tempe on November 13th along with a certificate of occupancy for the garage. METRO Signals and Communications is completing the installation of security systems for the garage.
- The City of Tempe completed construction for an additional 100 spaces at Dorsey/Apache. METRO Signals and Communications is providing the necessary interface for the facility security system.

Cost and Schedule – Variance Analysis

- Total award amount for the six sites to be constructed by METRO is $22,295,267.

Issues and Solutions

- Installation of the security building fire alarm reporting system at each of the four sites with buildings. This is necessary to obtain a Final Certificate of Occupancy for the sites.

Park and Ride Construction Data

No.	Park and Ride Site	Number of Spaces	Substantial Completion	Contractor
1	Montebello/19th Avenue	794	November 1, 2008	Kiewit
2	19th Avenue/Camelback	408	November 1, 2008	Kiewit
3	Central/Camelback	135	September 28, 2008	MRM Construction
4	38th Street/Washington	189	September 28, 2008	MRM Construction
5	Dorsey/Apache (2-Sites)	207	November 1, 2008	City of Tempe
6	McClintock/Apache--Garage	308	November 13, 2008	Developer, Gray
7	Price Freeway/Apache	678	November 22, 2008	Sundt, Stacy & Witbeck
8	Sycamore/Main	802	November 22, 2008	Sundt, Stacy & Witbeck
Opening Day Total		3,521		

Construction Photographs

Patching Surface on Motorcycle Bollards
19th Avenue/Montebello Park and Ride Facility

Replacing Dead Plants
19th Ave/Camelback Park and Ride Facility

Touching up Painting
Price/Apache Park and Ride Facility

Staking Trees
Sycamore/Main Park and Ride Facility

Landscaping Retention Basin for Gateway
38th St/Washington Park and Ride Facility

Cutting a Control Joint
Central/Camelback Park and Ride Facility

Track Material Procurement

Description

The track materials are broken down into five separate procurements as follows:

- Ballasted Special Trackwork – includes ballasted turnouts and concrete switch ties for the MSF and direct fixation fasteners for the MSF, Town Lake Bridge (TLB) and Deck Park Bridge.
- Girder Rail – rail needed for the embedded trackwork.
- Girder Rail Special Trackwork – turnouts needed for the embedded trackwork.
- Concrete Crossties – concrete crossties needed for the OMC.
- T Rail – rail for the MSF, TLB including approaches and Deck Park Bridge.

Progress

- Girder Rail
- Embedded Special Trackwork: The Contractor continues to produce special trackwork castings and other miscellaneous materials for this contract.

Cost and Schedule – Variance Analysis

- Track material procurement activities remain on schedule and within budget at this time.

Issues and Solutions

- None.

Traffic Signal Procurement

Description

These Purchase Orders include the system-wide procurement of traffic signal poles, controllers, controller cabinets, and traffic central system upgrades for the City of Phoenix and Tempe.

Progress

- All of traffic signal equipment for the five Line Section contracts initially ordered under these Purchase Orders has been delivered to METRO or directly to the Line Section contractors' storage yards.

Cost and Schedule – Variance Analysis

- No Change for this month, traffic signal procurement activities has been completed; however, the Central System Upgrades for phoenix and Tempe is an ongoing activity, and will continue throughout the duration of the project.

Issues and Solutions

- None.

Underfloor Wheel Profiling Machine

Description

Design, fabricate, furnish an Underfloor Wheel Profiling Machine, Mechanical Chip Collection/Removal Conveying System, and all necessary accessories, items of equipment, and mechanical, electrical, controls and structural items to re-profile wheels on Light Rail Vehicles. Deliver the machine to the OMC and install the machine within the concrete foundation constructed by the Agency in the Maintenance of Equipment building. Inspect, test, start-up the machine to ensure it is operating properly and safely and provide training to Agency staff.

Progress

- The work is complete.

Cost and Schedule – Variance Analysis

- The contract is closed out.

Issues and Solutions

- None.

13. Systems

Automated Fare Collection System

Description

Design, manufacture, furnish, assemble, test, inspect and install the LRT Automated Fare. Collection System (AFCS) for use by METRO. The AFCS consists of Ticket Vending Machines (TVMs), Ticket Validators (Validators) integrated within the TVMs, a Data Collection/Information System (DC/IS), station LANs, Hand Held Verifiers (HHVs), Revenue Collection Equipment, related data communication networks to allow the TVMs to communicate with a central fare collection computer, spare parts, tools, test equipment, documentation, software listings, training, technical assistance and warranty.

Progress

- Milestone 1 Progress: Approved Management Plan and Master Schedule – Complete.
- Milestone 2 Progress: Approved Conceptual Design Review – Complete.
- Milestone 3 Progress: Approved Preliminary Design Review – Formal closeout of Preliminary Design Review (PDR) submittals outstanding.
- Milestone 4 Progress: Approved Final Design Review – Formal closeout of Final Design Review (FDR) submittals outstanding.

- Milestone 5 Progress: First Article Configuration Inspection Approved – Complete.
- Milestone 6 Progress: Qualification Testing – Complete.
- Milestone 7 Progress: Factory Integration Testing – Combined with Milestone 8, Pilot Station Testing.
- Milestone 8 Progress: Combined FIT/Pilot Station Testing - Complete. Punchlist items being addressed.
- Milestone 9: Delivery of Ticket Vending Machines – Complete.
- Milestone 10 Progress: Completion of Training – Training commenced on November 10, 2008. Approval of training material complete.
- Milestone 11 Progress: Field Installation Testing – 91 of 95 TVMs Installed, 35 fully tested and accepted, 39 conditionally accepted, and 17 not yet accepted.
- Milestone 12 Progress: Contractor-Led System Integration testing scheduled to begin the week of December 1, 2008.

Cost and Schedule – Variance Analysis

- A revised project schedule for TVM installation and testing has been received. The contractor is working closely with the Station Finishes contractors to work at platforms that have completed punch list items to allow proper installation. Forecasting the installation timing for Park and Ride lots and Transit Center has been difficult due to lack of power and/or conduit and pad construction problems.

Issues and Solutions

- Standalone Ticket Validator – Change Oder executed. Production underway, with first delivery scheduled for December 5, 2008.
- Handheld Verifier – Interim solution agreed to by the Contractor to provide verifiers that can be completed in time for revenue service. Change Order pending for the addition of additional verifiers with the revised design following in February 2009; however, design is underway to expedite delivery.
- Power Availability - Power availability at the 19th Avenue and Montebello Transit Center still outstanding. Installation is being rescheduled to accommodate the delay.
- Transit Center and Park and Ride Lot Conduit and Pad Issues – Continuing to address conduit blockages and pad reconstruction work at one Transit Center and two Park and Ride Lots.
- City of Phoenix Electrical Inspection Issues – Inspections by City of Phoenix have identified issues that require modifications to power and grounding provisions. Modifications, after receiving City of Phoenix approval at one initial location, are now underway. Contractor also addressing issues associated with TVM/AC assembly UL rating.

Construction Photographs

Cash Cart First Article Inspection

Software Upgrade Testing at the OMC

Acceptance Testing at 24th Street and Washington Station

Acceptance Testing at Priest and Washington Station

Light Rail Vehicle

Description

METRO has a Contract with KINKISHARYO International, L.L.C. (KI) for two prototype and forty eight production light rail vehicles (LRVs) for a total of fifty (50) LRVs. The contract includes prototype engineering, special tools and test equipment, training, spare parts and publications. The cars are 70 percent low-floor, double-articulated LRVs with two main “A” and “B” passenger sections and a mid “C” section, joined to form one single operating unit. There are four passenger doors on each side and an operators cab at each end. The LRVs are designed to be “street friendly” with energy absorbing bumpers and crashworthy cab ends.

Progress

- METRO is continuing review of submittals for Contract Data Requirement List items (CDRLs) the bulk of which are test procedures and reports. METRO and KI are engaged in daily and weekly meetings. Main topics for presentation by KI and discussion are going to be: special tools, spare parts, operator training course, application, closing open items, vehicle delivery schedule, GE and GEO Focus Interface, and conditional acceptance testing.

- Changes for an Overhead Catenary System (OCS) Surveillance Camera Installation on two cars and an Automatic Passenger Counting System (APC) for the fleet have been processed. Testing of the APC is on going and software is being installed.

- o All 50 cars have been delivered from Osaka. No further inspections are ongoing in Osaka Japan.
  - KI is installing equipment and static testing. Cars 146 through 147 have been inspected for delivery. Punch lists are done and waiting for title transfer.
  - A total of 50 LRVs are accepted as delivered. The last five vehicles are in final assembly and test. Twenty vehicles have start there warranty clock as of October 22nd.
  - Cars 149 and 150 are in the shop for testing and are now accepted as delivered.
  - Geo Focus equipment is being installed and testing is ongoing. DVR mod's are done and tested. Latest software is being installed on the fleet. KI is studying software changes.
  - Conditional acceptance testing is ongoing. Forty-two vehicles are now through this process and will continue through Nov. 08. Burn in with multi cars is in progress.
  - Main line vehicle testing has started and will be ongoing into December 2008.
  - Wheel to rail testing is ongoing and will be in test over the next couple of weeks.
  - Very good results have been recorded on wheel to rail interface and the issue is now under control.
  - All truck frames and components were shipped from Osaka to Phoenix for final assembly. Telephone, email and drawing exchange continue between KS-J and KI on vehicle issues, testing procedures and schedules, subsystem interfaces and equipment mounting, interior design and equipment installation, systems application issues, material shipments, production schedule and CDRL's items.
  - Qualification testing is ongoing on the main line for high speed. Car 101 is qualified to 55 mph.
  - Conditional acceptance testing procedures are set up and started February 4, 2008.

Cost and Schedule – Variance Analysis

- Car delivery remains on schedule, sufficient to meet the needs of the overall program. Contract remains within budget.

Issues and Solutions

- KI has experienced parts shortages METRO representatives held a series of meetings with both suppliers to evaluate the impacts to the schedule as well as to determine contingency production plans. To date, those plans are in action and the suppliers are maintaining on schedule. KI as a contingency plan to over come this temporary shortage. Brake pressure switches have been burning out. KI and Knorr know the problem and are working to install the fix mid November.

- While some part shortages have impacted the delivery of LRVs in the short term, both METRO and KI remain confident that the final LRV (150) will be delivered and accepted by November 2008.

Assembly Photographs

Car shells coming in for final assembly

Car under floor work

Car C section being prepped for final assembly

Car articulated and prepping for static testing

Signals and Communications

Description

The LRT Signal and Communications (SC) Contract provides for the final design, manufacturing, installation, and testing of the integrated signal and communication system.

Major work elements include train signal equipment and communication hardware and software for controlling train movements through crossovers and interlocking, fiber-optic backbone communication transmission system (CTS), closed-circuit TV (CCTV), public address system (PA), variable message boards (VMB), Train Control System, Vehicle Management (VMS), Radio System, PABX and Telephone System including emergency telephones at Park-and-Rides and Transit Centers, Supervisory Control and Data Acquisition System (SCADA), installation of workstations and equipment in the Operations Control Center (OCC) and at the Maintenance and Storage Facility (MSF), six site-built signal buildings and three signal buildings combined with traction power substations. The work scope also includes installation of fiber-optic cables for street traffic control systems for the Cities of Phoenix, Tempe and Mesa, and installation of fiber-optic cables for ASU.

Progress

- Signal Buildings and Signal Cases
    - Completed Operational Acceptance Testing activities at Montebello Interlocking.
    - Completed Dynamic Testing Activities at all locations except for the Montebello Interlocking.

- Completed all work associated with the Yard Entrance Interlocking rework to mitigate traction power imbalance issues.
- Completed testing and cleanup work associated with replacement of embedded switch machine internal limit switches.
- Began installation of the 11th Street Loop signal system equipment.
- Completed testing of final LRV Carborne Train-to-Wayside Communications equipment.

- Communications System
  - Continuing testing of redundancy paths for the Street Traffic System fiber communications system.
  - Continuing network testing and device end to end testing in all Rings.
  - Continuing Communications equipment installation at Park and Ride Lots and Transit Centers.
  - Began relocation and testing of Ambient Noise Sensors.
  - Continued train tracking tests.
- Coordinating with other Contracts
  - Station Finishes Communication Cabinets – Continuing to coordinate power-on activities of main circuit breakers (one transit center outstanding).
  - Station Finishes Conduit Issues – Continuing to address conduit blockages at final three stations.
- Integrated Testing
  - Began Contractor-Lead Integrated testing, concurrent with Agency-Lead Integrated Testing.

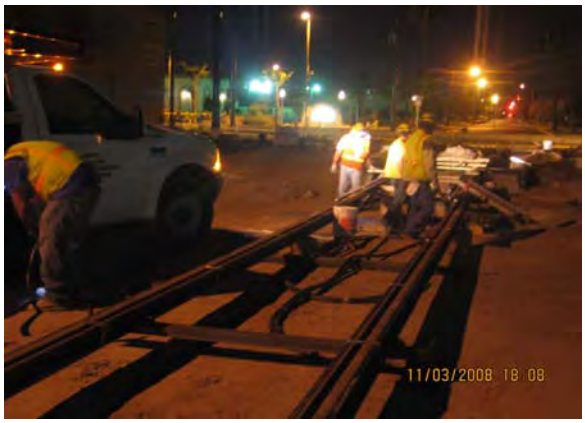
Cost and Schedule – Variance Analysis

- The final completion target Milestone of October 3, 2008 was not met but revenue service operations in December 2008 will not be significantly impacted. Mitigation planning continuing to lessen the impact of construction delays.
- Mitigation efforts include:
  - Ring testing is being done in series.
  - Contractor led integrated testing taking place in parallel with Agency-Led integrated testing.
  - Manpower levels for installation and testing are being monitored closely.

Issues and Solutions

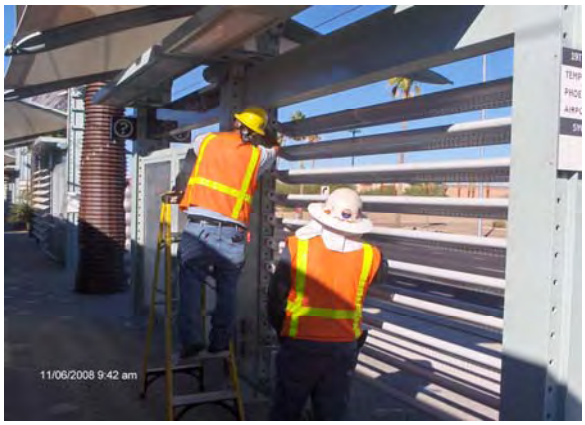
- Emergency Call Boxes – City of Phoenix will not approve emergency telephones since not UL listed as an assembly. Request for UL evaluation made.

Construction Photographs



11th Street Loop Cable Installation

Fiber Testing in Communications Cabinet for Price and Apache Park and Ride Lot



Ambient Noise Sensor Testing at Sycamore and Main Station

CCTV Camera Installation at 19th Ave and Montebello Park and Ride Lot

Communications UPS Testing at 1st Avenue and Jefferson Station

LRV Train to Wayside Communications Testing

Traction Electrification System

Description

The Traction Electrification System (TES) provides the electric power required to operate the Light Rail Vehicles (LRV). There are two main components to the TES, these are: Traction Power Substations (TPSS) that convert incoming utility power to DC power, which is used by the LRV and the Overhead Contact System (OCS), which distributes the DC power to the trackway. There are 15 Site Built 2,000 kW substations. Twelve of the substations are 22-feet by 44-feet and three are 22-feet by 57-feet. The substation buildings will be constructed of integrally colored concrete block on landscaped sites. The OCS is comprised of 20-route miles of double-track low-profile overhead catenary. The OCS will be installed on over 1,300 round painted poles. The nominal system voltage is 750 VDC. The nominal height of the OCS above the roadway is 18-feet, 6-inches.

The TES Contract provides final design of the TPSS and OCS, manufacturing, fabrication, installation, site work and testing.

Progress

- Traction Power Substation No. 1
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.

- Traction Power Substation No. 2
  - Uploaded new software for the thyristor controlled rectifier.
  - OCS electrical tests performed from substation.
  - Duct detector tests performed.
  - Landscaping installation progressed.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 3
  - Uploaded new software for the thyristor controlled rectifier.
  - HVAC installation progressed.
  - OCS electrical tests performed from substation.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 4
  - Uploaded new software for the thyristor controlled rectifier.
  - OCS electrical tests performed from substation.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 5
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Installation of metal louver fence progressed.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.

- Traction Power Substation No. 6
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 7
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 8
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 9
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 10
  - Uploaded new software for the thyristor controlled rectifier.
  - Di-electric floor tests performed.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.

- Traction Power Substation No. 11
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 12
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 90 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 13
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 14
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
  - Building and Sitework Construction – 95 percent complete.
  - Traction Power Substation Equipment Installation and Testing – 95 percent complete.
- Traction Power Substation No. 15
  - Uploaded new software for the thyristor controlled rectifier.
  - Performing punchlist work.
- MOE Shop and Traction Power Substation No. 16
  - Punchlist items remain outstanding.

- Traction Power Substation Performance Tests
  - Siemens uploaded revised software for the thyristor controlled rectifiers at a sample set of substations and re-performed the substation performance tests. Following the retest, the revised software was uploaded at all remaining thyristor controlled rectifier substations.
- Overhead Contact System
  - OMC Yard and MOE Shop
    - Installing OCS pole baseplate covers.
    - OCS pole touch-up painting progressed.
    - Punchlist items remain outstanding.
  - Line Section 1
    - OCS rework for ground connections and midpoint tensions performed.
    - OCS pole touch-up painting progressed.
    - Installing pole baseplate covers and numbers.
    - Punchlist items remain outstanding.
  - Line Section 2
    - OCS rework and inspections performed.
    - OCS pole touch-up painting progressed.
    - Installing pole baseplate covers and numbers.
    - Punchlist items remain outstanding.
  - Line Section 3
    - Contact wire installed for the 11th Street Loop.
    - Installing pole baseplate covers and numbers.
    - OCS pole touch-up painting progressed.
  - Line Section 4
    - OCS pole touch-up painting progressed.
    - Installing pole baseplate covers and numbers.
    - Installing ground straps for downguy assemblies.
    - Punchlist items remain outstanding.

- Line Section 5
  - OCS pole touch-up painting progressed.
  - Installing pole baseplate covers and numbers.
  - Installing ground straps for downguy assemblies.
  - Punchlist items remain outstanding.

- Coordination with other Contracts/Entities
  - Coordination meeting held with the Park and Ride Contractor regarding irrigation work for TPSS No. 1.

- Milestones
  - Draft letters for substantial completion of Milestone 10B and 10C are currently under review by METRO.

Cost and Schedule – Variance Analysis

- The contractor has completed most of the material delivery and TPSS civil construction and is primarily performing OCS construction, field testing and commissioning. Construction progress to date has included the civil and architectural parts of all sixteen traction power substations, TPSS electrical equipment installation in all sixteen of the traction power substations, OCS components installation in the OMC yard, OMC shop and parts of all Line Sections. Start up testing and commissioning has been done at the OMC, LS4 Test Track areas, and the extended 6 mile burn-in track area and is in progress for the balance of LS5. Milestone 10A for Test Area A was completed on schedule. Milestone 10B for Test Area B is nearing completion.

Issues and Solutions

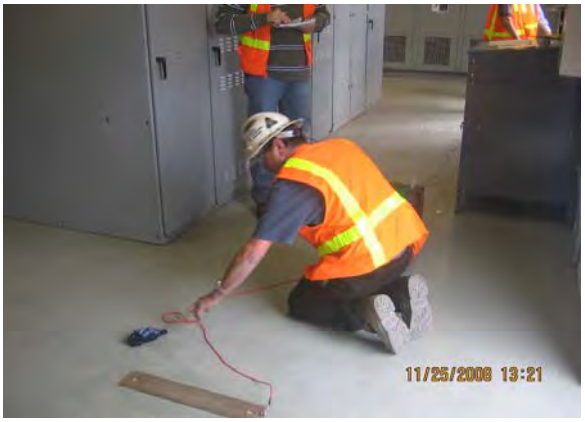
- TPSS/LRV Compatibility Issue. The light rail vehicles are still experiencing unexpectedly high voltage levels. Specialists from the GEC and CAC are currently investigating this issue to determine the source of the voltage spikes.

- High Rail Voltage. Unexpectedly high voltage levels have been detected along the negative return rail which is a potential safety hazard. The designers are currently investigating whether or not the negative grounding device settings can be adjusted to avoid tripping out of the substations. The ground fault test report which is related to the negative grounding device is currently under review.

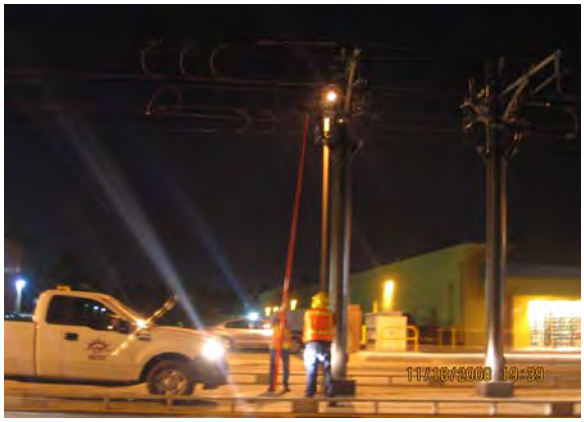
Construction Photographs

11th Street Loop – Installing Headspans

TPSS No. 2 – Duct Detector Testing



TPSS No. 10 – Dielectric Floor Testing



LS1 and LS2 – OCS Electrical Tests

Rail Activation/System Integration

Description

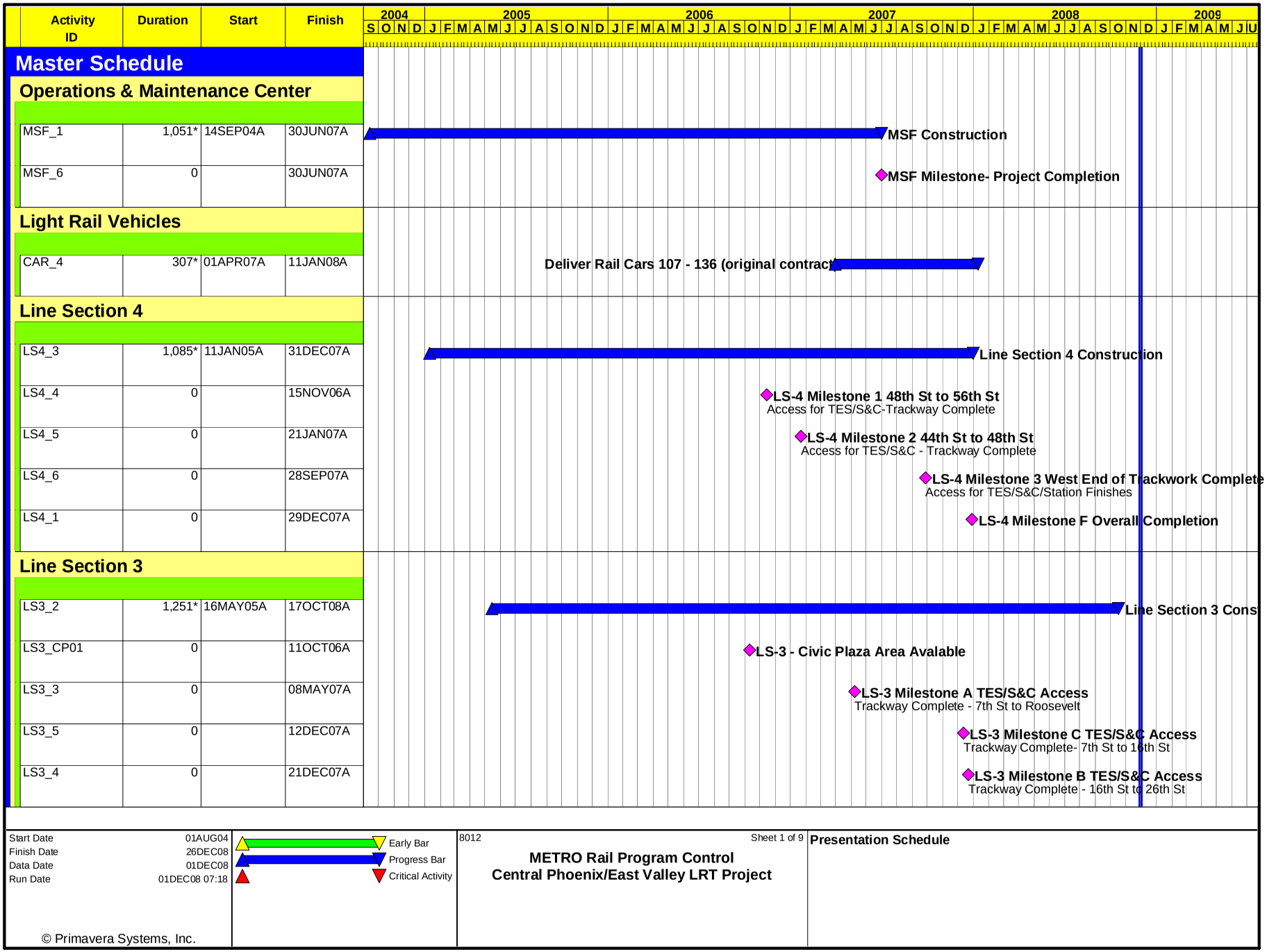
The Rail Activation Plan was developed in June, 2006 to outline the process and organizational approach that METRO will employ to oversee the testing and start-up of the 20 mile light rail CP/EV system. The Rail Activation process is used to transition the Light Rail Project from the construction phase, through testing, pre-revenue operations, and finally into revenue service. The Rail Activation Team is a diverse group of Transit professionals which consists of METRO staff from Operations, Maintenance, System Engineering, Safety/Security, and Media relations, along with CAC, PMC, GEC and City staff.

This same group will participate in and oversee the System Integration process, which is the final testing process before sections of the alignment can be activated for use. The System Integrated tests are designed to prove that the various systems within the alignment work well together and meet design criteria. The primary goal of the Rail Activation Team is to ensure the project achieves revenue operations in a timely and safe manner.

Progress

- METRO and the consulting staff are developing test plans and procedures related to track allocation, rail/wheel interface, clearance, and LRV dynamic testing.
- METRO, CAC and Seimens are continuing work on modifications to the substations, but this work has no impact on LRV testing.
- An investigative report was received from a CAC substation expert for review by Rail Activation Team.
- Seimens has implemented a new software revision to the substations and will begin testing mid November.
- LRV testing was performed on the main line, with the original wheel profile, and the rail activation team is waiting for the results.
- The Rail Activation Team is observing and monitoring the progress of TES and Signal testing to determine when the expanded test track and future milestones will be achieved.
- The extended test zone (Montebello to Sycamore) has been activated and is available for METRO's use.
- Trains are running from Montebello to Main and Sycamore regularly for LRV burn-in and Transportation Supervisors training.
- Transportation supervisors and operators are now working two shifts for training and LRV burn-in.
- The Transportation group has assumed "track allocation" responsibilities on September 29, 2008.
- The Rail Activation Team and the CAC are continually modifying the integrated test schedule to reflect changes in turnover dates.

- Rail Activation and the CAC are developing the integrated test procedures.
- Fifty percent of the integrated test procedures are under METRO review.
- Systems and SCADA Integrated testing is ongoing.
- The integrated test team is working with MEC to participate in some of the contractor lead integrated tests.
- Track Allocation meetings are being held every Thursday at the OMC conference room.
- Track Access Training is ongoing the first Monday of the month.


Activity ID
Duration
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2004
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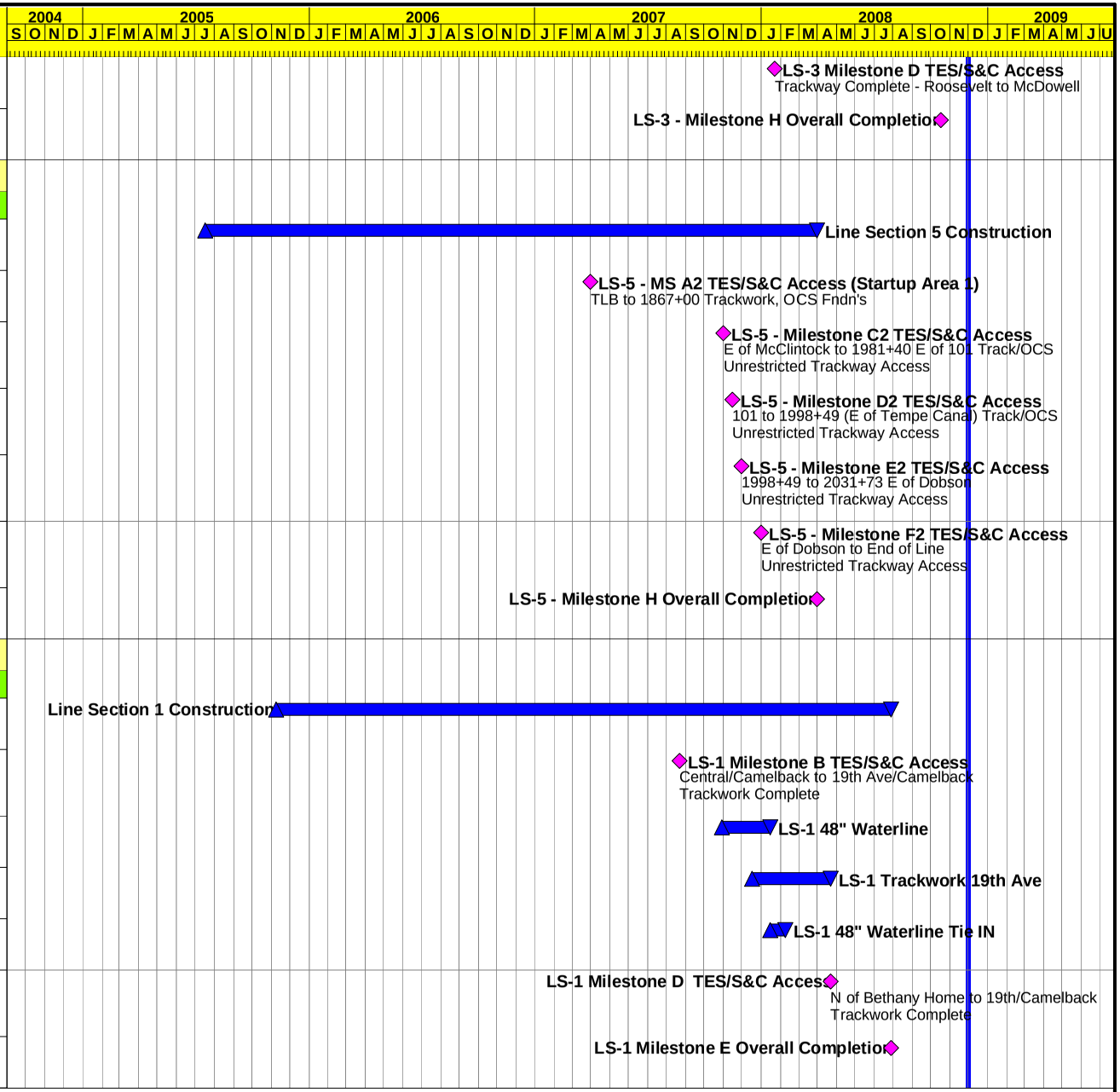
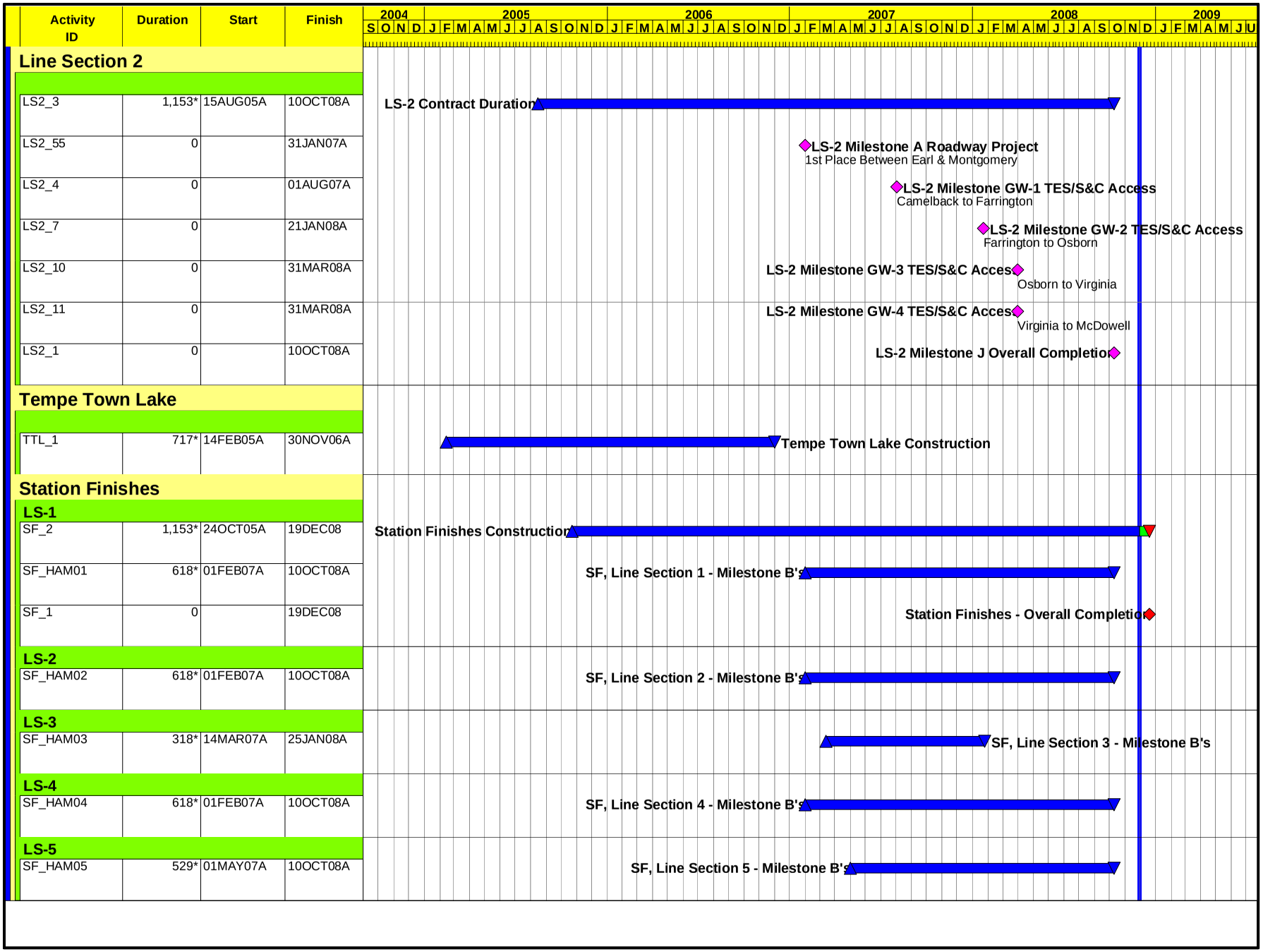
Master Schedule
Operations & Maintenance Center
MSF_1 1,051* 14SEP04A 30JUN07A
MSF Construction
MSF_6 0 30JUN07A
MSF Milestone- Project Completion
Light Rail Vehicles
CAR_4 307* 01APR07A 11JAN08A
Deliver Rail Cars 107 - 136 (original contract)
Line Section 4
LS4_3 1,085* 11JAN05A 31DEC07A
Line Section 4 Construction
LS4_4 0 15NOV06A
LS-4 Milestone 1 48th St to 56th St
Access for TES/S&C-Trackway Complete
LS4_5 0 21JAN07A
LS-4 Milestone 2 44th St to 48th St
Access for TES/S&C - Trackway Complete
LS4_6 0 28SEP07A
LS-4 Milestone 3 West End of Trackwork Complete
Access for TES/S&C/Station Finishes
LS4_1 0 29DEC07A
LS-4 Milestone F Overall Completion
Line Section 3
LS3_2 1,251* 16MAY05A 17OCT08A
Line Section 3 Cons
LS3_CP01 0 11OCT06A
LS-3 - Civic Plaza Area Avalable
LS3_3 0 08MAY07A
LS-3 Milestone A TES/S&C Access
Trackway Complete - 7th St to Roosevelt
LS3_5 0 12DEC07A
LS-3 Milestone C TES/S&C Access
Trackway Complete- 7th St to 16th St
LS3_4 0 21DEC07A
LS-3 Milestone B TES/S&C Access
Trackway Complete - 16th St to 26th St
Start Date 01AUG04
Finish Date 26DEC08
Data Date 01DEC08
Run Date 01DEC08 07:18
Early Bar
Progress Bar
Critical Activity
8012
Sheet 1 of 9
METRO Rail Program Control
Central Phoenix/East Valley LRT Project
Presentation Schedule
© Primavera Systems, Inc.

Activity ID	Duration	Start	Finish
LS3_6	0		22JAN08A
LS3_1	0		17OCT08A
Line Section 5			
LS5_5	1,018*	18JUL05A	31MAR08A
LS5_4	0		30MAR07A
LS5_8	0		01NOV07A
LS5_10	0		15NOV07A
LS5_12	0		30NOV07A
LS5_14	0		31DEC07A
LS5_1	0		31MAR08A
Line Section 1			
LS1_3	993*	09NOV05A	28JUL08A
LS1_4	0		22AUG07A
ALS1_4	78*	29OCT07A	14JAN08A
TAALS1_4	127*	17DEC07A	21APR08A
AALS1_4	24*	15JAN08A	07FEB08A
LS1_6	0		22APR08A
LS1_1	0		28JUL08A

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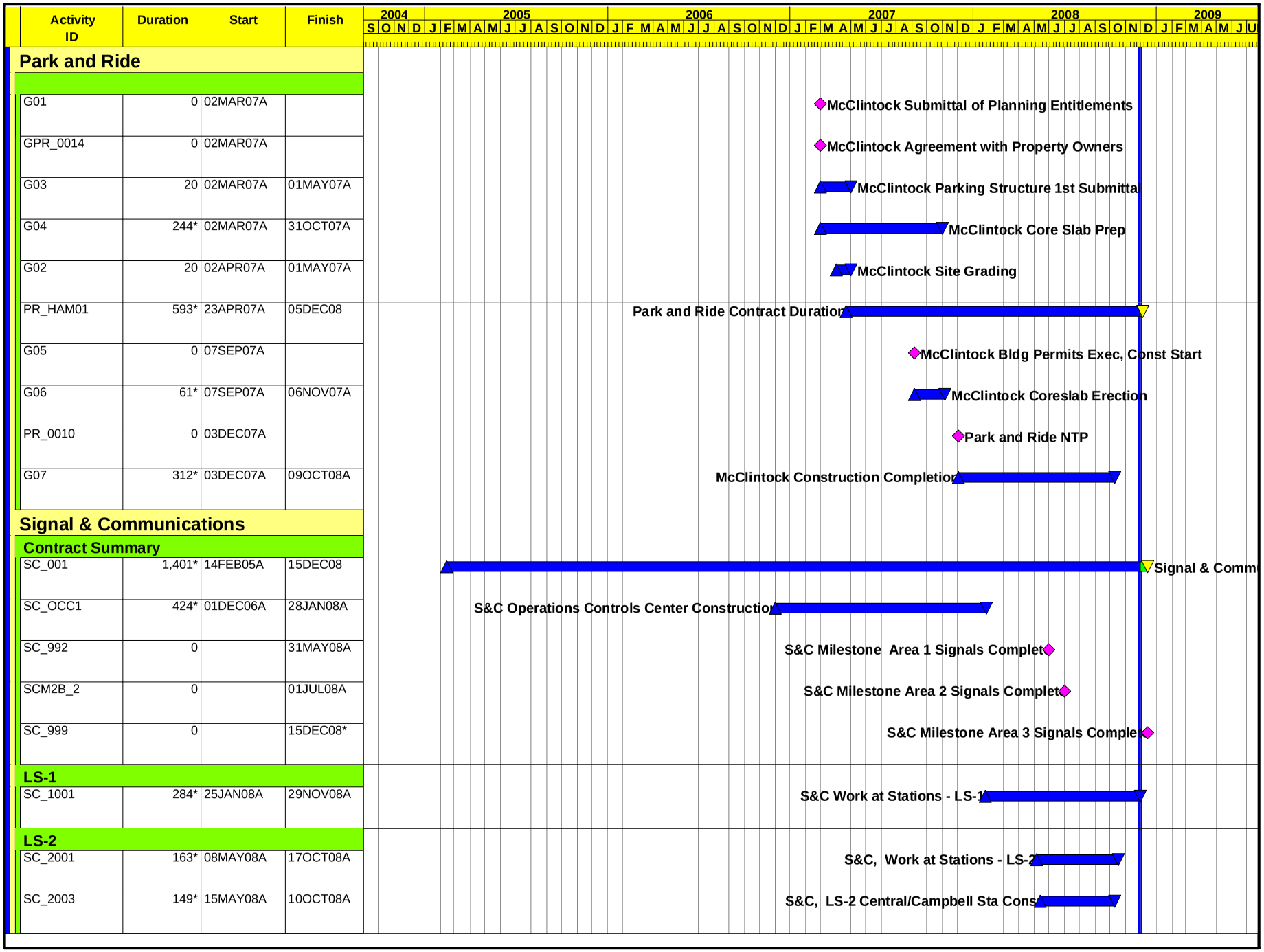
Line Section 2
LS2_3 1,153* 15AUG05A 10OCT08A
LS-2 Contract Duration
LS2_55 0 31JAN07A
LS-2 Milestone A Roadway Project
1st Place Between Earl & Montgomery
LS2_4 0 01AUG07A
LS-2 Milestone GW-1 TES/S&C Access
Camelback to Farrington
LS2_7 0 21JAN08A
LS-2 Milestone GW-2 TES/S&C Access
Farrington to Osborn
LS2_10 0 31MAR08A
LS-2 Milestone GW-3 TES/S&C Acces
Osborn to Virginia
LS2_11 0 31MAR08A
LS-2 Milestone GW-4 TES/S&C Acces
Virginia to McDowell
LS2_1 0 10OCT08A
LS-2 Milestone J Overall Completion
Tempe Town Lake
TTL_1 717* 14FEB05A 30NOV06A
Tempe Town Lake Construction
Station Finishes
LS-1
SF_2 1,153* 24OCT05A 19DEC08
Station Finishes Construction
SF_HAM01 618* 01FEB07A 10OCT08A
SF, Line Section 1 - Milestone B's
SF_1 0 19DEC08
Station Finishes - Overall Completion
LS-2
SF_HAM02 618* 01FEB07A 10OCT08A
SF, Line Section 2 - Milestone B's
LS-3
SF_HAM03 318* 14MAR07A 25JAN08A
SF, Line Section 3 - Milestone B's
LS-4
SF_HAM04 618* 01FEB07A 10OCT08A
SF, Line Section 4 - Milestone B's
LS-5
SF_HAM05 529* 01MAY07A 10OCT08A
SF, Line Section 5 - Milestone B's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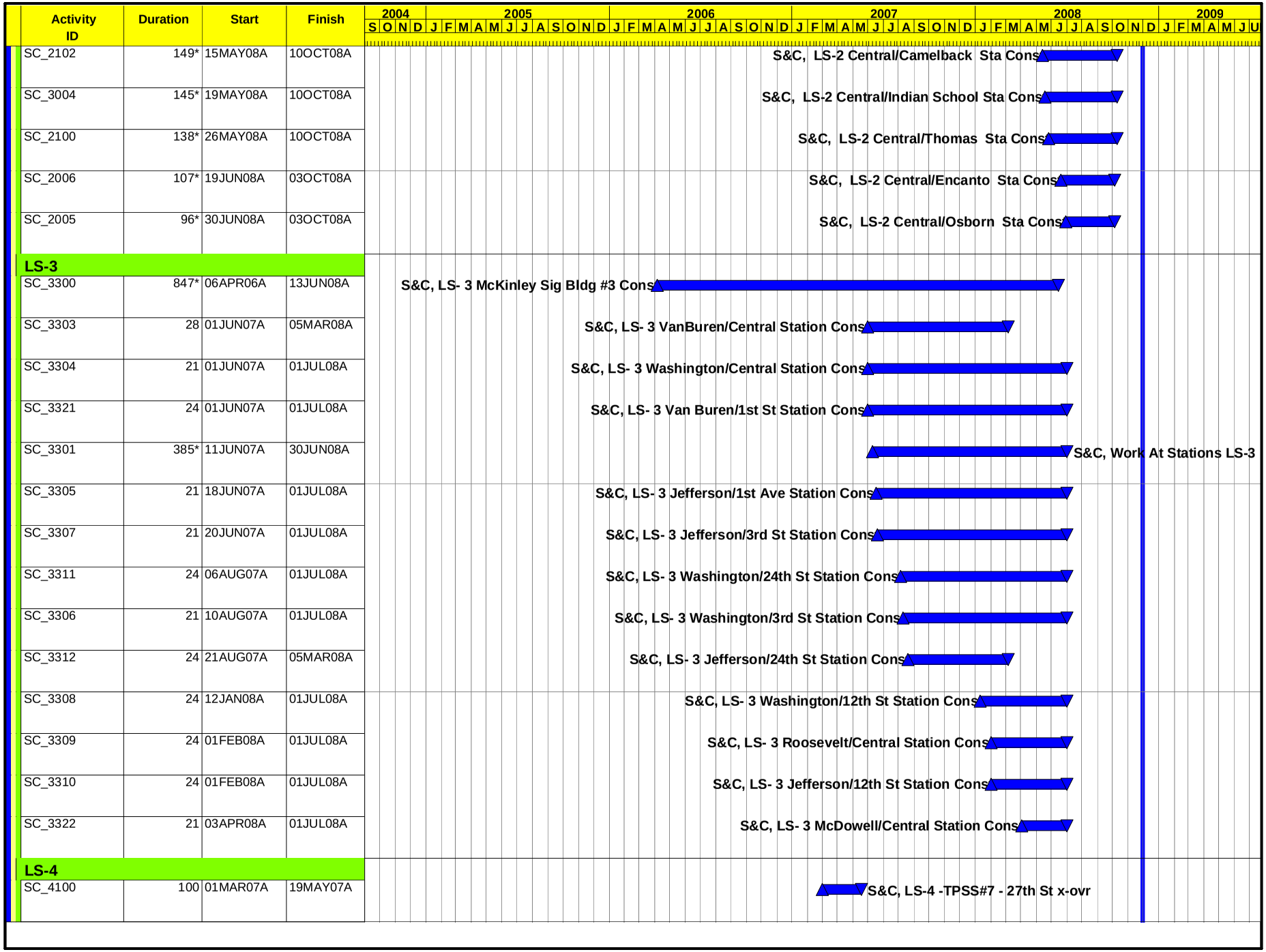
Park and Ride
G01 0 02MAR07A
GPR_0014 0 02MAR07A
G03 20 02MAR07A 01MAY07A
G04 244* 02MAR07A 31OCT07A
G02 20 02APR07A 01MAY07A
PR_HAM01 593* 23APR07A 05DEC08
G05 0 07SEP07A
G06 61* 07SEP07A 06NOV07A
PR_0010 0 03DEC07A
G07 312* 03DEC07A 09OCT08A
McClintock Submittal of Planning Entitlements
McClintock Agreement with Property Owners
McClintock Parking Structure 1st Submittal
McClintock Core Slab Prep
McClintock Site Grading
Park and Ride Contract Duration
McClintock Bldg Permits Exec, Const Start
McClintock Coreslab Erection
Park and Ride NTP
McClintock Construction Completion
Signal & Communications
Contract Summary
SC_001 1,401* 14FEB05A 15DEC08
SC_OCC1 424* 01DEC06A 28JAN08A
SC_992 0 31MAY08A
SCM2B_2 0 01JUL08A
SC_999 0 15DEC08*
Signal & Comm
S&C Operations Controls Center Construction
S&C Milestone Area 1 Signals Complet
S&C Milestone Area 2 Signals Complet
S&C Milestone Area 3 Signals Comple
LS-1
SC_1001 284* 25JAN08A 29NOV08A
S&C Work at Stations - LS-1
LS-2
SC_2001 163* 08MAY08A 17OCT08A
SC_2003 149* 15MAY08A 10OCT08A
S&C, Work at Stations - LS-2
S&C, LS-2 Central/Campbell Sta Cons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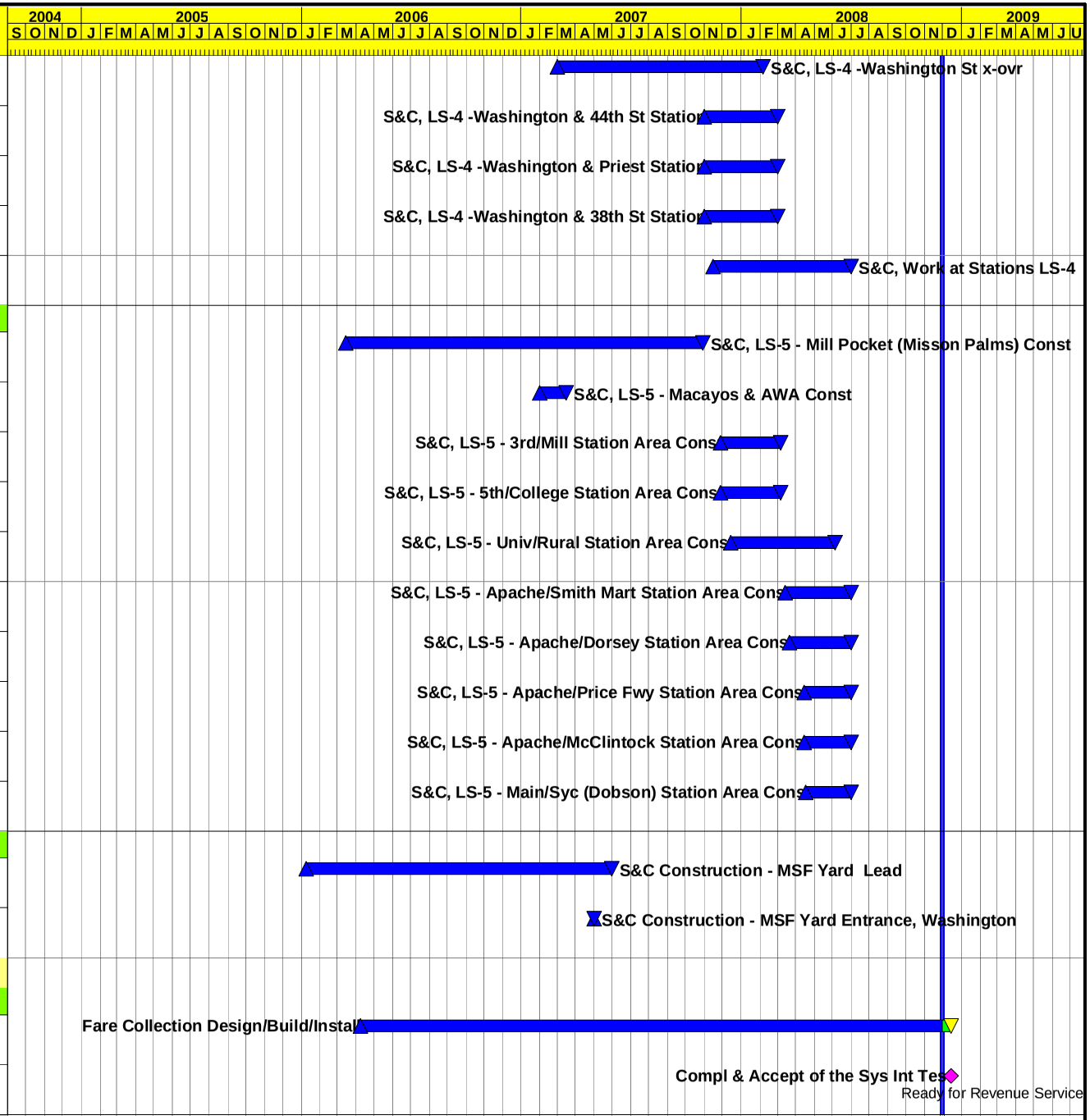
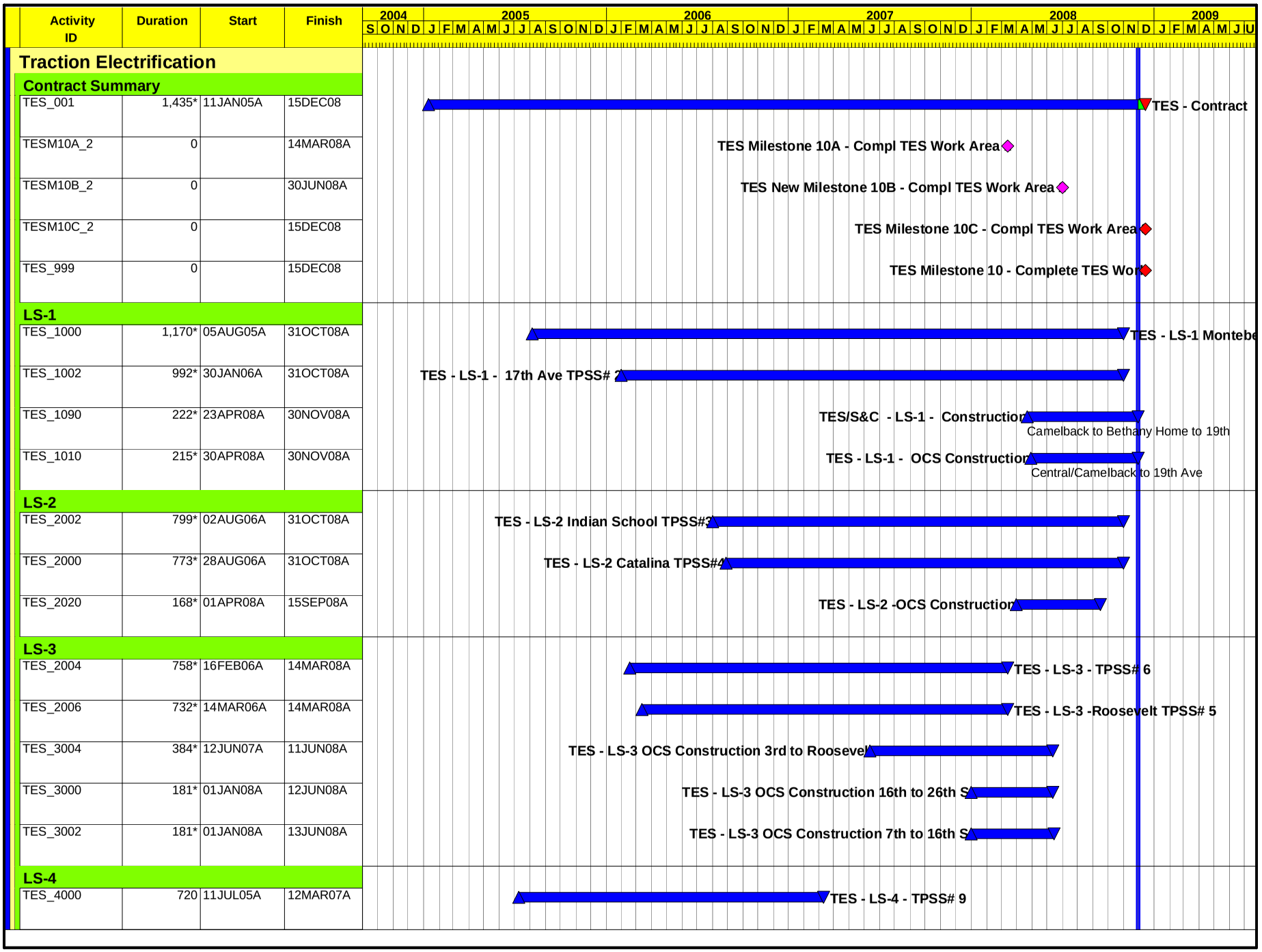
SC_2102 149* 15MAY08A 10OCT08A
S&C, LS-2 Central/Camelback Sta Cons
SC_3004 145* 19MAY08A 10OCT08A
S&C, LS-2 Central/Indian School Sta Cons
SC_2100 138* 26MAY08A 10OCT08A
S&C, LS-2 Central/Thomas Sta Cons
SC_2006 107* 19JUN08A 03OCT08A
S&C, LS-2 Central/Encanto Sta Cons
SC_2005 96* 30JUN08A 03OCT08A
S&C, LS-2 Central/Osborn Sta Cons
LS-3
SC_3300 847* 06APR06A 13JUN08A
S&C, LS- 3 McKinley Sig Bldg #3 Cons
SC_3303 28 01JUN07A 05MAR08A
S&C, LS- 3 VanBuren/Central Station Cons
SC_3304 21 01JUN07A 01JUL08A
S&C, LS- 3 Washington/Central Station Cons
SC_3321 24 01JUN07A 01JUL08A
S&C, LS- 3 Van Buren/1st St Station Cons
SC_3301 385* 11JUN07A 30JUN08A
S&C, Work At Stations LS-3
SC_3305 21 18JUN07A 01JUL08A
S&C, LS- 3 Jefferson/1st Ave Station Cons
SC_3307 21 20JUN07A 01JUL08A
S&C, LS- 3 Jefferson/3rd St Station Cons
SC_3311 24 06AUG07A 01JUL08A
S&C, LS- 3 Washington/24th St Station Cons
SC_3306 21 10AUG07A 01JUL08A
S&C, LS- 3 Washington/3rd St Station Cons
SC_3312 24 21AUG07A 05MAR08A
S&C, LS- 3 Jefferson/24th St Station Cons
SC_3308 24 12JAN08A 01JUL08A
S&C, LS- 3 Washington/12th St Station Cons
SC_3309 24 01FEB08A 01JUL08A
S&C, LS- 3 Roosevelt/Central Station Cons
SC_3310 24 01FEB08A 01JUL08A
S&C, LS- 3 Jefferson/12th St Station Cons
SC_3322 21 03APR08A 01JUL08A
S&C, LS- 3 McDowell/Central Station Cons
LS-4
SC_4100 100 01MAR07A 19MAY07A
S&C, LS-4 -TPSS#7 - 27th St x-ovr

Activity ID	Duration	Start	Finish
SC_4101	58	01MAR07A	05FEB08A
SC_4102	41	01NOV07A	29FEB08A
SC_4103	41	01NOV07A	29FEB08A
SC_4104	41	01NOV07A	29FEB08A
SC_4120	177	15NOV07A	01JUL08A
LS-5			
SC_5001	595*	16MAR06A	28OCT07A
SC_5004	45	01FEB07A	15MAR07A
SC_5009	48	28NOV07A	05MAR08A
SC_5010	63	28NOV07A	05MAR08A
SC_5005	152	16DEC07A	04JUN08A
SC_5016	25	15MAR08A	30JUN08A
SC_5012	30	21MAR08A	30JUN08A
SC_5006	30	16APR08A	30JUN08A
SC_5014	25	16APR08A	30JUN08A
SC_5007	30	18APR08A	30JUN08A
Operations & Maintenance Center			
SC_M003	476*	10JAN06A	30MAY07A
SC_M002	0*	01MAY07A	30APR07A
Automated Fare Collection			
Contract Summary			
FC_001	981*	10APR06A	15DEC08
FC_013	0		15DEC08

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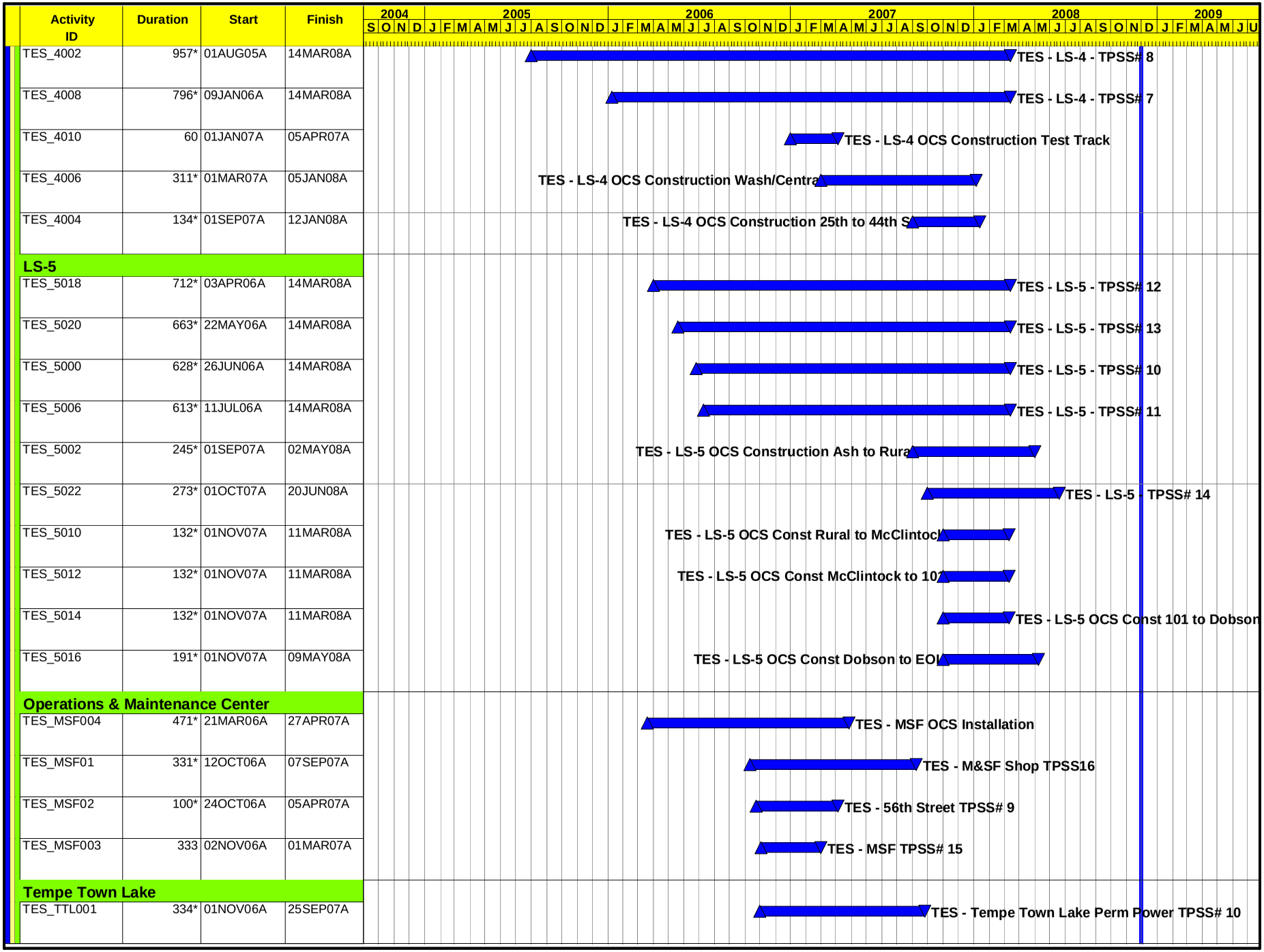
Traction Electrification
Contract Summary
TES_001 1,435* 11JAN05A 15DEC08
TES - Contract
TESM10A_2 0 14MAR08A
TES Milestone 10A - Compl TES Work Area
TESM10B_2 0 30JUN08A
TES New Milestone 10B - Compl TES Work Area
TESM10C_2 0 15DEC08
TES Milestone 10C - Compl TES Work Area
TES_999 0 15DEC08
TES Milestone 10 - Complete TES Work
LS-1
TES_1000 1,170* 05AUG05A 31OCT08A
TES - LS-1 Montebe
TES_1002 992* 30JAN06A 31OCT08A
TES - LS-1 - 17th Ave TPSS# 2
TES_1090 222* 23APR08A 30NOV08A
TES/S&C - LS-1 - Construction
Camelback to Bethany Home to 19th
TES_1010 215* 30APR08A 30NOV08A
TES - LS-1 - OCS Construction
Central/Camelback to 19th Ave
LS-2
TES_2002 799* 02AUG06A 31OCT08A
TES - LS-2 Indian School TPSS#3
TES_2000 773* 28AUG06A 31OCT08A
TES - LS-2 Catalina TPSS#4
TES_2020 168* 01APR08A 15SEP08A
TES - LS-2 -OCS Construction
LS-3
TES_2004 758* 16FEB06A 14MAR08A
TES - LS-3 - TPSS# 6
TES_2006 732* 14MAR06A 14MAR08A
TES - LS-3 -Roosevelt TPSS# 5
TES_3004 384* 12JUN07A 11JUN08A
TES - LS-3 OCS Construction 3rd to Roosevel
TES_3000 181* 01JAN08A 12JUN08A
TES - LS-3 OCS Construction 16th to 26th S
TES_3002 181* 01JAN08A 13JUN08A
TES - LS-3 OCS Construction 7th to 16th S
LS-4
TES_4000 720 11JUL05A 12MAR07A
TES - LS-4 - TPSS# 9


Activity ID
Duration
Start
Finish
2004
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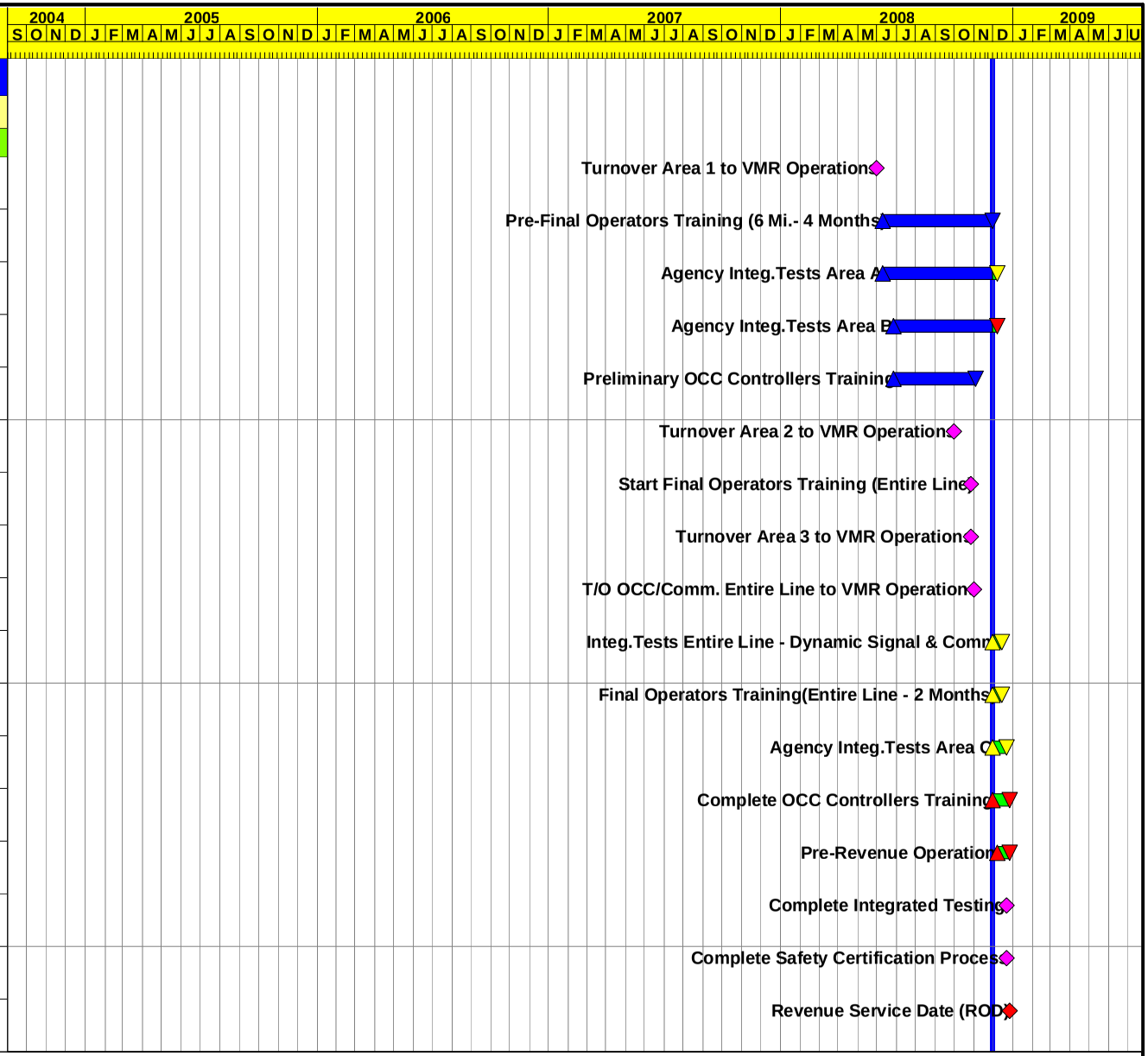
2006
2007
2008
2009
TES_4002 957* 01AUG05A 14MAR08A
TES - LS-4 - TPSS# 8
TES_4008 796* 09JAN06A 14MAR08A
TES - LS-4 - TPSS# 7
TES_4010 60 01JAN07A 05APR07A
TES - LS-4 OCS Construction Test Track
TES_4006 311* 01MAR07A 05JAN08A
TES - LS-4 OCS Construction Wash/Centra
TES_4004 134* 01SEP07A 12JAN08A
TES - LS-4 OCS Construction 25th to 44th S
LS-5
TES_5018 712* 03APR06A 14MAR08A
TES - LS-5 - TPSS# 12
TES_5020 663* 22MAY06A 14MAR08A
TES - LS-5 - TPSS# 13
TES_5000 628* 26JUN06A 14MAR08A
TES - LS-5 - TPSS# 10
TES_5006 613* 11JUL06A 14MAR08A
TES - LS-5 - TPSS# 11
TES_5002 245* 01SEP07A 02MAY08A
TES - LS-5 OCS Construction Ash to Rura
TES_5022 273* 01OCT07A 20JUN08A
TES - LS-5 - TPSS# 14
TES_5010 132* 01NOV07A 11MAR08A
TES - LS-5 OCS Const Rural to McClintock
TES_5012 132* 01NOV07A 11MAR08A
TES - LS-5 OCS Const McClintock to 101
TES_5014 132* 01NOV07A 11MAR08A
TES - LS-5 OCS Const 101 to Dobson
TES_5016 191* 01NOV07A 09MAY08A
TES - LS-5 OCS Const Dobson to EOL
Operations & Maintenance Center
TES_MSF004 471* 21MAR06A 27APR07A
TES - MSF OCS Installation
TES_MSF01 331* 12OCT06A 07SEP07A
TES - M&SF Shop TPSS16
TES_MSF02 100* 24OCT06A 05APR07A
TES - 56th Street TPSS# 9
TES_MSF003 333 02NOV06A 01MAR07A
TES - MSF TPSS# 15
Tempe Town Lake
TES_TTL001 334* 01NOV06A 25SEP07A
TES - Tempe Town Lake Perm Power TPSS# 10

Rail Activation Plan

Testing & Startup

Activity ID	Duration	Start	Finish
TURNOVER_2	0		30MAY08A
OPTTR2_2	175*	09JUN08A	30NOV08A
INTTESTA_2	182*	09JUN08A	07DEC08
INTTESTB_2	165*	26JUN08A	07DEC08
OPTTR5_2	60	27JUN08A	03NOV08A
TURNOVER_3	0		30SEP08A
OPTTR3_2	0	27OCT08A	
TURNOVER_4	0		27OCT08A
TURNOVER_5	0		31OCT08A
INTTESTD_2	15	01DEC08	15DEC08
OPTTR4_2	15	01DEC08	15DEC08
INTTESTC_2	20	01DEC08*	20DEC08
OPTTR6_2	26	01DEC08	26DEC08
PREREV_2	19	08DEC08	26DEC08
INTTESTC_C	0		20DEC08
SFTYCERT_2	0		20DEC08
PREREVC_2	0	27DEC08	



Acronyms

AASHTO	American Association of State Highway and Transportation Officials
AC	Alternating Current
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
ADOT	Arizona Department of Transportation
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
APM	Automatic People Mover
APPROX	Approximately
APS	Arizona Public Service
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASTM	American Society for Testing and Materials
ASU	Arizona State University
ATS	Automatic Train Stop
AT&T	American Telephone and Telegraph Company
AWG	American Wire Gauge
AWS	American Welding Society
BTU	British Thermal Unit
CAC	Construction Administration Consultant
CALCS	Calculations
CCTV	Closed Circuit Television
CFM	Cubic Feet Per Minute
CFS	Cubic Feet Per Second
CMU	Concrete Masonry Unit
CNPA	Concurrent Non-Project Activity
COE	US Corp of Engineers
COM	City of Mesa
COMM	Communications
COP	City of Phoenix
COT	City of Tempe
CPU	Central Processing Unit
CRSI	Concrete Reinforcing Steel Institute
CRT	Cathode Ray Tube
CTS	Carrier Transmission System
CWR	Continuous Welded Rail
CY	Cubic Yard
DBE	Disadvantaged Business Enterprise

DC	Direct Current
DSD	Development Services Department
DWG	Drawing(s)
EPA	Environmental Protection Agency
EST	Estimate, Estimated
FAA	Federal Aviation Administration
FAI	First Article Inspection
FHWA	Federal Highway Administration
FPS	Feet Per Second
FTA	Federal Transit Administration
GEC	General Engineering Consultant
HVAC	Heating, Ventilating, Air Conditioning
ICBO	International Conference of Building Officials
IEEE	Institute of Electrical and Electronic Engineers
IFB	Invitation For Bid
IPI	In Process Inspection
LAN	Local Area Network
LF	Linear Feet
LRT	Light Rail Transit
LRV	Light Rail Vehicle
LS	Line Section
MAG	Maricopa Association of Governments
MEC	Mass Electric Company
MISC	Miscellaneous
MOE	Maintenance of Equipment
MOW	Maintenance of Way
MPH	Miles Per Hour
OMC	Maintenance and Storage Facility
MUTCD	Manual on Uniform Traffic Control Devices
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
NFPA	National Fire Protection Association
NRHP	National Register of Historic Places
OCC	Operations Control Center
OCS	Overhead Contact System
O&M	Operations And Maintenance
OMC	Operations and Maintenance Center

OPS	Operations
PA	Public Address
PAN	Pantograph
PBAX	Telephone Private Exchange And Controls
PCI	Prestressed Concrete Institute
PSI	Pre Shipment Inspection
PED	Pedestrian
PMC	Program Management Consultant
PNR	Park-and-Ride
PSF	Pounds Per Square Foot
PSI	Pounds Per Square Inch
PTZ	Pan Tilt Zoom
QA	Quality Assurance
QC	Quality Control
RE	Resident Engineer
RFI	Request For Information
RI	Receiving Inspection
RPM	Revolutions Per Minute
ROW	Right-of-Way
RTU	Remote Terminal Unit
S&C	Signals and Communications
SCADA	Supervisory Control and Data Acquisition
SDI	Steel Deck Institute
SJI	Steel Joist Institute
SONET	Synchronous Optical Network
SPEC	Specification
SRP	Salt River Project
SSPC	Structural Steel Painting Council
SSW	Sundt/Stacy and Witbeck
SSWJV	Sundt/Stacy and Witbeck Joint Venture
SWG	Southwest Gas Corporation
TBD	To Be Determined
TCE	Temporary Construction Easement
TES	Traction Electrification System
TTLB	Tempe Town Lake Bridge
TPSS	Traction Power Substation
TTY	Text Teletype ADA Device
TVM	Ticket Vending Machine

TWC	Train to Wayside Communications
UBC	Uniform Building Code
UL	Underwriters Laboratories Incorporated
UPRR	Union Pacific Railroad
UPS	Uninterruptible Power System
VCR	Video Cassette Recorder
VETAG	Vehicle Tagging System
VMB	Variable Message Board
VMR	Valley Metro Rail
VMS	Vehicle Management System
WAN	Wide Area Network