

CRENSHAW/LAX TRANSIT CORRIDOR DESIGN/BUILD

APPROVED

APPROVED AS NOTED, NO RESUBMITTAL REQUIRED

REJECTED, REVISE AND RESUBMIT

RECORD ONLY

Director Construction MGR / Engineer: *[Signature]* Date: **3-28-18**

- CONSTRUCTION NOTES:**
- CONSTRUCT CURB TYPE 'A' PER SPPWC STD PLAN 5-484-B
 - CONSTRUCT LONGITUDINAL GUTTER PER SPPWC STD PLAN 122-2

ABBREVIATIONS:

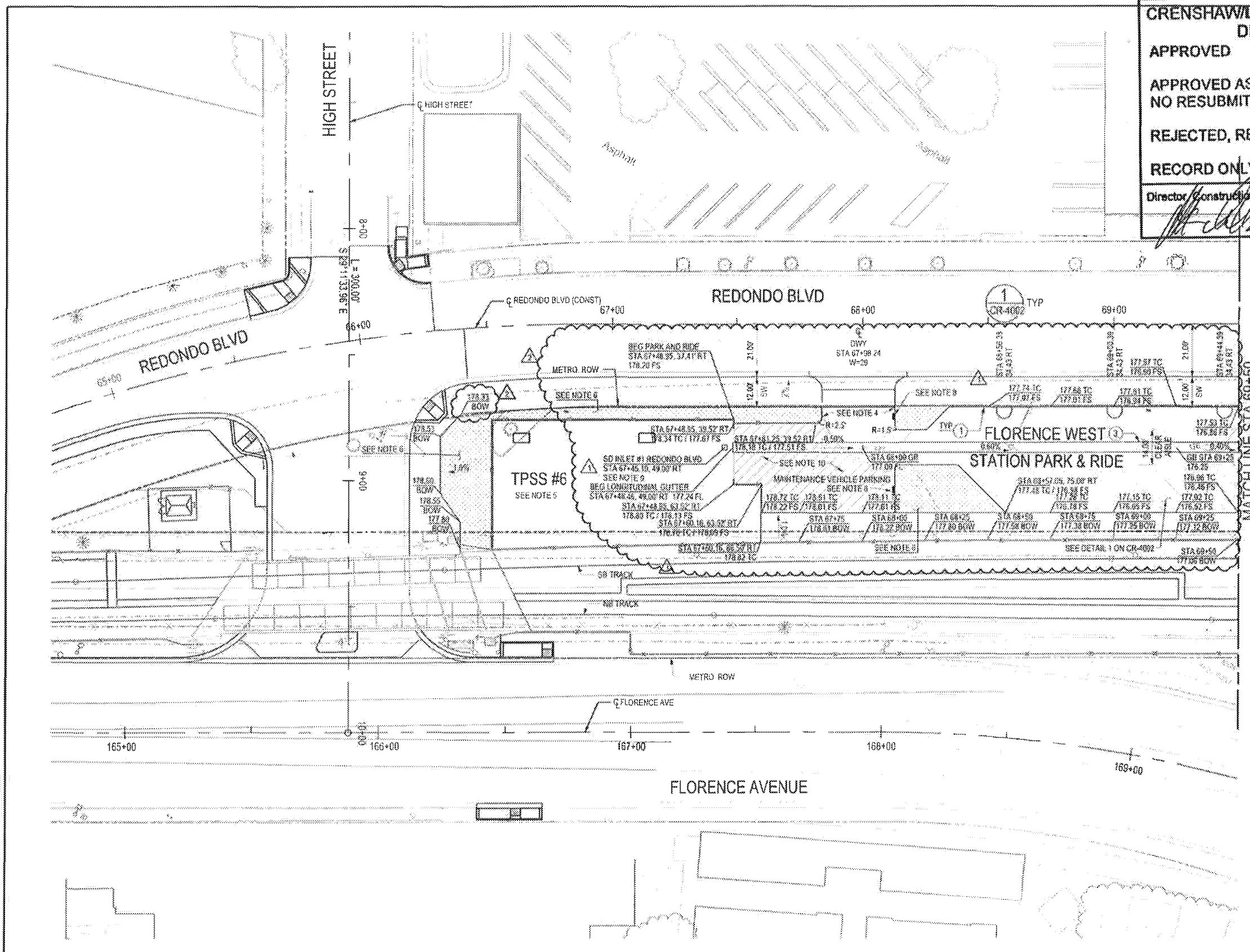
- FS FINISHED SURFACE
- BW BACK OF WALK
- TC TOP OF CURB

LEGEND:

- LANDSCAPE AREA

NOTES:

- STATION / OFFSET ARE BASED ON REDONDO BLVD CONSTRUCTION CENTERLINE.
- SEE B-1.5 ROADWAY IMPROVEMENT (CI) PLANS FOR PROPOSED ROADWAY IMPROVEMENTS.
- THE CONTRACTOR SHALL VERIFY TIE-IN ELEVATIONS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
- SEE DRIVEWAY DETAIL SHEET CDT-61-114.
- SEE SYSTEMS PACKAGE FOR TPSS#6 GRADING & DRAINAGE SHEET TP-0640
- SEE PW23 LANDSCAPE (L) PLANS FOR PROPOSED LANDSCAPING IMPROVEMENTS.
- GRADING AND SITE PREPARATION SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED IN THE PROJECT'S FINAL GEOTECHNICAL DESIGN REPORT.
- ADD CURB CUT PER CITY OF LOS ANGELES STANDARD PLAN 5-484-B, TWO LOCATIONS THIS SHEET.
- SEE PW23 DRAINAGE (CR) PLANS FOR PROPOSED PARKING LOT DRAINAGE.
- INSTALL 4" WHITE STRIPING, 45° DIAGONAL AT 3' SPACING, AND PROPER SIGNAGE AT NO PARKING AREA.



PACKAGE B-1.4

<p>THE PREPARATION OF THIS DRAWING HAS BEEN FINANCED BY PART THROUGH A GRANT FROM THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA) UNDER THE FEDERAL TRANSIT ACT OF 1964, AS AMENDED, AND IN PART BY THE TAXES OF THE CITIZENS OF LOS ANGELES COUNTY AND OF THE STATE OF CALIFORNIA.</p>										<p>DESIGNED BY WERNER ABREGO</p> <p>DRAWN BY JOHN MONG</p> <p>CHECKED BY RYAN BROWNE</p> <p>DATE 5/21/15</p>		<p>A SIGNED & SEALED ORIGINAL OF REV 0 OF THIS DRAWING IS MAINTAINED BY WSSC</p>		<p>M LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY Metro</p> <p>WALSH-SHEA CORRIDOR CONSTRUCTORS 1777 Oakland Blvd. Walnut Creek, CA 94596</p>		<p>HNTB STEVE WHITAKER APPROVED</p>		<p>D'LEON Consulting Engineers DOMINGO LEON APPROVED</p>		<p>CRENSHAW/LAX TRANSIT CORRIDOR PROJECT FLORENCE / WEST STATION PARK & RIDE STA 66+00 TO STA 69+50 GRADING PLAN 1 OF 3</p>		<p>CONTRACT NO. C0988</p> <p>SHEET NO. CR-4001</p> <p>SCALE 1"=20'</p> <p>DATE PLOT 3/28/18</p>	
REV	DATE	BY	APP	REQ NO	EXPIRES	SEAL HOLDER	DESCRIPTORS																
0	5/21/15	JDD	JWM	34988	9/30/19	DOMINGO LEON	NDC 331																
							NDC 201																
							AFC SUBMITTAL																



CONSTRUCTION NOTES:

1. CONSTRUCT CURB "TYPE A1" PER SPPWC STD PLAN 120-2, "CF" PER PLAN
2. REMOVE EXISTING CURB & GUTTER
3. CONSTRUCT LONGITUDINAL GUTTER PER SPPWC STD PLAN 122-2
4. CONSTRUCT CURB AND GUTTER "TYPE A2" PER SPPWC STD PLAN 120-2, "CF" PER PLAN
5. CONSTRUCT 4" THICK PCC SIDEWALK JOINTS PER SPPWC STD PLAN 112-2
6. INSTALL AC PAVEMENT SECTION, THICKNESS PER PLAN
7. INSTALL CRUSHED MISCELLANEOUS BASE (CMB) OVER COMPACTED NATIVE, THICKNESS PER PLAN

ABBREVIATIONS:

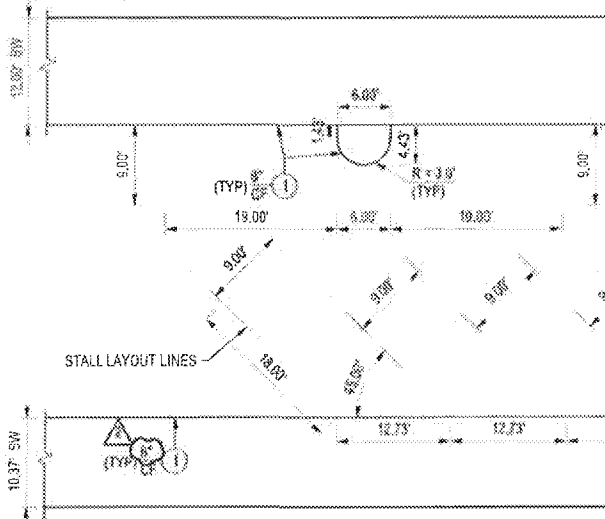
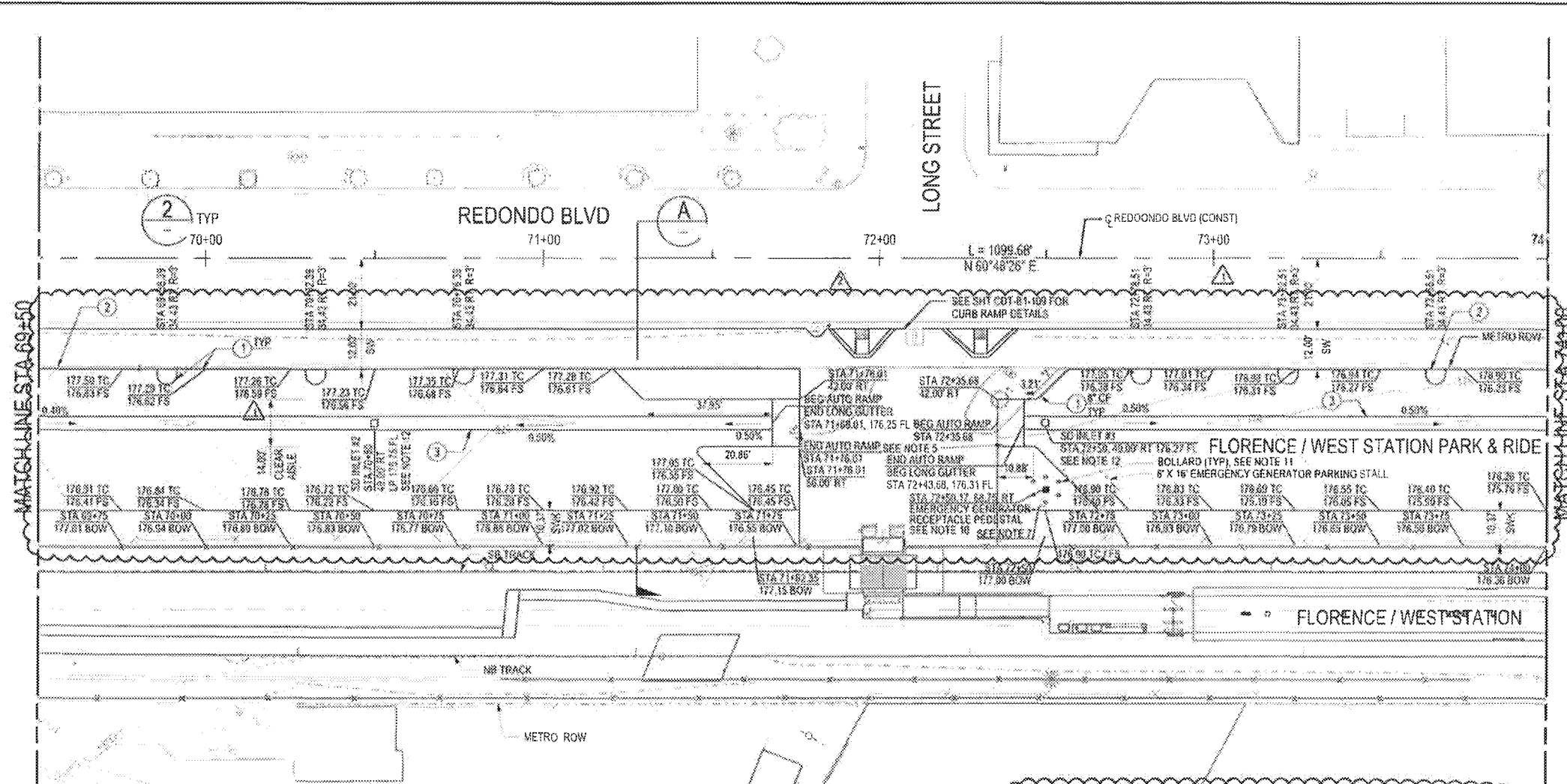
- FS FINISHED SURFACE
- BW BACK OF WALK
- TC TOP OF CURB

LEGEND:

- = LANDSCAPE AREA

NOTES:

1. STATION / OFFSET ARE BASED ON REDONDO BLVD CONSTRUCTION CENTERLINE.
2. SEE B-1.5 ROADWAY IMPROVEMENT (CS) PLANS FOR PROPOSED ROADWAY IMPROVEMENTS.
3. SEE METRO STANDARD DRAWING AS-035 FOR PICKET FENCE DETAILS.
4. THE CONTRACTOR SHALL VERIFY TIE-IN ELEVATIONS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
5. SEE B-1.5 HIGH STREET & REDONDO BLVD CURB RAMP DETAILS SHEET CDT-B1-109 DETAIL 5.
6. SEE NORMAL CAR PARKING LOT LAYOUT, MRDC SECTION 3 FIGURE 3.A. AISLE WIDTH SHALL BE 18.5'.
7. SEE PW23 LANDSCAPE (L) PLANS FOR PROPOSED LANDSCAPING IMPROVEMENTS.
8. SEE CIVIL GUIDEWAY (CG) PLANS FOR IMPROVEMENTS WITHIN PROPOSED GUIDEWAY.
9. ADD CURB CUT PER CITY OF LOS ANGELES STANDARD PLAN S-404-0. ONE LOCATION THIS SHEET.
10. INSTALL PROMOUNTED UNIVERSAL PEDESTAL, STAINLESS STEEL OR APPROVED EQUAL.
11. SEE PW28 GATE CROSSING DETAIL SHEET Q-B1-114 FOR BOLLARD DETAIL.
12. SEE PW23 DRAINAGE (CB) PLANS FOR PROPOSED PARKING LOT DRAINAGE.
13. SEE BWS CR-4007 FOR RELOCATION OF MVD VENT.
14. PROVIDE 1/2" JOINT FILLER BETWEEN SIDEWALK AND FACE OF BALLAST WALL.



**CRENSHAW/LAX TRANSIT CORRIDOR
DESIGN/BUILD**

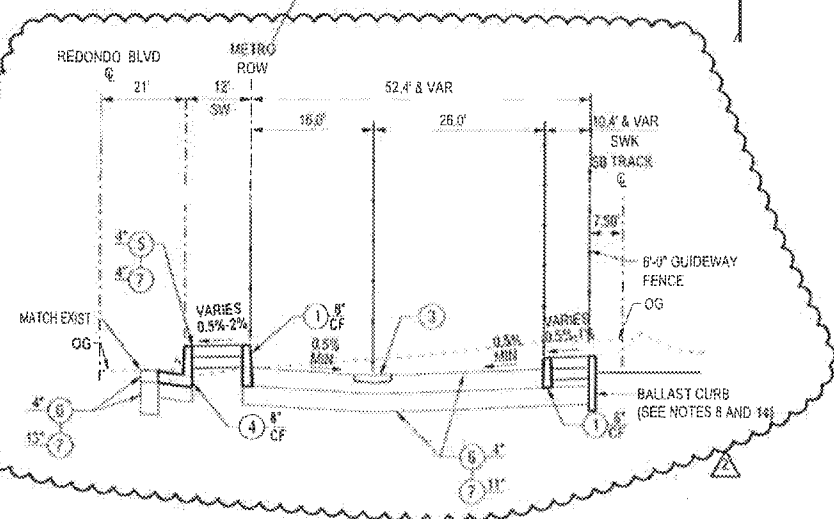
APPROVED

**APPROVED AS NOTED,
NO RESUBMITTAL REQUIRED**

REJECTED, REVISE AND RESUBMIT

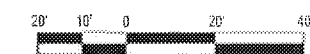
RECORD ONLY

Director, Construction MGR / Engineer: _____ Date: **3-28-18**



DETAIL 1
NO SCALE
CR-4002

FLORENCE / WEST PARK & RIDE SECTION A
REDONDO BLVD
STA 67+50 TO 76+85
NO SCALE
CR-4002



PACKAGE B-1.4

THIS SHEET IS PART OF A SET OF DRAWINGS FOR THE CRENSHAW/LAX TRANSIT CORRIDOR PROJECT. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

REV	DATE	BY	APP	REG NO	EXPIRES	DESCRIPTION
1	3/5/15	RB	ED	34988	9/30/19	NO SCALE
2	11/1/16	JDD	JWM	39335	12/31/17	NO SCALE
3	5/21/15			34988	9/30/15	NO SCALE

DATE	BY	DESCRIPTION
5/21/15	DOMINGO LEON	AFC SUBMITTAL

WERNER ABREGO
JOHN MONG
RYAN BROWNE
DOMINGO LEON

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
Metro

WALSH-SHEA CORRIDOR CONSTRUCTORS
1777 Oakland Blvd.
Walnut Creek, CA 94596

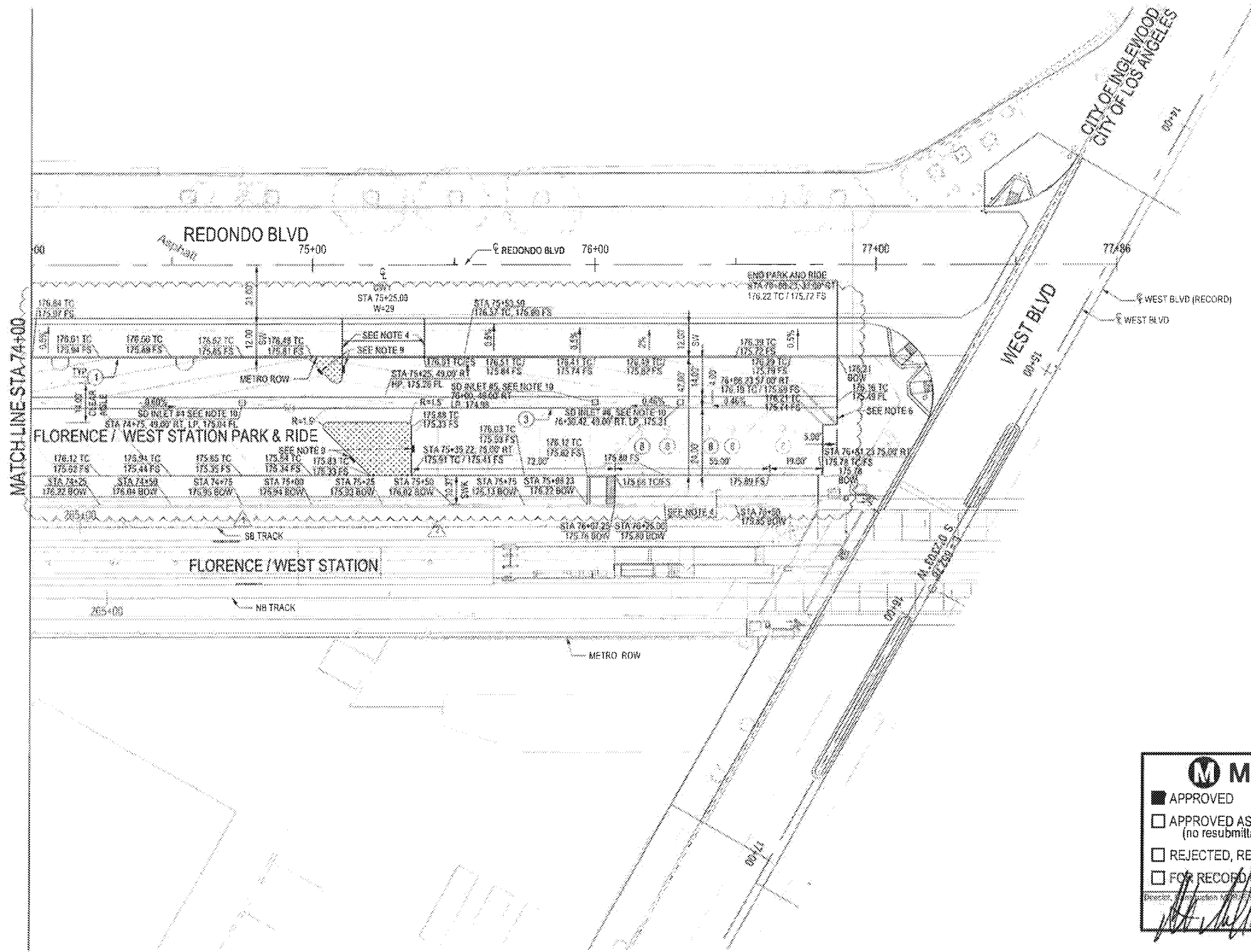
HNTB
STEVE WHITAKER
APPROVED

D'LEON
Consulting Engineers
DOMINGO LEON
SUBMITTED

A SIGNED & SEALED ORIGINAL OF REV 0 OF THIS DRAWING IS MAINTAINED BY WSCC

**CRENSHAW/LAX
TRANSIT CORRIDOR PROJECT**
FLORENCE / WEST STATION
PARK & RIDE STA 69+50 TO STA 74+00
GRADING PLAN 2 OF 3

PROJECT NO.	C0988
DRAWING NO.	CR-4002
SCALE	1"=20'
SHEET NO.	2



CONSTRUCTION NOTES:

- 1 CONSTRUCT CURB TYPE A1 PER SPPWC STD PLAN 120-2, "C" PER PLAN
- 2 CONSTRUCT LONGITUDINAL GUTTER PER SPPWC STD PLAN 122-2
- 3 INSTALL ADA STALL AND SIGNAGE PER CALTRANS STANDARD PLAN RSP A90A

ABBREVIATIONS:

- FS FINISHED SURFACE
- BW BACK OF WALK
- TC TOP OF CURB

LEGEND:

- LANDSCAPE AREA

NOTES:

- 1. STATION / OFFSET ARE BASED ON REDONDO BLVD CONSTRUCTION CENTERLINE.
- 2. SEE R-1.5 ROADWAY IMPROVEMENT (CS) PLANS FOR PROPOSED ROADWAY IMPROVEMENTS.
- 3. THE CONTRACTOR SHALL VERIFY TIE-IN ELEVATIONS PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
- 4. FOR DETAILS, SEE SHEET B-1.5, CDT-B1-110 & CDT-B1-114.
- 5. SEE PW23 LANDSCAPE (L) PLANS FOR PROPOSED LANDSCAPING IMPROVEMENTS.
- 6. SEE METRO STANDARD DRAWING AS-035 FOR PICKET FENCE.
- 7. GRADING AND SITE PREPARATION SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED IN THE PROJECT'S FINAL GEOTECHNICAL DESIGN REPORT.
- 8. SEE CIVIL GUIDEWAY (CG) PLANS FOR IMPROVEMENTS WITHIN PROPOSED GUIDEWAY.
- 9. ADD CURB CUT PER CITY OF LOS ANGELES STANDARD PLAN S-484-0, FOUR LOCATIONS THIS SHEET.
- 10. SEE PW28 DRAINAGE (CR) PLANS FOR PROPOSED PARKING LOT DRAINAGE.

M Metro

- APPROVED
- APPROVED AS NOTED (no resubmittal required)
- REJECTED, REVISE & RESUBMIT
- FOR RECORD ONLY

3-28-18



PACKAGE B-1.4

<p>THE PREPARATION OF THIS DRAWING HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL TRANSIT ADMINISTRATION (FTA) UNDER THE FEDERAL TRANSIT ACT OF 1964, AS AMENDED, AND IN PART BY THE TAXES OF THE CITIES OF LOS ANGELES COUNTY AND OF THE STATE OF CALIFORNIA.</p>										<p>PROFESSOR OF CIVIL ENGINEERING WERNER ABREGO</p> <p>DESIGNED BY JOHN MONG</p> <p>CHECKED BY RYAN BROWNE</p> <p>IN CHARGE DOMINGO LEON</p> <p>DATE 5/21/15</p>		<p>A SIGNED & SEALED ORIGINAL OF REV 0 OF THIS DRAWING IS MAINTAINED BY WSCC</p>		<p>M Metro LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY</p> <p>WALSH-SHEA CORRIDOR CONSTRUCTORS 1777 Oakland Blvd. Walnut Creek, CA 94596</p>		<p>HNTB STEVE WHITAKER APPROVED</p>		<p>D'LEON Consulting Engineers DOMINGO LEON SUBMITTED</p>		<p>CONTRACT NO C0988</p> <p>DRAWING NO CR-4003</p> <p>SCALE 1"=20'</p> <p>SHEET NO 2</p>	
REV	DATE	BY	APP	REC NO	EXPIRES	SEAL HOLDER	DESCRIPTION														
1	2/1/16	RB	DL	34988	9/30/19	<i>Dom. Leon</i>	NDC 331														
2	11/1/16	RB	DL	34988	9/30/17	DOMINGO LEON	NDC 201														
3	5/21/15			34988	9/30/17	DOMINGO LEON	AFC SUBMITTAL														

**CRENSHAW/LAX
TRANSIT CORRIDOR PROJECT
FLORENCE / WEST STATION
PARK & RIDE STA 74+00 TO STA 77+00
GRADING PLAN 3 OF 3**

**CRENSHAW/LAX TRANSIT CORRIDOR
DESIGN/BUILD**

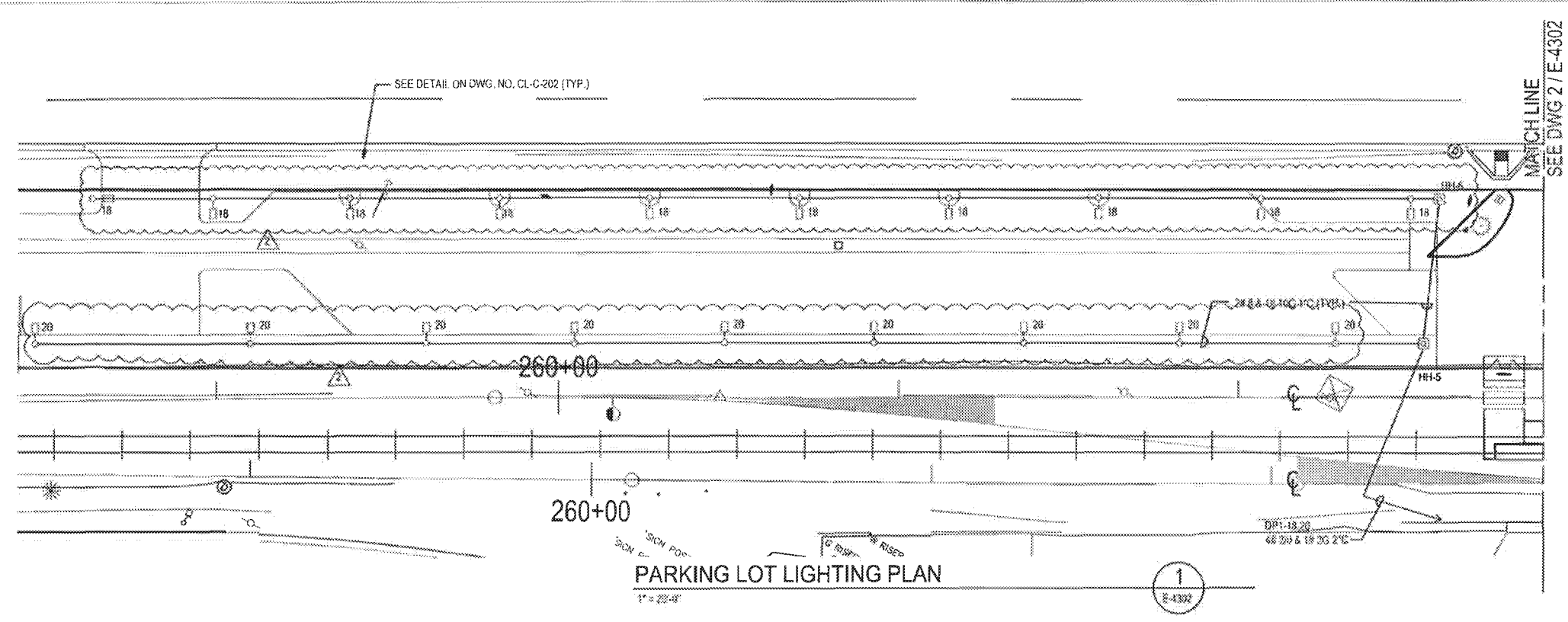
APPROVED

APPROVED AS NOTED,
NO RESUBMITTAL REQUIRED

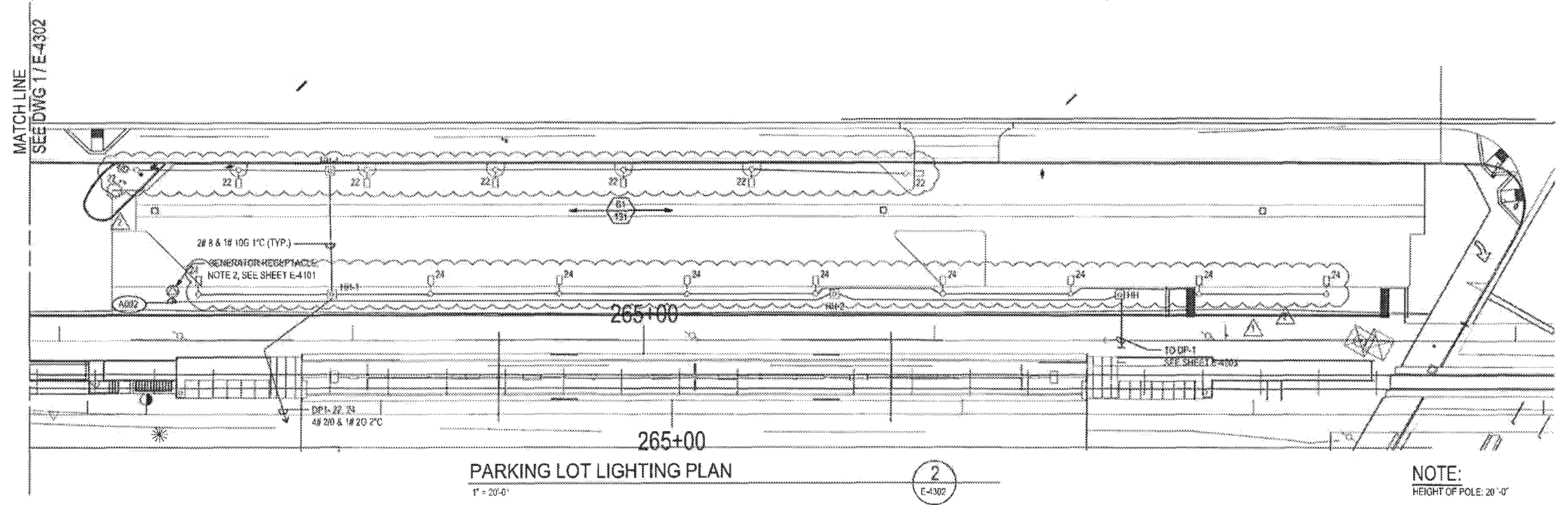
REJECTED, REVISE AND RESUBMIT

RECORD ONLY

Director / Construction MGR / Engineer: *[Signature]* Date: 3.28.18



- NOTE:**
- REFER TO LIGHTING FIXTURE SCHEDULE E-4901, THE SELECTED FIXTURE WILL PROVIDE 1.0 FOOT CANDLE AT A DISTANCE 20 FEET FROM THE POLE (POLE HEIGHT 20 FEET.)
 - SEE SHEET CR-4002 FOR RECEPTACLE MOUNTING INFORMATION. COORDINATE EXACT RECEPTACLE MODEL WITH METRO. RECEPTACLE SHALL BE VANDAL RESISTANT AND TAMPER PROOF.



NOTE:
HEIGHT OF POLE: 20'-0"

PACKAGE B-1.4

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REV	DATE	BY	APP	REG NO	FIGURES	SCALE	DESCRIPTION
0	10/23/15	BC	CA	E17891	12/31/17		AFC SUBMITTAL
	12/04/17	A.K.	YL	E21498	6/30/18		NDC 331
	12/21/18	BC	CA	E17891	9/30/18		NDC 201

DESIGNED BY
WG. WANG
DRAWN BY
T.K. LIU
CHECKED BY
N. ALAVI
IN CHARGE
WG. WANG
DATE
10/23/15

A SIGNED & SEALED ORIGINAL OF REV 0 OF THIS DRAWING IS MAINTAINED BY WSCC

M LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
Metro

WALSH-SHEA CORRIDOR CONSTRUCTORS

HNTB
STEVE WHITAKER
APPROVED

NBA
Engineering Inc.
W. G. WANG
SUBMITTED

1777 Oxford Blvd.
Walnut Creek, CA 94596

**CRENSHAW / LAX
TRANSIT CORRIDOR PROJECT
FLORENCE - WEST STATION
PARKING LOT LIGHTING PLAN**

CONTRACT NO C0988	REV 2
DRAWING NO E-4302	
SCALE 1" = 20'-0"	
SHEET NO 183	



**CRENSHAW/LAX TRANSIT CORRIDOR
DESIGN/BUILD**

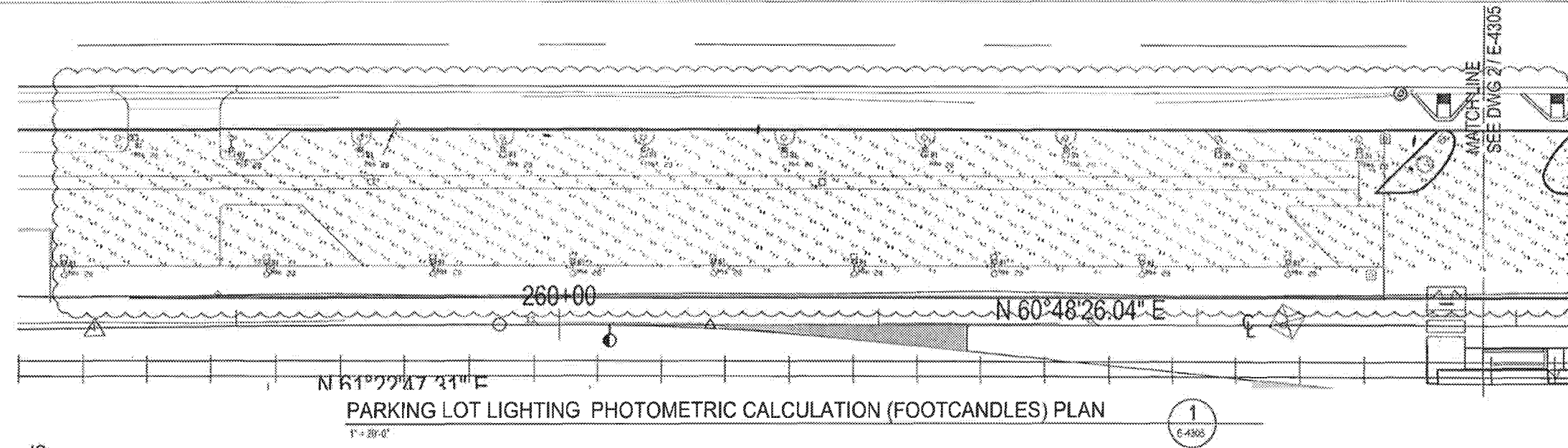
APPROVED

APPROVED AS NOTED,
NO RESUBMITAL REQUIRED

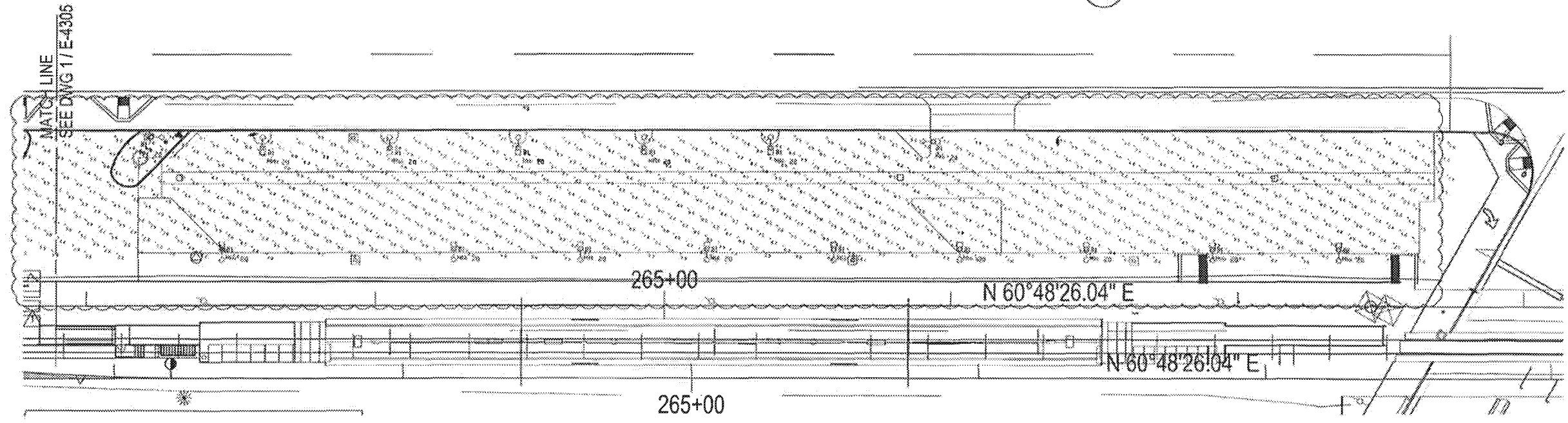
REJECTED, REVISE AND RESUBMIT

RECORD ONLY

Director, Construction MGR / Engineer: *[Signature]* Date: 3-28-18

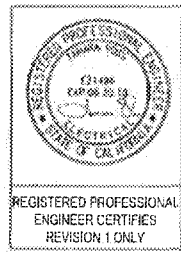


PARKING LOT LIGHTING PHOTOMETRIC CALCULATION (FOOTCANDLES) PLAN



PARKING LOT LIGHTING PHOTOMETRIC CALCULATION (FOOTCANDLES) PLAN

NOTE:
HEIGHT OF POLE: 20'-0"



PACKAGE B-1.4

CALCULATION SUMMARY						LUMINAIRE SCHEDULE							
CALC TYPE	UNITS	AVG	MAX	MIN	AVG/MBN	MAX/MBN	SYMBOL	ARRANGEMENT	LABEL	DELIVERED LUMEN	LUM WATTS	LLF	DESCRIPTION
ILLUMINANCE	FC	7.1	10.6	1.0	7.1:1	10.5:1	[Symbol]	SINGLE	B1	15285	151	0.85	LITHONIA LIGHTING-DSX1 LED 800 700 40K T3M 277 SPA DBBDX

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REV	DATE	BY	APP	REV NO	EXPRES	SCALE HOLDER	DESCRIPTION
0	5/21/15						
A	12/04/17	A-K	TU	E21496	6/30/18		NDC 331
				E12624	9/30/15	W. G. WANG	AFC SUBMITTAL

DESIGNED BY
WG. WANG
DRAWN BY
T.K. LIU
CHECKED BY
N. ALAMI
IN CHARGE
WG. WANG
DATE
5/21/15

A SIGNED & SEALED ORIGINAL OF REV 0 OF THIS DRAWING IS MAINTAINED BY WSCC

M LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY
Metro

WALSH-SHEA CORRIDOR CONSTRUCTORS

HNTB
STEVE WHITAKER

NBA
Engineering Inc.
W. G. WANG

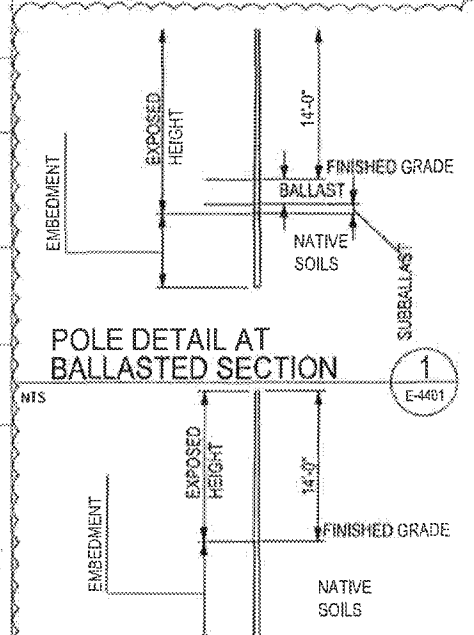
1717 Oxford Blvd.
Walnut Creek, CA 94596

CRENSHAW / LAX
TRANSIT CORRIDOR PROJECT
FLORENCE - WEST STATION
PARKING LOT LIGHTING PHOTOMETRIC
CALCULATION (FOOTCANDLES) PLAN (OPTION-1)

CONTRACT NO	C0988
DRAWING NO	E-4305
SCALE	1" = 20'-0"
SHEET NO	1

AT GRADE STATION FIXTURE SCHEDULE

TYPE (Plan Sheets)	TYPE (Calc Sheets)	DESCRIPTION	SYMBOL	MANUFACTURER/ CATALOG NUMBER	LAMP	WATTAGE	VOLTAGE	DETAIL	NOTES
F1	F1F	4"x4" FLOURESCENT FIXTURE, ELECTRONIC IS BALLAST, WITH PRE-INSTALLED BALLASTS, LOW-PROFILE ENCLOSED AND GASKETED, EXTRUDED ALUMINUM HOUSING, DIE CAST ZINC END CAP, MOULDED ELASTOMER GASKETS, EXTRUDED ACRYLIC PROTECTED LENS, LOW PROFILE ENCLOSED AND RECESS MOUNTED.		AXIS LIGHTING WBR-F-4-1S-1	(1) T28V	33	277		
F2	F1FH	SIMILAR TO F1, BUT WITH 1 HIGH OUTPUT LAMP.		AXIS LIGHTING WBR-F-4-TSHO-1	(1) T181SHO	59	277		
F3	F2FH	SIMILAR TO F2, BUT WITH 2 HIGH OUTPUT LAMPS.		AXIS LIGHTING WBR-F-4-TSHO-2	(2) F54TSHO	118	277		
L1	L300SR7	SIMILAR TO L4, BUT WITH A 530MA DRIVER AND DISTRIBUTION TYPE SR2.		LITHONIA LIGHTING MRP_LED_1_42C530V/40K_SR2_MVOLT	LED	75	277		SIMILAR TO L4
L2	L700SR7	MH = 14'-0" AFF		LITHONIA LIGHTING MRP_LED_1_42C700V/40K_SR2_MVOLT	LED	100	277		SIMILAR TO L4
L3	L1000SR7	MH = 14'-0" AFF		LITHONIA LIGHTING MRP_LED_1_42C1000V/40K_SR2_MVOLT	LED	151	277		SIMILAR TO L4
L4	L300SR5	MHP LED AREA LIGHTING SINGLE-PIECE DIE-CAST HOUSING, 0.012" WALL THICKNESS. EXTERIOR PROTECTED BY ZINC-INFUSED TGIC THERMOSET POWDER COAT FINISH FOR CORROSION AND WEATHERING RESISTANCE. LIGHT ENGINE CONSISTING OF 42 LEDs MOUNTED TO MFTAL-CORE CIRCUIT BOARD. ENERGY EFFICIENT, 1000MA DRIVER, DISTRIBUTION TYPE SR5.		LITHONIA LIGHTING MRP_LED_1_42C1000V/40K_SR5_MVOLT	LED	151	277		POLE DETAIL: "E" TYPE FIBERGLASS SHAFT WITH PIGMENTED, UV INHIBITING, POLYESTER RESIN. PAINTED WITH POLYURETHANE TOP COAT AS A SMOOTH SURFACE. 2.5" X 5" NONMETALLIC HANDHOLE WITH VANDAL RESISTANT STAINLESS STEEL 1/4" SOCKET HEAD SCREW. ZINC PLATED OR STAINLESS STEEL FASTENERS. 12" TALL MRP120_D08K0 ANCHOR BASE AND DIRECT BURY VERSIONS SEE ARCHITECTURAL DRAWINGS.
H1		FLOURESCENT, THERMALLY PROTECTED, AND ENERGY SAVING. PRE-INSTALLED 18 BALLASTS ARE SOUND RATED, <10% THD, AND INSTANT START. PRESSURE-LOCK LAMP HOLDERS. 10% VERTICLE UPLIGHT REFLECTION. DIE-EMBOSSED REFLECTOR MADE OF COIL-ROLLED STEEL. INTENDED FOR WAREHOUSE, STORAGE, OR TASK LIGHTING. TWO BALLASTS.		LITHONIA LIGHTING AF19-2-32-120-GER10IS	(2) 32W-18	64	120		
B1		DSX LED AREA LIGHTING SINGLE-PIECE DIE-CAST ALUMINUM HOUSING IS COMPLETELY SEALED (IP65). EXTERIOR PROTECTED BY ZINC-INFUSED TGIC THERMOSET POWDER COAT FINISH FOR CORROSION AND WEATHERING RESISTANCE. LIGHT ENGINE CONSISTING OF 60 LEDs, DRIVER MOUNTED IN DIRECT CONTACT WITH LEDS. ENERGY EFFICIENT, 1000MA DRIVER, DISTRIBUTION TYPE B1 MEDIUM.		LITHONIA LIGHTING DSX1-LED-60C-700-40K-130W-277	LED	131	277		
E1		LED EXIT SIGN 6" HIGH WITH 3/4" STROKE LETTERS. ALUMINUM HOUSING FINISH. PROVIDE FACE AND CHEVRONS PER PLANS AND FIELD CONDITIONS.		LITHONIA LIGHTING LE-S-X-G-12-XP-VR	LED	2	120/177		



CRENSHAW/LAX TRANSIT CORRIDOR DESIGN/BUILD

APPROVED

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NO RESUBMITTAL REQUIRED

REJECTED, REVISE AND RESUBMIT

RECORD ONLY

Director/Construction MGR/Engineer: *[Signature]* Date: 3-28-16



GENERAL NOTES:

- PROVIDE ALL LIGHTING FIXTURES AS SHOWN COMPLETE WITH ALL LAMPS, COMPLETELY WIRED, CONTROLLED AND SECURELY ATTACHED TO SUPPORTS.
- THE LIGHTING FIXTURES AND WORKMANSHIP MUST BE IN ACCORDANCE WITH AND MEET STANDARDS AND REGULATIONS OF THE LOCAL BUILDING AND SAFETY CODE AGENCIES.
- LIGHT FIXTURES IN ALL FACILITY EQUIPMENT AREAS AND WALKWAYS TO BE ON CONTROL FROM OCCUPANCY. LIGHT FIXTURES TO BE TIMED FOR 30 MINUTES. SENSORS TO BE LOCATED AT ENTRANCES TO ROOMS AND EQUIPMENT AREAS.
- LIGHT FIXTURES IN AREAS SUBJECT TO DAYLIGHT TO BE ON CONTROL FROM PHOTOELECTRIC LIGHT SENSORS SO THAT OPERATION IS NOT AFFECTED BY OPERATION OF EXISTING STREET LIGHTING.
- LIGHT FIXTURES IN PLATFORM AND ENTRANCE AREAS TO BE ON CONTROL OF TIME CLOCK. 50% OF LIGHT FIXTURES TO BE TURNED OFF DURING NON OPERATIONAL HOURS OF RAIL LINE.
- ALL LIGHTING FIXTURES TO BE PLACED SO THAT FIXTURE IS READILY ACCESSIBLE FOR MAINTENANCE & REPAIR. THE REMOVAL OF ANY LIGHTING FIXTURES IS NOT PERMITTED.
- PROVIDE ADEQUATE AND STURDY SUPPORT FOR EACH LIGHTING FIXTURE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ALL SUPPORTS AND SHALL COMPLY WITH ALL LOCAL SEISMIC CODES AND REGULATIONS.
- LIGHT FIXTURES TO BE SEISMICALLY BRACED.
- ALL LIGHTING FIXTURES SHALL BE 277V UNLESS OTHERWISE NOTED, ONLY WHERE REQUIRED BY CODE.
- PUBLIC AREA LIGHTING WIRING REQUIREMENTS - 1 HOUR FIRE RATED LOW SMOKE ZERO HALOGEN CABLING.
- DESIGN OF ILLUMINATION LEVELS TO BE PER METRO STANDARDS. LIGHT FIXTURE VENDOR SHALL PROVIDE LIGHTING CALCULATIONS.
- LIGHTING FIXTURES MOUNTED BELOW CABLE TRAYS IN TC & CRM, MINIMUM HEIGHT OF FIXTURE TO BE 6' AFF.
- SEE SHEET E-4381 FOR LIGHT POLE LAYOUT.

POLE #	NORTHING	EASTING	POLE HEIGHT	POLE TYPE
WES-401	1813435.36	6459567.24	24.0	Direct Bury
WES-402	1813454.27	6459557.10	24.0	Direct Bury
WES-403	1813460.79	6459558.22	24.0	Direct Bury
WES-404	1813459.54	6459559.86	24.0	Direct Bury
WES-405	1813451.00	6459568.87	24.0	Direct Bury
WES-406	1813336.30	6459532.20	14.0	Concret
WES-407	1813467.70	6459552.38	14.0	Concret
WES-408	1813461.84	6459561.80	14.0	Direct Bury
WES-409	1813328.42	6459534.00	SEE FIXTURE	FOUNDATION CONCRETE
WES-410	1813327.30	6459535.80	SEE FIXTURE	FOUNDATION CONCRETE
WES-411	1813485.40	6459513.01	SEE FIXTURE	FOUNDATION CONCRETE
WES-412	1813534.31	6459667.60	SEE FIXTURE	FOUNDATION CONCRETE
WES-413	1813548.74	6459802.93	SEE FIXTURE	FOUNDATION CONCRETE
WES-414	1813649.77	6459808.88	SEE FIXTURE	FOUNDATION CONCRETE
WES-415	1813275.90	6459198.24	SEE FIXTURE	FOUNDATION CONCRETE
WES-416	1813313.50	6459202.91	SEE FIXTURE	FOUNDATION CONCRETE
WES-417	1813286.78	6459243.03	SEE FIXTURE	FOUNDATION CONCRETE
WES-418	1813333.79	6459240.77	SEE FIXTURE	FOUNDATION CONCRETE
WES-419	1813307.75	6459281.20	SEE FIXTURE	FOUNDATION CONCRETE
WES-420	1813354.75	6459279.18	SEE FIXTURE	FOUNDATION CONCRETE
WES-421	1813376.72	6459317.59	SEE FIXTURE	FOUNDATION CONCRETE
WES-422	1813340.80	6459357.51	SEE FIXTURE	FOUNDATION CONCRETE
WES-423	1813397.88	6459356.00	SEE FIXTURE	FOUNDATION CONCRETE
WES-424	1813419.16	6459334.36	SEE FIXTURE	FOUNDATION CONCRETE
WES-425	1813392.80	6459284.16	SEE FIXTURE	FOUNDATION CONCRETE
WES-426	1813495.47	6459218.07	SEE FIXTURE	FOUNDATION CONCRETE
WES-427	1813415.21	6459474.35	SEE FIXTURE	FOUNDATION CONCRETE
WES-428	1813463.92	6459474.55	SEE FIXTURE	FOUNDATION CONCRETE
WES-429	1813437.20	6459514.89	SEE FIXTURE	FOUNDATION CONCRETE
WES-430	1813507.42	6459520.77	SEE FIXTURE	FOUNDATION CONCRETE
WES-431	1813449.60	6459432.83	SEE FIXTURE	FOUNDATION CONCRETE
WES-432	1813539.28	6459620.17	SEE FIXTURE	FOUNDATION CONCRETE
WES-433	1813560.89	6459647.62	SEE FIXTURE	FOUNDATION CONCRETE
WES-434	1813582.41	6459636.10	SEE FIXTURE	FOUNDATION CONCRETE
WES-435	1813566.83	6459701.62	SEE FIXTURE	FOUNDATION CONCRETE
WES-436	1813601.55	6459724.57	SEE FIXTURE	FOUNDATION CONCRETE
WES-437	1813527.24	6459704.81	SEE FIXTURE	FOUNDATION CONCRETE
WES-438	1813625.10	6459767.02	SEE FIXTURE	FOUNDATION CONCRETE
WES-439	1813620.72	6459841.25	SEE FIXTURE	FOUNDATION CONCRETE
WES-440	1813641.62	6459879.75	SEE FIXTURE	FOUNDATION CONCRETE
WES-441	1813663.28	6459918.07	SEE FIXTURE	FOUNDATION CONCRETE
WES-442	1813684.59	6459956.58	SEE FIXTURE	FOUNDATION CONCRETE

NOTE 1: POLE HEIGHTS PROVIDED ARE BASED ON MANUFACTURER RECOMMENDATIONS ON EMBEDMENT DEPTH. CONTRACTOR SHALL CONFIRM EMBEDMENT DEPTH WITH MANUFACTURER PRIOR TO PROCUREMENT.

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DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION
12/4/17	A.K.	TDV	E21496	6/30/18		NDC 331, NDC 314, RFI 1367
10/31/16	DC	CA	E17891	9/30/18	CARL AYUBI	NDC 230, NDC 188, RFI 251, RFI 250
10/23/15			E12624	09/30/15	W.G. WANG	AFC SUBMITTAL

DESIGNED BY
W.G. WANG
DRAWN BY
T.R. LIU
CHECKED BY
M. ALAVI
IN CHARGE
W.G. WANG
DATE
10/23/15

A SIGNED & SEALED ORIGINAL OF REV 0 OF THIS DRAWING IS MAINTAINED BY WSCC

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

Metro

WALSH-SHEA CORRIDOR CONSTRUCTORS

1777 Oxford Blvd, Walnut Creek, CA 94596

HNTB STEVE WHITAKER

NBA Engineering Inc. W.G. WANG

CRENSHAW / LAX TRANSIT CORRIDOR PROJECT

FLORENCE - WEST STATION LIGHTING FIXTURE SCHEDULE

CONTRACT NO	C0988
DRAWING NO	E-4401
SCALE	NONE
SHEET NO	2

PACKAGE B-1.4

PANEL NO. DP-1		SECTION 1 OF 1		BUS: 480 /277 VOLTS		MAIN C.B. 225 AMP	
LOCATION: WEST STATION		SERVING: STATION		3 PH, 4 WIRE		225 AMP	
FULLY RATED SC RATING:							
RMS SYM AMPS				SURFACE MNT			
LOAD TYPE	CIRCUIT DESCRIPTION	CONN KVA	AMP	C.B. POLE	CKT	PH	LOAD TYPE
H	AC-1 (HVAC-CP1)	5.059	30	3	1	A	N
H	AC-2 (HVAC-CP2)	5.059	30	3	9	B	N
M	EF-1 (CPEF-1)	0.690	15	3	13	A	L
M	EF-2 (CPEF-2)	0.690	15	3	21	B	L
L	TCC ROOM NORMAL LIGHTS	1.218	20	1	25	A	N
L	EXIT LIGHT	0.002	15	1	27	B	N
L	PYLON LIGHTS	0.168	20	1	29	C	N
	SPARE		20	1	31	A	N
	SPARE		20	1	33	B	N
	SPARE		20	1	35	C	N
					37	A	
					39	B	
					41	C	
TOTAL RECEPTACLE (R) LOAD @ 180VA/EA, 100% FOR FIRST 10,000VA, & 50% FOR REMAINDER:						0.00 KVA	
TOTAL NONCOINCIDENT (E) LOAD		0.00 KVA (NOT INCLUDED IN DEMAND LOAD)				TOTAL HVAC (H) LOAD: 0.00 KVA	
TOTAL LIGHTING (L) LOAD @ 1.25%:		14.61 KVA				TOTAL NONCONTINUOUS (N) LOAD: 56.80 KVA	
TOTAL MOTOR (M) LOAD:		1.38 KVA				LARGEST MOTOR @ 25%: 20 KW	
TOTAL CONNECTED LOAD:		104.98 KVA		CONNECTED AMP TOTAL / PHASE		A 130.6 B 125.1 C 122.7 MINIMUM FEEDER CAPACITY 108.42 KVA 130.6 A	

PANEL NO. LP-1		SECTION 1 OF 1		BUS: 208 /120 VOLTS		MAIN C.B. 100 AMP	
LOCATION: WEST STATION		SERVING: STATION		3 PH, 4 WIRE		100 AMP	
FULLY RATED SC RATING:							
RMS SYM AMPS				SURFACE MNT			
LOAD TYPE	CIRCUIT DESCRIPTION	CONN KVA	AMP	C.B. POLE	CKT	PH	LOAD TYPE
R	TCC ROOM RECEPTACLE	0.90	20	1	1	A	R
R	TCC ROOM RECEPTACLE	0.90	20	1	3	B	R
	SPARE		20	1	5	C	R
M	BEF-1, BEF-2	1.10	20	1	7	A	
N	MD-3.5,7,9,11	0.03	20	1	9	B	
	SPARE		20	1	11	C	
	SPARE		20	1	13	A	
	SPARE		20	1	15	B	
	SPARE		20	1	17	C	
					19	A	
					21	B	
					23	C	
					25	A	
					27	B	
					29	C	
					31	A	
					33	B	
					35	C	
					37	A	
					39	B	
					41	C	
TOTAL RECEPTACLE (R) LOAD @ 180VA/EA, 100% FOR FIRST 10,000VA, & 50% FOR REMAINDER:						3.96 KVA	
TOTAL NONCOINCIDENT (E) LOAD		0.00 KVA (NOT INCLUDED IN DEMAND LOAD)				TOTAL HVAC (H) LOAD: 0.00 KVA	
TOTAL LIGHTING (L) LOAD @ 1.25%:		0.00 KVA				TOTAL NONCONTINUOUS (N) LOAD: 0.03 KVA	
TOTAL MOTOR (M) LOAD:		1.10 KVA				LARGEST MOTOR @ 25%: HP 0.60 KVA	
TOTAL CONNECTED LOAD:		5.09 KVA		CONNECTED AMP TOTAL / PHASE		A 22.7 B 13.7 C 6.0 MINIMUM FEEDER CAPACITY 5.08 KVA 14.2 A	

PANEL NO. PP-1		SECTION 1 OF 1		BUS: 208 /120 VOLTS		MAIN C.B. 225 AMP	
LOCATION: WEST STATION		SERVING: STATION		3 PH, 4 WIRE		225 AMP	
FULLY RATED SC RATING:							
RMS SYM AMPS				SURFACE MNT			
LOAD TYPE	CIRCUIT DESCRIPTION	CONN KVA	AMP	C.B. POLE	CKT	PH	LOAD TYPE
N	30 KVA COMMUNICATIONS UPS	8.20			1	A	
N	connected load/efficiency	8.20	150	3	3	B	
N	%20 recharge	8.20			5	C	
N	FARE GATE EAST	1.15	20	1	7	A	N
N	FARE GATE EAST	1.15	20	1	9	B	N
N	FARE GATE EAST	1.15	20	1	11	C	N
N	TVM EAST	1.40	15	1	13	A	N
N	TVM EAST	1.40	15	1	15	B	N
N	MAP CASE EAST	0.80	15	1	17	C	N
M	CP-SP SUMP CONTROL PANEL	0.75	15	3	19	A	
					21	B	
					23	C	
					25	A	
					27	B	
					29	C	
					31	A	
					33	B	
					35	C	
					37	A	
					39	B	
					41	C	
TOTAL RECEPTACLE (R) LOAD @ 180VA/EA, 100% FOR FIRST 10,000VA, & 50% FOR REMAINDER:						0.00 KVA	
TOTAL NONCOINCIDENT (E) LOAD		0.00 KVA (NOT INCLUDED IN DEMAND LOAD)				TOTAL HVAC (H) LOAD: 0.00 KVA	
TOTAL LIGHTING (L) LOAD @ 1.25%:		0.00 KVA				TOTAL NONCONTINUOUS (N) LOAD: 39.30 KVA	
TOTAL MOTOR (M) LOAD:		2.24 KVA				LARGEST MOTOR @ 25%: 2.25 KVA 0.56 KVA	
TOTAL CONNECTED LOAD:		41.54 KVA		CONNECTED AMP TOTAL / PHASE		A 116.8 B 116.8 C 111.8 MINIMUM FEEDER CAPACITY 42.10 KVA 117.0 A	

PANEL NO. CRP		SECTION 1 OF 1		BUS: 480 /277 VOLTS		MAIN C.B. 50 AMP	
LOCATION: WEST STATION		SERVING: CRITICAL LOADS		3 PH, 4 WIRE		125 AMP	
FULLY RATED SC RATING:							
RMS SYM AMPS				SURFACE MNT			
LOAD TYPE	CIRCUIT DESCRIPTION	CONN KVA	AMP	C.B. POLE	CKT	PH	LOAD TYPE
L	SPARE		20	1	1	A	L
L	TCC ROOM EMERGENCY LIGHTS	0.70	20	1	3	B	L
L	PLATFORM EMERGENCY LIGHTS VIA LOPE	1.50	20	1	5	C	L
	SPARE		20	1	7	A	
	SPARE		20	1	9	B	
	SPARE		20	1	11	C	
					13	A	
					15	B	
					17	C	
					19	A	
					21	B	
					23	C	
					25	A	
					27	B	
					29	C	
					31	A	
					33	B	
					35	C	
					37	A	
					39	B	
					41	C	
TOTAL RECEPTACLE (R) LOAD @ 180VA/EA, 100% FOR FIRST 10,000VA, & 50% FOR REMAINDER:						0.00 KVA	
TOTAL NONCOINCIDENT (E) LOAD		0.00 KVA (NOT INCLUDED IN DEMAND LOAD)				TOTAL HVAC (H) LOAD: 0.00 KVA	
TOTAL LIGHTING (L) LOAD @ 1.25%:		7.98 KVA				TOTAL NONCONTINUOUS (N) LOAD: 0.60 KVA	
TOTAL MOTOR (M) LOAD:		0.00 KVA				LARGEST MOTOR @ 25%: HP 0.00 KVA	
TOTAL CONNECTED LOAD:		6.98 KVA		CONNECTED AMP TOTAL / PHASE		A 9.3 B 7.6 C 8.3 MINIMUM FEEDER CAPACITY 8.58 KVA 10.3 A	

Metro

APPROVED

APPROVED AS NOTED (no resubmittal required)

REJECTED, REVISE & RESUBMIT

FOR RECORD ONLY

DATE: 3-28-18



REGISTERED PROFESSIONAL ENGINEER CERTIFIES REVISION 2 ONLY

PACKAGE B-1.4

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REV	DATE	BY	APP	REG NO	EXPIRES	SFAL HOLDER	DESCRIPTION
1	12/04/17	A.K. TDV		E21496	6/30/18		NDC 251, NDC 331
2	10/23/15	BC CA		E17891	9/30/18	CARL AYUBI	NDC 236, NDC 188, RFI 556, RFI 249A, RFI 249
3	10/23/15	BC CA		E12624	09/30/17	W. G. WANG	AFC SUBMITTAL

A SIGNED & SEALED ORIGINAL OF REV 0 OF THIS DRAWING IS MAINTAINED BY WSCC

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

WALSH-SHEA CORRIDOR CONSTRUCTORS

HNTB STEVE WHITAKER

NBA Engineering Inc. W. G. WANG

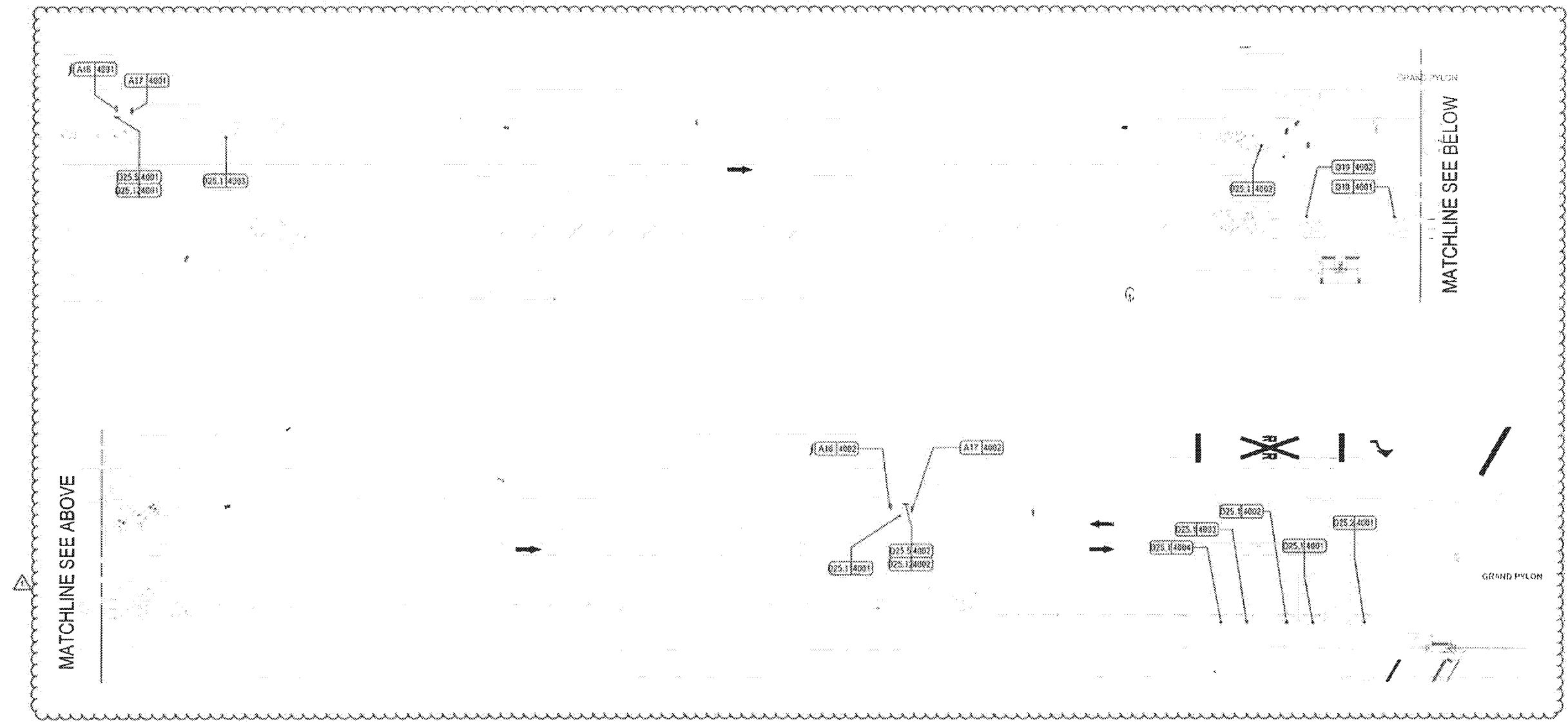
CRENSHAW / LAX TRANSIT CORRIDOR PROJECT FLORENCE - WEST STATION PANEL SCHEDULES

CONTRACT NO. C0988

DRAWING NO. E-4402

SCALE NONE

SHEET NO. 2



IDENTIFICATION
A04 - RAIL PLATFORM IDENTITY FREESTANDING
A05 - STATION ENTRANCE IDENTITY 1
A14 - STATION IDENTITY - MAP CASE
A15 - STATION IDENTITY - OVERHEAD
A16 - METRIC TAG
A17 - PARKING ENTRY SIGN
A23 - TAP 1
A24 - TAP 2
A25 - TAP 3
A26 - REGULATORY DECAL
DIRECTION
B10 - OVERHEAD DIRECTIONAL 1
INFORMATION
C00 - SINGLE SIDED MAP CASES
C05 - DOUBLE SIDED MAP CASES
C06 - PTEL KIOSK
C07 - ETEL KIOSK
C08 - STEL KIOSK
C09 - LINE MAP
REGULATION
D08.1 - STATION IDENTITY 1
D08.2 - STATION IDENTITY 2
D10 - EXIT PLAQUE
D11.1 - ADA PLAQUE
D12 - STATION REGULATORY
D13 - AUTHORIZED PERSONNEL ONLY
D18.4 - ENTRY GATEWAY SIGN 4
D19 - BIKE LOCKER PLAQUE
D31.2 - EMERGENCY EXIT ONLY - MEDIUM
D31.3 - EMERGENCY EXIT ONLY - SMALL
D32 - ORDER SURVEILLANCE
D33.1 - DISABLED PARKING IDENTITY
D35.5 - PARKING FOR TRANSIT PATRONS ONLY
D35.11 - LAMINA TITLE 8
D35.12 - TOWN AWAY
D36 - REGULATORY SIGN POLE
D37 - TEMPORARY MESSAGE CABINET
D38 - FIRE HOSE CABINET GRAPHICS
D39 - CROSSING GATE EXIT
D30 - CROSSING GATE ENTER
D31 - AREA OF ASSISTED RESCUE
*D37 - PLATFORM FLOOR WARNING
*D38 - PLATFORM FLOOR WARNING - STRIP MARKING
D44.1 - PLATFORM COLLISION WARNING 1
D45 - LOOK BOTH WAYS WARNING
D46 - LOOK BOTH WAYS WARNING SPANISH

DESCRIPTION
(A01 5000) SIGN NAME
MESSAGE NUMBER
SIGN TYPE
ELECTRICITY REQUIRED
* SEE DETAIL SHEETS FOR SIGN LOCATIONS

M Metro

APPROVED

APPROVED AS NOTED
(no resubmittal required)

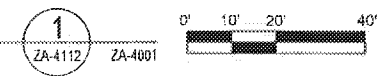
REJECTED, REVISE & RESUBMIT

FOR RECORD ONLY

Date: 3-28-18

SIGN LOCATION PLAN - PARKING

1" = 20'-0"



PACKAGE B-1.4

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REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION
0	3/31/17	MC	JPT	C21914	8/31/18	[Signature]	NDC 331
0	3/31/17			C21914	8/31/18	JOHN TRAUTMANN	APC SUBMITTAL

DESIGNED BY
PAUL NAGAKURA

DRAWN BY
EDGAR GODDY

CHECKED BY
ANDY DAVEY

IN CHARGE
JOHN TRAUTMANN

DATE
3/31/17

A SIGNED & SEALED ORIGINAL OF REV. 0 OF THIS DRAWING IS MAINTAINED BY WSSC

M Metro LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

WALSH-SHEA CORRIDOR CONSTRUCTORS

1777 Oakland Blvd.
Walnut Creek, CA 94596

HNTB

JERRY PORTER
SENIOR PROJECT MANAGER

JOHN TRAUTMANN
PROJECT MANAGER

CRENSHAW/LAX
TRANSIT CORRIDOR PROJECT
FLORENCE / WEST STATION
SIGN LOCATION PLAN - PARKING

CONTRACT NO. C0988
DRAWING NO. ZA-4112
SCALE 1/8" = 1'-0"
SHEET NO. 1