

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

February 12, 2020

## Crenshaw/LAX Transit Project



- 8.5 miles Light Rail
- 8 Stations
- \$2,058.0 Million  
(Board approved revised LOP)

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Overview of trackwork progress issues for 01/30/2020 – 2/12/2020  
(Please note the attached Trackwork Progress Tracking Report)

Trackwork continues with punchlist and rework activities. Both DF and Ballasted Trackwork that was previously reported as 100% complete may yet require rework. The contractor is in the process of analyzing, planning, and executing the repair and rework required throughout the guideway limits. Remaining incomplete trackwork activities progress will be reported upon the execution of planned rework.

## **Current Issues:**

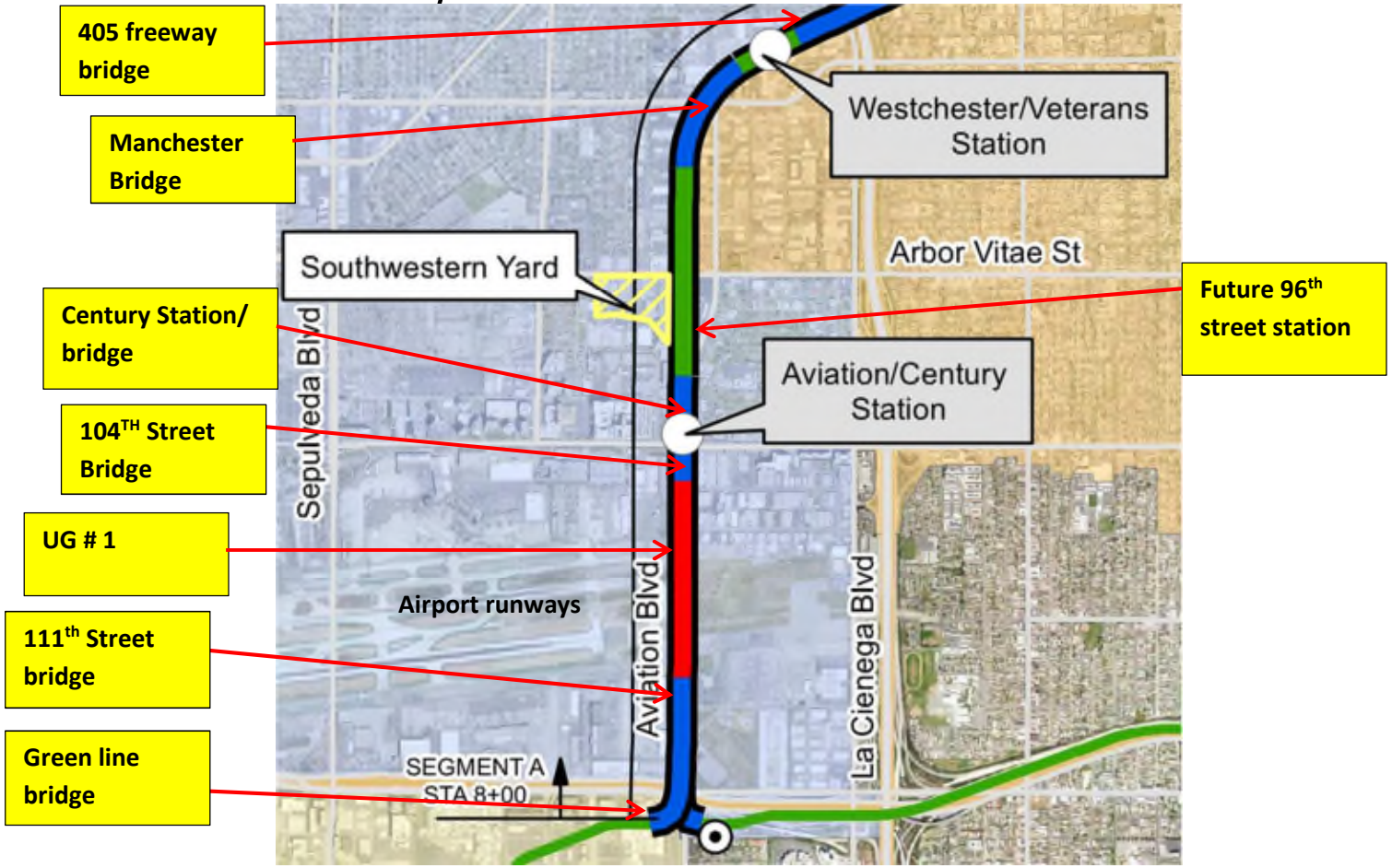
**General Note:** Some of the DF plinth ends have started to separate from the invert. There are from 450 to 1800 locations project wide that may need to be repaired. WSCC is in the process of preparing a test sample of a potential repair process for review.

## **GREEN LINE TIE-IN:**

- Rework is still required for guard rail which had been installed with not-per-plan OTM
- Rework is still required for several temporary Insulated Joints (IJs) from the Green Line Tie-in across the Imperial Bridge to Segment A Guideway STATION 13+00.
- Rework is still required for the inserts for the Movable Point Frog STA 13+99

## Segment A

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Florence/Hindry: – Sanding and prepping for paint at the Hindry Station.



Florence/Hindry: – WSCC labor measuring crossing warning device foundation for pull box on SB track Hindry Ped.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Manchester Bridge:** – Curb and gutter grading and setting forms on the south side of Manchester.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Manchester Bridge:** – Removal of the El Pollo Loco drive approach on Manchester.



**Manchester Bridge:** – Start of the concrete placement for the curb and gutter on Manchester.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Manchester Bridge: – Placing gutter concrete at Manchester.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Manchester Bridge: – Curb removal and grading at Manchester and Florence.



Manchester Bridge: – Setting anchor bolts for a light pole foundation on Manchester

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Manchester Bridge: – Sidewalk grading on Manchester.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Manchester Bridge: – Electrical pull box installation on the NE corner of Florence and Manchester.



UG - 1 – RESA testing facility - Wiring controls for testing UG1-MCC



UG - 1 – RESA testing facility - FAT for UG1-MCC



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Aviation/Century – Sidewalk demo on the south east corner of Manchester and Aviation.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Aviation/Century – Demo and rough grading at the Aviation Station plaza area.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Aviation/Century – Potholing to locate utilities on Aviation at 111th.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Aviation/Century** – Welding the Aviation Station deck supports for the eliminated Supervisor's booth.



**Aviation/Century** – Excavating for an electrical trench at the Aviation Station

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Aviation/Century – Excavating for an electrical trench at the Aviation Station

## **SEGMENT A:**

- Rework is needed for emergency walkway insert plates due to miss-alignment
- Disturbed ballast due to systems electrical conduit relocations continues to be repaired and re-dressed

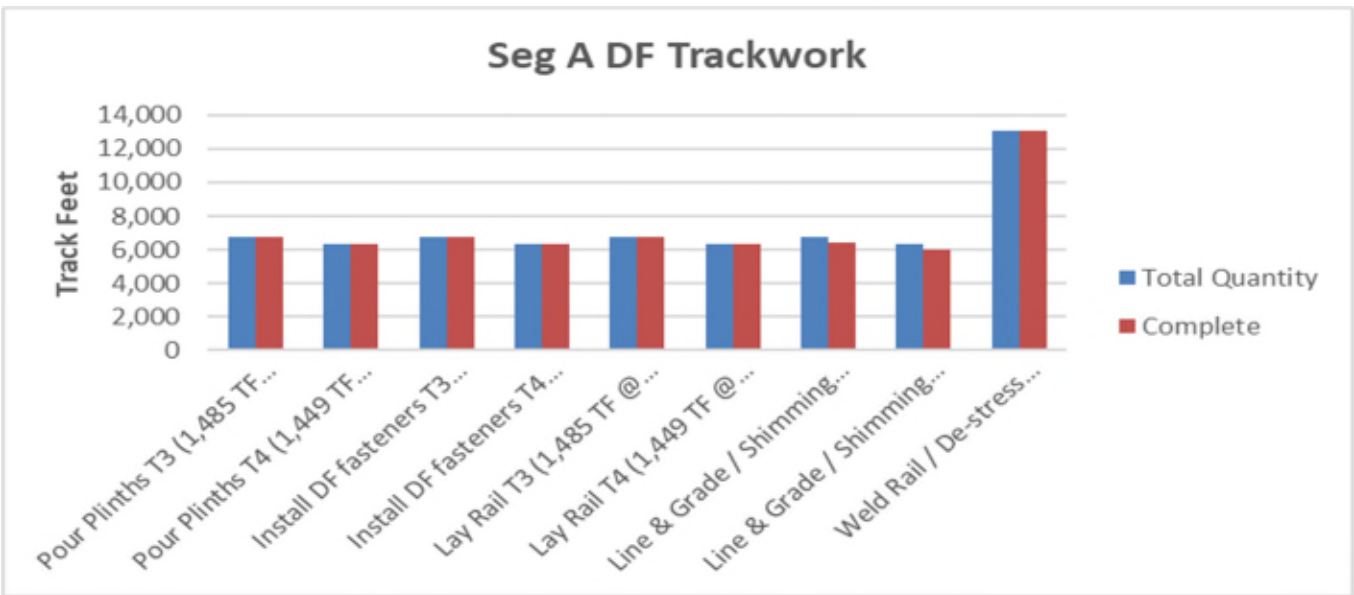
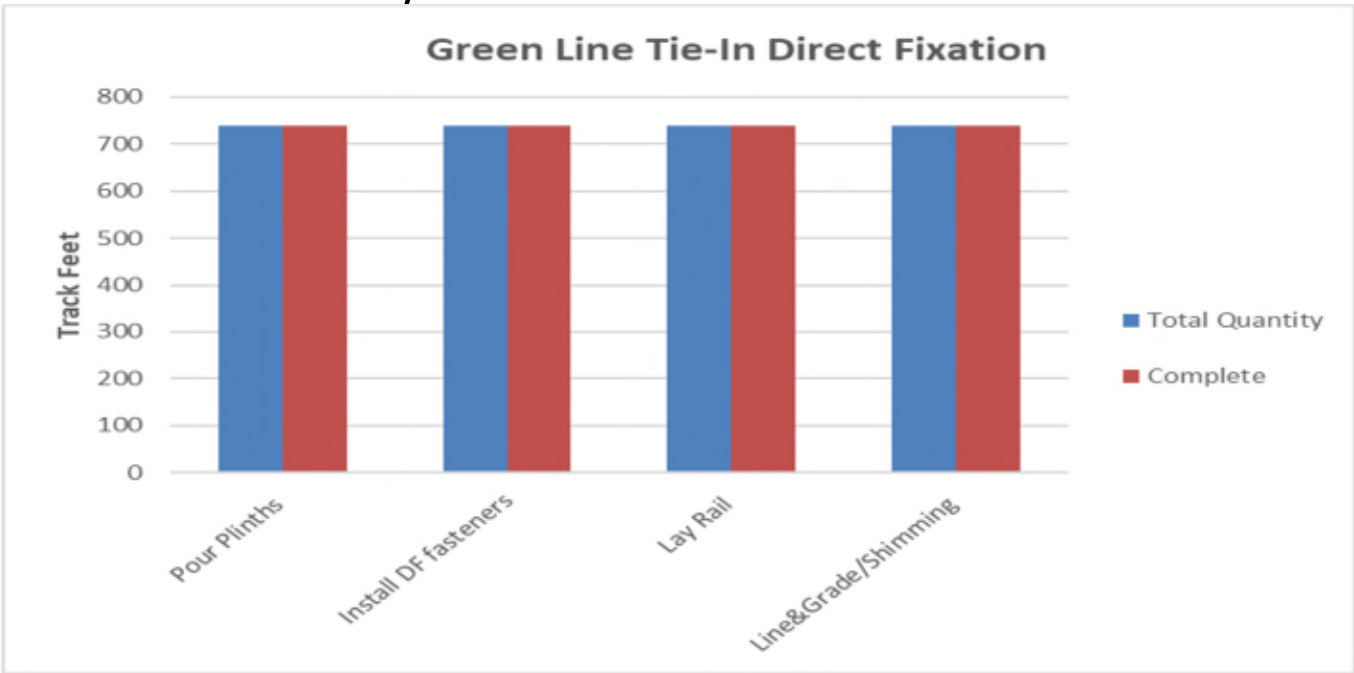
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

## PROJECT WIDE TRACKWORK PROGRESS

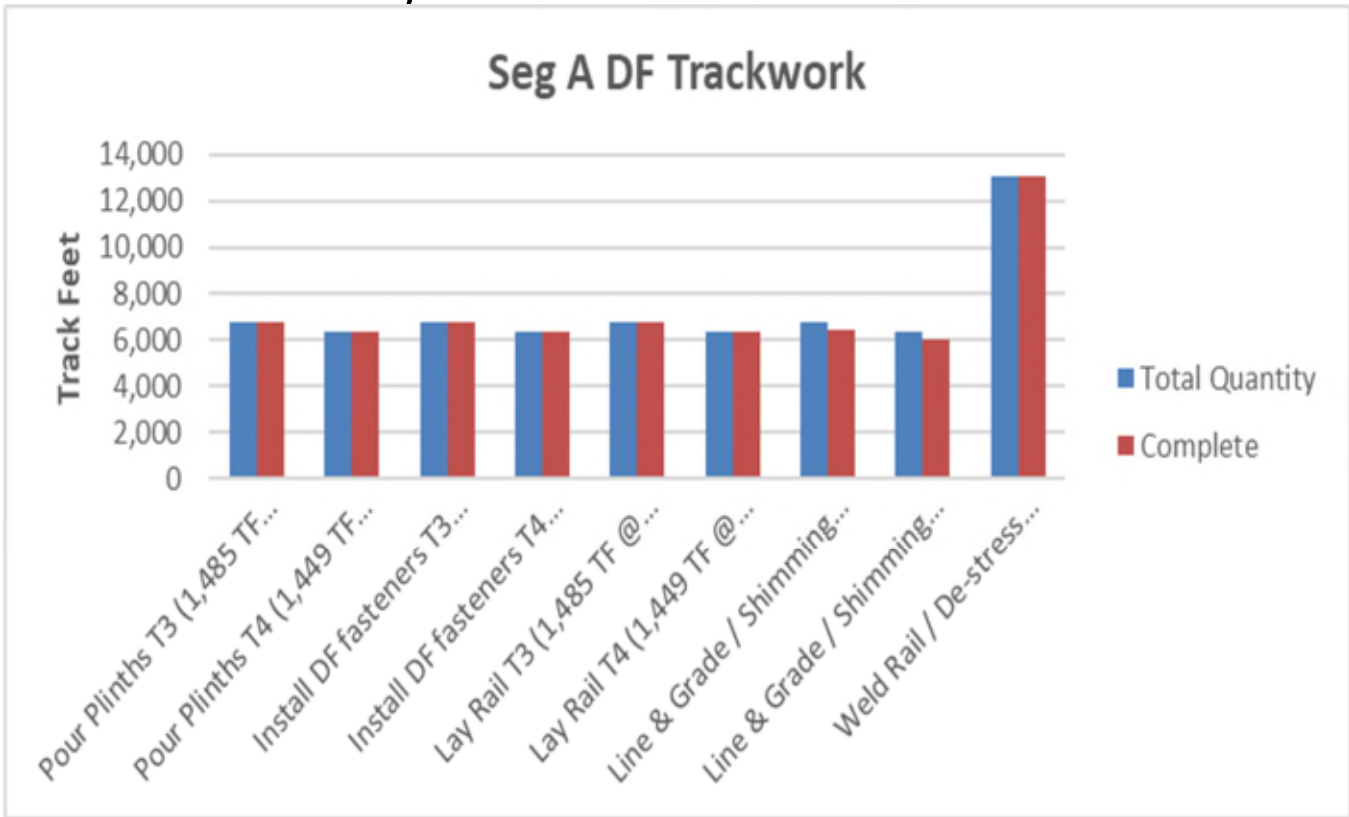
	TRACK TYPE	ACTIVITY	TRACK FEET/QUANTITY	INSTALLED TO DATE	REMAINING	ACTIVITY % PROGRESS	Potential Rework *	Punchlist ** (Complete/Incomplete)	
<b>GREENLINE TIE-IN</b>	<b>DIRECT FIXATION</b>	Pour Plinths	738	738	0	100.00%			
		Install DF fasteners	738	738	0	100.00%			
		Lay Rail	738	738	0	100.00%			
		Line&Grade/Shimming	738	738	0	100.00%			
		Weld Rail/ Destress							
		Emergency Walkway	4	4	0	100.00%		INC	
	Acceptance for turnover to subcontractors	yes/no	yes						
	<b>SPECIAL TRACKWORK</b>	DF Double Crossovers (Diamond XING 1 & 2)	2	2	0	100.00%			
		Line & Grade / Shimming	2	2	0	100.00%			
		DF Single Crossovers (A/F, B/E, C/F, D/E)	4	4	0	100.00%			
		Line & Grade / Shimming	4	4	0	100.00%			
		Thermite Welds	40	40	0	100.00%			
		Insulated Joints (IJ's)	28	28	0	100.00%	*		
	Acceptance for turnover to subcontractors	yes/no	yes						
<b>SEGMENT A</b>	<b>DF (13,089 TF include 395 TF of K1/K2 XO)</b>	Pour Plinths T3 (1,485 TF @ wye + 4,884 TF + 395 TF K1/K2 XO) (Insert rework continues)	6,763	6,763	0	100.00%	*		
		Pour Plinths T4 (1,449 TF @ wye + 4,877 TF) (Insert rework continues)	6,326	6,326	0	100.00%	*		
		Install DF fasteners T3 (1,485 TF @ wye + 4,884 TF + 395 TF K1/K2 XO)	6,763	6,763	0	100.00%	*		
		Install DF fasteners T4 (1,449 TF @ wye + 4,877 TF)	6,326	6,326	0	100.00%	*		
		Lay Rail T3 (1,485 TF @ wye + 4,884 TF + 395 TF K1/K2 XO)	6,763	6,763	0	100.00%			
		Lay Rail T4 (1,449 TF @ wye + 4,877 TF)	6,326	6,326	0	100.00%			
		Line & Grade / Shimming T3 (1,485 TF @ wye + 4,884 TF + 395 TF K1/K2 XO)	6,763	6,425	338	95.00%			
		Line & Grade / Shimming T4 (1,449 TF @ wye + 4,877 TF)	6,326	6,010	316	95.00%			
		Weld Rail / De-stress (Rework complete)	13,089	13089	0	100.00%	*		
		Emergency Walkway							
	Acceptance for turnover to subcontractors	yes/no	no						
	<b>BALLASTED TRACKWORK (20,551 TF including grade crossing, Yard Leads &amp; Tail Track)</b>	Install Bottom Ballast (T3+T4, and include SYL, NYL & Tail Track)	20,551	20,551	0	100.00%	*		
		Install ties, rail / clips, top ballast T3 (9,480 TF) + SYL (244 TF) + NYL (937 TF)	10,661	10,661	0	100.00%	*		
		Install ties, rail / clips, top ballast T4 (9,475 TF) + Tail Track (415 TF)	9,890	9,890	0	100.00%	*		
		Surface and line / Regulate T3 + SYL + NYL	10,661	10,661	0	100.00%	*	INC	
		Surface and line / Regulate T4 + Tail Track	9,890	9,890	0	100.00%	*	INC	
		Weld Rail / De-stress	20,550	20,550	0	100.00%	*	INC	
		Emergency Walkway	9,176	9,176	0	100.00%	*	INC	
	Acceptance for turnover to subcontractors	yes/no	no						
	<b>SPECIAL TRACKWORK</b>	Ballasted Double Crossover (G1/G2, H1/H2)	2	2	0	100.00%			
		DF Single Crossover (K1/K2)	2	2	0	100.00%	*		
		Line & Grade / Shimming	2	0	2				
		Ballasted Single Crossover (I1/IEQ, I2/IEQ, M1/M2, N1/N2)	4	4	0	100.00%			
		Install switches (A,B,C,D,E,F,G1,G2,H1,H2,I1,I2,IEQ,S,N1,N2,M1,M2 = 18)	18	18	0	100.00%			
		Thermite Welds	130	130	0	100.00%			
	Insulated Joints (IJ's)	74	74	0	100.00%	*			
	Acceptance for turnover to subcontractors	yes/no	no						
	<b>GRADE X-ING</b>	Construct Crossing (Arbor Vitae, Hindry)	2	2		100.00%			
	DF =	Direct Fixation							
	T3 =	Track 3							
T4 =	Track 4								
TF =	Track Feet								
*	Potential for rework based on recent guideway survey. Total impact of rework is unknown at this time.								
**	Punchlist Complete/Incomplete: Indicates the completion (COMP) or Incompletion (INC) of identified punchlist items								



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



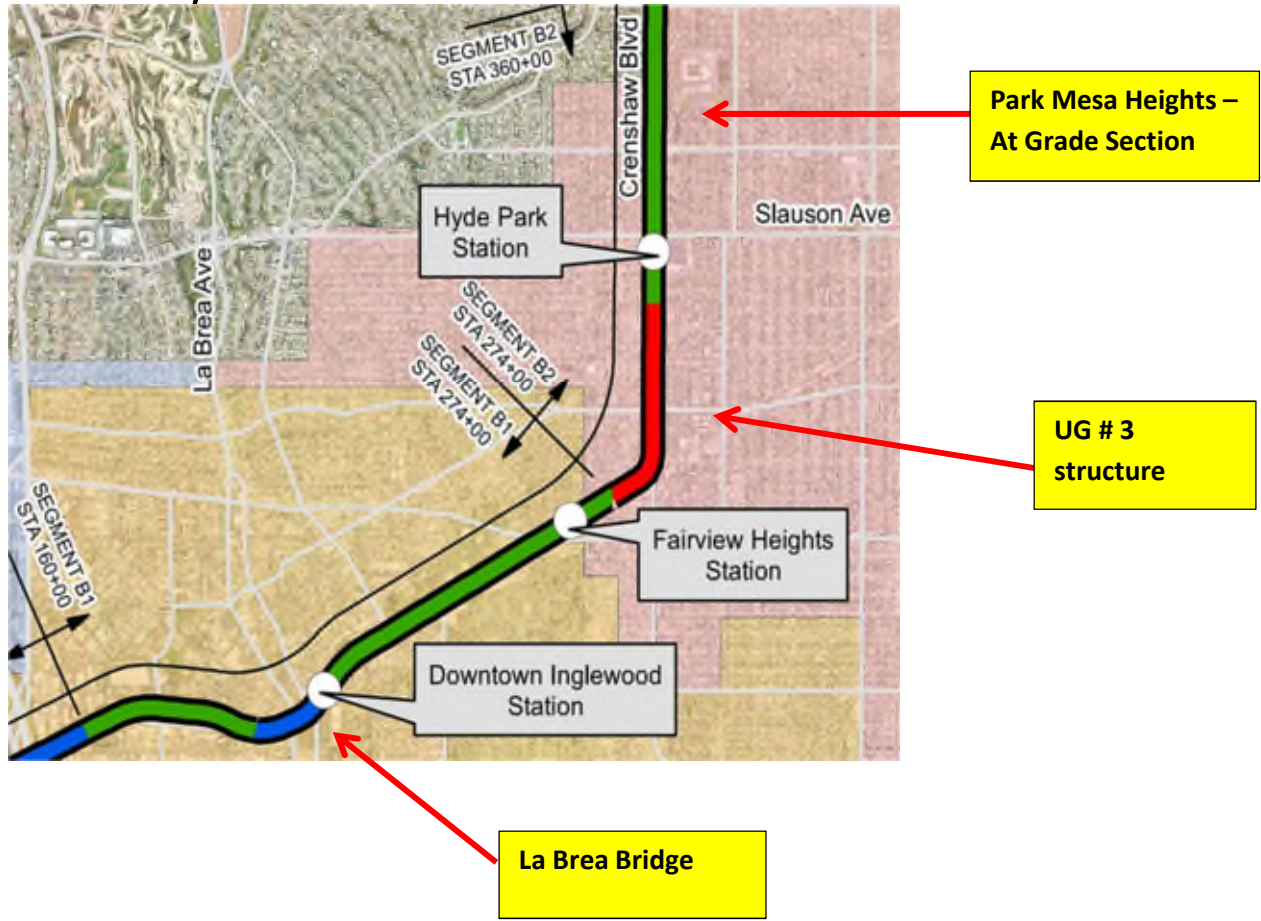
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



## Segment B



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Park Mesa – Backfilling and compacting for new concrete sidewalk placement on 60th St & Crenshaw Blvd. 1/24/20



Park Mesa – Began rebar installation and concrete placement of the Aux Power Site pad at TPSS#7 on 60th St & Crenshaw Blvd.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Park Mesa – Began stripping formwork of the Aux Power Site pad at TPSS#7 on 60th St & Crenshaw Blvd.



Park Mesa – Continue working on ground grid system around the Aux Power Site pad at TPSS#7 on 60th St & Crenshaw Blvd.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Park Mesa – Resumed LADWP main line tie-in on the intersection of 60th St & Crenshaw Blvd.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Park Mesa – Excavation of northbound sidewalk near the southeast corner of 60th St & Crenshaw Blvd. 1/21/20



Park Mesa – Form installation for new curb/gutter on the northeast corner of 60th St & Crenshaw Blvd. 1/21/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Park Mesa – Excavating northbound ballast wall for median embedded cobble installation on Crenshaw Blvd between 57th and 54th St. 1/27/20





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Park Mesa** – Began sidewalk excavation on the northeast corner of 48th St and Crenshaw Blvd. 1/20/20



**Park Mesa** – Continued moving northbound and extending sidewalk excavation from the northeast corner of 48th St and Crenshaw Blvd. 1/23/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Park Mesa – Began formwork for meter/utility boxes on Crenshaw Blvd between Brynhurst Ave to 48th St. 1/22/20





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Park Mesa** – Resume concrete placement of sidewalk on Crenshaw Blvd between Brynhurst Ave to 48th St. 1/23/20



**Hyde Park Station** – Excavation for new curb/gutter and ADA ramp on the southwest corner of 58th St & Crenshaw Blvd. 1/27/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Hyde Park Station** – Placing concrete for new curb/gutter, sidewalk and ADA ramp on the north and southwest corners of 58th St & Crenshaw Blvd. 2/1/20



**UG3** – Excavation for the southwest sidewalk curb of “New Road” at the intersection of Crenshaw Blvd. 1/23/20.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**UG3** – Building curb/gutter forms for southwest corner of “New Road” at the intersection of Crenshaw Blvd. 1/27/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Concrete placement of the eastbound sidewalk of “New Road.”





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 – Began formwork for new curb/gutter on the northbound sidewalk of North Victoria Ave. 1/20/20



UG3 – Continued excavation and compaction for new curb/gutter at North Victoria Ave. 1/24/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Continued excavation and compaction for new curb/gutter at North Victoria Ave.  
1/27/20





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 –Continued excavation and compaction for new curb/gutter at North Victoria Ave.  
1/27/20



UG3 – Installing 1” PVC inside trenches for site lighting around the auxiliary power site at Victoria Yard adjacent to the south end portal.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Jan 30, 2020 at 12:55:07 AM  
Los Angeles



UG3 – Delivering the sub-station bungalow for the auxiliary power site at Victoria Yard adjacent to the south end portal.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 – Placing the auxiliary power bungalow and generator on top of equipment pads at Victoria Yard adjacent to the south end portal.



UG3 – Resume welding fence posts and panels along the north and southbound track walls.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**UG3** – Continued new curb/gutter and ADA ramp installation on the northeast corner of 67th St and Crenshaw Blvd. 1/18/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Excavating for the installation of signal light conduits on the northeast corner of 67th St and Crenshaw Blvd. 1/23/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 – Began excavation for new curb/gutter and ADA ramp installation on the southeast corner of 67th St and Crenshaw Blvd. 1/24/20



UG3 – Excavation and removal of existing northbound curb/gutter and abandoned rail lines near the southeast corner of 67th St and Crenshaw Blvd. 1/21/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Continued excavation and removal of existing northbound curb/gutter and abandoned rail lines near the southeast corner of 67th St and Crenshaw Blvd. 1/22/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 – Continued excavation for new curb/gutter and ADA ramp installation and abandoned rail lines near the southeast corner of 67th St and Crenshaw Blvd. 1/23/20



UG3 – Excavating and removing existing rail lines and roadway along the northbound lane of 67th St and Crenshaw Blvd. 1/27/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Continued excavating and removing existing rail lines and roadway along the northbound lane of 67th St and Crenshaw Blvd. 1/28/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 – Continued excavating, backfilling and compacting to roadway grade on 67th St and Crenshaw Blvd. 1/29/20



UG3 – Continued excavating, backfilling and compacting to roadway grade on 67th St and Crenshaw Blvd. 1/30/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Continued backfilling and compacting to final roadway grade in preparation for concrete placement on 67th St and Crenshaw Blvd. 2/1/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

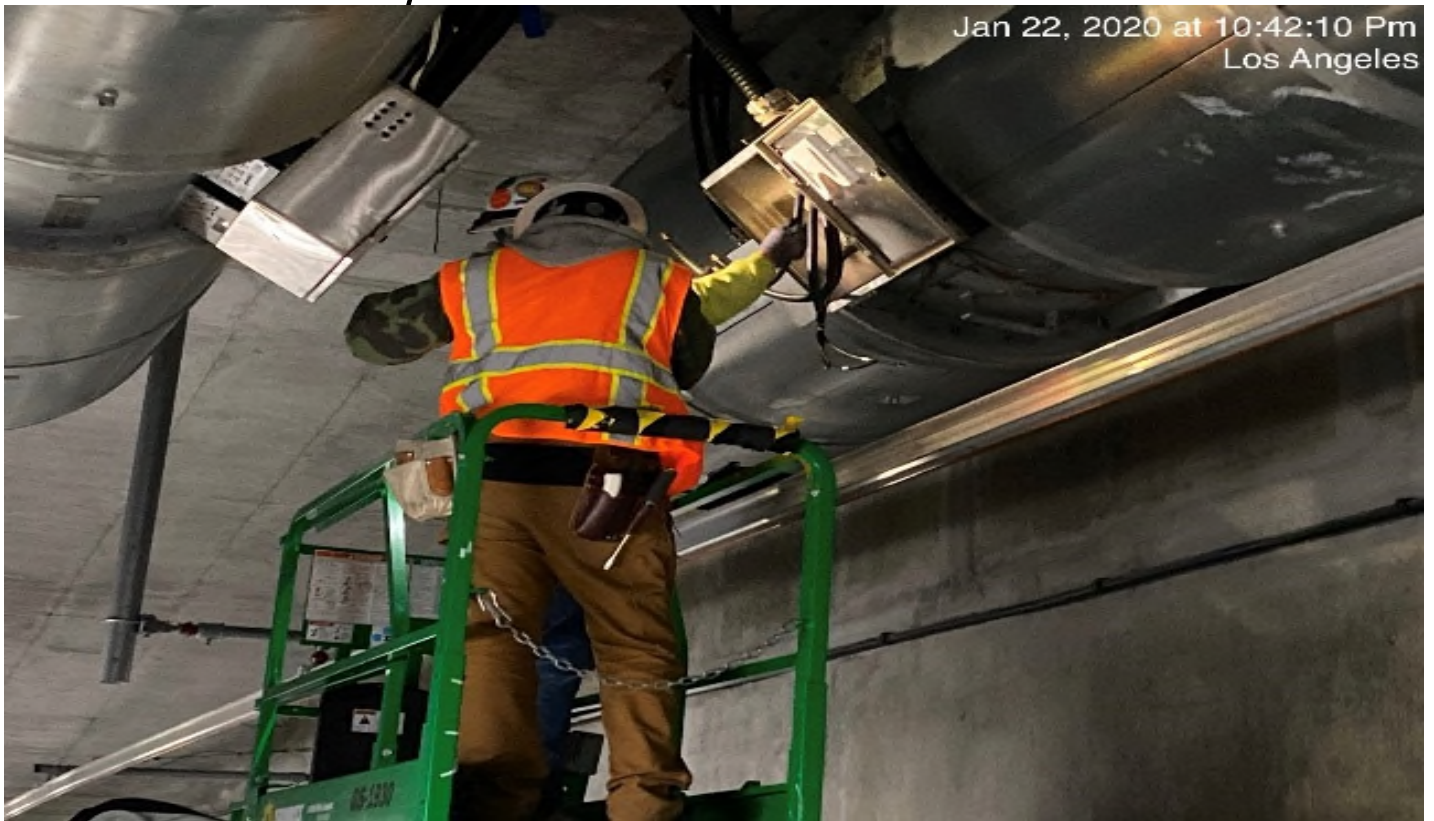
UG3 – Placing asphalt concrete on the intersection of 67th St and Crenshaw Blvd. 2/3/20



UG3 – Continue wiring and running cable for the booster fans at the southbound tunnel at Sta 300+00.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**UG3** – Continue wiring and running cable for the booster fans at the northbound tunnel at Sta 301+25

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Jan 24, 2020 at 9:53:26 PM  
Los Angeles



UG3 – Continue wiring and running cable for the booster fans at the northbound tunnel at Sta 307+25.

Jan 31, 2020 at 10:21:19 PM  
Los Angeles





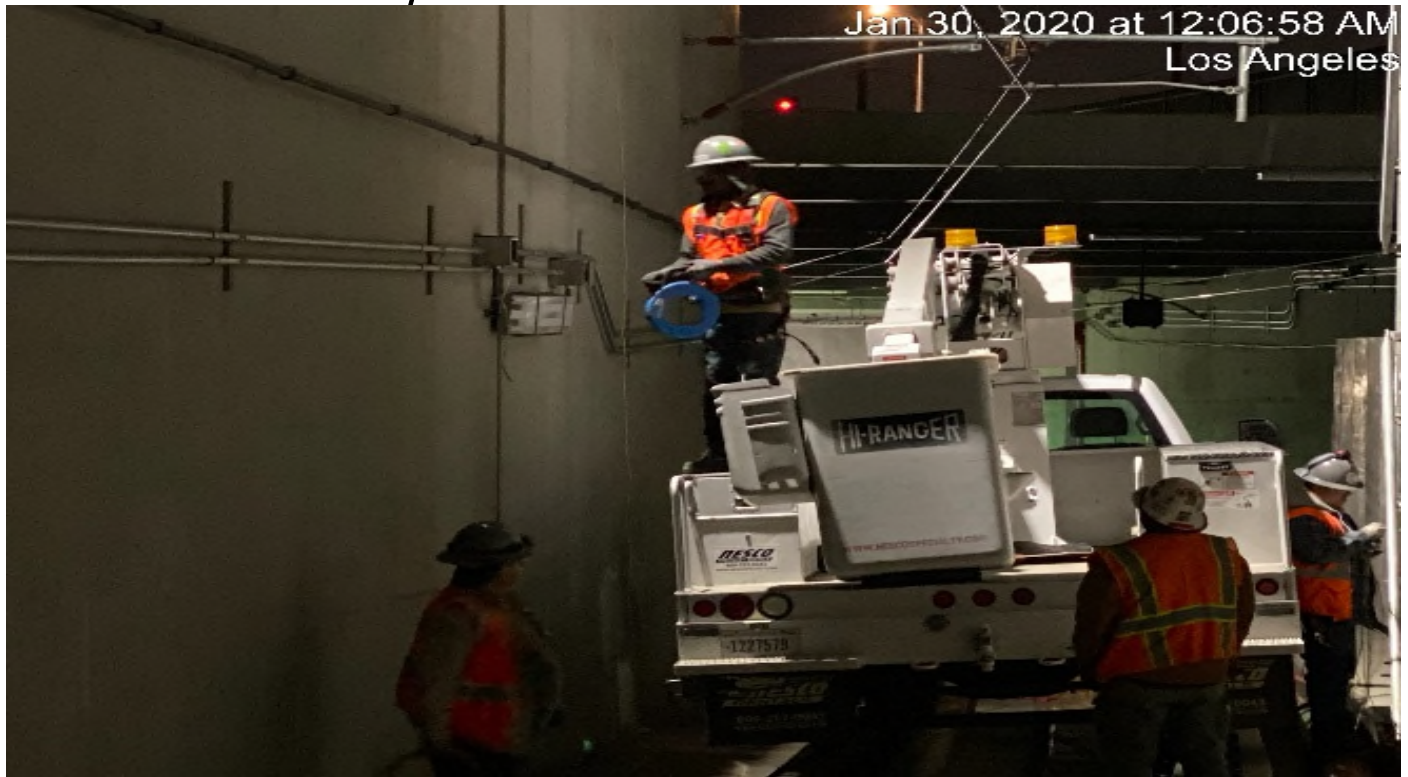
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 – Continue wiring and running cable for the last booster fans located at the 4th Niche of the northbound tunnel.



UG3 – Pulling wire for the emergency lighting at the south end portal entrance.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Continue pulling wire for the emergency lighting at the south end portal entrance.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG3 – Continue pulling wire for the emergency lighting at the south end portal entrance.



UG3 – Regulating OCR balance points at the north end portal at Sta 373+20.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Crenshaw/Slauson – STA318+00\_ Looking North\_ Wood blocks set along Slauson Station Platform.



Crenshaw/Slauson – STA318+00\_ Looking North\_ Wood blocks set along Slauson Station Platform.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Florence/West – STA262+75\_ Track structure disturbed to set Xing foundation between tracks\_ West.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Florence/West – STA262+75\_ Track structure disturbed to set Xing foundation between tracks\_ Detail\_ West.



Florence/West – STA262+75\_ Looking South\_ Between tracks track ballast disturbance for landing pad construction investigation\_ West.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Florence/West – STA262+74\_ Looking South\_ Track ballast removal 4 pedestrian landing pad\_ West.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Florence/Brea – STA220+50\_ Looking North\_ left shoulder track ballast disturbed around SD CO\_ La Brea.



Florence/Brea – La Brea MSE wall STA 207+00 SB #3 track open ballast trench.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Florence/Brea – STA211+30\_ Looking North\_ Track structure disturbed\_ PUNCH LIST\_ La Brea.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Florence/Brea – STA207+60\_ Looking North\_ Unsuitable rock AC & dirt spilled over track ballast\_ La Brea



Florence/Brea – STA211+55\_ Right shoulder CIDH set light foundation\_ La Brea north



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Florence/Brea – STA211+20\_ Looking South\_ Dirt spill over track ballast\_ PUNCH LIST\_ La Brea.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Florence/Brea – STA218+06\_ Looking North\_ Dirt spill over track ballast\_ PUNCH LIST\_ La Brea



Florence/Brea – STA213+50\_ Looking South\_ Track geometry check\_ La Brea.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Florence/Brea** – WSCC calibration wrench set for 300 FT.LBS prior to verifying DF fastener bolts on LA Brea bridge



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Florence/Brea – Metro WW inspectors witnessing torque procedure on NB #4 track at La Brea bridge STA 201+80.



Florence/Brea – Metro WW inspectors & WSCC QC inspector performing, inspection on NB track at La Brea bridge.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Florence/Brea – STA225+25\_ Looking South\_ Alignment view\_ Centinela\_ La Brea.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Florence/Brea – WSCC carpenters assembling temp. scaffolding on La Brea MSE wall for investigation work on spoils STA 204+50



Florence/Brea – False work timbers on site for temp. crossing on La Brea MSE wall for drill rig.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Florence/Brea – WSCC carpenters on La Brea MSE wall, preparing temp. crossings for drill rig.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Florence/Brea – WSCC QC & Metro QC personal holding field meeting for investigation work to be performed on La Brea OP.

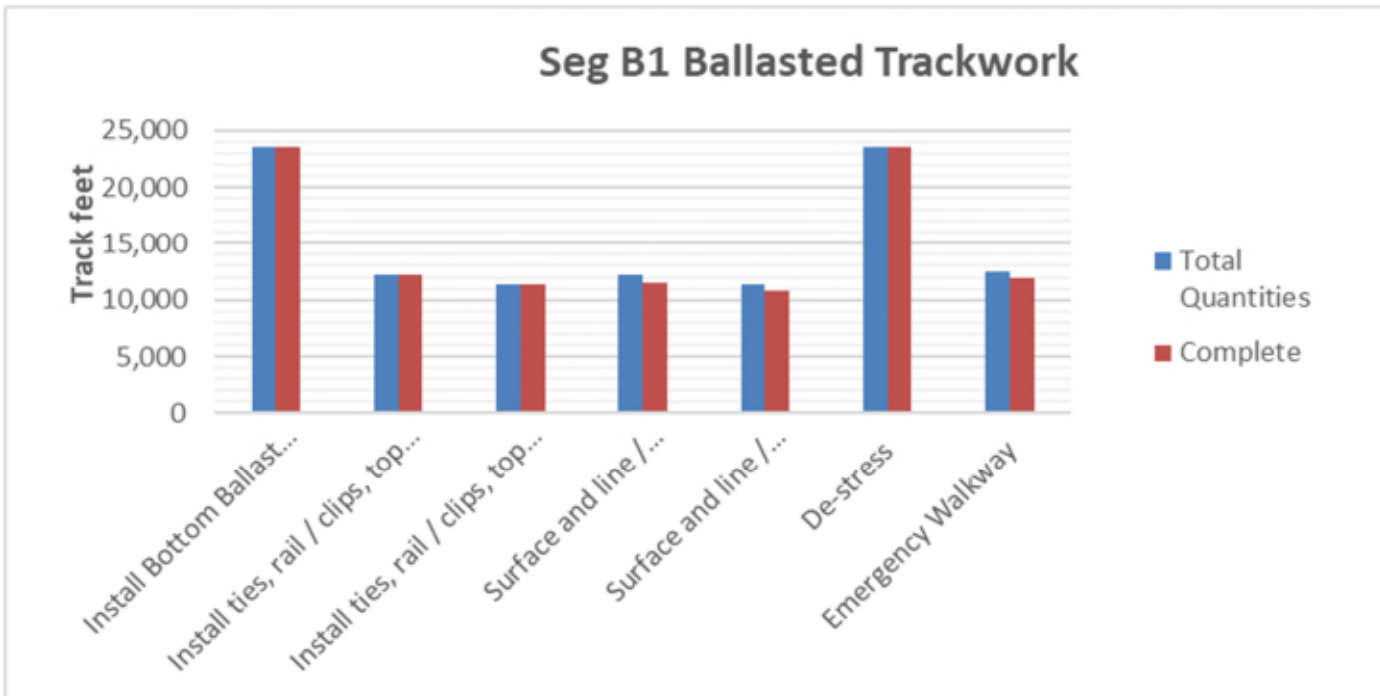
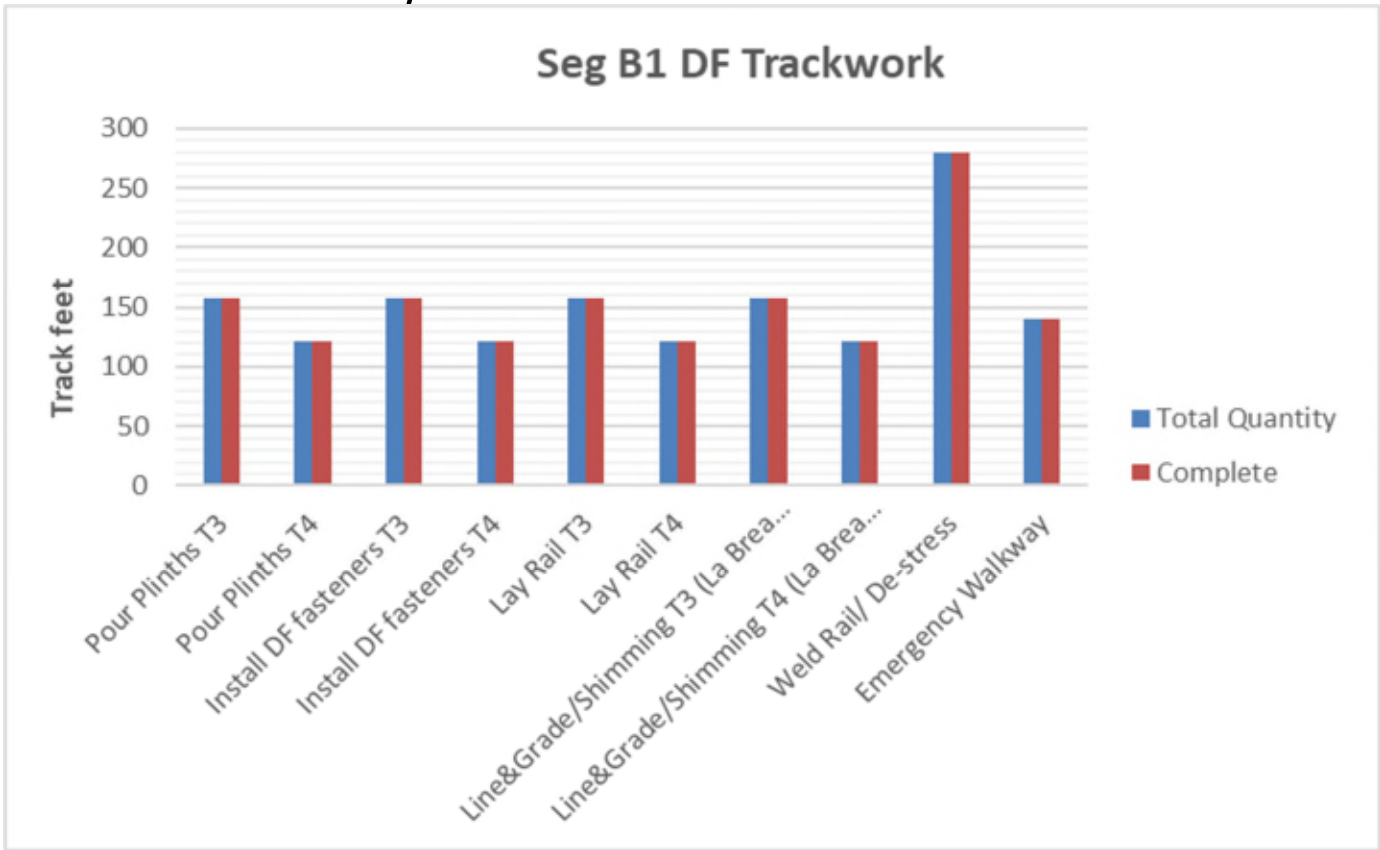
## SEGMENT B1:

- Disturbed ballast due to systems electrical conduit relocations continues to be repaired and re-dressed

PROJECT WIDE TRACKWORK PROGRESS								
	TRACK TYPE	ACTIVITY	TRACK FEET/QUANTITY	INSTALLED TO DATE	REMAINING	ACTIVITY % PROGRESS	Potential Rework*	Punchlist** (Complete/Incomplete)
<b>SEGMENT B1</b>	<b>DF (279 TF)</b>	Pour Plinths T3	158	158	0	100.00%		
		Pour Plinths T4	121	121	0	100.00%		
		Install DF fasteners T3	158	158	0	100.00%	*	INC
		Install DF fasteners T4	121	121	0	100.00%	*	INC
		Lay Rail T3	158	158	0	100.00%		
		Lay Rail T4	121	121	0	100.00%		
		Line&Grade/Shimming T3 (La Brea Bridge)	158	158	0	100.00%		
		Line&Grade/Shimming T4 (La Brea Bridge)	121	121	0	100.00%		
		Weld Rail/ De-stress	279	279	0	100.00%		
		Emergency Walkway	140	140	0	100.00%		
	Acceptance for turnover to subcontractors	yes/no	no					
	<b>BALLASTED TRACKWORK (23,506 TF including grade crossings and Siding track)</b>	Install Bottom Ballast (T3+T4 and Siding)	23,506	23,506	0	100.00%	*	INC
		Install ties, rail / clips, top ballast T3 + Siding	12,184	12,184	0	100.00%	*	INC
		Install ties, rail / clips, top ballast T4	11,322	11,322	0	100.00%	*	INC
		Surface and line / Regulate T3 + Siding	12,184	11,575	609	95.00%		
		Surface and line / Regulate T4	11,322	10,756	566	95.00%		
		De-stress	23,506	23,506	0	100.00%		
		Emergency Walkway	12,506	12,000	506	95.95%	*	INC
	Acceptance for turnover to subcontractors	yes/no	yes			N/A		
	<b>SPECIAL TRACKWORK</b>	Ballasted Single Crossover (O1/O2, P1/P2, Q1/Q2, T1/T2)	4	4	0	100.00%		
		Install switches (M, O1, O2, P1, P2, Q1, Q2, R, T1, T2 = 10)	10	10	0	100.00%		
		Thermite Welds	104	104	0	100.00%	*	
		Insulated Joints (IJ's)	43	43	0	100.00%	*	
		Acceptance for turnover to subcontractors	yes/no	No				
	<b>GRADE X-ING</b>	Construct Crossing (Oak/Cedar/Eucalyptus/Ivy/Continela, High (50%), West, Brynhurst)	8	8		100.00%		
	DF =	Direct Fixation						
	T3 =	Track 3						
T4 =	Track 4							
TF =	Track Feet							
*	Potential for rework based on recent guideway survey. Total impact of rework is unknown at this time.							
**	Punchlist Complete/Incomplete: Indicates the completion (COMP) or Incompletion (INC) of identified punchlist items							



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

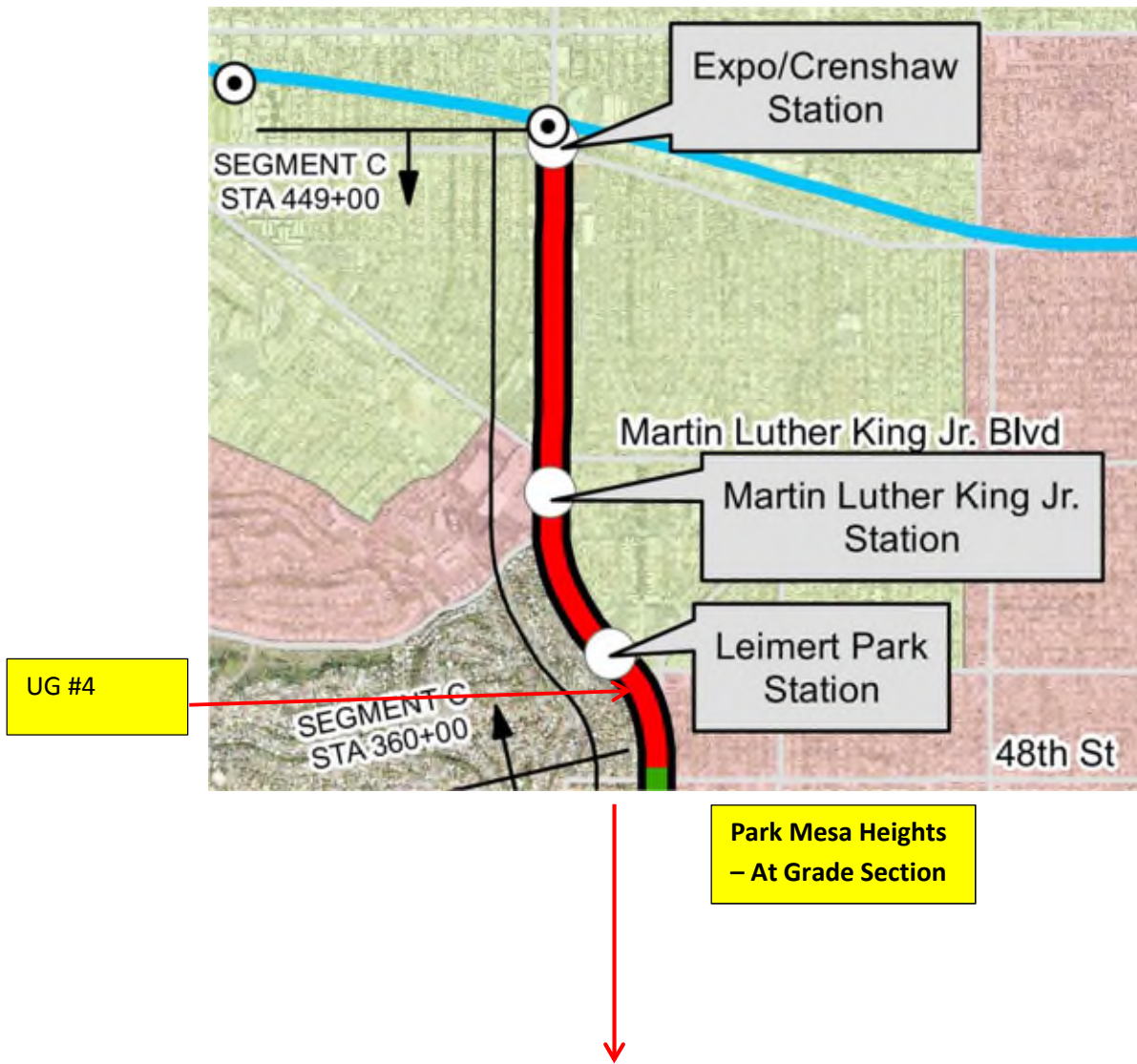


## **SEGMENT B2:**

- Disturbed ballast due to systems electrical conduit relocations continues to be repaired and re-dressed

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

## Segment C





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Expo Station** - Sac and patching inside the barrel of Manhole#18 on the southwest corner of Rodeo Blvd and Crenshaw Blvd.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Expo Station** - Applying slurry encasement over 24" RCP for Line U – storm drain on the northwest corner of Rodeo Blvd and Crenshaw Blvd. 1/20/20



**Expo Station** - Prepping for AC placement and paving of completed 24" RCP for Line U – storm drain on the northwest corner of Rodeo Blvd and Crenshaw Blvd.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Expo Station** - Excavating and shoring for Line W – storm drain near the northwest corner of Rodeo Blvd and Crenshaw Blvd.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Expo Station** - Continued excavating and prepping to install the 24" RCP for Line W – storm drain on the northwest corner of Rodeo Blvd and Crenshaw Blvd.



**Expo Station** - Excavating for station light pole base on the northeast corner of the plaza adjacent to the Metro Exposition Line.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Expo Station** - Applying second coat of paint to the wind screen curbs and preparing to prime the main entrance canopy at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Expo Station** - Continue excavating for drainage adjacent to structural Elevators 1&2 at the plaza level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Expo Station** - Began laying out HDPE pipe and connecting inlets for the under drainage system on the west side of the plaza level.

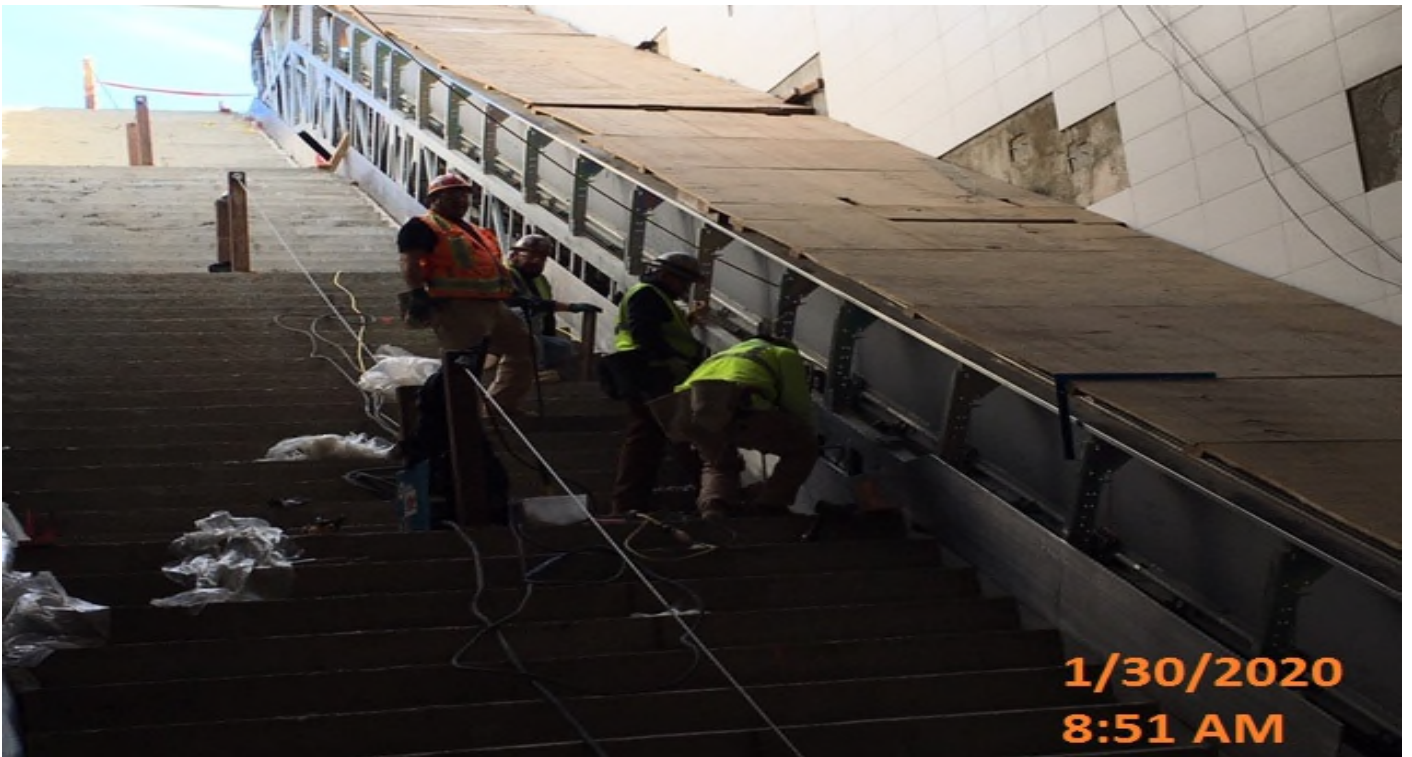


**Expo Station** - Continue laying out HDPE pipe and connecting inlets for the under drainage system on the west side of the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Expo Station** - Setting and installing edge plates for Escalator 1&2 at the main staircase landing of the plaza level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Expo Station** - Continued installing edge plates for Escalator 1&2 at the main staircase landing of the plaza level.

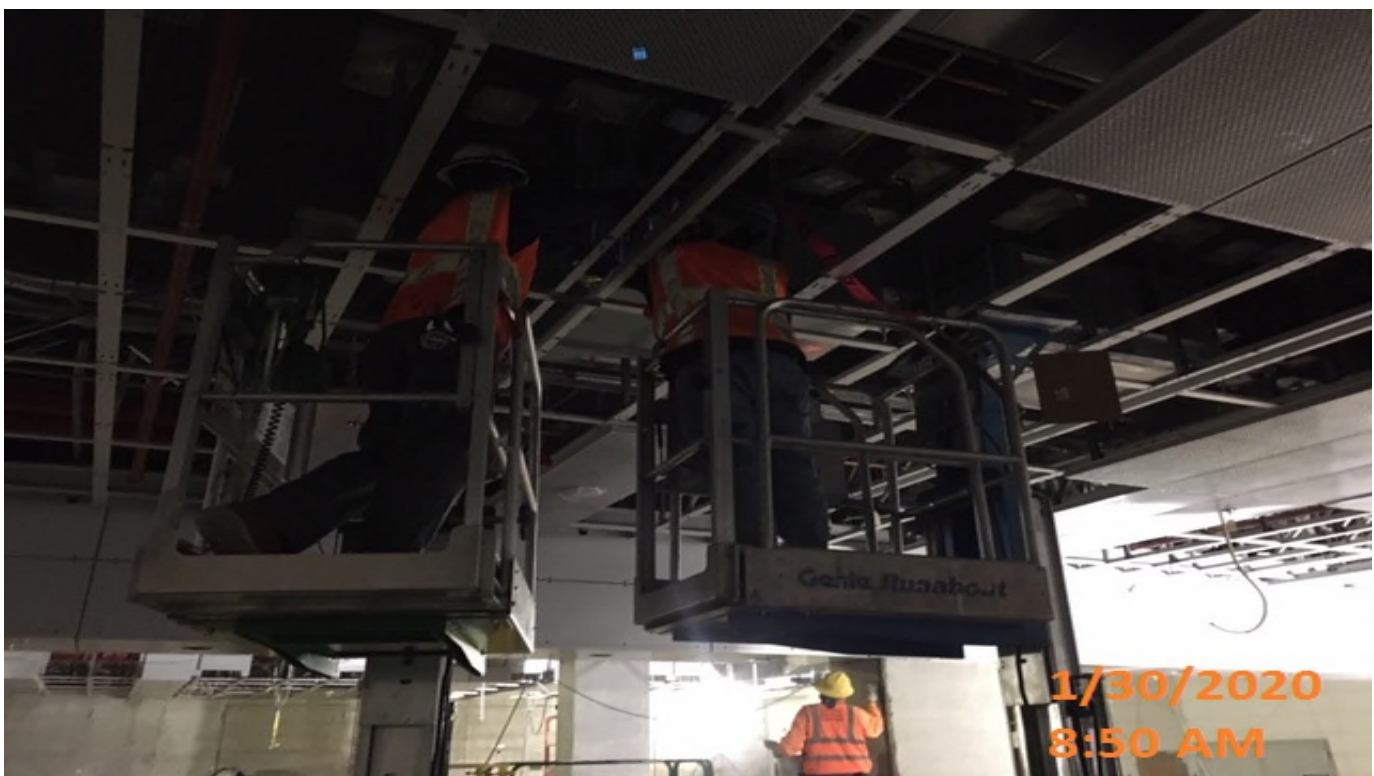


**Expo Station** - Continue painting interior door jamb/hinge connections at the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Expo Station -** Hosting AC units into the ceiling of the Free Area C – 133 at the concourse level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Expo Station** - Installing refrigerant lines for the AC units in the Free Area C – 133 of the concourse level.



**Expo Station** - Began bolting flex connection for both EVF-8-151 and 8-351 in the South Fan Room C – 104 of the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



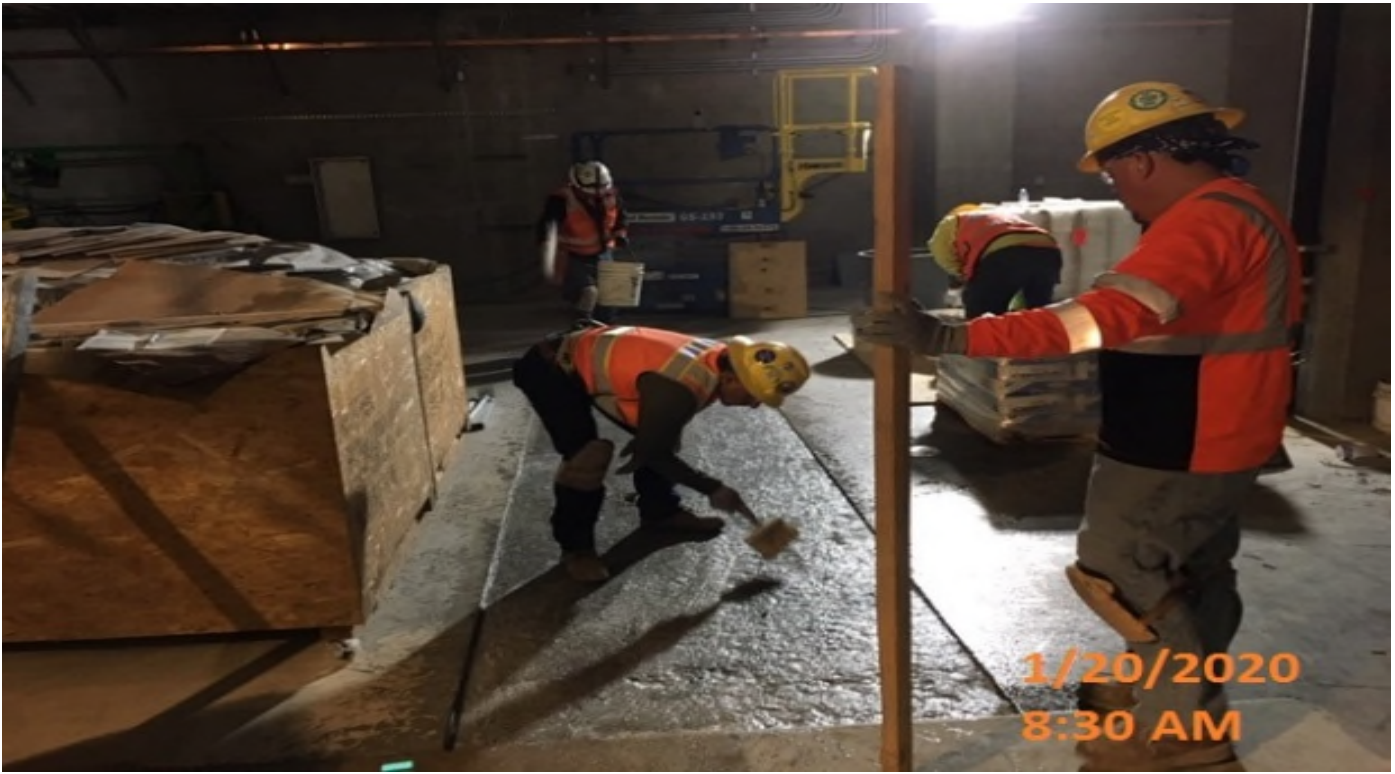
Expo Station - Installation of laminated cladding frame for the metal panels beneath staircase 1&2 and escalator 3&4 at the platform level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Expo Station** - Continue installation of laminated cladding frame for the metal panels beneath staircase 1&2 and escalator 3&4 at the platform level.



**Expo Station** - Continue expanding and applying concrete bonder to the dielectric pad in the TPSS Room T – 115 at the invert level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK Station - Grading gutter in preparation for paving from Sta 129+50 – 130+05 at the plaza level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**MLK Station** - Excavation and removal of abandoned 10" oil pipe located on the southwest corner of Martin Luther King Blvd and Crenshaw Blvd.



**MLK Station** - Continued excavation and removal of abandoned 10" oil pipe located on the southwest corner of Martin Luther King Blvd and Crenshaw Blvd.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK Station** - Capping and removing abandoned 10" oil pipe located on the southwest corner of Martin Luther King Blvd and Crenshaw Blvd.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**MLK Station** - Patching inside of 18" RCP pipe that was tied into with 33" RCP Line G – storm drain at the plaza level.



**MLK Station** - Building formwork for Catch Basin #3 to connect with 33" RCP Line G – storm drain at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



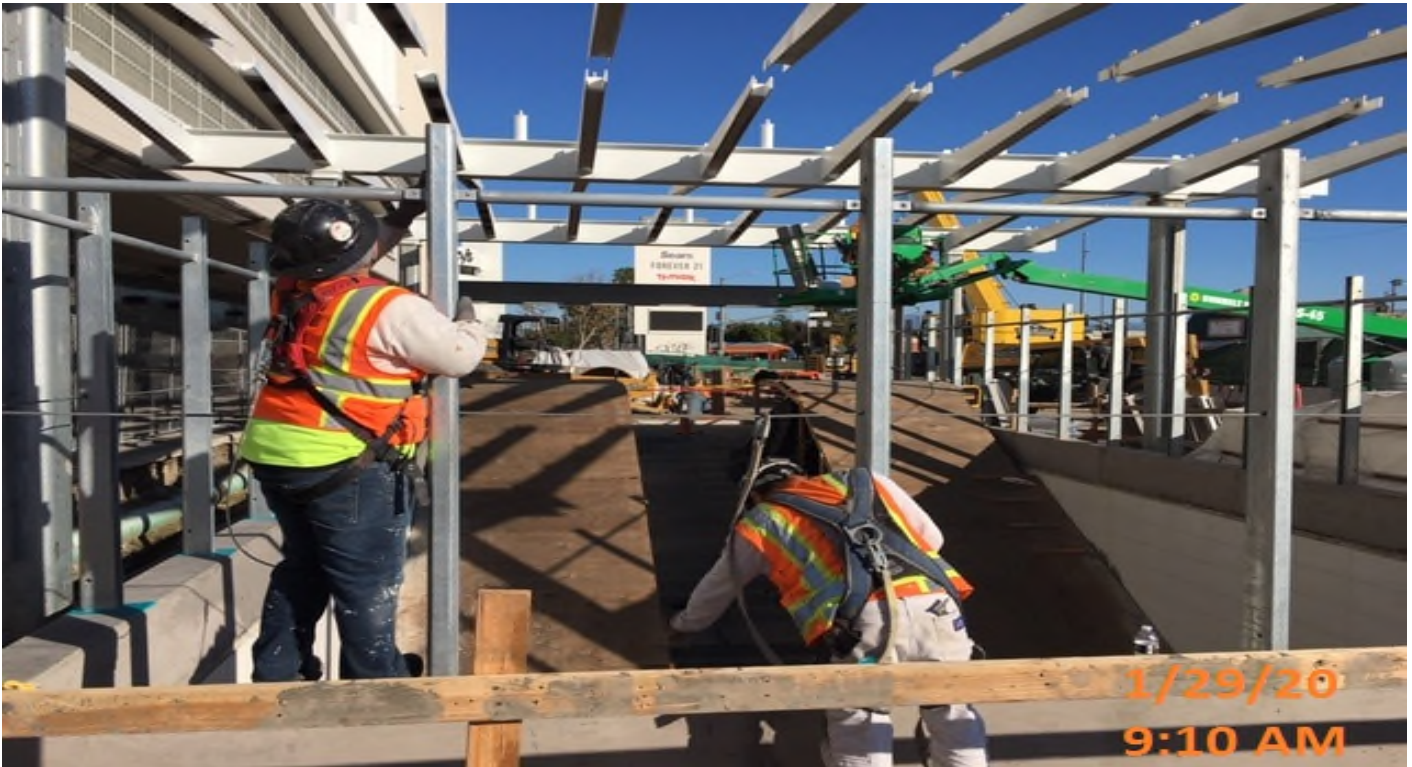
MLK Station - Concrete placement of the wind screen curbs on the main entrance canopy at the plaza level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**MLK Station** - Removing and stripping formwork from the wind screen curbs on the main entrance canopy at the plaza level.



**MLK Station** - Preparing to prime the wind screen curbs around the main entrance canopy at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK Station - Continued installing edge plates for Escalator 1&2 at the main staircase landing of the plaza level.





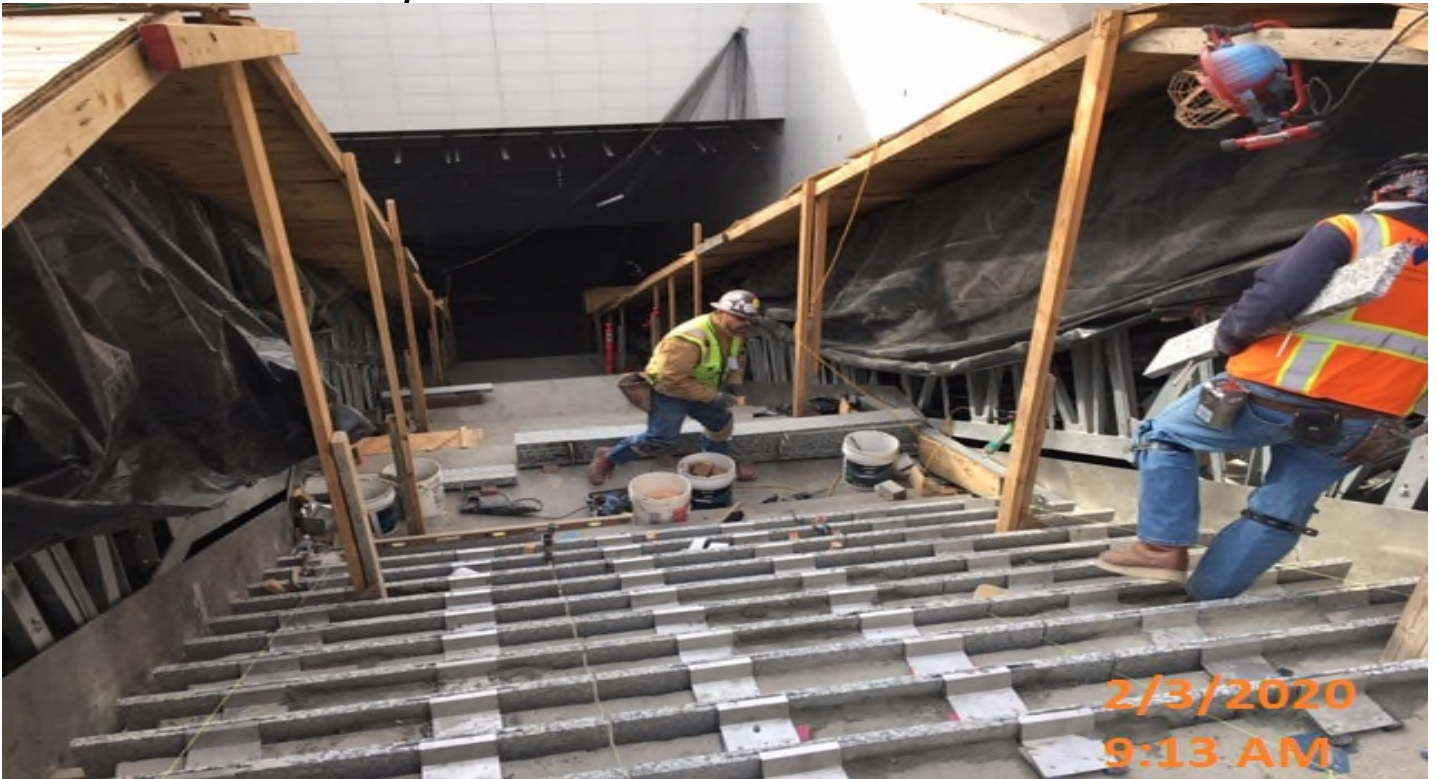
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**MLK Station** - Continued installing edge plates for Escalator 1&2 at the main staircase landing of the plaza level.



**MLK Station** - Began installing granite risers at the main staircase landing of the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK Station** - Continue installing granite risers at the main staircase landing of the plaza level.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK Station** - Continued jack installation and began welding starter rail brackets inside Elevator shafts 1&2 at the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK Station** - Continue drilling and anchoring EVF-7-122 square to round transition piece in the North Fan Room C – 142 of the concourse level.



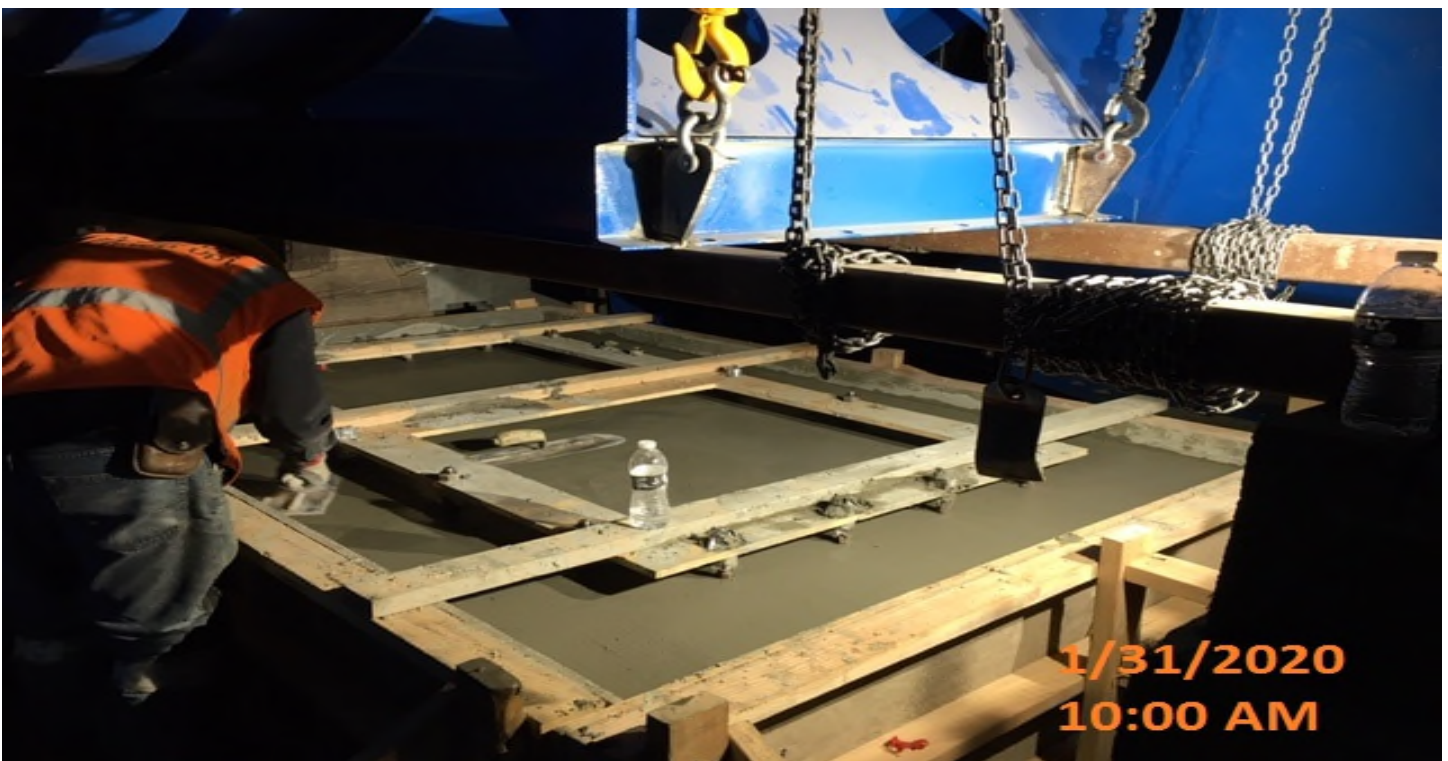
**MLK Station** - Scanning and drilling dowels for EVF-7-122 and EVF-322 equipment pads in the North Fan Room C – 142 of the concourse level.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

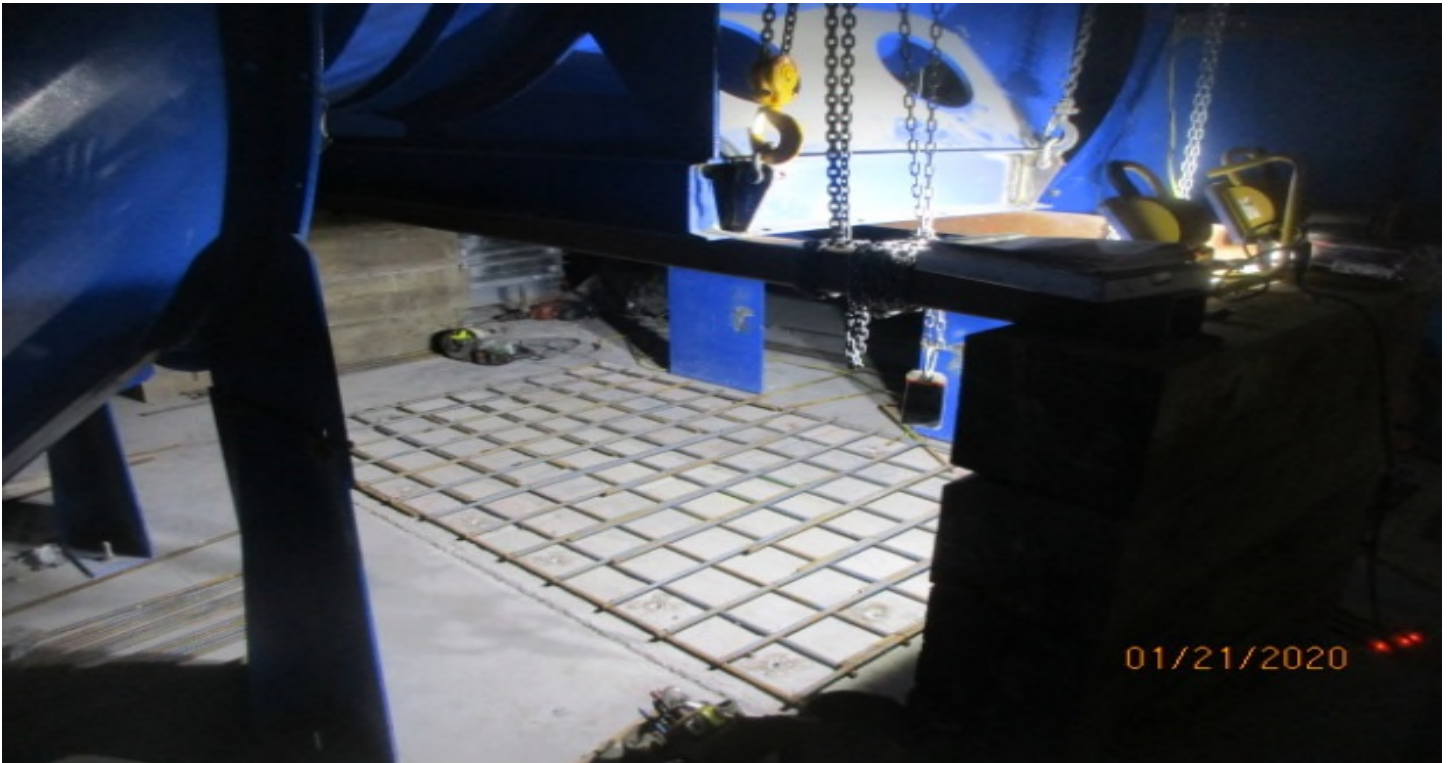


**MLK Station** - Began formwork and installing rebar to EVF-7-122 and EVF-322 equipment pads in the North Fan Room C – 142 of the concourse level.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**MLK Station** - Placed concrete on EVF-7-122 and EVF-322 equipment pads in the North Fan Room C – 142 of the concourse level.



**MLK Station** - Installing bottom mat rebar for both EVF-7-121 and 7-321 equipment pads in the South Fan Room C – 102 of the concourse level.

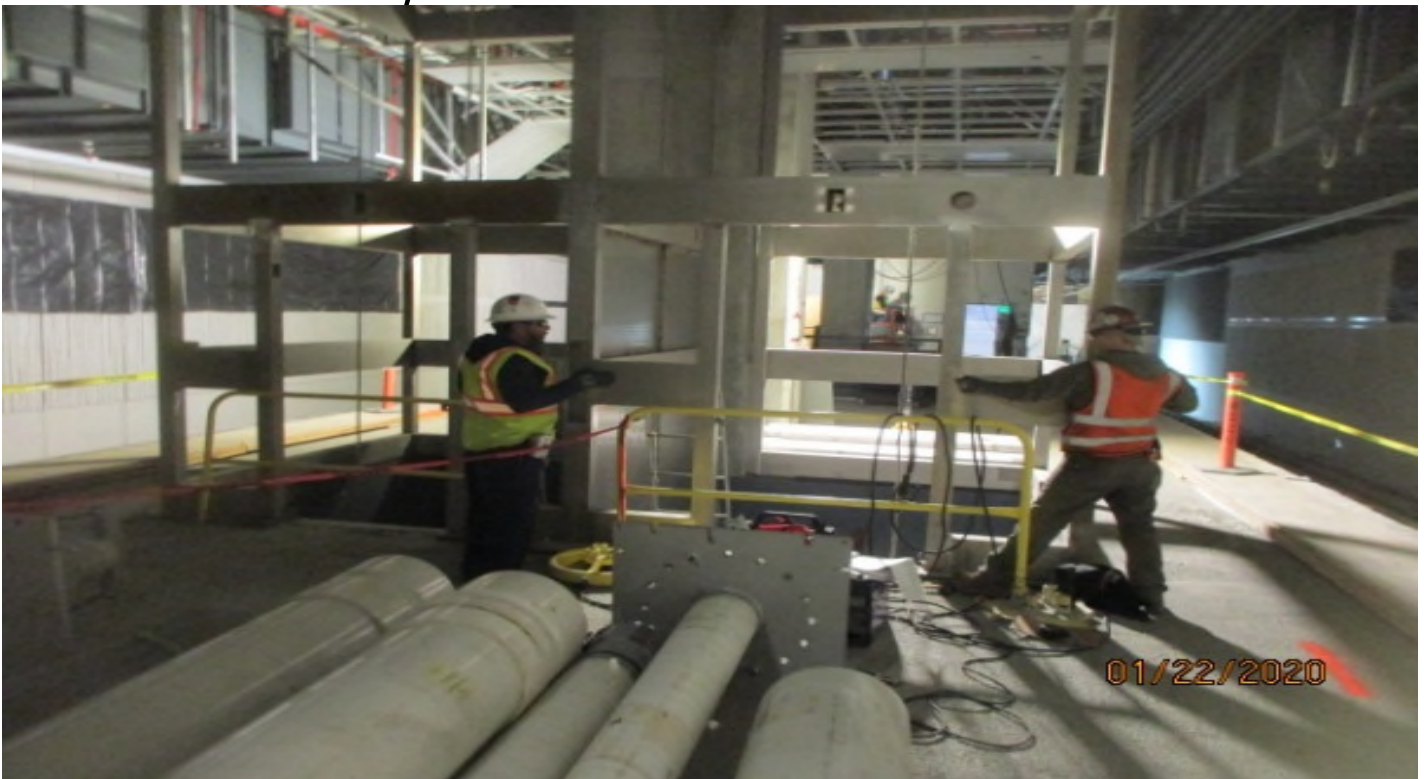


# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK Station** - Prepping for concrete placement of EVF-7-121 and 7-321 equipment pads in the South Fan Room C – 102 of the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK Station** - Prepping to install 15" PVC into HDPE sleeve within Elevator hoist way/pit #3&4 at the platform level.





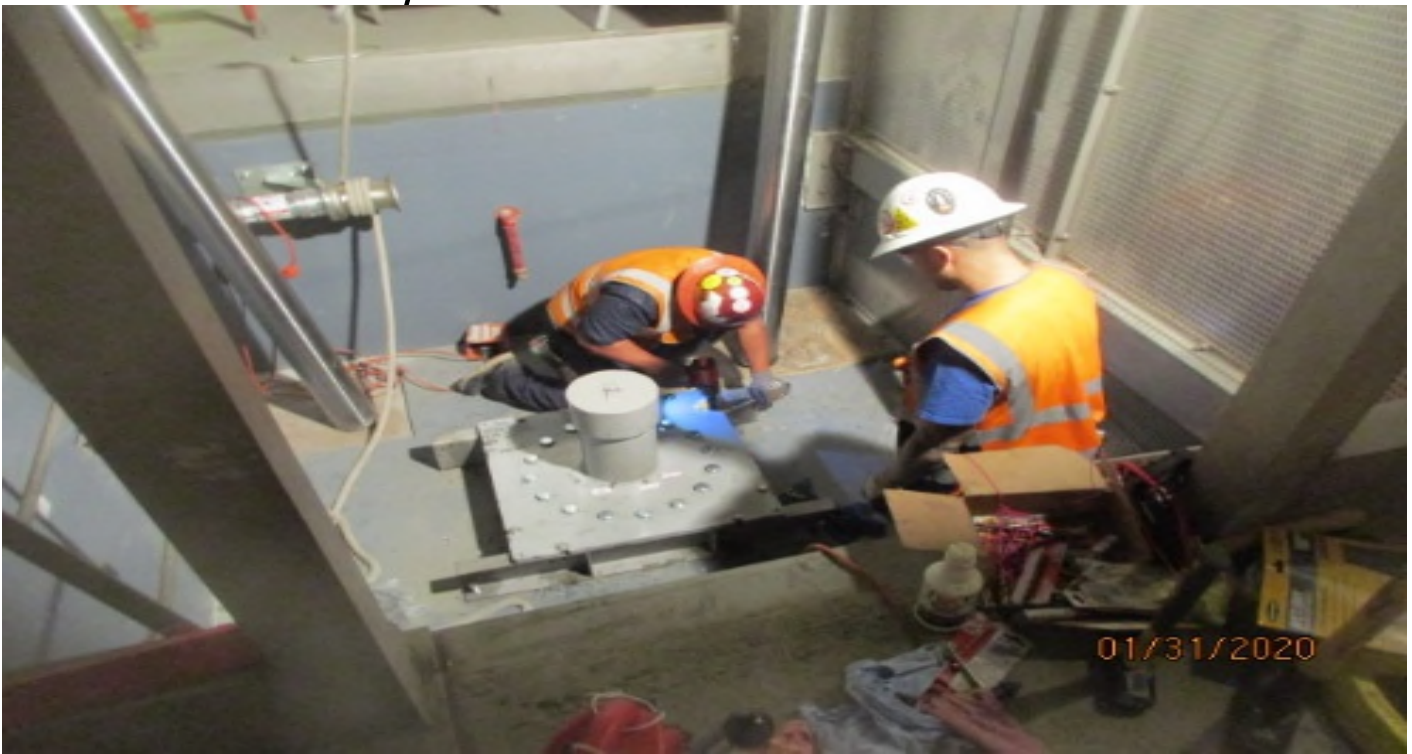
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

MLK Station - Rigging and installing 15" PVC into HDPE sleeve for Elevator hoist way/pit #3&4 at the platform level.



MLK Station - Continued rigging and installing 15" PVC into HDPE sleeve and hydraulic jack for Elevator hoist way/pit #3&4 at the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



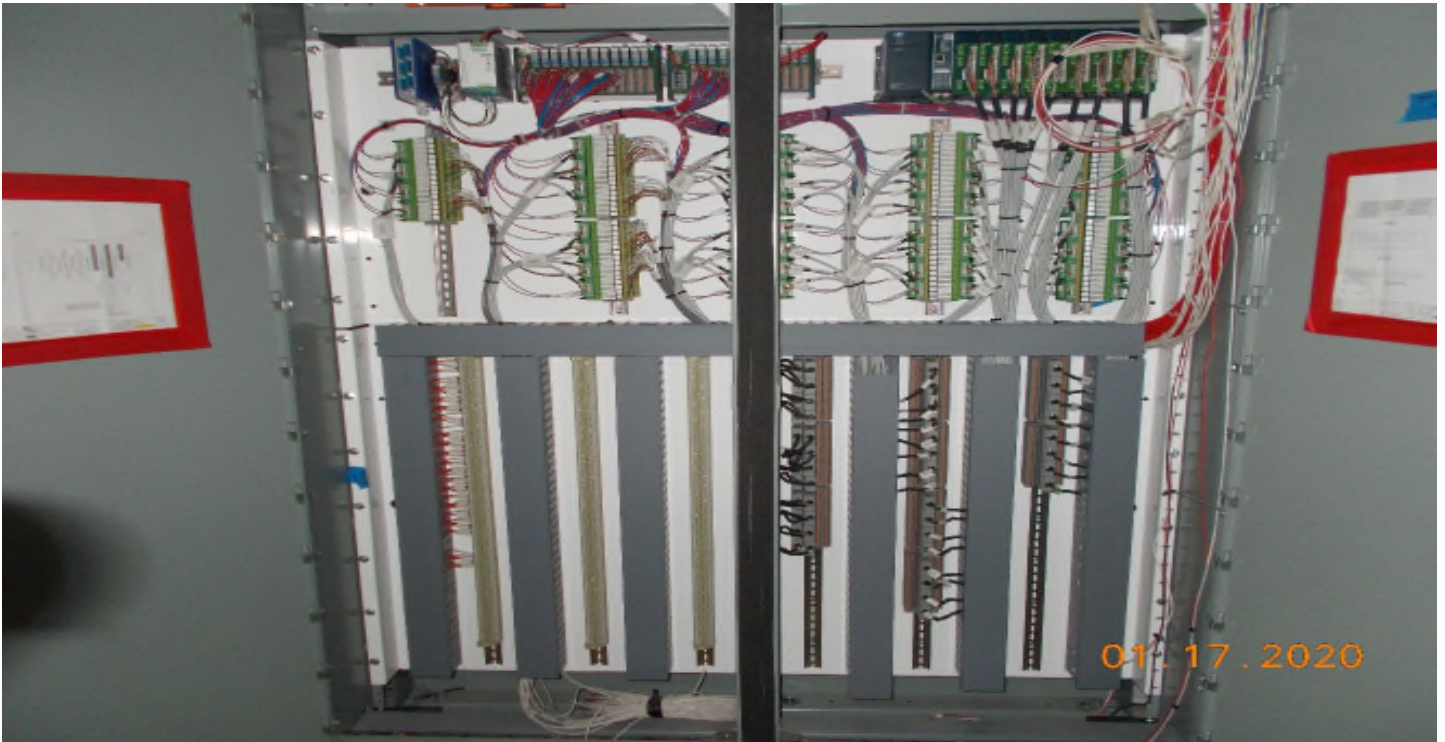
**MLK Station** - Continued rigging and installing 15" PVC into HDPE sleeve and hydraulic jack for Elevator hoist way/pit #3&4 at the platform level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

MLK Station - Resume setting and welding edge lighting support post #9 of 18 imbeds at the southbound track of the platform level.



Crenshaw/MLK - In the Aux Power rooms the large CIC cabinets have the low voltage wiring completed.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Crenshaw/Vernon - Vernon Station - PX2S has had high voltage cables supported and landed.



48<sup>th</sup> Street - STA363+30\_ Looking North\_ Cleaning flangeway\_48ST.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

48<sup>th</sup> Street - STA365+65\_ Looking North\_ Right plinth demo NCR-C-129\_PUNCH LIST\_48ST.



48<sup>th</sup> Street - STA364+79\_ Looking South\_ Baffle plinth sample core drill backfilled NCR-C-129\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



48<sup>th</sup> Street - STA364+50\_ Looking North\_ Excavation full of water around OCS 1278 foundation\_ 48ST





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

48<sup>th</sup> Street - STA365+65\_ Looking North\_ Right plinth demo NCR-C-129\_PUNCH LIST\_48ST.



48<sup>th</sup> Street - STA365+65\_ Looking North\_ Right plinth form set-up NCR-C-129\_PUNCH LIST\_48ST.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



48<sup>th</sup> Street - STA364+46\_ Looking North\_ Track structure disturbance in search of BLS conduits\_ 48ST





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

48<sup>th</sup> Street - STA365+65\_ Looking North\_ Right plinth PCC re-pour NCR-C-129\_ PUNCH LIST\_ 48ST



48<sup>th</sup> Street - STA365+85\_ Looking South\_ Right plinth PCC re-pour NCR-C-129\_ PUNCH LIST\_48ST.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



48<sup>th</sup> Street - STA364+46\_ Looking South\_ Track structure disturbance in search of BLS conduits\_ 48ST.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



48<sup>th</sup> Street - STA364+46\_ Looking South\_ Track structure disturbance in search of BLS conduits\_ 48ST.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

48<sup>th</sup> Street - STA364+46\_ Looking South\_ Track structure disturbance in search of BLS conduits\_ 48ST.

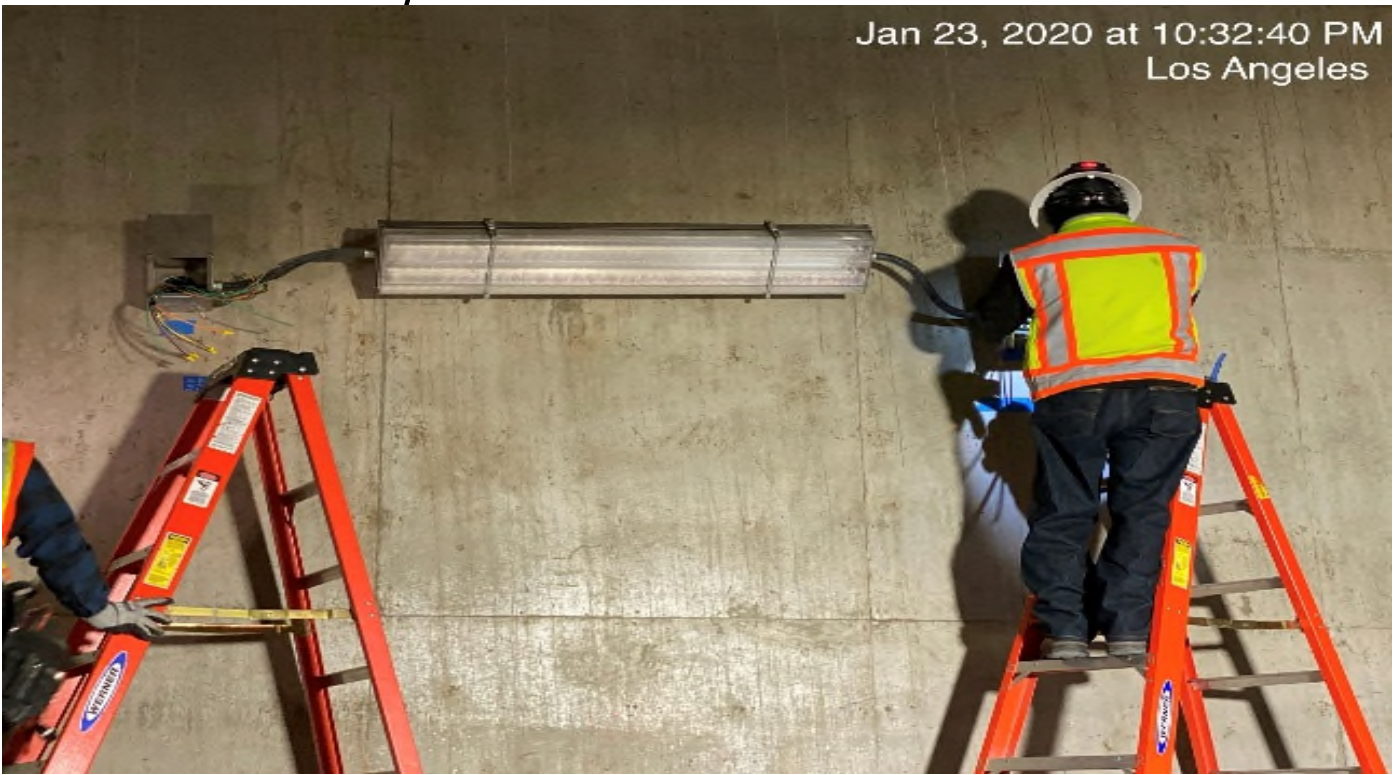


**UG-4-** Continue pulling wire for the emergency lighting along the northbound tunnel at Sta 375+30.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Jan 23, 2020 at 10:32:40 PM  
Los Angeles



UG-4- Continue pulling wire for the emergency lighting along the northbound tunnel at Sta 375+50.

Jan 27, 2020 at 10:48:47 PM  
Los Angeles



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

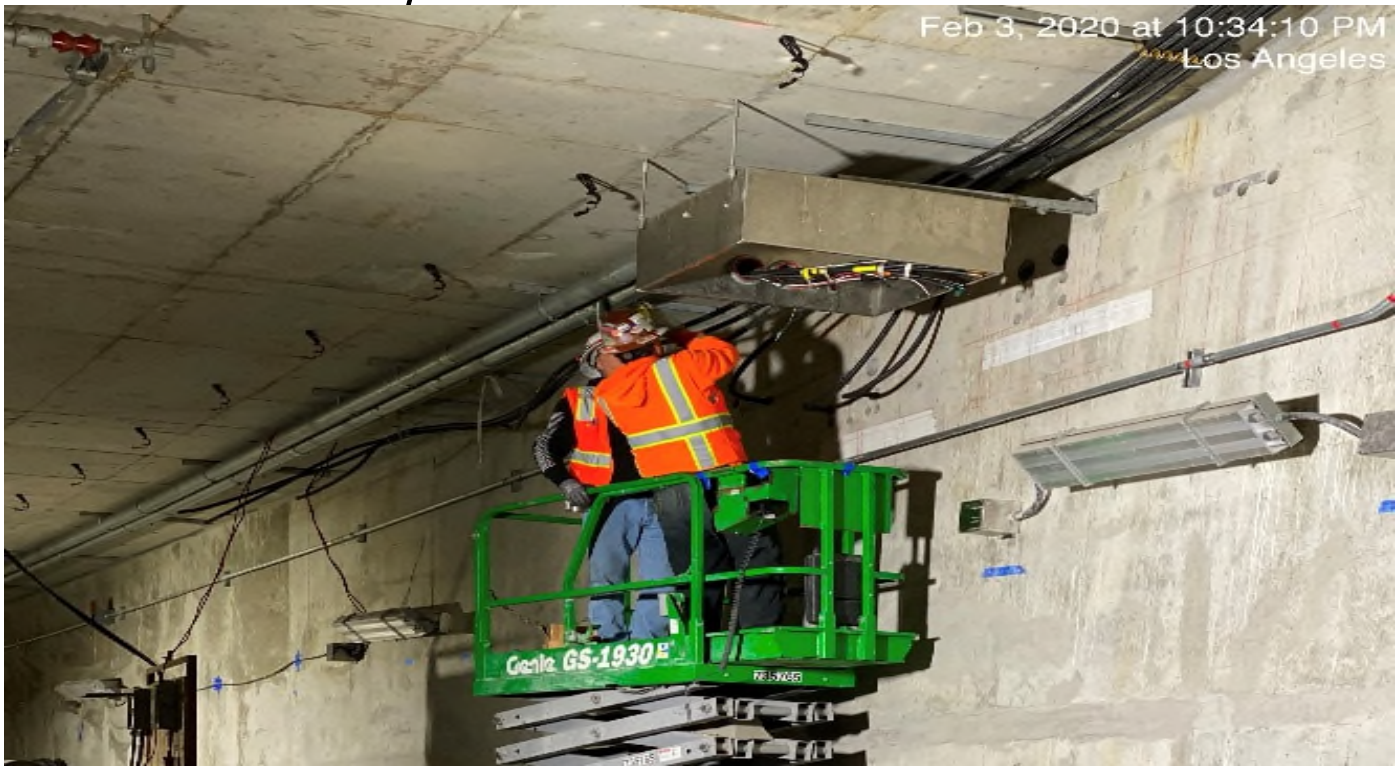
UG-4- Continue pulling wire for the emergency lighting along the northbound tunnel at Sta 376+00.



UG-4- Continue pulling wire for the emergency lighting along the northbound tunnel at Sta 376+00.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG-4- Began wiring and running cable for the booster fans at the southbound tunnel at Sta 377+85.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG-4- Continued installing IDS control cabinets along the southbound tunnel at Sta 371+25.



UG-4- Pulling ground wires and power to the IDS control cabinets in the southbound tunnel at Sta 371+25.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

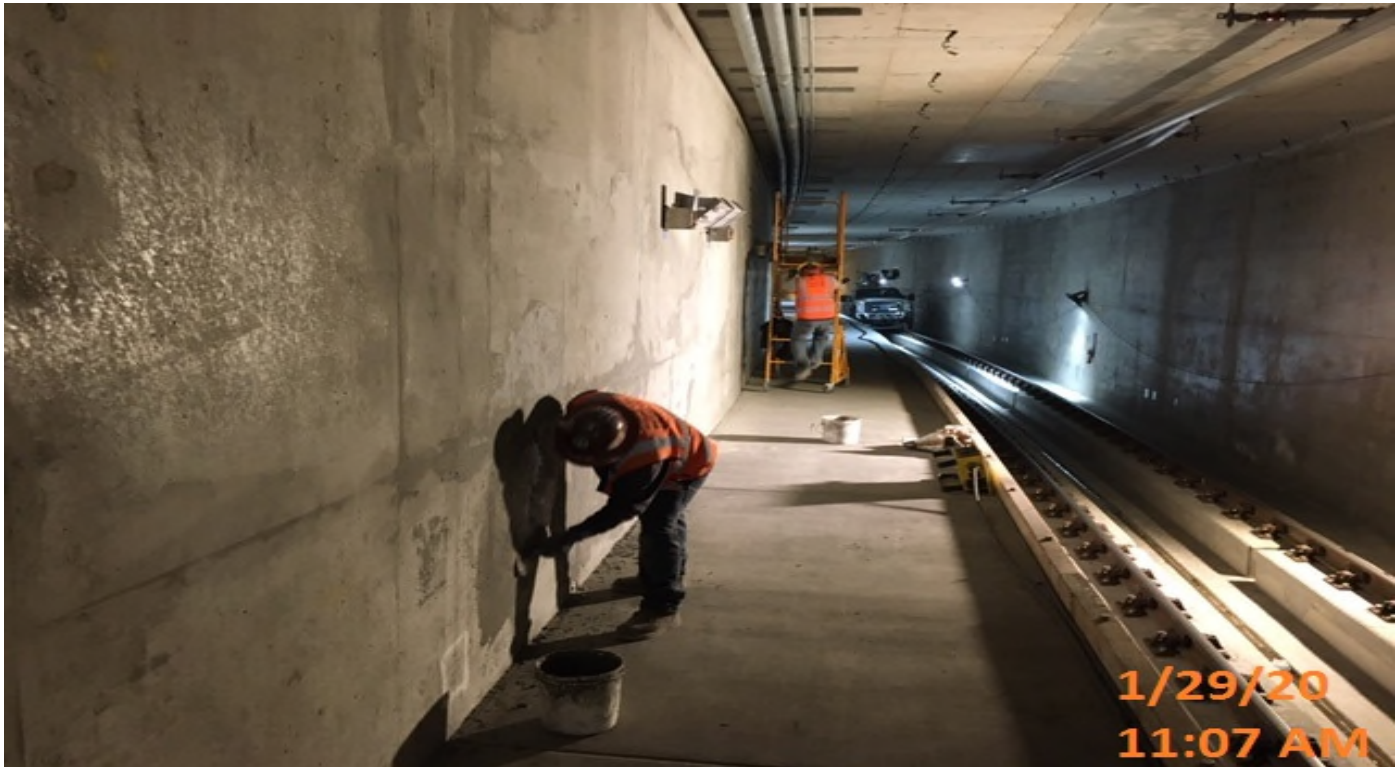


UG-4- Continue pulling ground wires and power to the IDS control cabinets in the southbound tunnel at Sta 371+25.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG-4- Sack and patching, and fog curing both walls along the south and northbound tunnels from Sta 372+00 – 377+26.



UG-4- Continue sack and patch, and applying fog cure for both walls along the south and northbound tunnels from Sta 372+00 – 377+26.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG-4- Continue sack and patch and applying fog cure for walls along the northbound tunnels from Sta 372+00 – 377+26.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

UG-4- STA370+00\_ Looking North\_ WSCC investigation of plinth work\_ UG4\_ 48ST.



UG-4- STA371+65\_ Looking North\_ Water drainage issue crosswalk\_ UG4\_ PUNCH LIST\_48ST.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG-4- STA442+50\_ XING5\_ Looking North\_ UG4 hi-rail\_ Equipment parked\_ Expo.



UG-4- STA444+40\_ UG4 hi-rail\_ Equipment with dirt on Expo invert



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Leimert Park Station** – Continued excavation/backfill and compacting median “Pork Chop” island between northbound Leimert Blvd and Crenshaw Blvd. 1/21/20





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Leimert Park Station – Began curb/gutter formwork on the median “Pork Chop” island between northbound Leimert Blvd and Crenshaw Blvd. 1/22/20



Leimert Park Station – Placing asphalt concrete on the northeast corner of 43rd Pl and Crenshaw Blvd. 2/3/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Leimert Park Station – Placing concrete on the east section of the south planter box footing at the plaza level. 1/18/20





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Leimert Park Station – Placing concrete on the north planter box footing at the plaza level.  
1/18/20



Leimert Park Station – Continued building sections of formwork for the north planter box footing at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Leimert Park Station** – Continued building sections of formwork for the north planter box footing at the plaza level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Leimert Park Station – Continued building sections of formwork for the north planter box footing at the plaza level.



Leimert Park Station – Continued building sections of formwork for the north planter box footing at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Leimert Park Station – Continued placing concrete and smoothing the surface for both north and south planter box sections at the plaza level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Leimert Park Station** – Installing and welding catwalk framing above the main entrance canopy structure at the plaza level.



**Leimert Park Station** – Began priming the main entrance canopy structure at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



Leimert Park Station – Prepping steel framing edge in order to mount EMP box at the concourse level.





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

**Leimert Park Station** – Placing concrete to all EVF equipment pads in both North C – 126 & South C – 102 Fan Rooms of the concourse level. 1/18/20

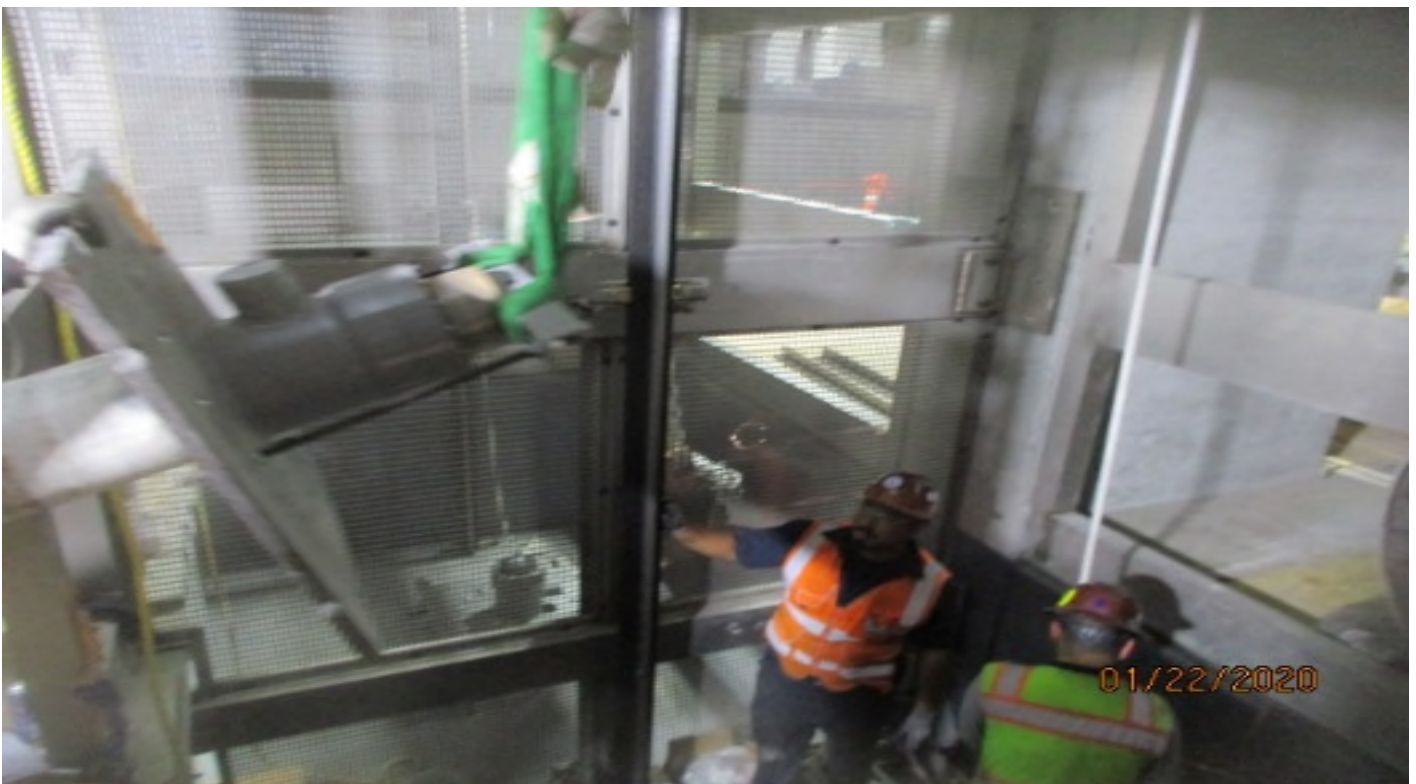


**Leimert Park Station** – Installing silicone gaskets and roughing in flex connectors to EVF-6-101 and EVF-6-301 in the South Fan Room C – 102 Fan Rooms of the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Leimert Park Station** – Continue installing silicone gaskets and roughing in flex connectors to EVF-6-101 and EVF-6-301 in the South Fan Room C – 102 Fan Rooms of the concourse level.





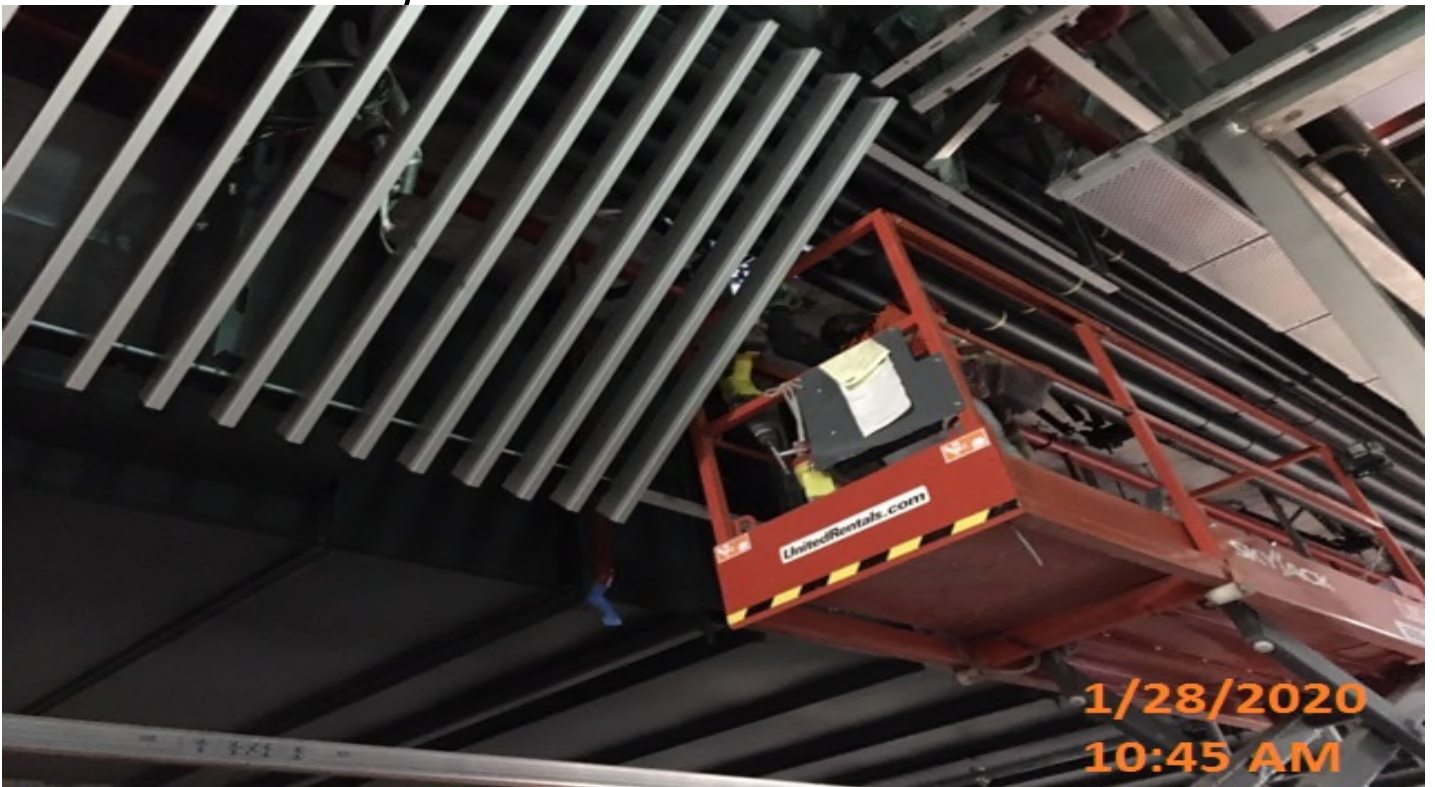
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Leimert Park Station – Continued rigging and installing 15” PVC into HDPE sleeve and hydraulic jack for Elevator hoist way/pit #4 at the platform level.



Leimert Park Station – Continue installing angle ceiling panels above the southbound track of the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Leimert Park Station** – Continue installing angle ceiling panels above the southbound track of the platform level.





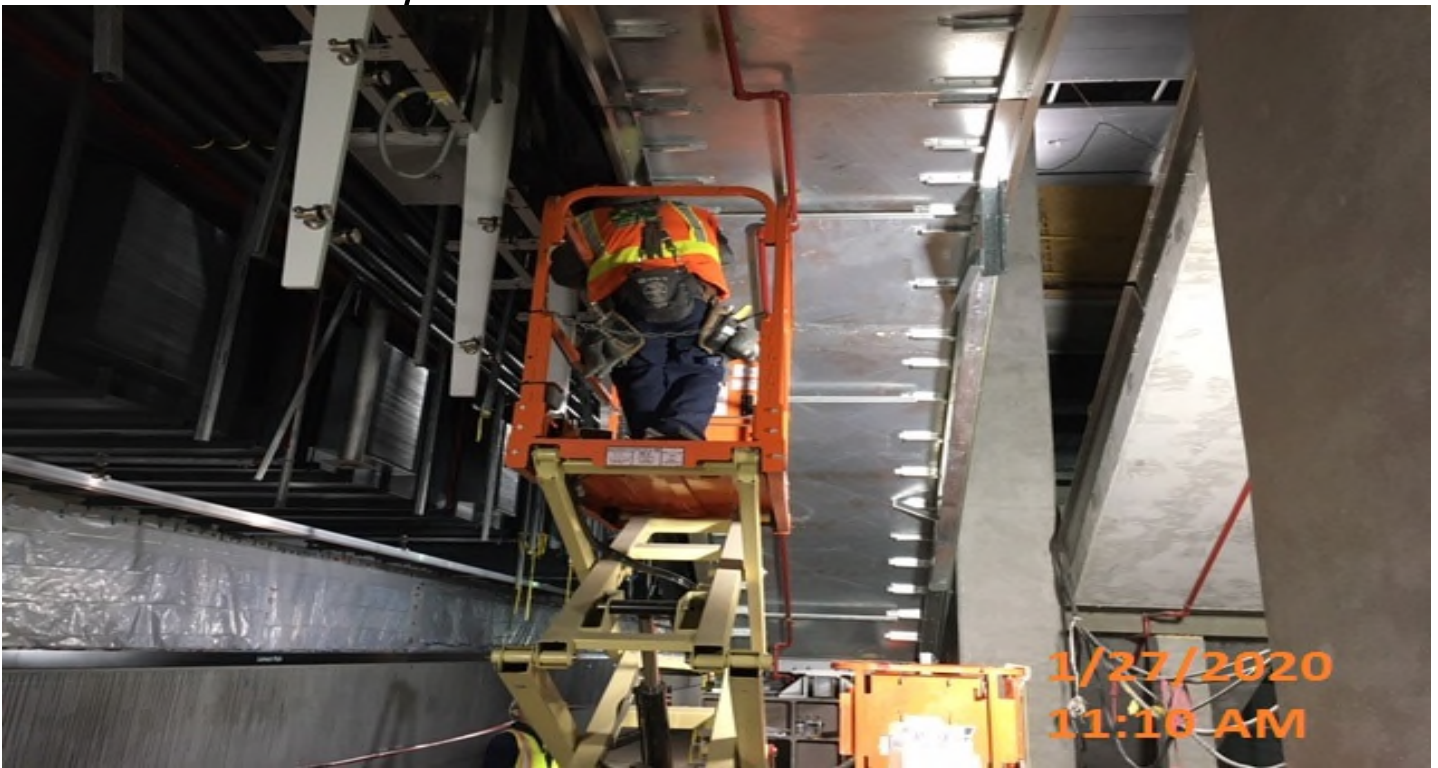
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Leimert Park Station – Cutting and leveling architectural concrete wall at the northbound track of the platform level.



Leimert Park Station – Installation of laminated cladding frame for the metal panels beneath staircase #5 and escalator #3 at the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Leimert Park Station** – Continued installation of laminated cladding frame for the metal panels beneath staircase #4 and escalator #6 at the platform level.

## **SEGMENT C:**

- Rework of VHRF fasteners is still required due to missing shims and incorrect installation
- Incomplete Double Crossovers due to parts shortage
- Rework of plinths is still required due to damage by chipping and cracks
- Incomplete plinth work
- Rework of the Top-of-Rail is still required due to gouges in the rail

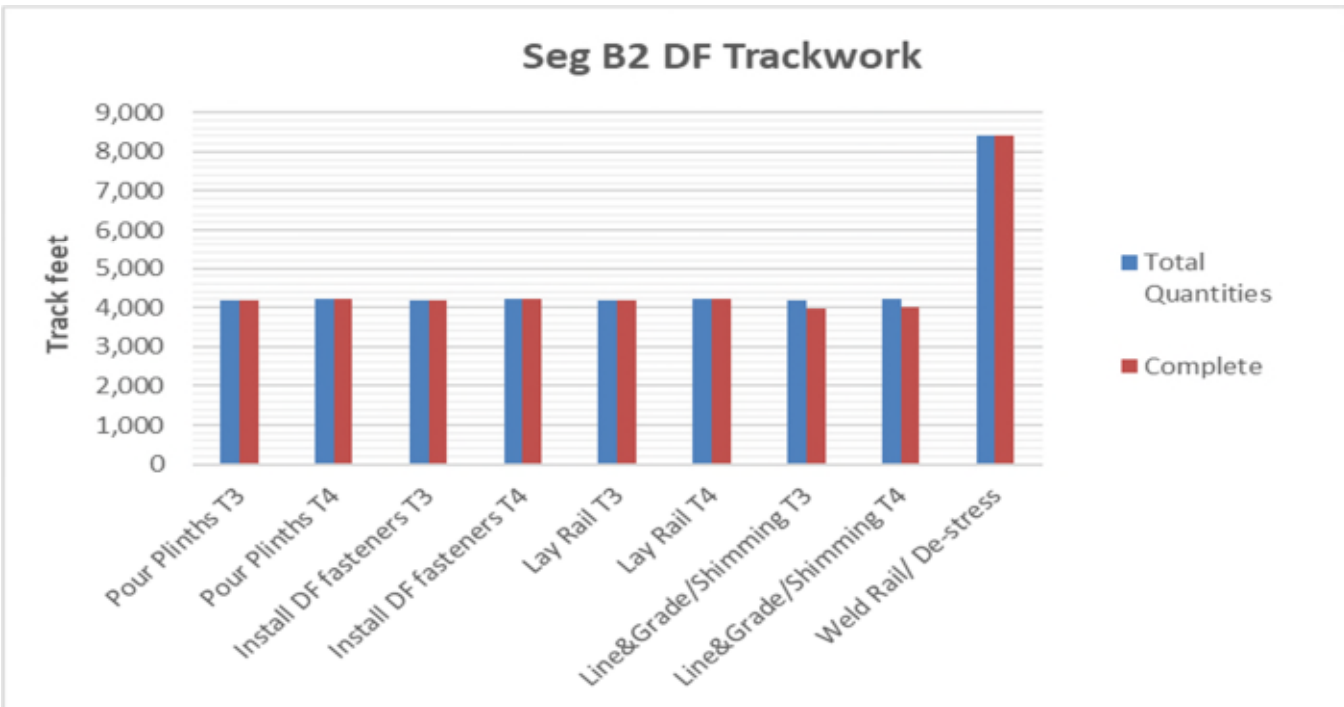
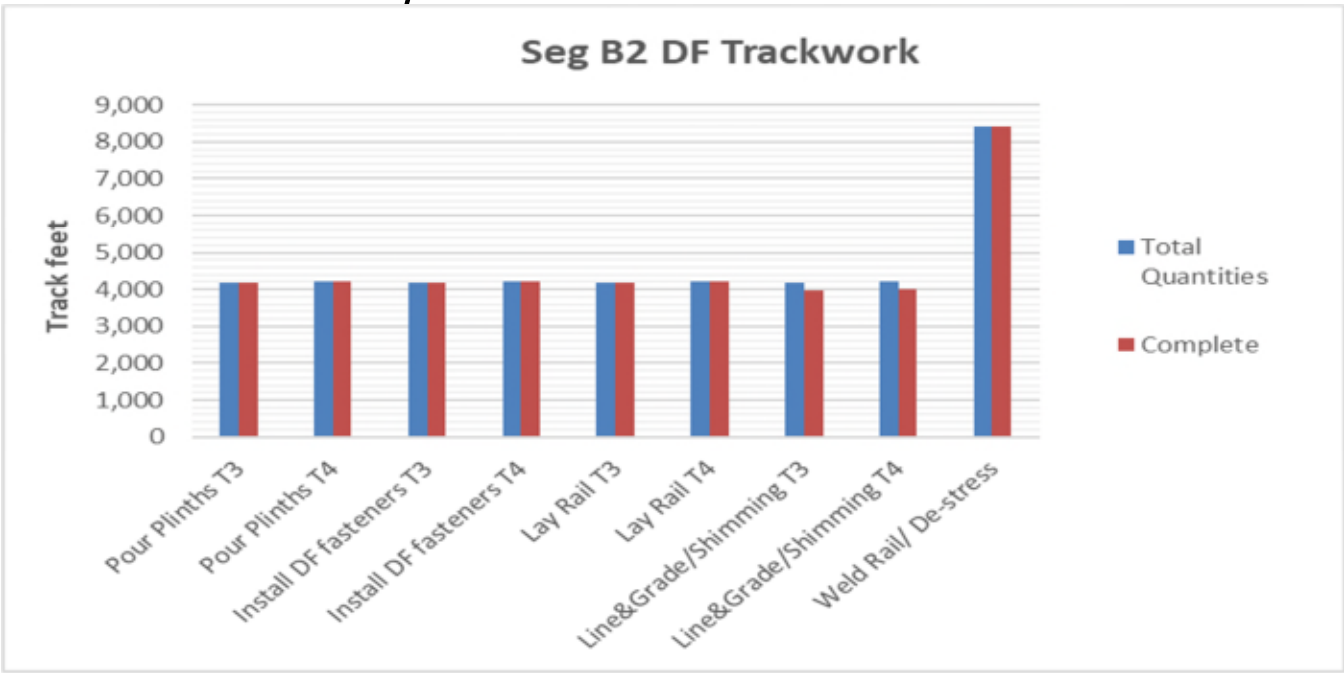


# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

## PROJECT WIDE TRACKWORK PROGRESS

	TRACK TYPE	ACTIVITY	TRACK FEET/QUANTITY	INSTALLED TO DATE	REMAINING	ACTIVITY % PROGRESS	Potential Rework	Punchlist
								(Complete/Incomplete)
<b>SEGMENT B2</b>	<b>DF (8,408 TF)</b>	Pour Plinths T3	4,193	4193	0	100.00%		
		Pour Plinths T4	4,215	4,215	0	100.00%		
		Install DF fasteners T3	4,193	4193	0	100.00%	*	
		Install DF fasteners T4	4,215	4215	0	100.00%	*	
		Lay Rail T3	4,193	4193	0	100.00%	*	
		Lay Rail T4	4,215	4215	0	100.00%	*	
		Line&Grade/Shimming T3	4,193	3983	210	95.00%		INC
		Line&Grade/Shimming T4	4,215	4004	211	94.99%		INC
		Weld Rail/ De-stress	8,408	8408	0	100.00%		
		Emergency Walkway						
	Acceptance for turnover to subcontractors	yes/no	no					
	<b>BALLASTED TRACKWORK (9681 TF including grade crossings)</b>	Install Bottom Ballast	9,681	9681	0	100.00%	*	INC
		Install ties, rail/clips, top ballast -T3	4,836	4836	0	100.00%	*	
		Install ties, rail/clips, top ballast -T4	4,845	4845	0	100.00%	*	
		Surface and line/Regulate T3	4,836	4836	0	100.00%	*	
		Surface and line/Regulate T4	4,845	4845	0	100.00%	*	
		De-stress	9,861	9861	0	100.00%		
		Emergency Walkway	6148	5840	308	94.99%		
	Acceptance for turnover to subcontractors	yes/no	no					
	<b>SPECIAL TRACKWORK</b>	Ballasted Single Crossover (U1/U2, V1/V2)	2	2	0	100.00%		INC
		Thermite Welds	56	56	0	100.00%		
Insulated Joints (IJ's)		12	12	0	100.00%	*	INC	
Acceptance for turnover to subcontractors		yes/no	no					
<b>GRADE X-ING</b>	Construct Crossing (48th, 50th, 52nd, 54th, 57th, 59th, Slauson)	7	6	1	85.71%			
<b>SEGMENT C</b>	<b>DF (16,756 TF)</b>	Pour Plinths T3	8,385	8385	0	100.00%	*	INC
		Pour Plinths T4	8,371	8371	0	100.00%	*	INC
		Install DF fasteners T3 (VHRF installed - pending NCR)	8,385	7965	420	94.99%	*	
		Install DF fasteners T4 (VHRF installed - pending NCR)	8,371	7952	419	94.99%	*	
		Lay Rail T3	8,385	8385	0	100.00%	*	
		Lay Rail T4	8,371	8371	0	100.00%	*	
		Line&Grade/Shimming T3	8,385	7546	839	89.99%	*	INC
		Line&Grade/Shimming T4	8,371	7533	838	89.99%	*	INC
		Emergency Walkway						
		Acceptance for turnover to subcontractors	yes/no	no				
	<b>SPECIAL TRACKWORK</b>	DF Double Crossover (Diamond)	1	1	0	100.00%	*	
		Line&Grade/Shimming	1	1	0	100.00%	*	
		Thermite Welds	56	56	0	100.00%		
		Insulated Joints (IJ's)	20	20	0	100.00%	*	
		Acceptance for turnover to subcontractors	yes/no	no				
DF =	Direct Fixation							
T3 =	Track 3							
T4 =	Track 4							
TF =	Track Feet							
*	Potential for rework based on recent guideway survey. Total impact of rework is unknown at this time.							
**	Punchlist Complete/Incomplete: Indicates the completion (COMP) or Incompletion (INC) of identified punchlist items							

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

