

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

March 5, 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 **2/12/2020-03/02/2020**  
(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: WSCC continues the investigation of MSE Wall #202 where track misalignment has occurred. A geotechnical report is in process of being prepared and a repair plan will be prepared by WSCC upon receipt of the final report. WSCC also continues investigating the process to repair the gap between the plinth ends and the invert slab in Segment C.**

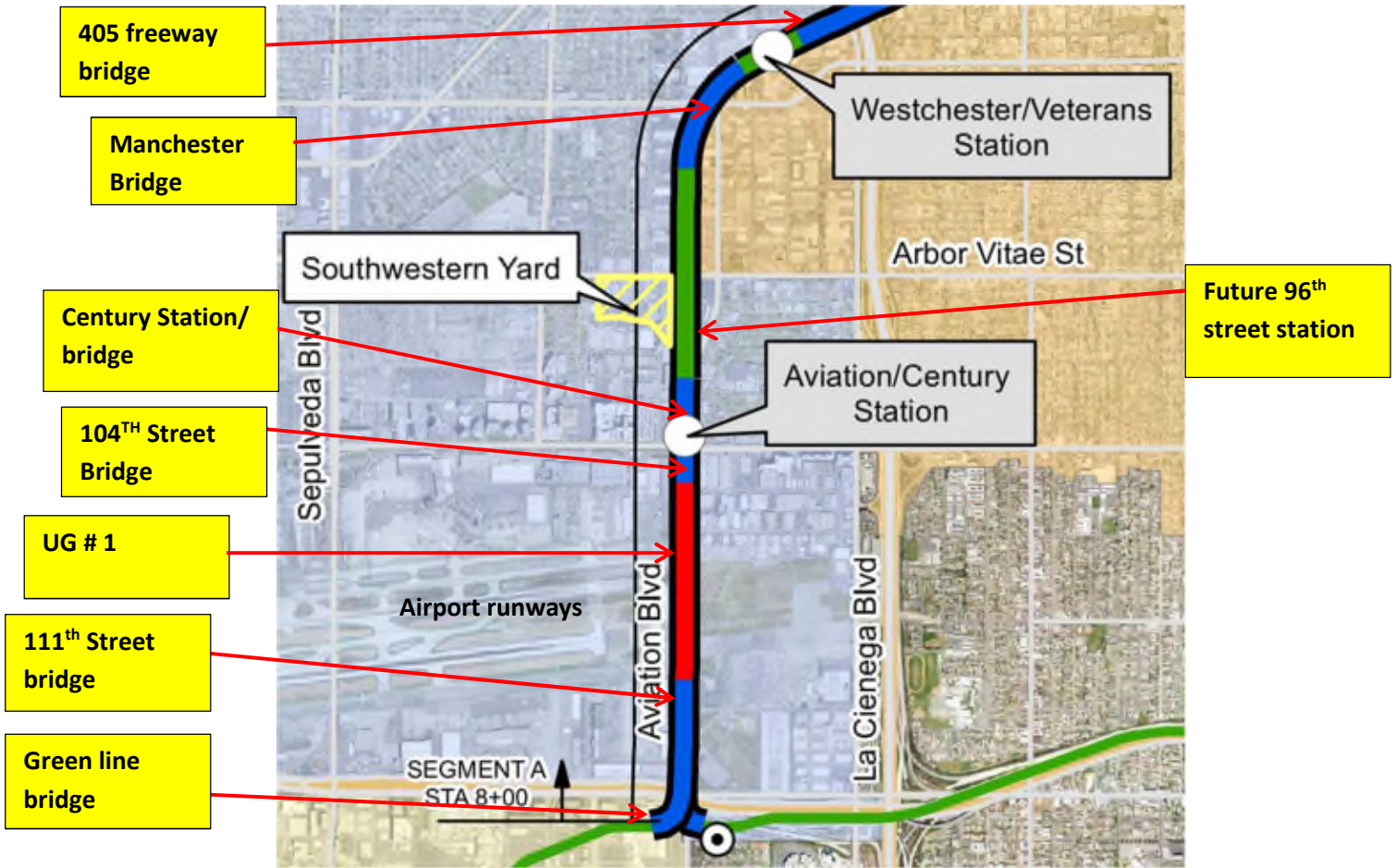
**WSCC has resumed rework of the plinths for the Movable Point Frog on the Green Line Wye and began the relocation of incorrectly placed IJs in Segment B2.**

## **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
- Rework resumes for the plinths for the Movable Point Frog on the Green Line Wye STA 13+99

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

## Segment A



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



HINDRY AVE- Saw cutting expansion joints and buffing the topping slab at the NB platform.



HINDRY AVE- STA131+40\_ looking South\_ Track structure disturbed \_PUNCH LIST.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



HINDRY AVE- Metal stud installation on the NB Hindry Station platform TVM.



HINDRY AVE- Metal stub framing at the Hindry Station.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



HINDRY AVE- Metal stud framing at the Hindry Station.



HINDRY AVE- Metal stud installation at the Hindry NB platform. Facing west.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MANCHESTER AVE- Sidewalk subgrade grading at Manchester.



MANCHESTER AVE- Sidewalk subgrade grading at Aviation and Manchester.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MANCHESTER AVE- Cutting sidewalk subgrade on Manchester.



MANCHESTER AVE- Forming the TPSS #3 drive approach on Manchester.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



96<sup>th</sup> STREET: Layout of the handrail at the 96th Street Station operators platform.



96<sup>th</sup> STREET- Excavating the ballast the set forms for the operators platform stairs.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



96<sup>th</sup> STREET- Drilling handrail post holes at 96th Street Station.



96<sup>th</sup> STREET- Ballast removal to build the operator's platform stairs.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



96<sup>th</sup> STREET- Core drilling the handrail post holes at the operator's platform.



96<sup>th</sup> STREET- 96th Street Station operator's platform handrail installation.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



96<sup>th</sup> STREET- Grouting the handrails at the 96th Street Station.



96<sup>th</sup> STREET- Grouting the handrail posts for the 96th Street Station operator's platform.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



AVIATION/CENTURY- Removal of the rain cover and wood at the Aviation Station elevators.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



AVIATION/CENTURY- Grading and excavating at the Aviation Station plaza area.



AVIATION/CENTURY- Fire line excavation at the Aviation Station.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



AVIATION/CENTURY- Saw cutting for the demo of the curb & gutter on Aviation & Century.



AVIATION/CENTURY- Curb & gutter demo on Aviation & Century.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



AVIATION/CENTURY- Subgrade compaction for the curb & gutter on Aviation & Century.



AVIATION/CENTURY- Curb & gutter demo on Aviation and Century.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



AVIATION/CENTURY- Integrity is building rebar cages at the Aviation Station.



AVIATION/CENTURY- Sidewalk subgrade grading at Aviation and Manchester.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



AVIATION/CENTURY- WSCC using E-hammer to chip out inserts holes on Century, Aviation bridge SB #3 track STA 66+09 (looking west).



104th St Substation - WA Rasic was backfilling and compacting a power duct bank.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**104th St. Substation** - Dyna Electric was installing two 5-inch conduits between the DWP precast boxes



**104<sup>th</sup> STREET** – Forming the DWP meter pad at 104th Street.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



104<sup>th</sup> STREET – The DWP meter section was poured.



104<sup>th</sup> STREET – Chain link fence repair at 104th street.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



104th STREET – WSCC was digging to install bollards around utilities.



UG 1- Drainage swale grading at UG-1.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG 1- Drainage swale grading at the north portal of UG-1.



UG 1- Installing the screen panels at UG-1.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

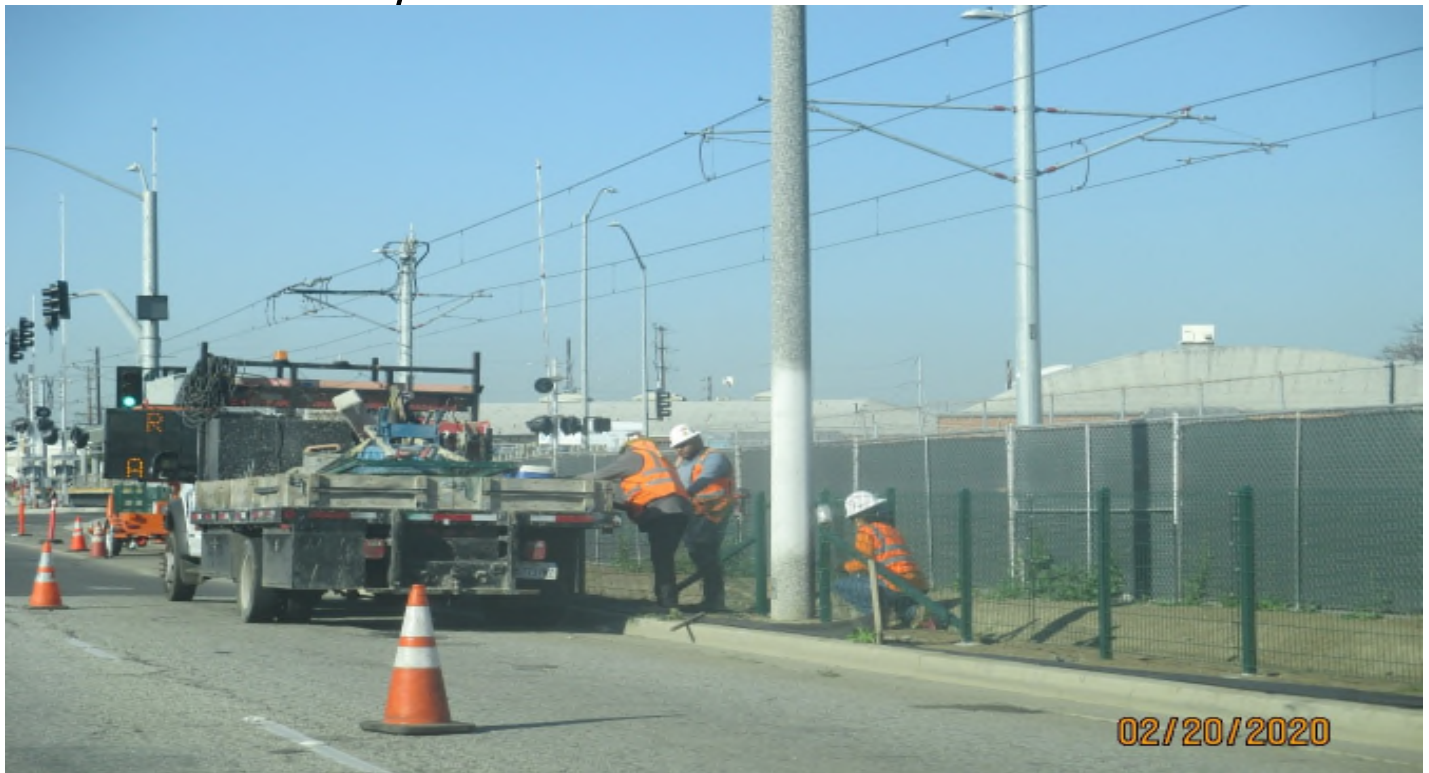


UG 1- Saw cutting the curb at UG-1 to make way for the new driveways on Aviation.



UG 1- Chain link fence repair at 104th street. Facing south.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG 1- Crimping wire mesh fence panels near RW #140. Facing west.



111 STREET – Vacuum truck exposing the gas line at the SW corner of 111th street and Aviation.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



111 STREET – Curb & gutter subgrade compaction at 111th street.



111 STREET – Electrical trench excavation at 111th Street.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



111 STREET – Signal conduit installation on Aviation at 111th.



111 STREET – Placing concrete for the new curb and gutter on 111th.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



111 STREET – Forming the curb & gutter on 111th street. Facing west.

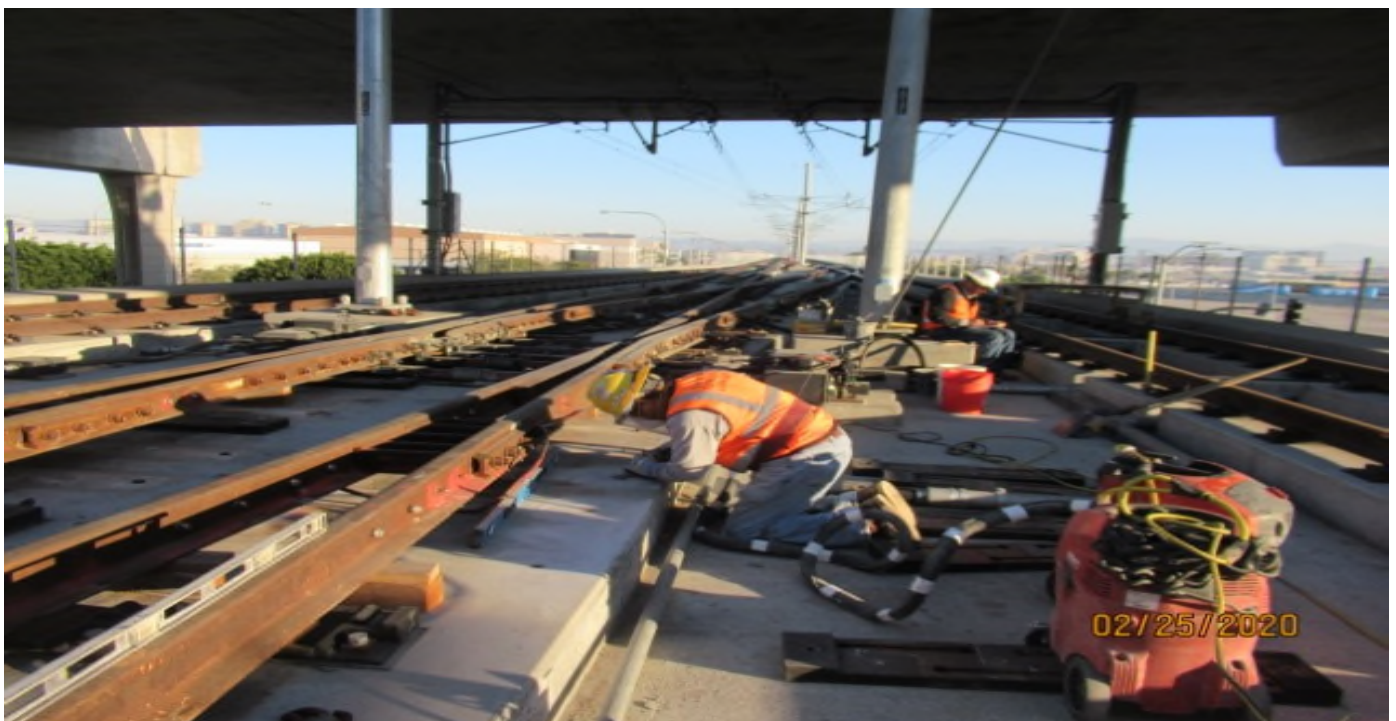


GREENLINE UNDERPASS- East leg of Wye crossing plates incomplete install.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**GREENLINE UNDERPASS-** HCC working on MPF at GL Wye raising rails for WSCC to work on concrete slab elevation.



**GREENLINE UNDERPASS –** WSCC Concrete foreman grinding out slab on MPF GL Wye STA 13+90

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



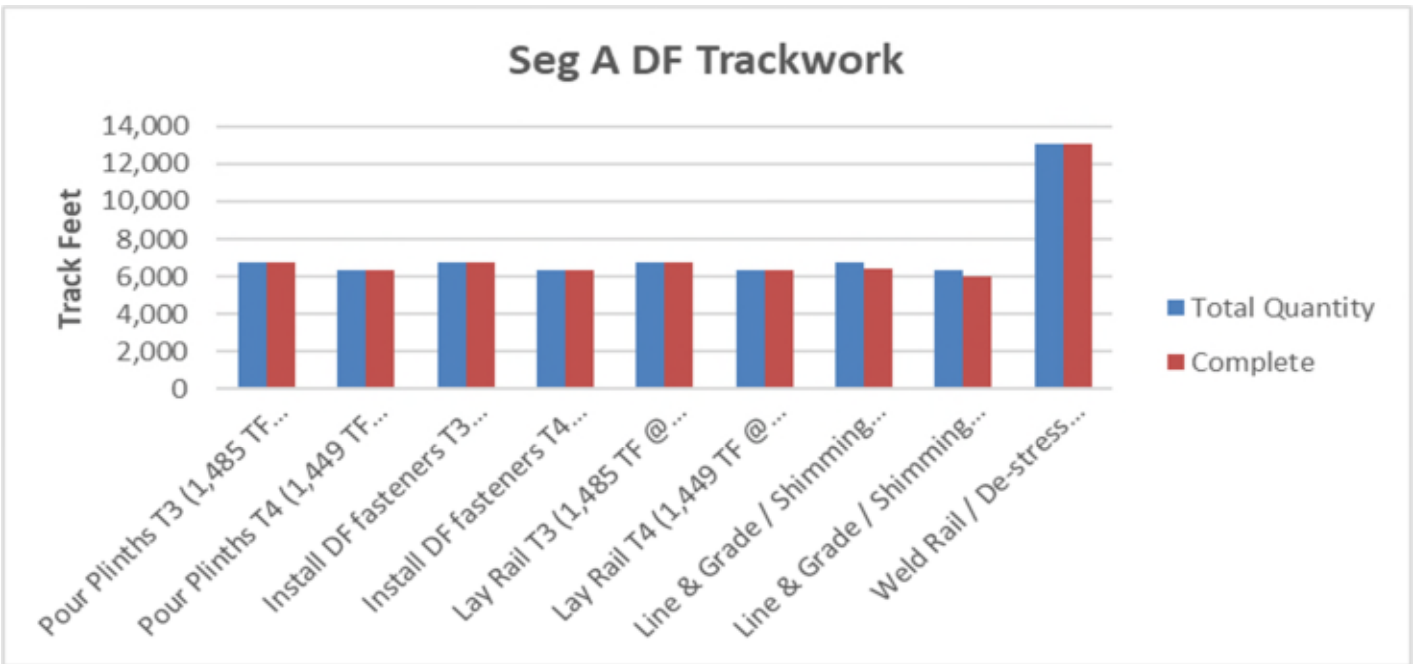
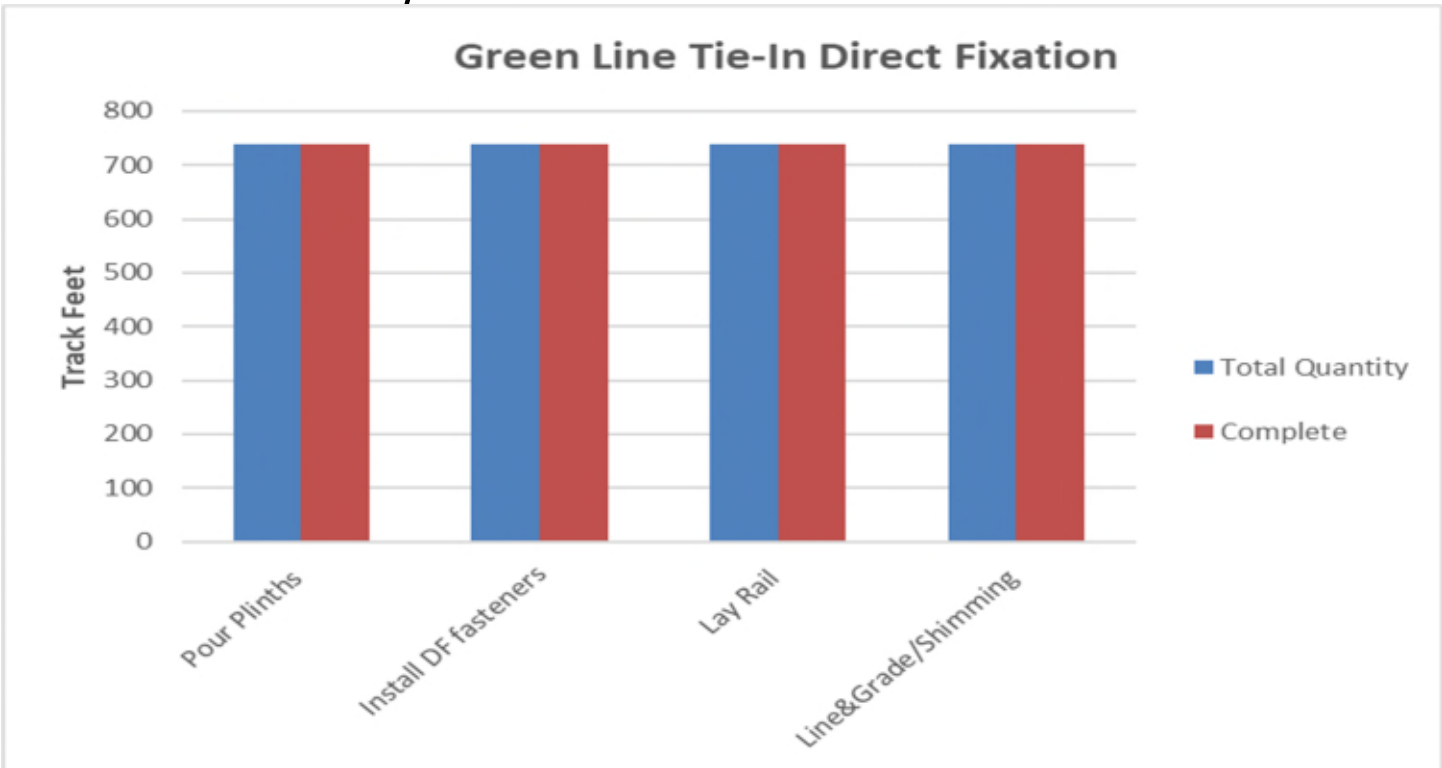
**GREENLINE UNDERPASS** - WSCC working on evening out concrete slab for MPF southeast portion GL Wye STA 13+90

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

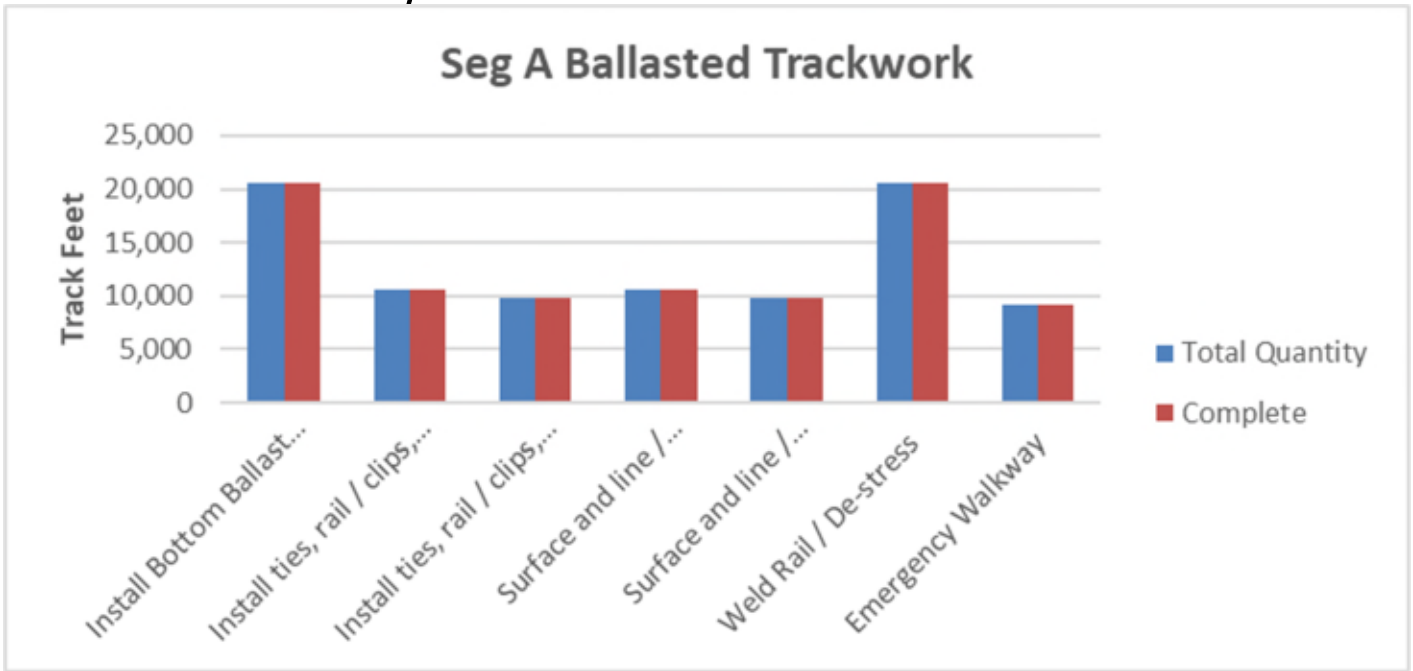
## PROJECT WIDE TRACKWORK PROGRESS

	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								

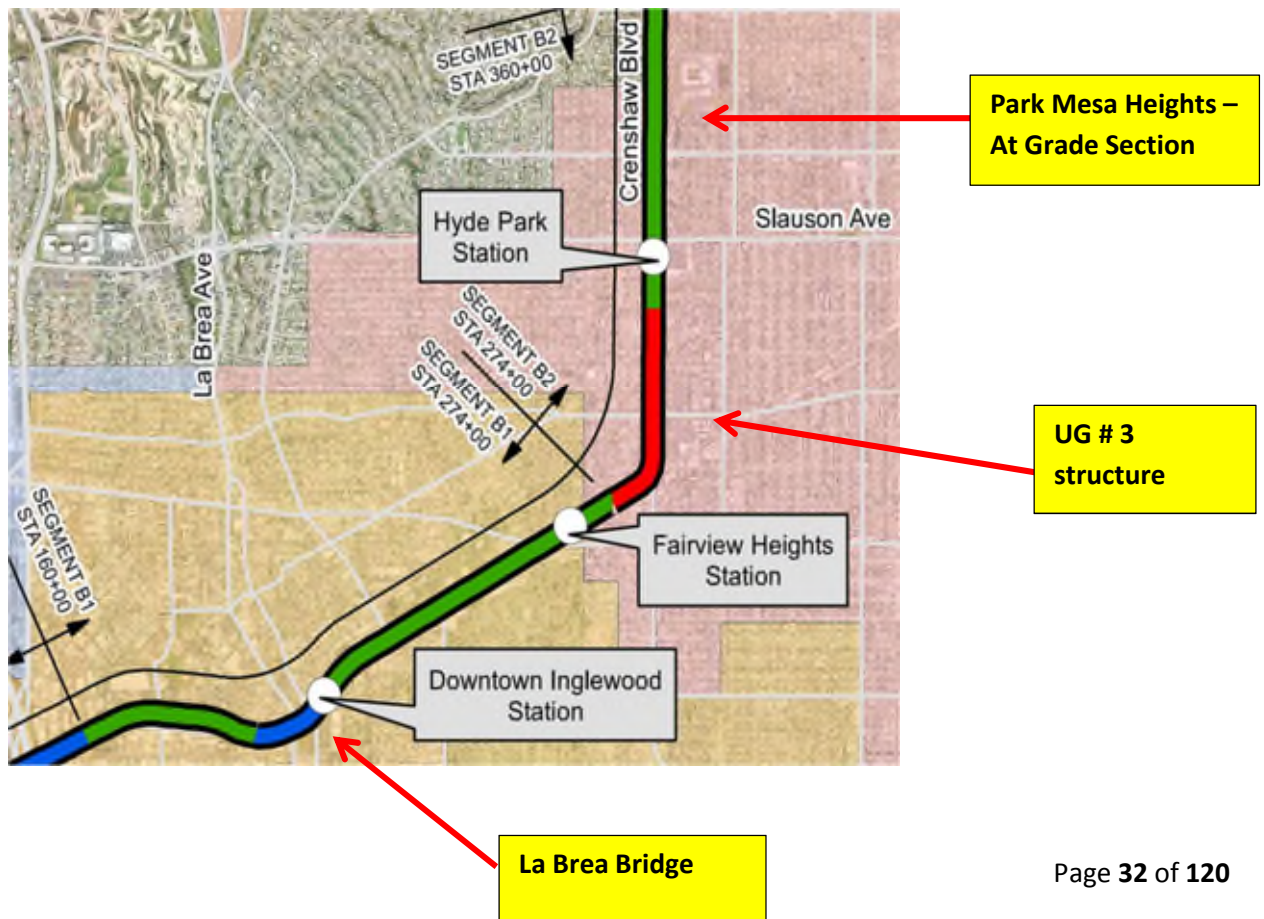
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



## Segment B





# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Park Mesa** – Excavating for new concrete sidewalk installation on the northeast corner of 60th St & Crenshaw Blvd. 2/5/20



**Park Mesa** – Continued excavating for new concrete sidewalk installation on the northeast corner of 60th St & Crenshaw Blvd. 2/6/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Park Mesa –** Continued excavating for new concrete sidewalk installation on the northeast corner of 60th St & Crenshaw Blvd. 2/6/20



**Park Mesa –** Excavating trench to continue TPSS#7 ground grid system work on 60th St & Crenshaw Blvd.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**Park Mesa** – Grading in preparation for the placement of the auxiliary power bungalow and generators on top of equipment pads at 60th St & Crenshaw Blvd.



**Park Mesa** – Continued LADWP main line tie-in at the intersection of 60th St & Crenshaw Blvd.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Feb 11, 2020 at 12:13:26 AM  
Los Angeles



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

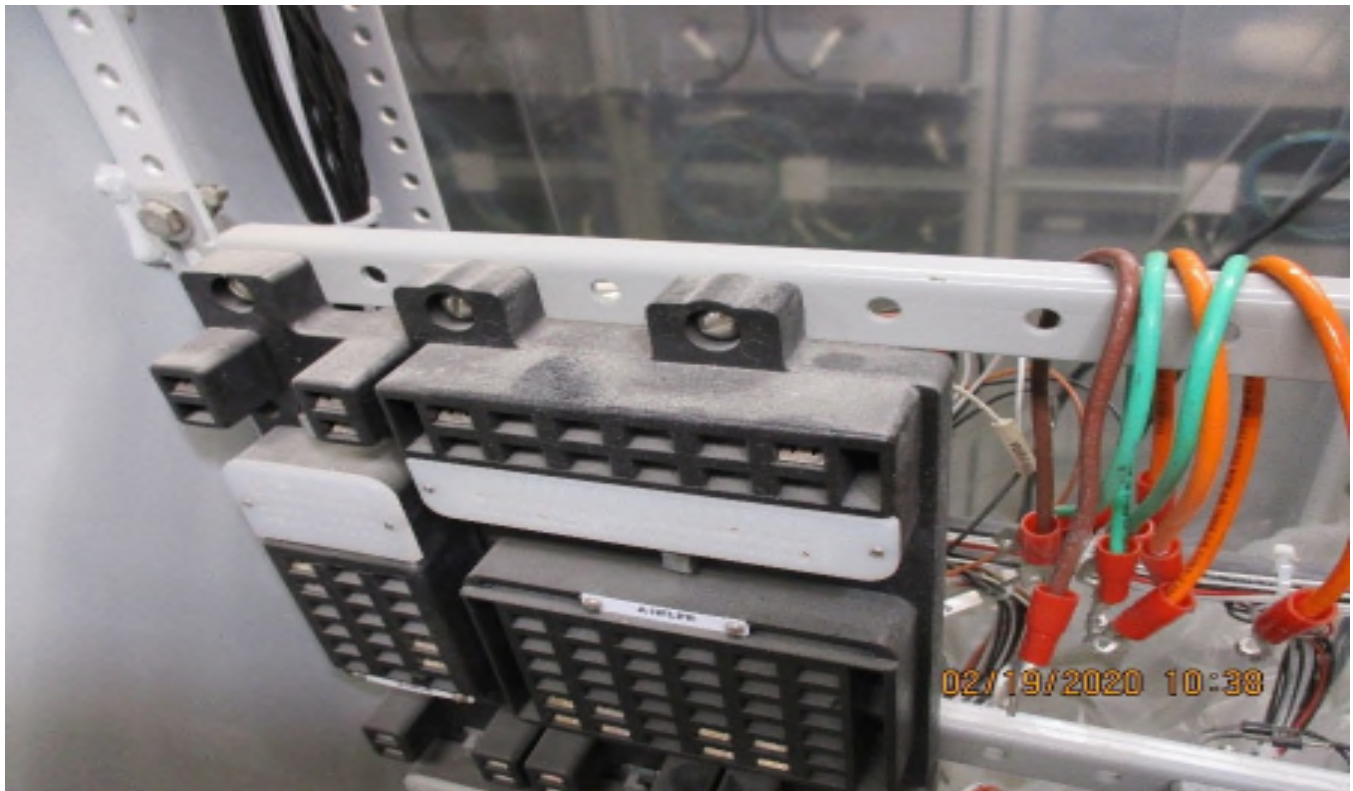


Park Mesa – Sack and patch of Catch Basin #36 on the southwest corner of 48th St and Crenshaw Blvd. 2/15/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**HYDE PARK-** LKC Personnel Terminating the Cables for Coupling Unit 3CU320, Looking North



**HYDE PARK-** Dust Accumulated in one of the Ports for the Relays, TC&C Room, Looking South

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**UG3** – Completing final excavation of eastbound “New Road” sidewalk in preparation for curb/gutter installation and concrete placement. 2/4/20



**UG3** – Installing block-out forms for curb/tree wells and placing concrete on the eastbound “New Road” sidewalk. 2/5/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Began concrete placement on both west and eastbound “New Road” sidewalks.  
2/11/20



UG3 – UG3 – Continued concrete placement of westbound “New Road” sidewalk panels.  
2/13/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**UG3** – Continued excavation/compaction of the new Cul-de-sac in preparation for curb/gutter installation and concrete placement at North Victoria Ave. 2/4/20



**UG3** – Continued excavation/compaction of the new Cul-de-sac in preparation for curb/gutter installation and concrete placement at North Victoria Ave. 2/6/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Continued excavation/compaction of the new Cul-de-sac in preparation for curb/gutter installation and concrete placement at North Victoria Ave. 2/12/20



UG3 – Began excavating and installing conduit for street light power on the eastside of the new Cul-de-sac radius at North Victoria Ave. 2/14/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Excavating and removing temporary AC for new installation and concrete placement of sidewalk and ADA ramp on the southeast corner of 67th St and Crenshaw Blvd. 2/10/20



UG3 – Began backfilling/compacting for new installation and concrete placement of sidewalk and ADA ramp on the southeast corner of 67th St and Crenshaw Blvd. 2/12/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Feb 5, 2020 at 10:45:38 PM  
Los Angeles



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

Feb 7, 2020 at 10:21:44 PM  
Los Angeles



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

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Placing phenolic conduit for the emergency lighting at the sump pit area.

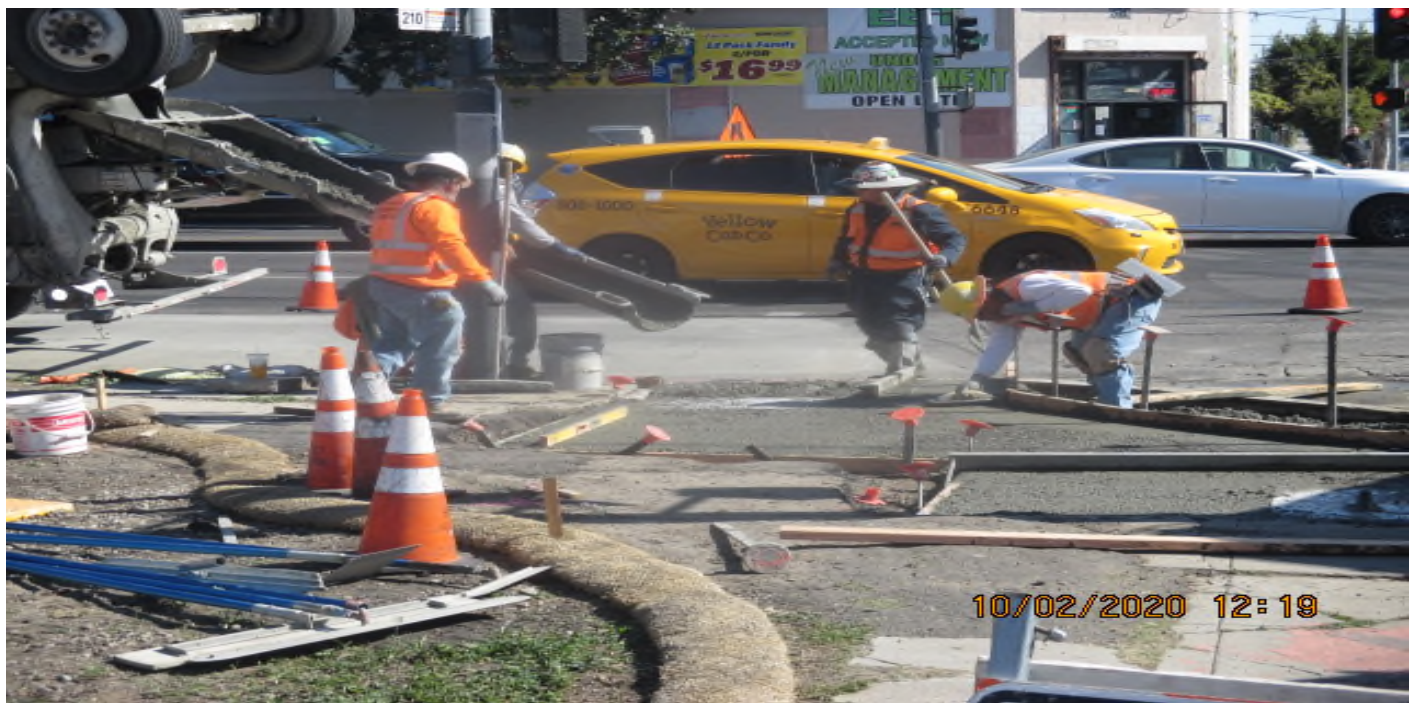


UG3 – Continue pulling wire for the emergency lighting at the south end portal entrance.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



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



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

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – Excavating and removing temporary AC for new installation and concrete placement of sidewalk and ADA ramp on the southwest corner 63rd St and Crenshaw Blvd. 2/11/20



UG3 – STA 278+80 SB looking south – checking VDC clearance UG3 south ramp (Victoria)

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG3 – STA277+50\_ Looking North\_ Check VDC clearance\_ UG3\_ Victoria



HIGH STREET- STA 245+92 SB looking north – frog of 10Q2LHXO new spike screws (Prairie- High) PUNCH LIST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**HIGH STREET- STA 241+40 NB looking south – MH#67 rim elevation vs. TOT; no track work (Centinela – High)**



**HIGH STREET- STA 244+74 NB looking south – MH#68 rim elevation vs. TOT; no track work (Centinela – High)**



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

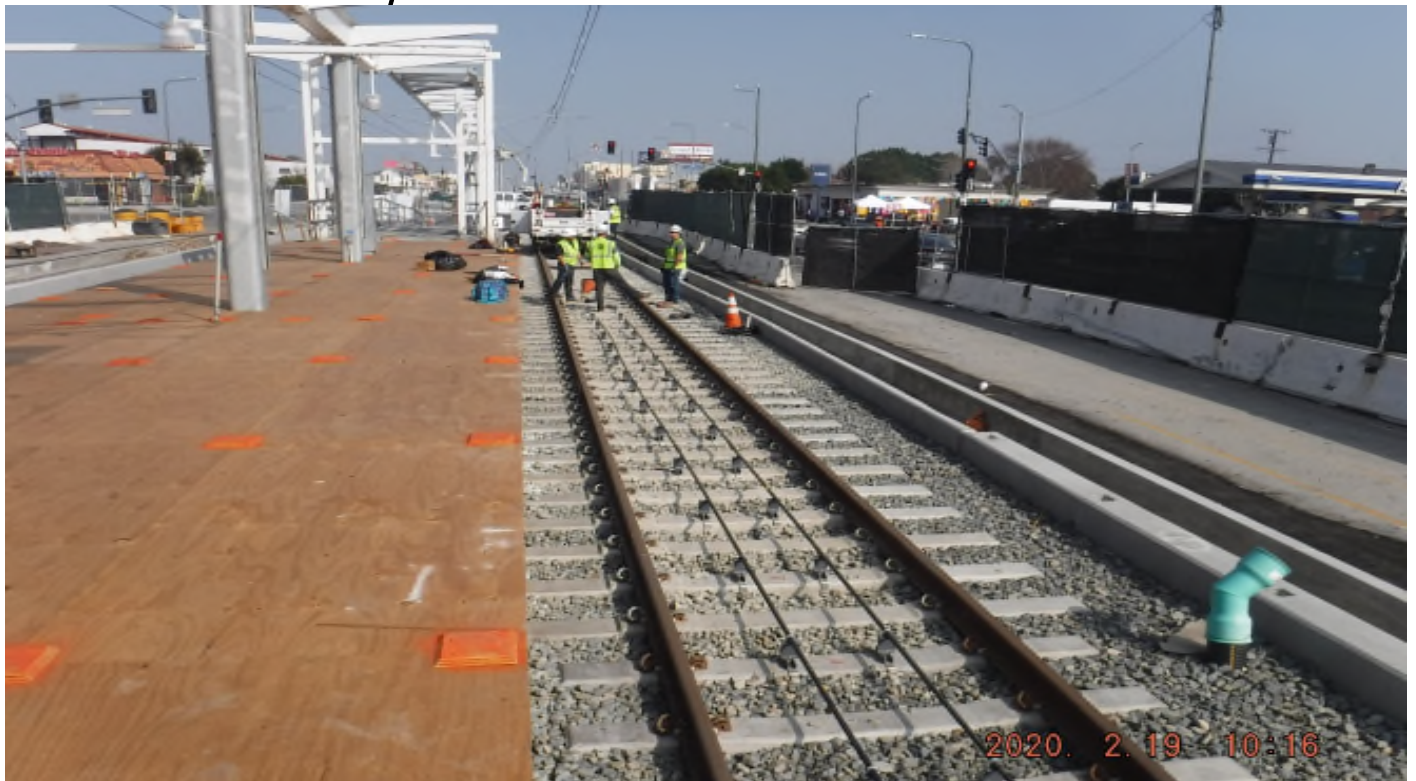


**HIGH STREET- STA 249+50 SB looking north – disturbed track structure @ S461, S462 (Centinela – High) – PUNCH LIST**



**SLAUSON STA – STA262+75\_ Looking South\_ OCS work\_ Slauson-57ST**

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



SLAUSON STA- STA320+50\_ Looking North\_ Resume loop detector set along Slauson Station



SLAUSON STA- STA322+66\_ Looking East\_ Disturbed track structure\_ PUNCH LIST.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



SLAUSON STA - STA322+63\_ Looking South\_ Disturbed track structure\_ PUNCH LIST



WEST STATION- Cross gutter grading at the West Station park and ride.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**WEST STATION-** Base grading for the West Station park & ride.



**WEST STATION-** WSCC Making fine grade for asphalt at West Sta parking lot.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**WEST STATION- STA262+75\_ looking North\_ Landing pad & foundation vacuum excavation status\_PUNCH LIST\_West**



**WEST STATION- STA262+75\_ lookN\_ Status landing pad & light pole foundations\_PUNCH LIST**

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



WEST STATION- STA262+74\_ lookS\_ Gridding next to ped at gr xing\_ Sub-ballast migrate in track ballast\_ PUNCH LIST



WEST STATION- WSCC Making fine grade for asphalt and SWK at West Sta park and ride.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



WEST STATION- WSCC Placing conc curbs and gutter at West Sta Park and Ride.



LA BREA – Catch basin concrete finish work at the La Brea Station.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



LA BREA – Masonry Concepts Placing grout in block walls at La Brea bathrooms.



LA BREA – WSCC Preparing light foundations at La Brea.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



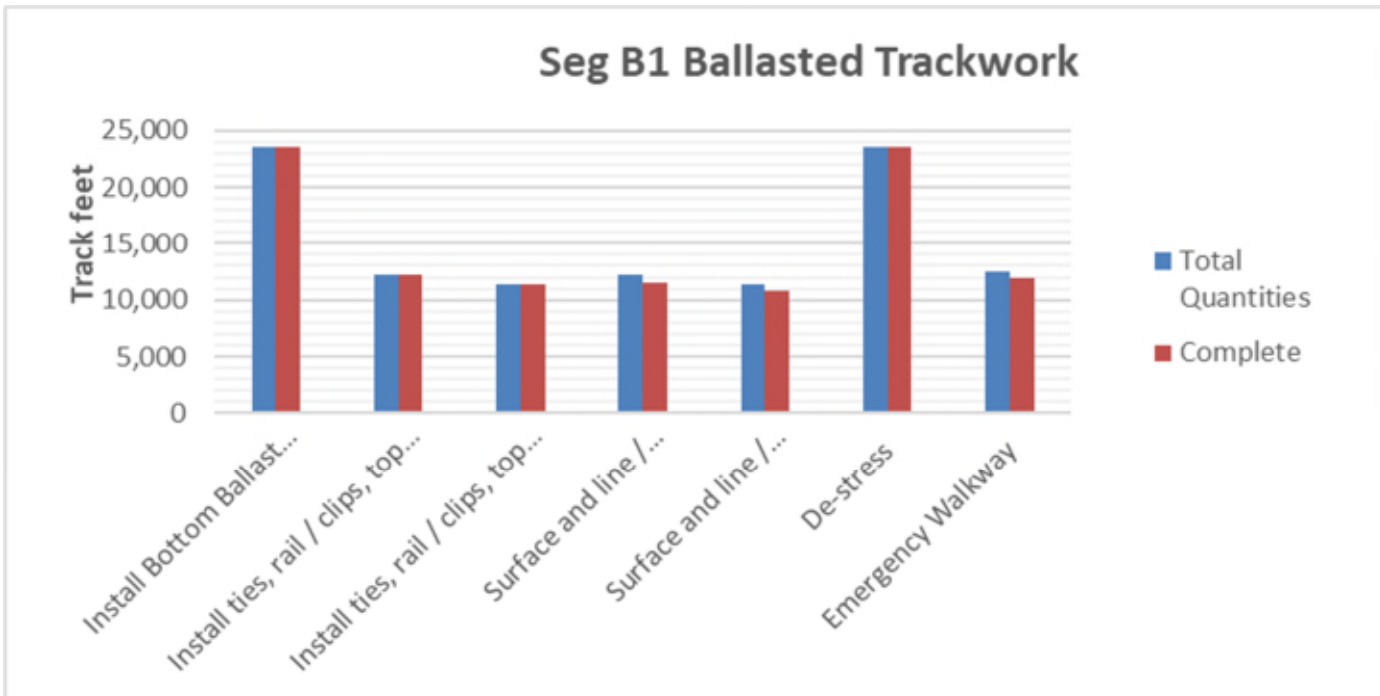
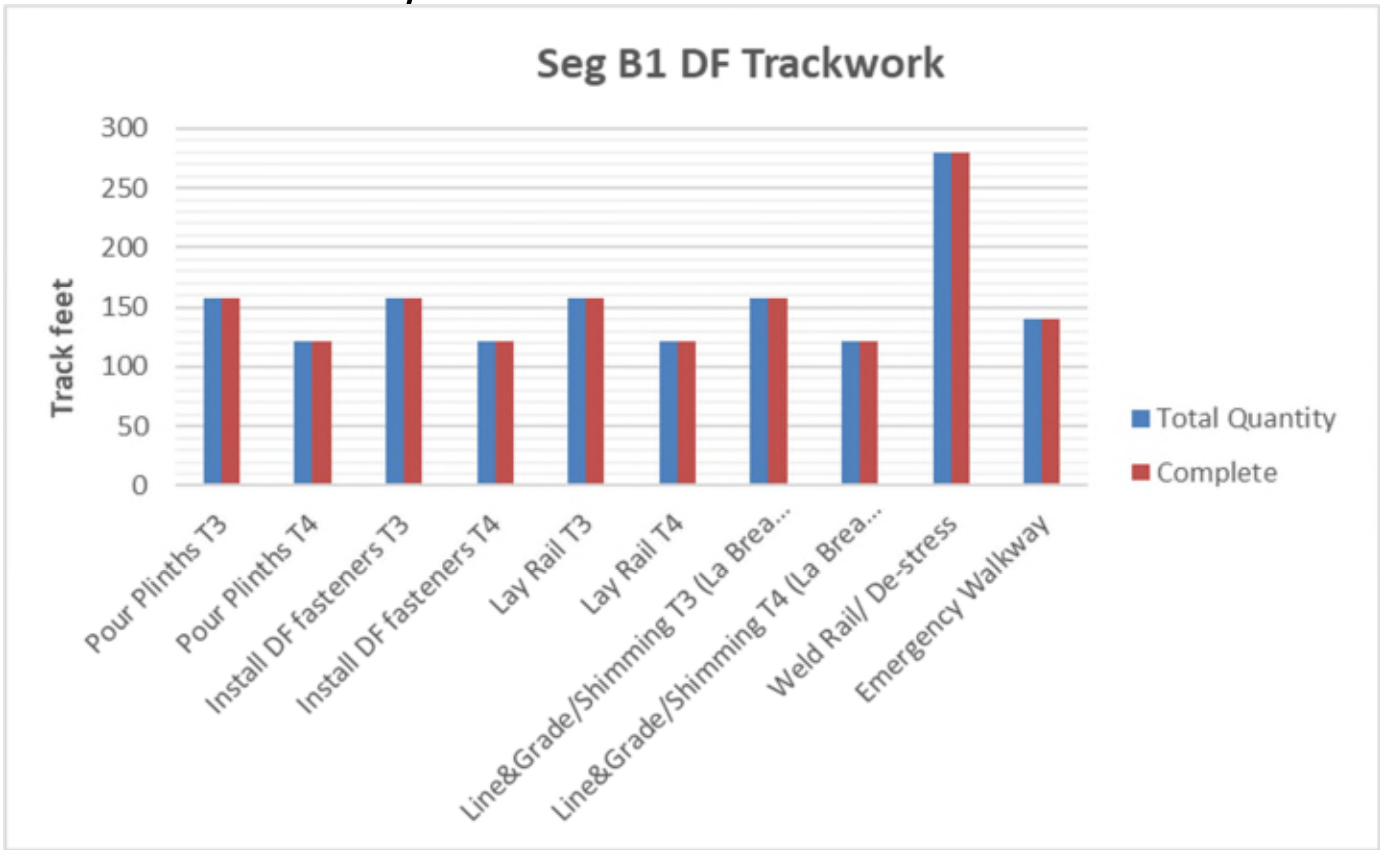
LA BREA - WSCC Placing conc for light foundations at La Brea park and Ride.

# 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 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/Centinel, 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



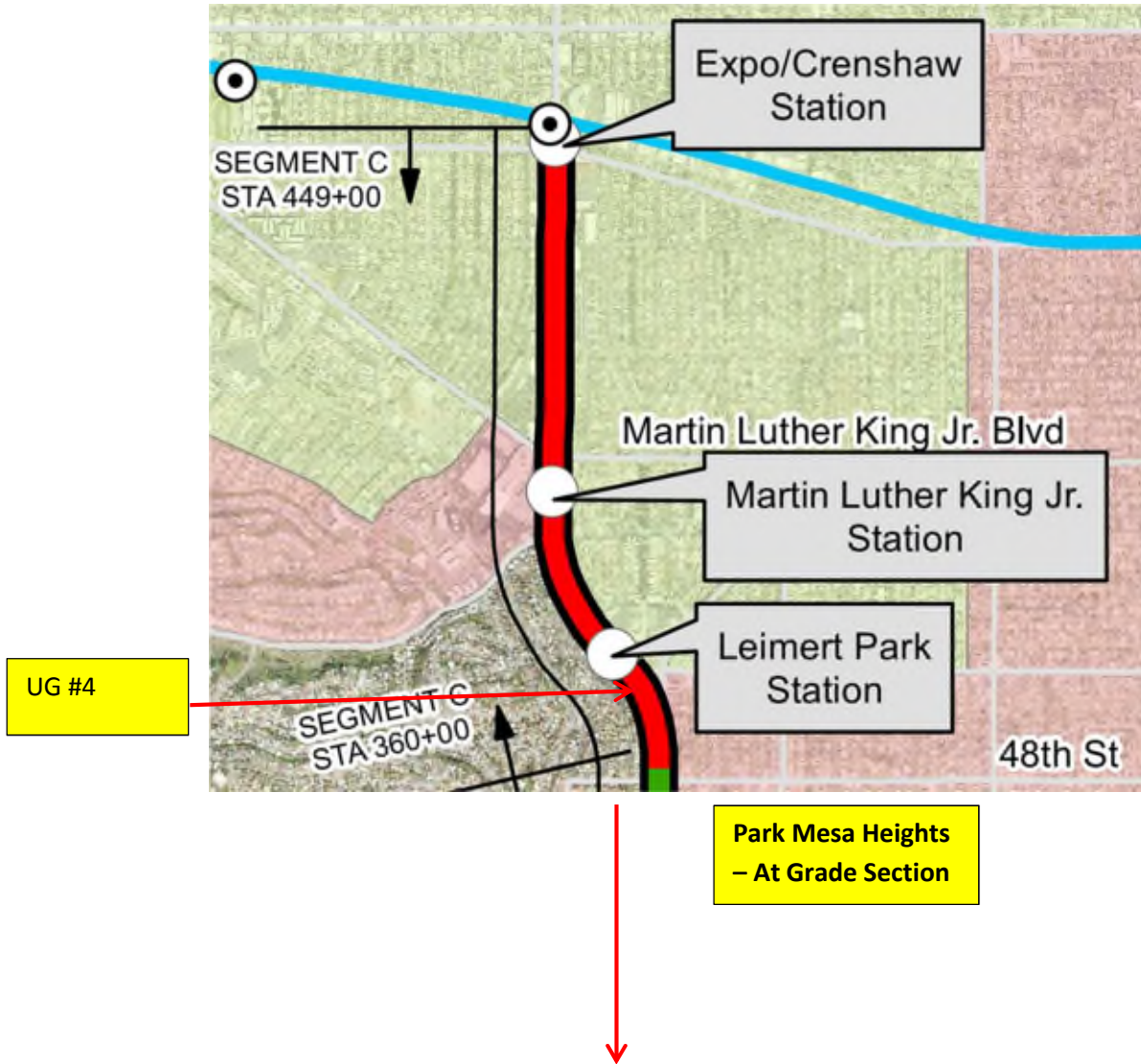
## SEGMENT B2:

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

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

- Rework begins to relocate incorrectly installed Insulated Joints (IJs) for train control on both north and south bound tracks south of 57th Street

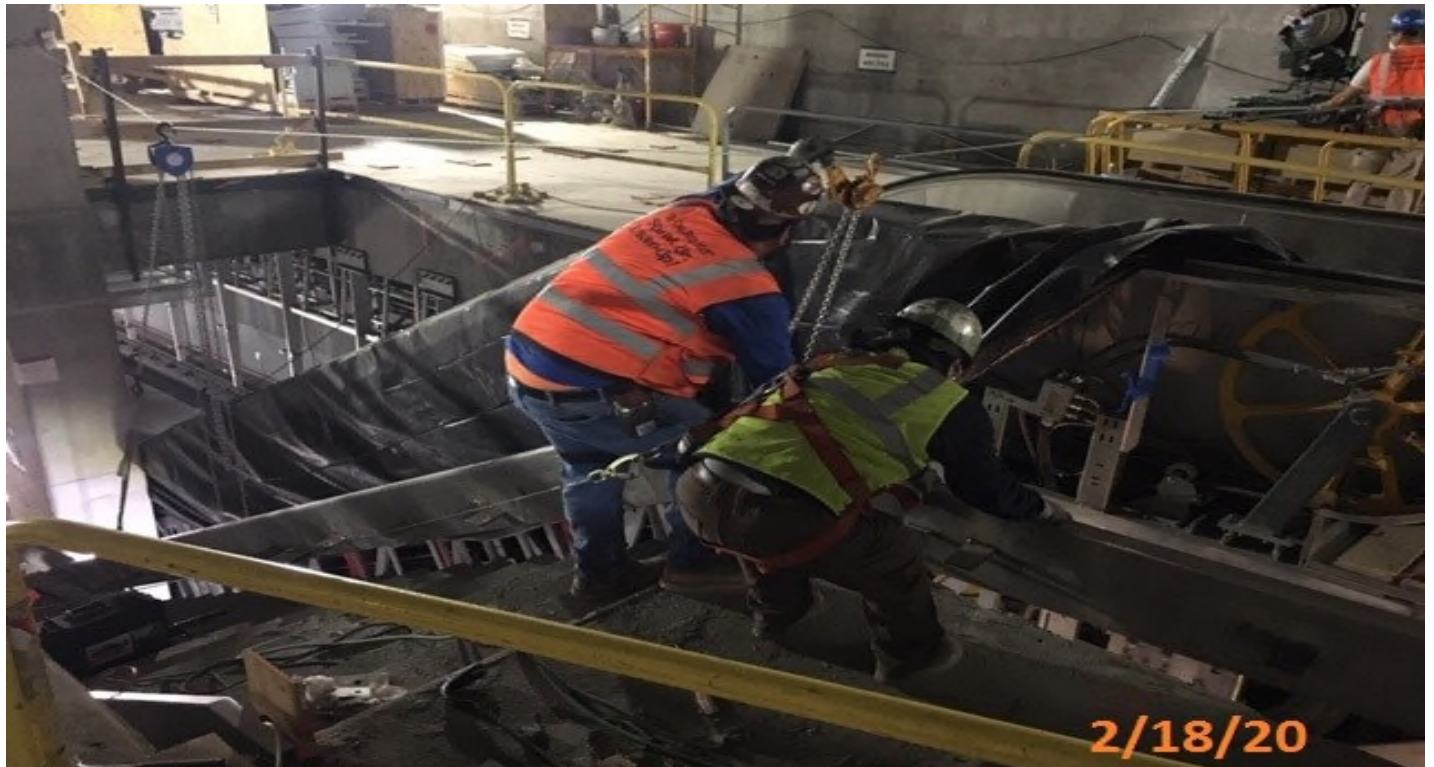
## Segment C



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

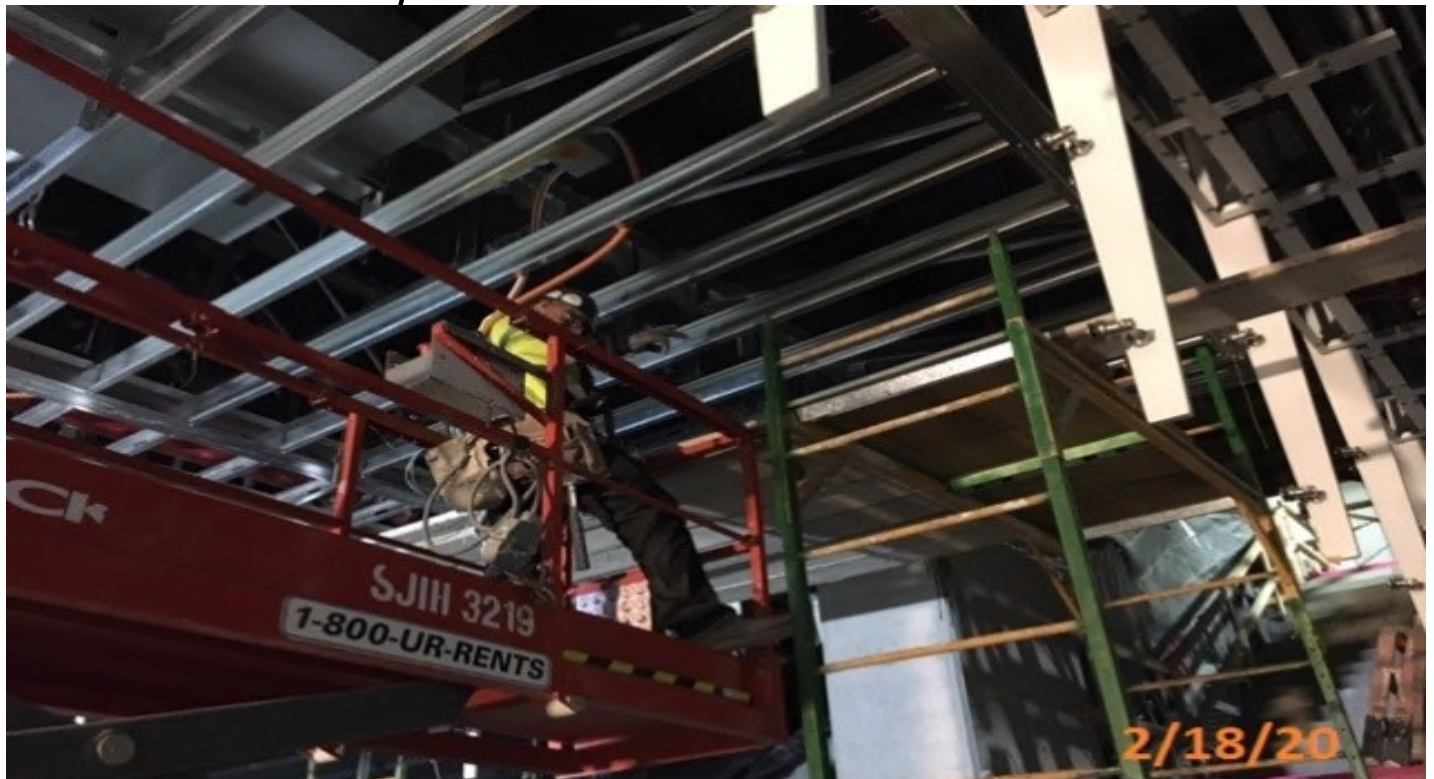


**EXPO STATION-** STA 444+50 TK#3 SB looking south – OCS work XING 5 – UG4.

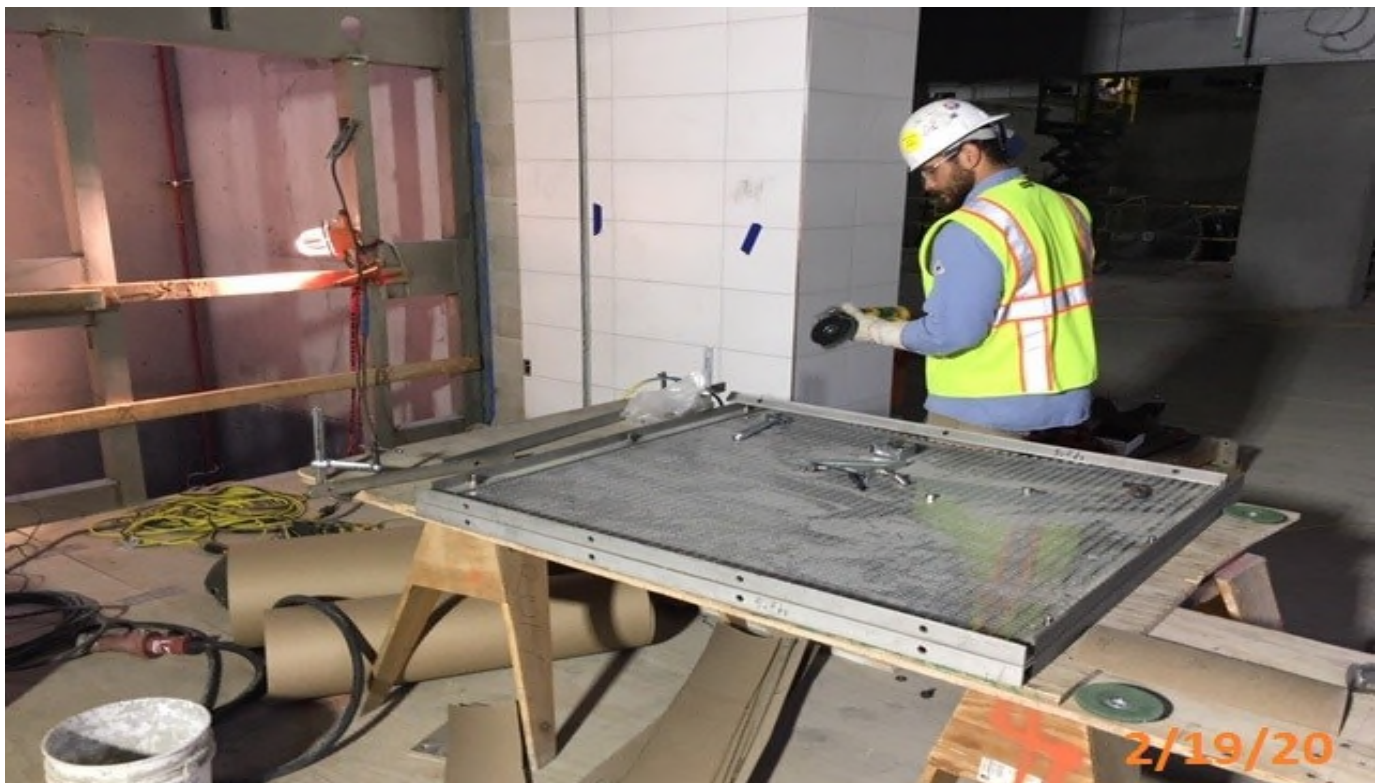


**EXPO STATION-** McMahon installing edge plate for stair case #3.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**EXPO STATION-** KHS&S continue work on metal framing.



**EXPO STATION-** McMahon installing divider screens in sub pit.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**EXPO STATION-** Masonry Concepts making cuts to cinder.



**EXPO STATION-** LKC Personnel Pulled Cable Adjacent to the South Cable Room, Looking West.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Continued installing sections of the 24” RCP for Line W – storm drain on the northbound side of Rodeo Blvd and Crenshaw Blvd. 2/11/20



EXPO STATION – Demolishing and excavating for the new Cul-de-sac construction on Bronson St. east of the plaza. 2/4/20



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Continued demolishing and excavating for the new Cul-de-sac construction on Bronson St. east of the plaza. 2/5/20



EXPO STATION – Continued demolishing and excavating for the new Cul-de-sac construction on Bronson St. east of the plaza. 2/6/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Continued excavation/backfill for the new Cul-de-sac construction on Bronson St. east of the plaza. 2/7/20



EXPO STATION – Continued demolishing and excavating for the new Cul-de-sac construction on Bronson St. east of the plaza. 2/7/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Demolishing and excavating curb/gutter for the new Cul-de-sac construction on Bronson St. east of the plaza. 2/10/20



EXPO STATION – Continued demolishing and excavating curb/gutter for the new Cul-de-sac construction on Bronson St. east of the plaza. 2/16/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Began curb/gutter formwork and placing concrete for new Cul-de-sac radius on Bronson St. east of the plaza. 2/17/20



EXPO STATION – Installing and welding HSS members of door frame of Elevator structures 1&2 at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Continued grinding welds on HSS member frames of Elevator structures 1&2 at the plaza level.



EXPO STATION – Began gutter installation on top of the main entrance canopy structure at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Continued gutter installation on top of the main entrance canopy structure at the plaza level.



EXPO STATION – Continued gutter installation on top of the main entrance canopy structure at 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 – Reinstalling hardware on all completed painted doors at the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Continued edge plate installation for staircase 3 at the platform level.



EXPO STATION – Grinding and smoothing columns at the platform level.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



EXPO STATION – Placing transformer on top of dielectric pad in the TPSS Room T – 115



MLK STATION – Prepping valve pit access hatch formwork for concrete placement at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – Prepping valve pit access hatch formwork for concrete placement at the plaza level.



MLK STATION – Began gutter installation on top of the main entrance canopy structure at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – Began catwalk installation and continued gutter installation on top of the main entrance canopy structure at the plaza level.



MLK STATION – Continued catwalk and gutter installation on top of the main entrance canopy structure at the plaza level. 2/6/20

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

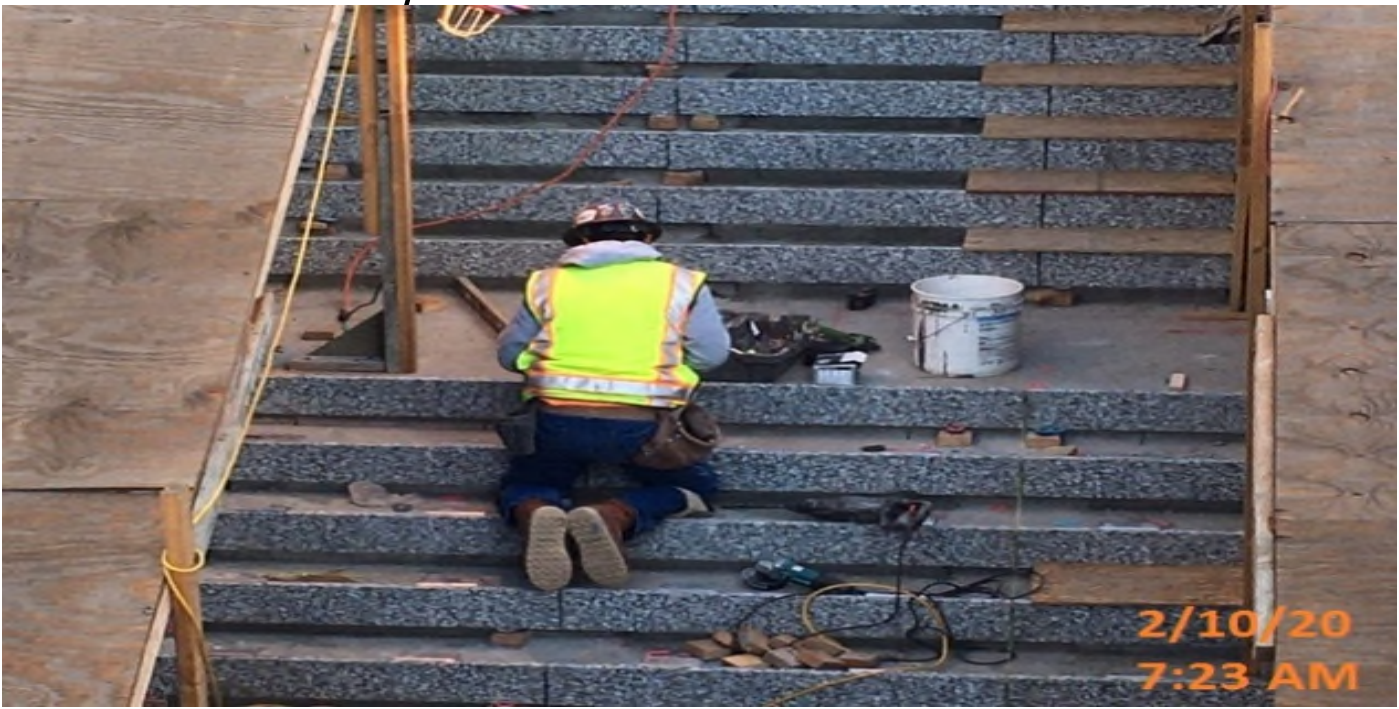


MLK STATION – Preparing for primer application for Elevator structures 1&2 at the plaza level.



MLK STATION – Continued painting Elevator structures 1&2 at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – Continue installing granite risers at the main staircase landing of the plaza level.



MLK STATION – Continued jack installation inside Elevator hoist way/pit 1 at the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – Continued jack installation inside Elevator hoist way/pits 1&2 at the concourse level.



MLK STATION – Continued jack installation inside Elevator hoist way/pit 2 at the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

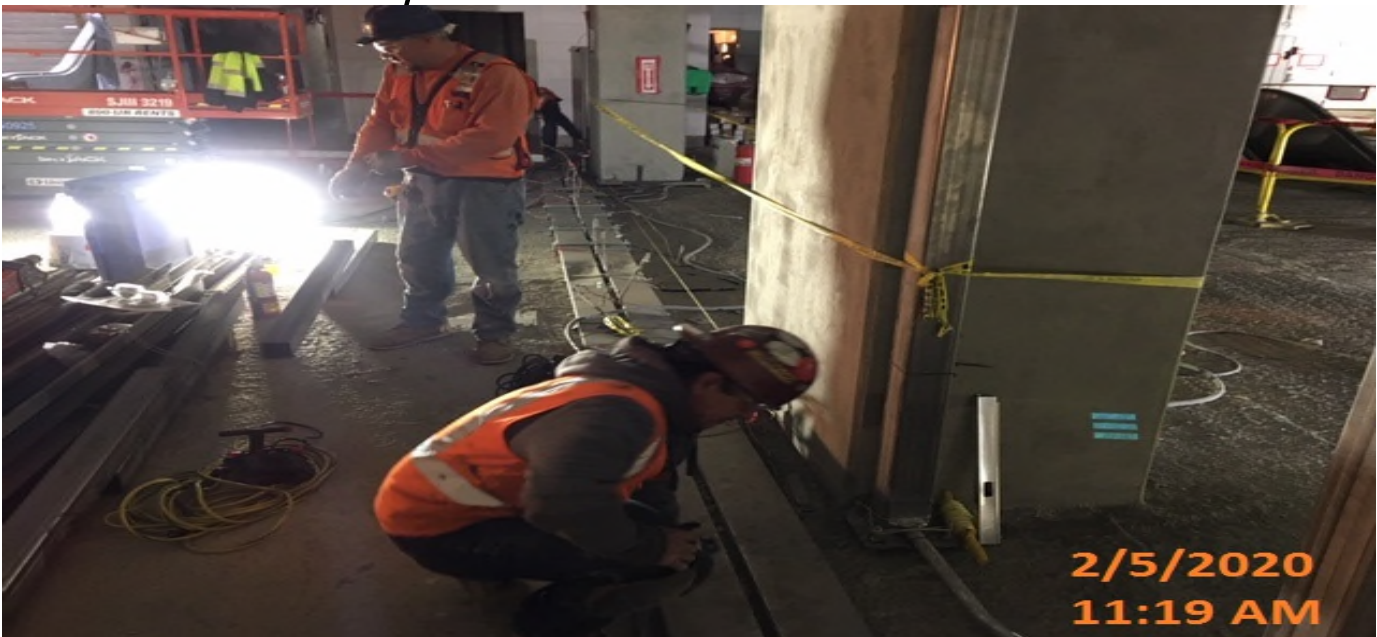


MLK STATION – Continued 3” hydraulic pipe line installation for Elevator 1 at the Machine Room C – 116 of the concourse level.



MLK STATION – Installing bent plates at the landing of Escalator #4 on the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – Began installing and welding fare gate posts in the Free Area of the concourse level.



MLK STATION – Grinding and smoothing columns in the Free Area of the concourse level.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – Continued grinding and smoothing columns in the Free Area of the concourse level. 2/15/20

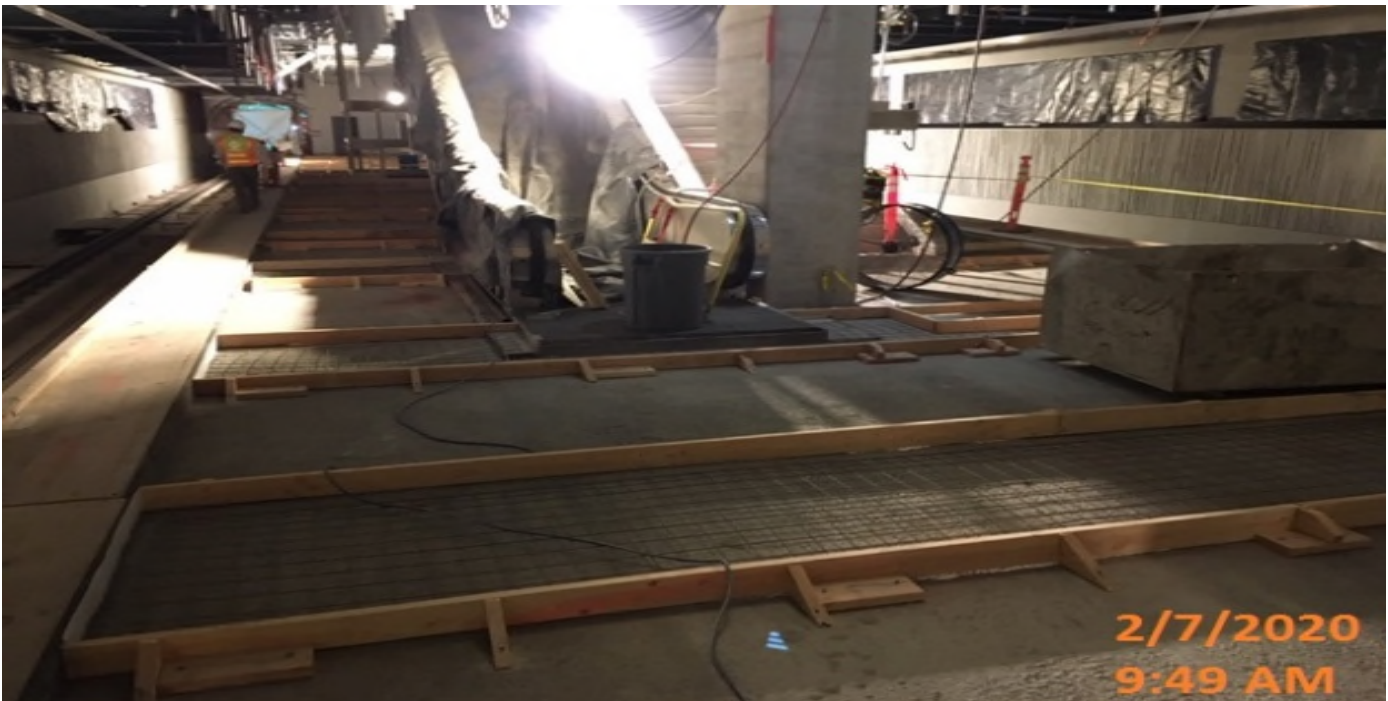


MLK STATION – Began formwork for the architectural topping slab at the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

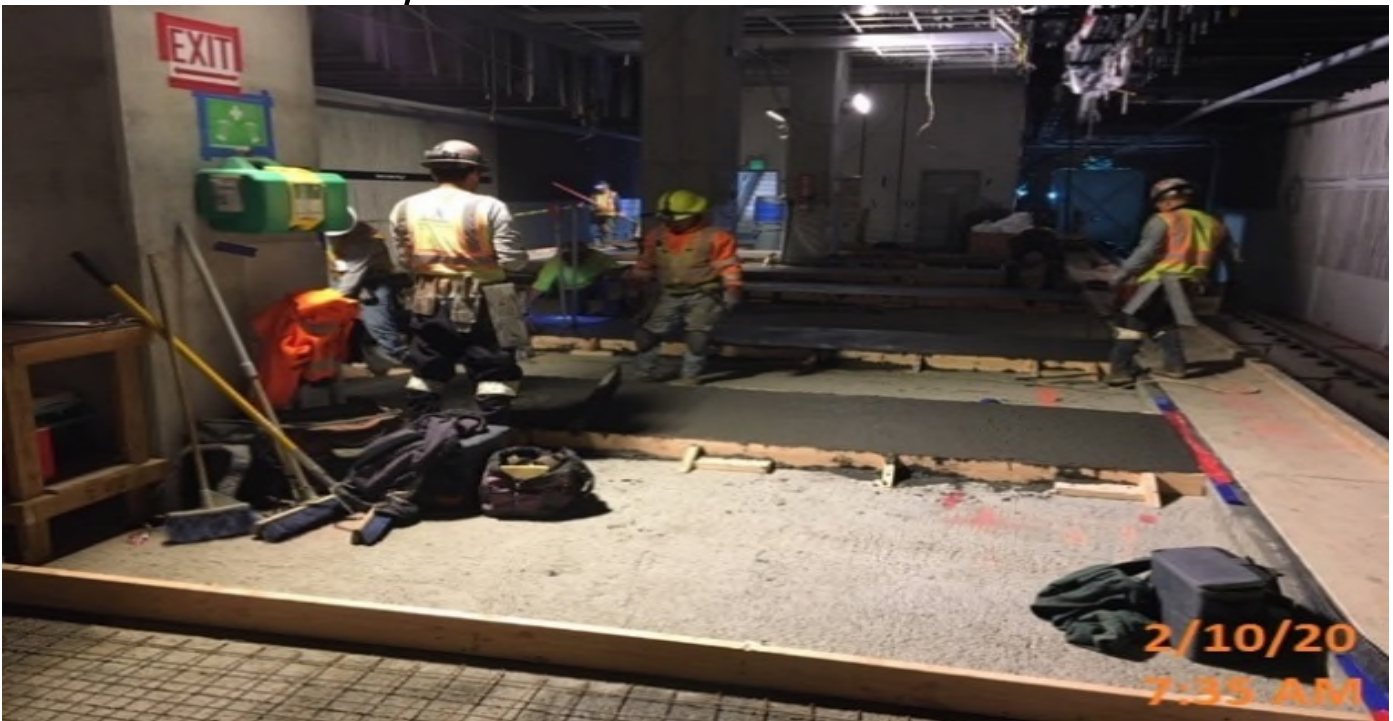


MLK STATION – Continued building formwork for the architectural topping slab at the platform level.



MLK STATION – Completed formwork in preparation of concrete placement of the architectural topping slab at the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

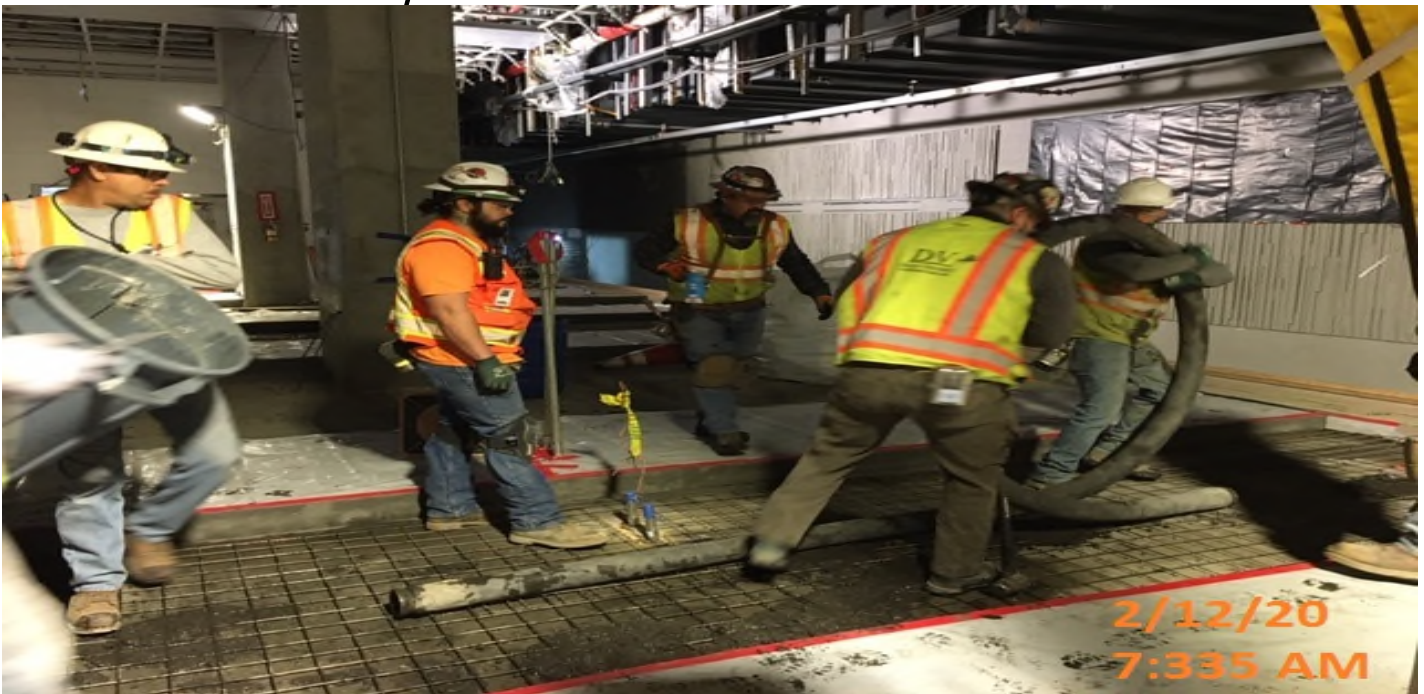


MLK STATION – Began 1st phase of concrete placement of the architectural topping slab at the platform level.

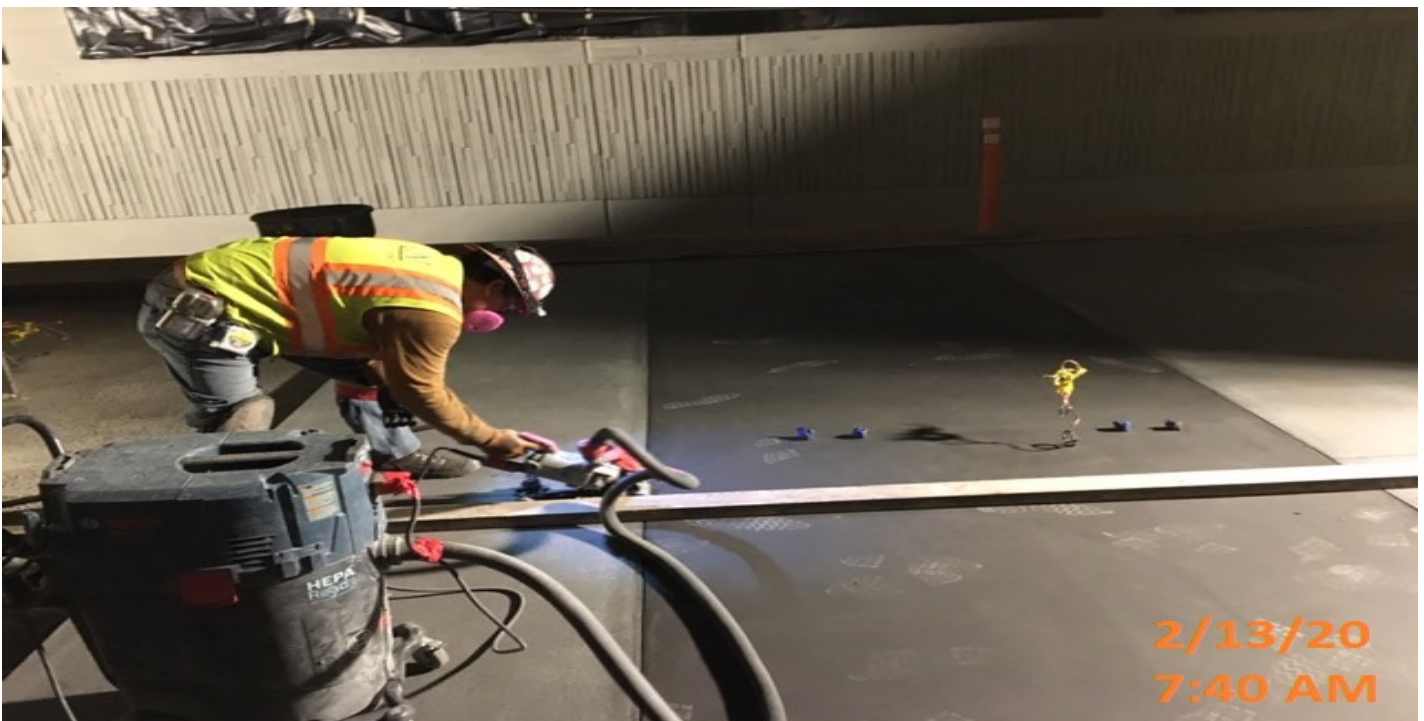


MLK STATION – Removing formwork and setting up for 2nd phase of concrete placement of the architectural topping slab at the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – Began 2nd phase of concrete placement of the architectural topping slab at the platform level.



MLK STATION – Removing formwork and saw cutting the architectural topping slabs at the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

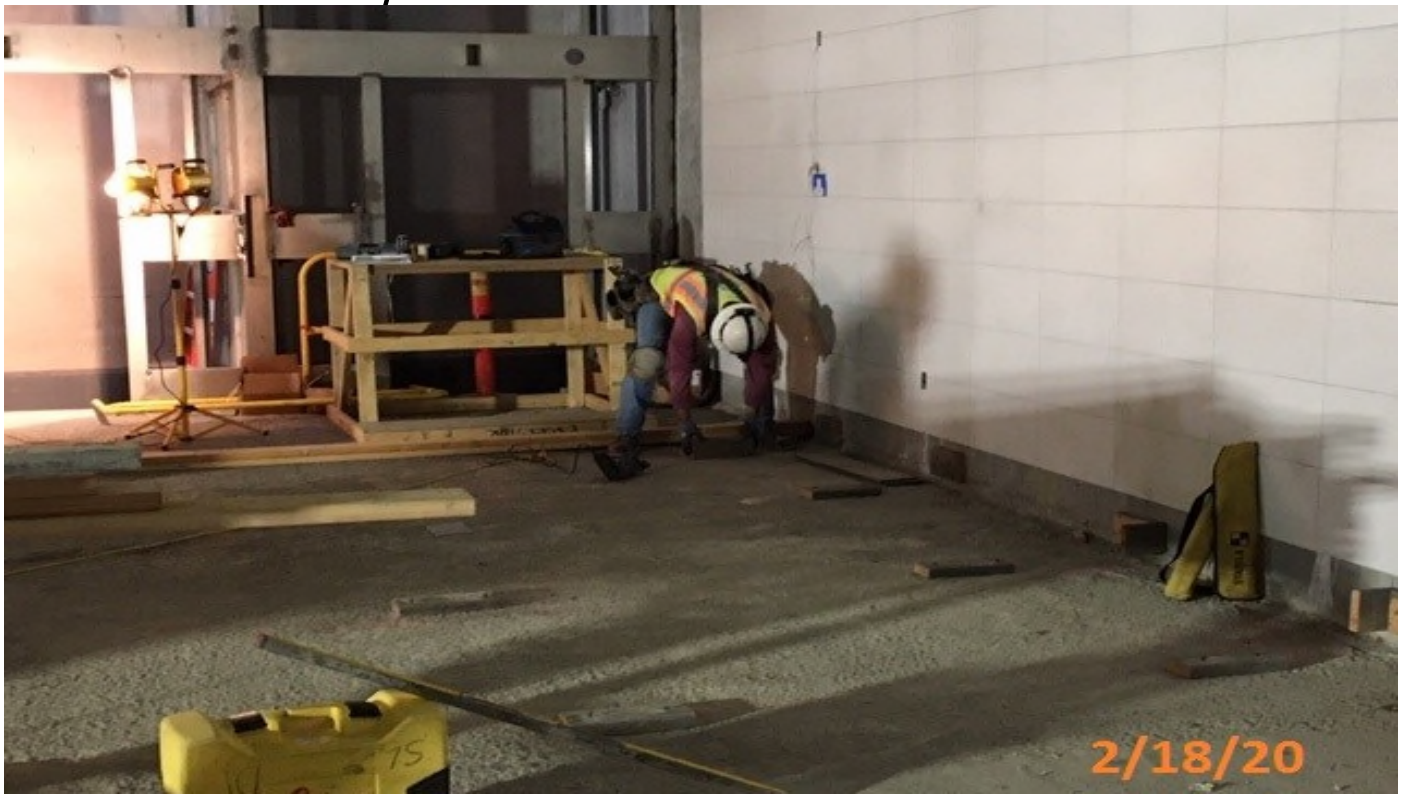


MLK STATION – Began 3rd phase of concrete placement of the architectural topping slab at the platform level.



MLK STATION – WSSC installing anchors for concrete valve pit top slab.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

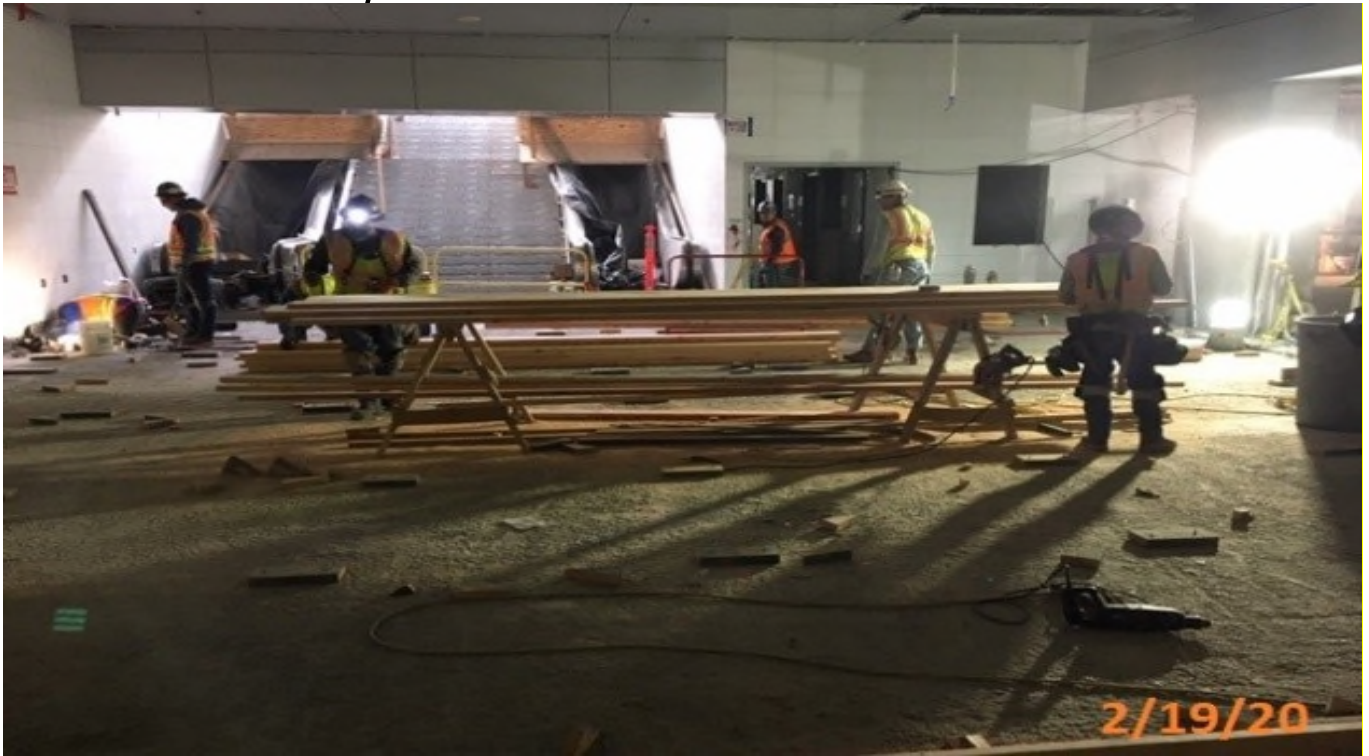


**MLK STATION** – Dean Visosky at concourse building formwork.



**MLK STATION** – Emergency Fan room (S) EVF pull box support rack kickers encroaching into path of travel means of egress.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK STATION** – Dean Visosky at concourse building formwork.



**MLK STATION** –Smithcraft installing hardware and signage.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK STATION** – Emergency Fan room (S) EVF-7-321 Continued at pull box 2 of 2 rough in supports per non approved plan.



**MLK STATION** – Aux Power (N) C132, Distribution panel VP1A-N Continued dressing & terminating FSD power.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**MLK STATION** – Dean Visosky at concourse building formwork .



**MLK STATION** – MLK TPSS Room T109, continued installing drip pans at 4" cast iron concourse level emergency & area drains

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



MLK STATION – WSSC Ironworkers aligning bent plate .



EXPO STATION- STA 444+50 TK#3 SB looking south – OCS work XING 5 – UG4.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**LEIMERT PARK STATION** – Continued placing concrete on both the north and south section planter walls at the plaza level.



**LEIMERT PARK STATION** – Applying second coat of finish paint on Elevator structures 1&2 at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

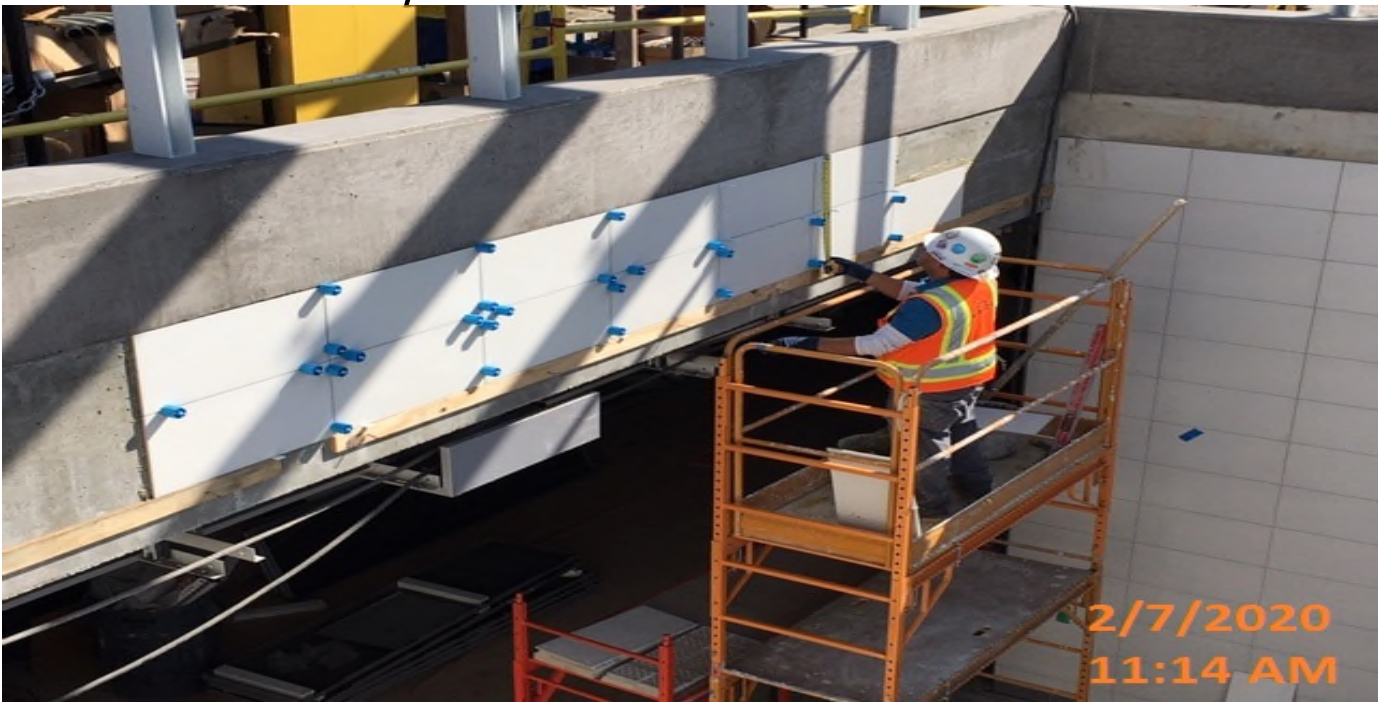


LEIMERT PARK STATION – Drilling for the installation of the luminaire light posts at the plaza level.



LEIMERT PARK STATION – Setting sonotubes in preparation of concrete placement for the footing of the luminaire light posts at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



LEIMERT PARK STATION – Installing tile on top of the main entrance header of the intermediate landing of the plaza level.



LEIMERT PARK STATION – Installing glass stops for Elevator structures 1&2 at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



LEIMERT PARK STATION – Building formwork for slurry encasement of 12” HDPE drainage pipe at the plaza level.



LEIMERT PARK STATION – Continue building formwork for the north emergency shaft ventilation grate and exit hatches at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



LEIMERT PARK STATION – Began glass panel installation for the main entrance canopy structure at the plaza level.



LEIMERT PARK STATION – Began imbed and hydrophilic water stop installation for Emergency Exit Hatches 1&2 at the plaza level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



LEIMERT PARK STATION – Continue installing 15” PVC into HDPE sleeve and began starter rails for Elevator hoist way/pit 1&2 at the concourse level.



LEIMERT PARK STATION – Continued jack installation inside Elevator hoist way/pit 1 at the concourse level.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

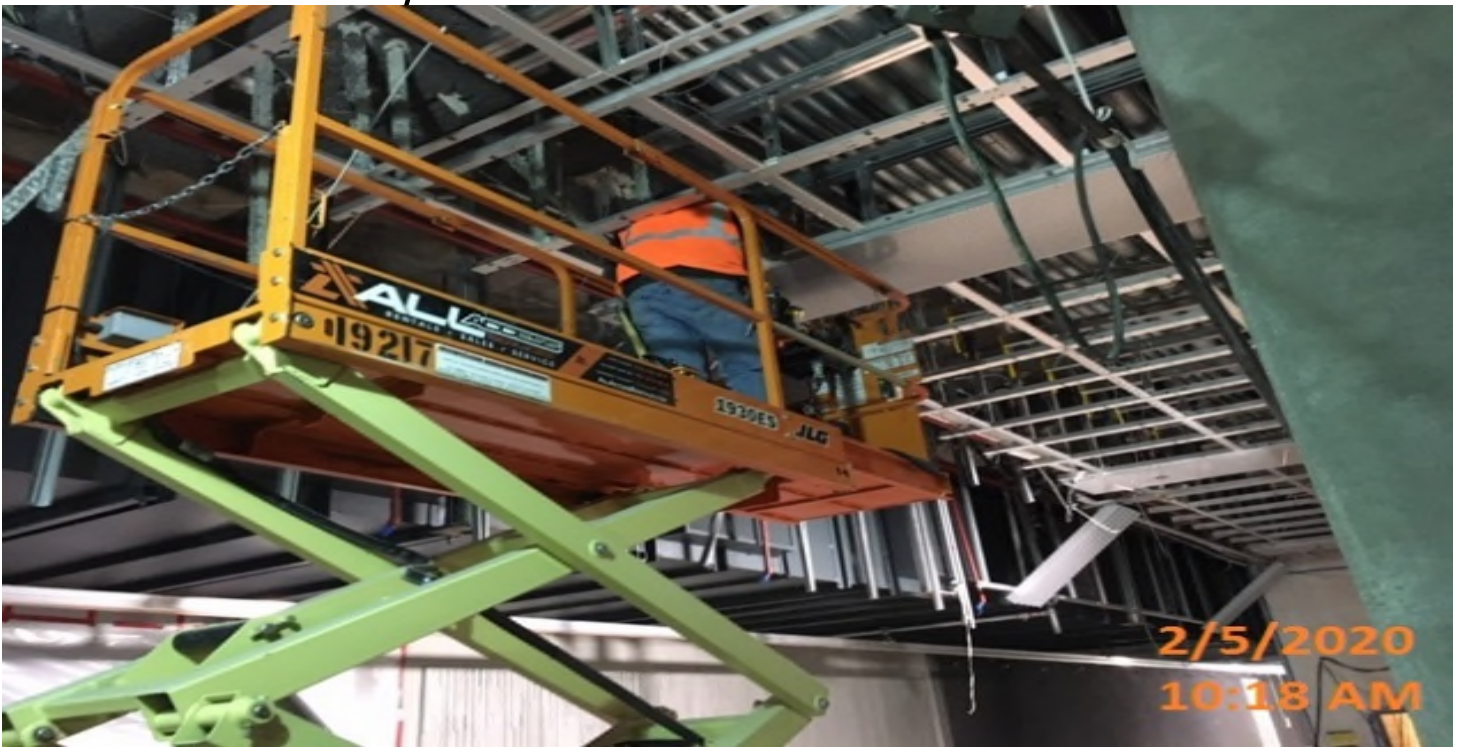


LEIMERT PARK STATION – Continued installing silicone gaskets and roughing in flex connectors to EVF-6-102 in the North Fan Room C – 126 Fan Rooms of the concourse level.



LEIMERT PARK STATION – Continued installing silicone gaskets and roughing in flex connectors to EVF-6-302 in the North Fan Room C – 126 Fan Rooms of the concourse level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



LEIMERT PARK STATION – Continue installing angle ceiling panels above the platform level.



LEIMERT PARK STATION – Continue installing metal ceiling panels above the platform level.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



2020. 2. 18 9:26

UG4 – STA365+12\_ Looking East\_ LT plinth drilling\_ NCR-A-111\_UG4\_48ST



2020. 2. 18 9:33

UG4 – STA365+12\_ Looking East\_ LT plinth drilling\_ NCR-A-111\_UG4\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG4 – STA369+62\_ lookN\_ Protecting drilled holes\_ Drilling RT plinth\_ NCR-A-111\_UG4\_48ST



UG4 – STA366+00\_ Looking North\_ WSCC QC field meeting\_ NCR-A-111\_UG4\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

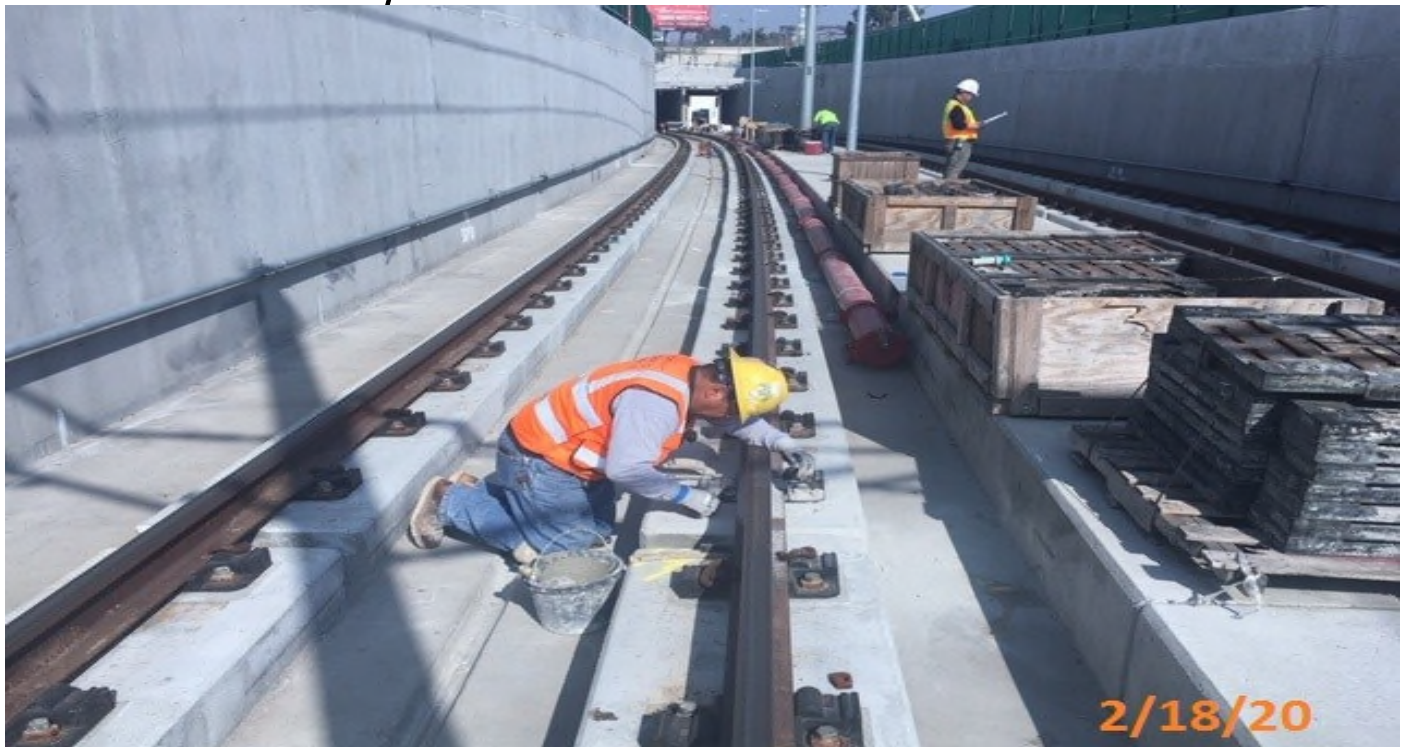


UG4 – STA365+12\_ Looking North\_ LT plinth dowel epoxy\_NCR-A-111\_UG4\_48ST



UG4 – STA370+00\_ Looking North\_ OTM inventory\_ UG4 south ramp\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG4 – WSCC drilling into plinths for rebar reinforcement.



UG4 – STA367+50\_ Looking North\_ OTM inventory\_UG4 south ramp\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



VERNON STA – Faith Electric was finishing securing and landing cables for PX2N



VERNON STA – NETE was megger testing elevator disconnects.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**VERNON STA** – Faith Electric was racking and securing a high voltage wall box on track #3 near the platform



**VERNON STA** – NETE was testing the disconnect switches in the TCC room.



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**VERNON STA** – Emergency Fan room (S) C102, EVF-6-101, continued (3) 2" FRP from PB 1 of 2 to EVF control panel



**VERNON STA** – Sprinkler valve room (S) C116 Overhead Begin pipping 1" GRC to 6"x6"x6" pull box & smoke detector

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



**VERNON STA – Giroux Glass aligning canopy glass**

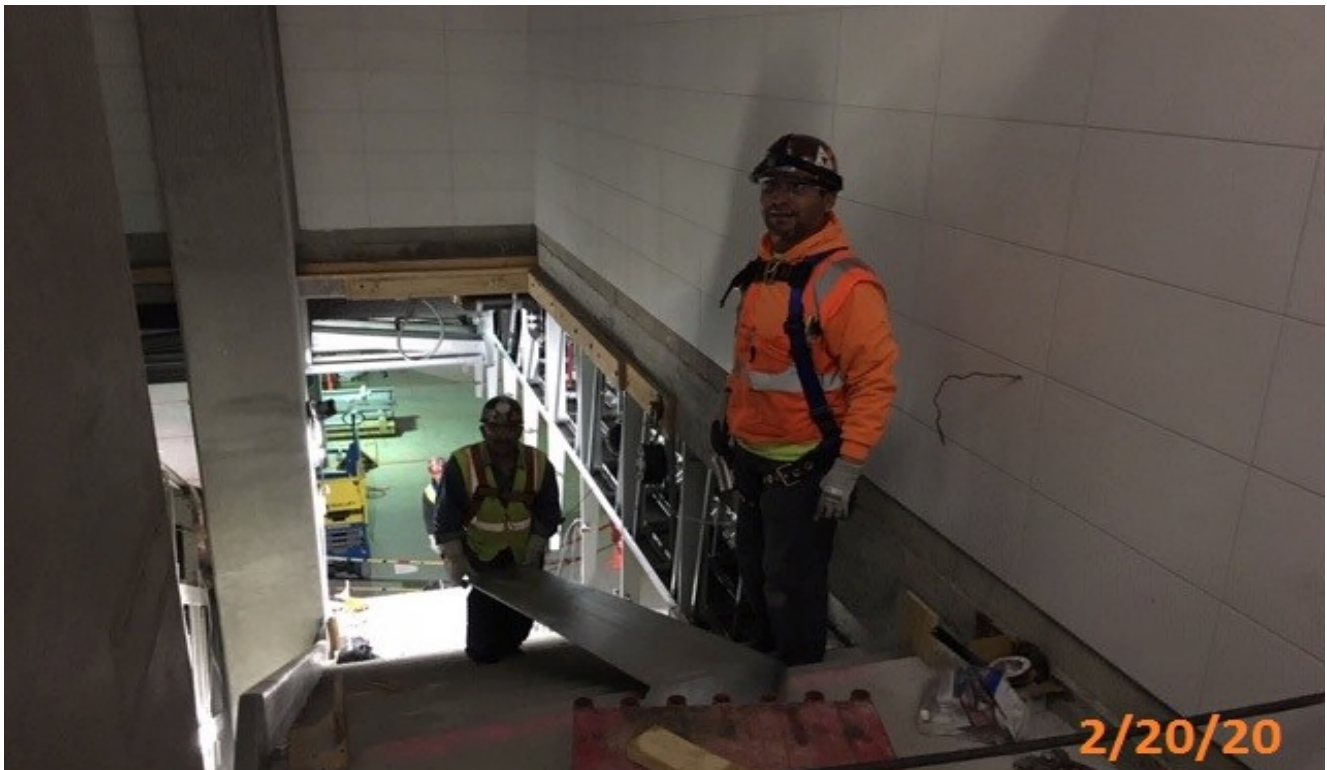


**VERNON STA – Giroux Glass aligning and spacing canopy glass panels.**

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

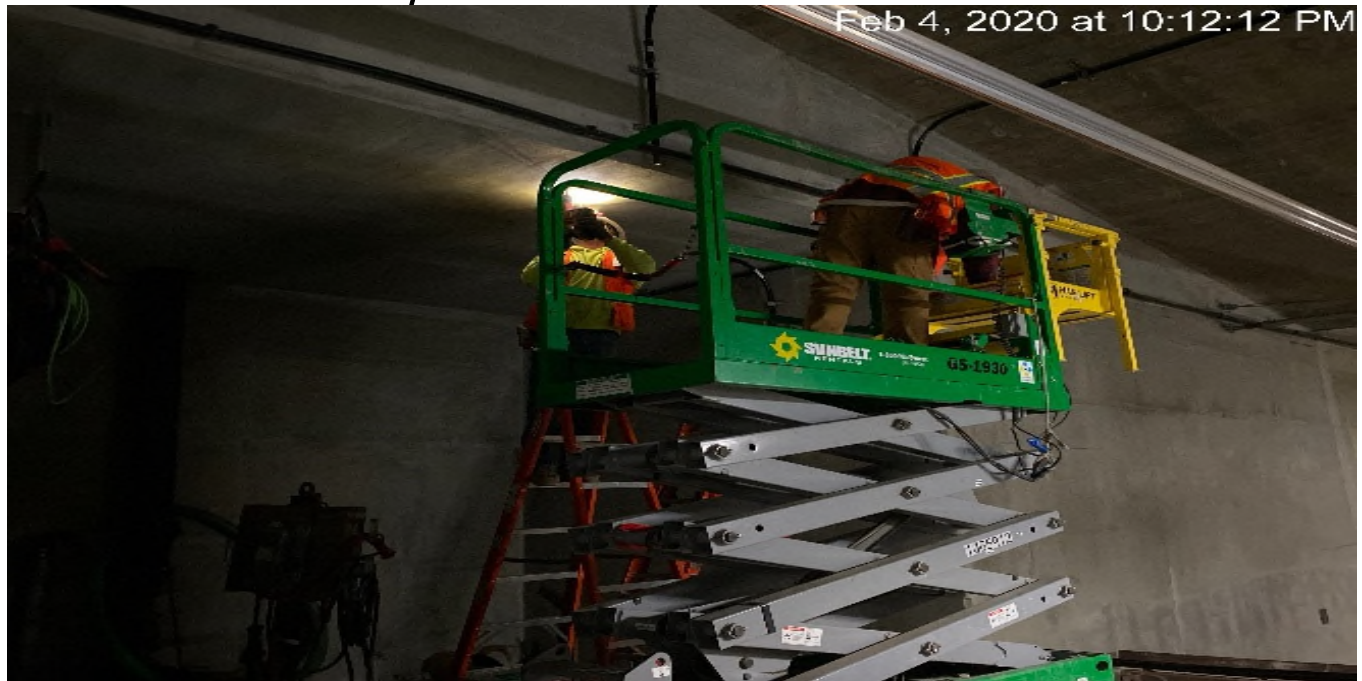


**VERNON STA** –Ironworkers fabricating trim edge.



**VERNON STA** – McMahon installing edge plate at stairwell #3

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG-4- Continue wiring and running cable for the booster fans at the southbound tunnel at Sta 377+95.

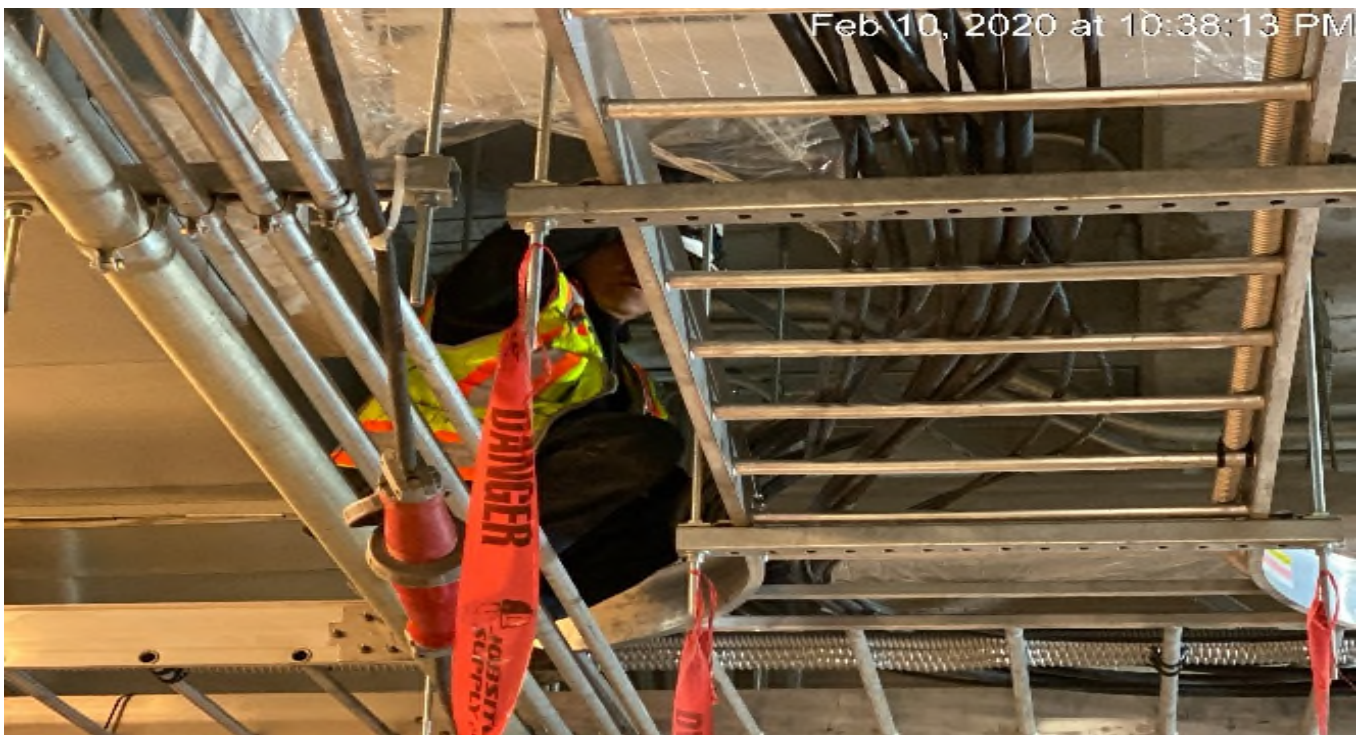


UG-4- Continue wiring and running cable for the booster fans at the southbound tunnel at Sta 377+95.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



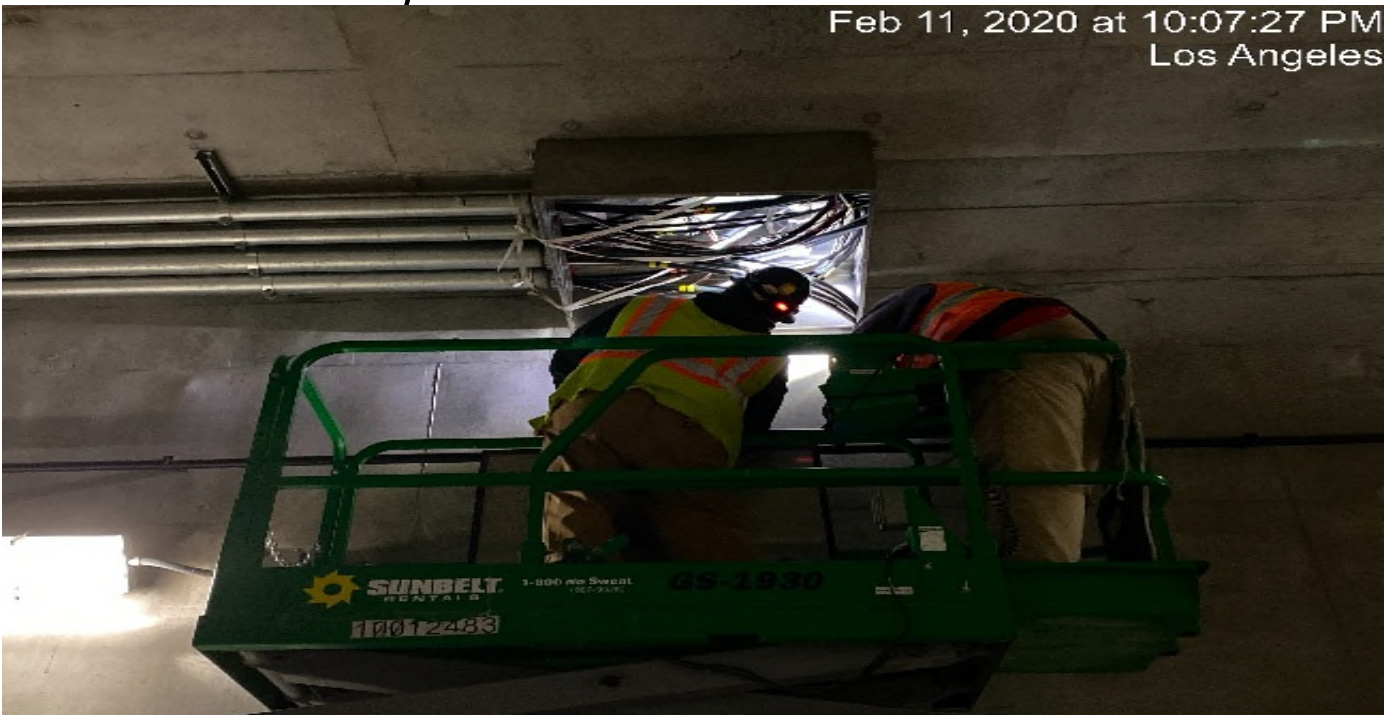
**UG-4-** Continue wiring and running cable for the booster fans at the southbound tunnel at Sta 377+95.



**UG-4-** Continue wiring and running cable for the booster fans on both north and southbound tunnels.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Feb 11, 2020 at 10:07:27 PM  
Los Angeles



UG-4- Continue wiring and running cable for the booster fans on both north and southbound tunnels.

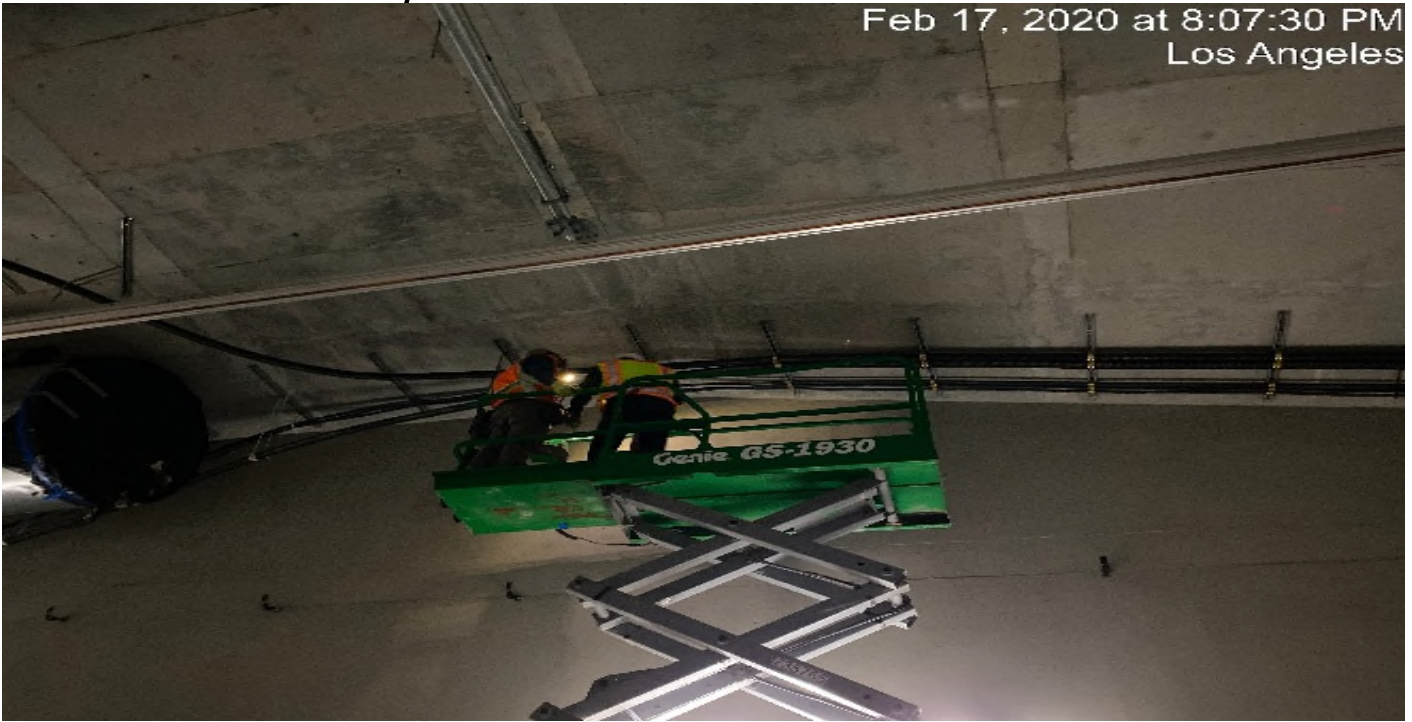
Feb 13, 2020 at 10:37:22 PM  
Los Angeles



UG-4- Continue wiring and running cable for the booster fans on both north and southbound tunnels.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

Feb 17, 2020 at 8:07:30 PM  
Los Angeles



UG-4- Continue wiring and running cable for the booster fans on the northbound tunnel at Sta 374+25.

Feb 7, 2020 at 10:45:29 PM  
Los Angeles

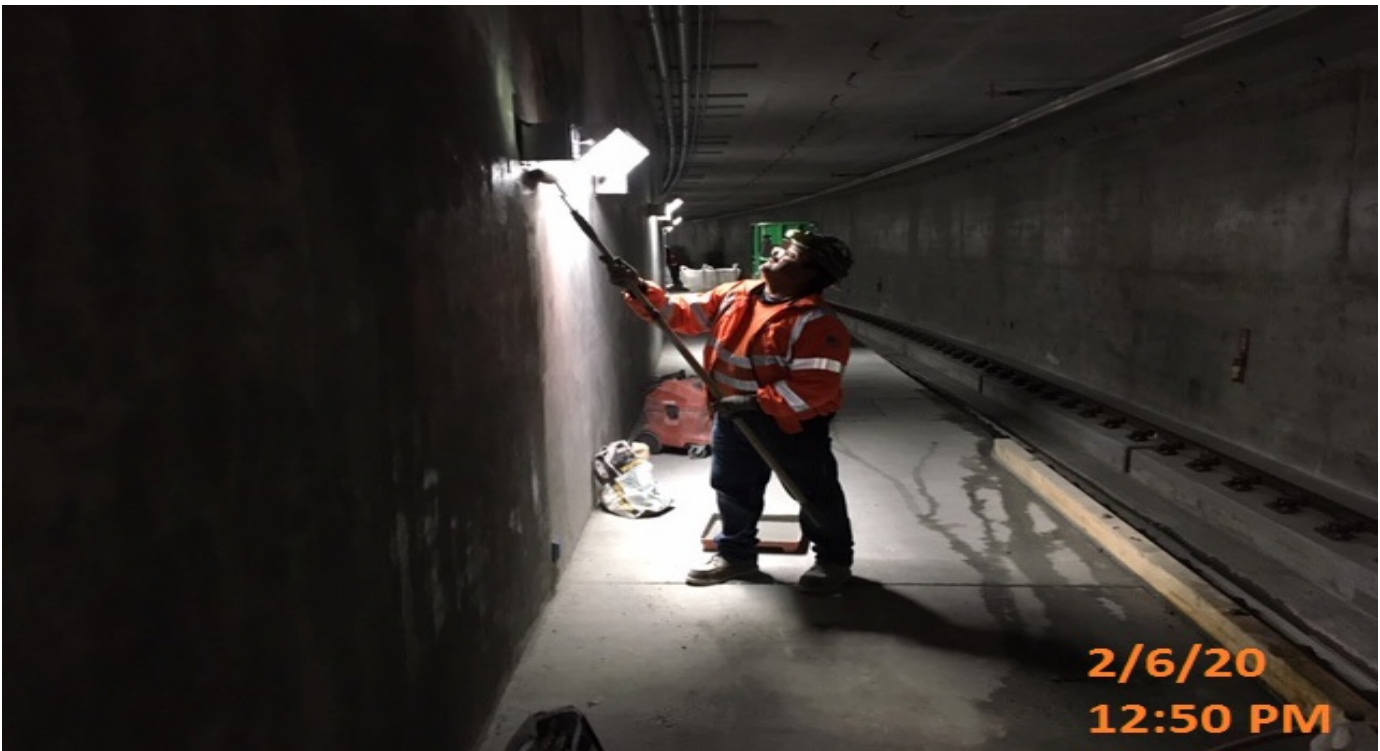


UG-4- Continue pulling wire for the emergency lighting at the south end portal entrance.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG-4- Continue pulling wire for the emergency lighting at the south end portal entrance.



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



# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG-4- Continue sack and patch of ceiling along the southbound tunnel from Sta 372+00 – 377+26.



UG4 – STA365+12\_ Looking East\_ LT plinth drilling\_ NCR-A-111\_UG4\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG4 – STA365+12\_ Looking East\_ LT plinth drilling\_ NCR-A-111\_UG4\_48ST



UG4 – STA369+62\_ lookN\_ Protecting drilled holes\_ Drilling RT plinth\_ NCR-A-111\_UG4\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG4 – STA366+00\_ Looking North\_ WSCC QC field meeting\_ NCR-A-111\_UG4\_48ST

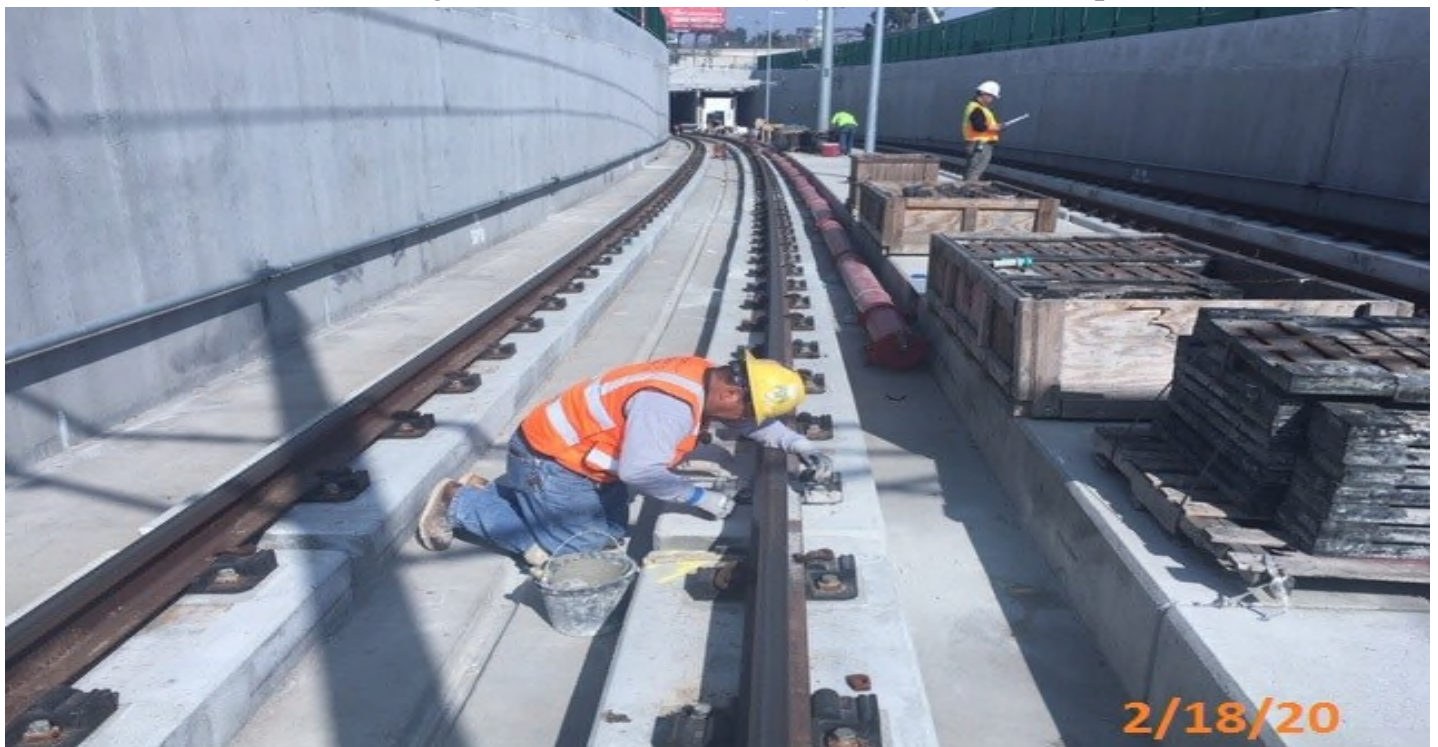


UG4 – STA365+12\_ Looking North\_ LT plinth dowel epoxy\_ NCR-A-111\_UG4\_48ST

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG4 – STA370+00\_ Looking North\_ OTM inventory\_ UG4 south ramp\_48ST



UG4 – WSCC drilling into plinths for rebar reinforcement.

# CRENSHAW/LAX PHOTOGRAPHIC UPDATE



UG4 – STA367+50\_ Looking North\_ OTM inventory\_UG4 south ramp\_48ST



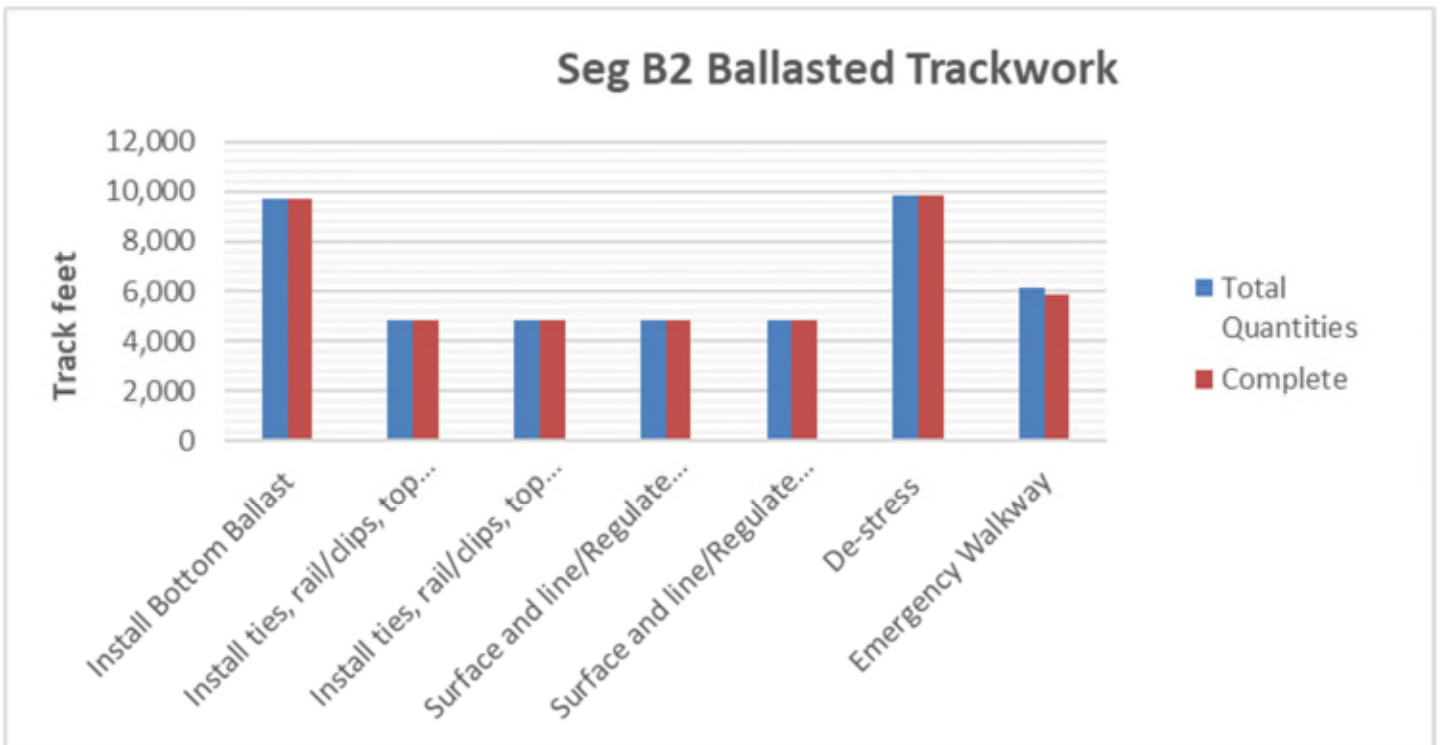
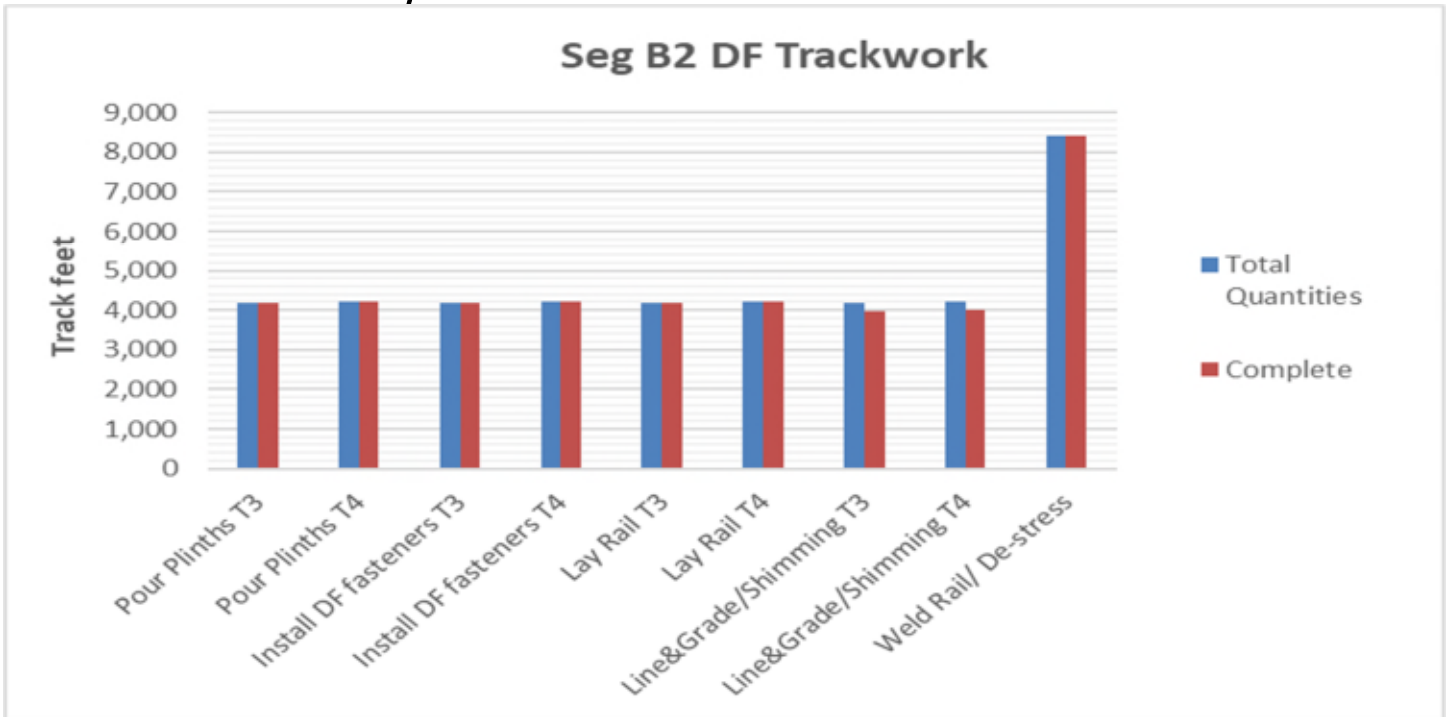
# CRENSHAW/LAX PHOTOGRAPHIC UPDATE

## 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
- Investigation of a possible repair process for plinth to invert gap is started

PROJECT WIDE TRACKWORK PROGRESS								
	TRACK TYPE	ACTIVITY	TRACK FEET/QUANTITY	INSTALLED TO DATE	REMAINING	ACTIVITY % PROGRESS	Potential Rework *	Punchlist ** (Complete/Incomplete)
SEGMENT B2	DF (8,408 TF)	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					
	BALLASTED TRACKWORK (9681 TF including grade crossings)	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				
	SPECIAL TRACKWORK	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				
	GRADE X-ING	Construct Crossing (48th, 50th, 52nd, 54th, 57th, 59th, Slauson)	7	6	1	85.71%		
SEGMENT C	DF (16,756 TF)	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				
	SPECIAL TRACKWORK	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

