

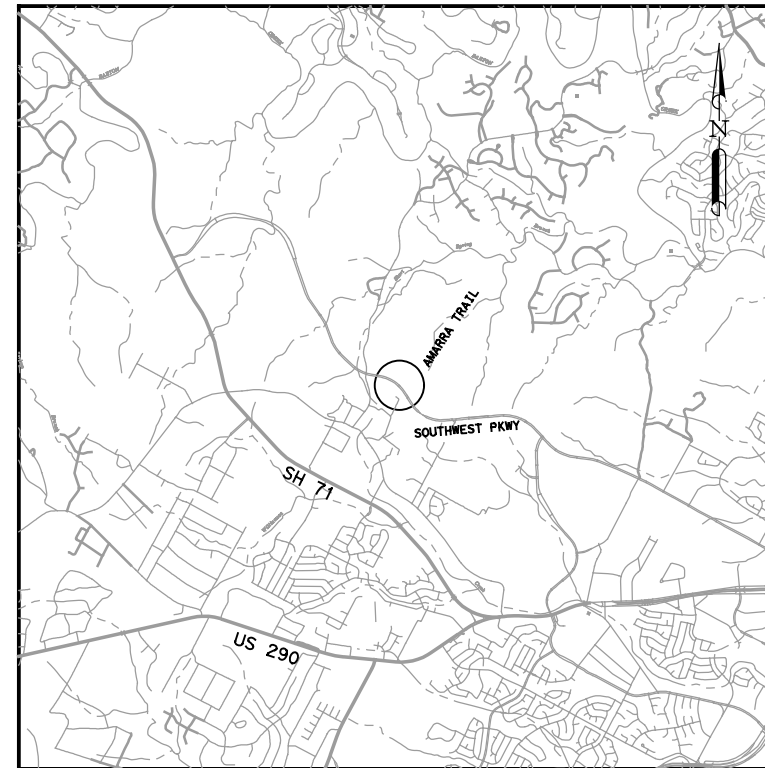
FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
-			1
STATE	STATE DIST.	COUNTY	
TEXAS	AUS	TRAVIS	
CONT.	SECT.	JOB	HIGHWAY NO.
			-

PROPOSED TRAFFIC SIGNAL PLANS
FOR INTERSECTION OF:

SOUTHWEST PARKWAY
& AMARRA TRAIL

INDEX OF SHEETS

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GENERAL	
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3	EXISTING CONDITION
4	PROPOSED SIGNS AND MARKINGS
5	PROPOSED SIGNAL LAYOUT
6	PROPOSED CONDUIT LAYOUT
7	SIGNAL DETAILS
8	SIGNAL ELEVATIONS
9	VEHICLE DETECTION DETAILS
10	SIGN DETAILS
TRAFFIC SIGNAL STANDARDS	
11-17	CITY OF AUSTIN TRAFFIC SIGNAL STANDARDS CONTROLLER CABINET FOUNDATION SIGNAL POLE & MAST ARM SIGNAL POLE FOUNDATION TRENCH DETAIL & RISER DETAIL PEDESTRIAN & VEHICULAR SIGNAL INSTALLATION DETAIL TYPE D GROUND BOX
18-22	TXDOT TRAFFIC SIGNAL STANDARDS LONG MAST ARM ASSEMBLY

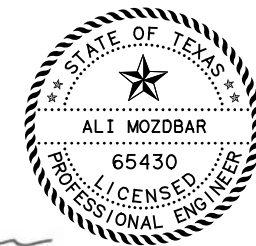


NOT TO SCALE

EXCEPTIONS: NONE
EQUATIONS: NONE
RAILROADS: NONE



SUBMITTED BY:



Ali Mozdabar

5/27/2022

PROJECT MANAGER
ALI MOZDABAR, P. E.
LJA ENGINEERING, INC.

DATE

REVIEWED BY:

CITY OF AUSTIN

DATE

5/27/2022 12:25:28 PM I:\A140 Riverside Res\2201 Signal at Amarra Trail & SW PKWY\CADD\SHEETS\08-Traffic Items\A140*2201*Signal Title Sheet.dgn

TRAFFIC SIGNAL ESTIMATE SUMMARY				
ITEM NO.		DESCRIPTION	UNITS	QTY
SP831S	342	42" DIAMETER TRAFFIC SIGNAL DRILLED SHAFT FOUNDATIONS	LF	32
SP831S	448	48" DIAMETER TRAFFIC SIGNAL DRILLED SHAFT FOUNDATIONS	LF	18
835S	LT2	INSTALLING TRAFFIC SIGNAL CONDUIT WITH CONDUIT 2 INCH IN DIAMETER	LF	165
835S	LT3	INSTALLING TRAFFIC SIGNAL CONDUIT WITH CONDUIT 3 INCH IN DIAMETER	LF	1140
835S	LT4	INSTALLING TRAFFIC SIGNAL CONDUIT WITH CONDUIT 4 INCH IN DIAMETER	LF	165
	**	BORING FOR CONDUIT	LF	320
SP844S	1BC	CLASS 1 TRENCHING FOR TRAFFIC SIGNAL CONDUIT BEHIND CURB	LF	165
SP844S	2BC	CLASS 2 TRENCHING FOR TRAFFIC SIGNAL CONDUIT BEHIND CURB	LF	45
SP844S	3BC	CLASS 3 TRENCHING FOR TRAFFIC SIGNAL CONDUIT BEHIND CURB	LF	120
SS1032	EE	ELECTRICAL ENCLOSURE (GROUND MOUNTED) ELC SRV TY D 120/240 070(NS)AL(E)SP(U)	EA	1
840S	TSI	TRAFFIC SIGNAL INSTALLATION	EA	1
	**	ROD, 5/8" X 10' COPPER GROUND (CONTROLLER ONLY)	EA	1
	**	LED RDWY LUMINAIRE (.25KW EQ)	EA	4
	**	SIGN, STREET NAME	EA	4
	**	SIGN, (R9-3) (24"x24")	EA	2
		ITS COM CBL (ETHERNET)	LF	135
		BBU SYSTEM (EXTERNAL BATT CABINET)	EA	1
		VIDEO IMAGING AND RAD VEH DETECTION SYS	EA	1
		VIDEO IMAGING AND RADAR DETECTOR	EA	4
		VID IMAGE AND RADAR COM CABLE (COAX)	LF	755
SS1044	CCTV	CCTV CAMERA	EA	1
839S	MAP-W1	TYPE W1 MAST ARM POLE (WITH LUMINAIRE)	EA	2
839S	MAP-W2	TYPE W3 MAST ARM POLE (WITH LUMINAIRE)	EA	1
839S	MA25	25-FOOT MAST ARM	EA	1
839S	MA30	30-FOOT MAST ARM	EA	1
839S	MA60	60-FOOT MAST ARM	EA	1
830S	SCF	TRAFFIC SIGNAL CONTROLLER FOUNDATION	EA	1
SS1010	ATC-CU	2070 ATC CONTROLLER UNIT, COMPLETE IN PLACE	EA	1
SS1012	?	CALTRANS 352 CABINET FOR 2070 CONTROLLER, COMPLETE IN PLACE	EA	1
SS1014	SCM	SIGNAL CONFLICT MONITOR	EA	1
832S	VSM-3	VEHICULAR SIGNAL INSTALLATION, 3 SECTION, COMPLETE IN PLACE WITH RETROREFLECTIVE BACKPLATES	EA	14
SP831S	5	4" DIAMETER PEDESTRIAN SIGNAL FOUNDATION TYPE A	EA	3
SP838S	PSM	PEDESTRIAN SIGNAL INSTALLATION (COUNTDOWN TYPE), COMPLETE IN PLAC	EA	
	**	PED SIG SEC (LED) (COUNTDOWN)	EA	6
	**	PEDESTRIAN POLE	EA	1
	**	PEDESTRIAN PUSH BUTTON POLE	EA	2
	**	PED DETECT PUSH BUTTON (APS)	EA	6
	**	SIGN, PEDESTRIAN PUSH BUTTON (9"x15") (R10-3eL)	EA	5
	**	SIGN, PEDESTRIAN PUSH BUTTON (9"x15") (R10-3eR)	EA	1
	**	PED DETECTOR CONTROLLER UNIT	EA	1
SS1020	2C	INSTALL TRAFFIC SIGNAL CABLE, 2C	LF	755
SS1020	5C	INSTALL TRAFFIC SIGNAL CABLE, 5C	LF	585
SS1020	7C	INSTALL TRAFFIC SIGNAL CABLE, 7C	LF	260
SS1020	20C	INSTALL TRAFFIC SIGNAL CABLE, 20C	LF	520
SP16120S	GC	NO. 8 GROUNDING CONDUCTOR	LF	1030
		ELEC CONDR (NO.8) INSULATED	LF	1250
		ELEC CONDR (NO.6) BARE	LF	25
		ELEC CONDR (NO.6) INSULATED	LF	50
TXDOT 686	6067	INS TRF SIG PL AM(S)1 ARM(65')LUM	EA	1
TXDOT 690	6074	INS OF TRF SIG PL FND (48" DRIL SHFT)	LF	22
TXDOT 624	6010	GROUND BOX TY D (162922)W/APRON	EA	6
** MATERIALS SUBSIDIARY TO PERTINENT ITEMS				

GENERAL NOTES:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL INCIDENTAL EQUIPMENT AND MATERIALS NECESSARY TO RESULT IN A COMPLETE AND OPERATIONAL TRAFFIC SIGNAL. ANY ITEMS REQUIRED, BUT OMITTED, ARE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE SUBSIDIARY TO THE APPROPRIATE BID ITEMS.
- CONTRACTOR WILL LOCATE ALL UTILITIES IN THE FIELD PRIOR TO BEGINNING SIGNAL CONSTRUCTION WORK.
- CONTRACTOR WILL COORDINATE WITH THE AUSTIN ENERGY SERVICE AREA AND SEEK THEIR APPROVAL TO ENSURE THAT NO CONFLICT EXISTS BETWEEN THE SIGNAL EQUIPMENT AND OVERHEAD ELECTRICAL LINES. ALL SIGNAL EQUIPMENT WILL HAVE A 3 FEET CLEARANCE FROM NEUTRAL LINES AND 10 FEET CLEARANCE FROM POWER LINES. CONTRACTOR WILL FOLLOW OSHA REQUIREMENTS FOR WORKING CLOSE TO ELECTRICAL LINES.
- CONTRACTOR WILL INSTALL ALL SIGNAL EQUIPMENT AS SHOWN ON THE PLANS. ANY CHANGES WILL NEED TO BE APPROVED BY THE INSPECTING ENGINEER IN THE FIELD.
- SIGNAL POLE, CONTROLLER FOUNDATION, AND PULL BOX LOCATIONS WILL BE LOCATED/MARKED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE INSPECTING ENGINEER PRIOR TO INSTALLATION. CONTACT SCOTT FELDMAN AT 512-974-6366.
- ALL SIGNAL FOUNDATIONS WILL NEED TO BE INSPECTED AND APPROVED BY THE INSPECTING ENGINEER PRIOR TO CONTRACTOR POURING CONCRETE. CONTACT SCOTT FELDMAN AT 512-974-6366 WITH TWO(2) DAYS' NOTICE.
- ALL PROPOSED SIGNAL HEADS WILL BE WRAPPED IN A BURLAP UNTIL READY FOR OPERATION.
- COORDINATE WITH CITY (SCOTT FELDMAN) PRIOR TO INSTALLING WIRES FOR THE TRAFFIC SIGNAL. ONCE THE WIRES ARE INSTALLED BY THE CONTRACTOR, THE CITY CREW WILL CONNECT THE WIRES TO THE SIGNAL CONTROLLER.
- ANY EXISTING PAVEMENT, CURBS, SIDEWALK, AND DRIVEWAYS DAMAGED OR REMOVED DURING CONSTRUCTION WILL BE REPLACED TO THE CITY OF AUSTIN STANDARDS.
- ALL NEW CONDUITS UNDER ROADWAYS AND DRIVEWAYS WILL BE BORED. CONDUITS UNDER NATURAL GROUND WILL BE TRENCHED AND BURIED; HOWEVER, THE CONTRACTOR WILL BACKFILL, COMPACT, AND RESTORE TRENCHED AREA TO ORIGINAL CONDITION AND MATCH EXISTING SURFACE CONDITION TO THE DENSITY OF ADJACENT AREA.
- CONTRACTOR WILL CLEAN AND RESTORE THE CONSTRUCTION AREA TO ORIGINAL CONDITIONS PRIOR TO FINAL INSPECTION.
- SIGNAL HEADS WILL BE 12" LED WITH SPECIFIED HEADS AS SHOWN IN THE PLANS WITH RETROREFLECTIVE BACKPLATES.
- STREET NAME SIGN AND SIGNS ON MAST ARM WILL BE DESIGNED AS PER CITY SPECIFICATION 824S. COORDINATE WITH THE CITY TRAFFIC SIGN SHOP AT 512-974-4055 FOR STREET BLOCK NUMBERS.
- ALL SIGNAL EQUIPMENT WILL BE INSTALLED AS PER CITY OF AUSTIN STANDARDS AND SPECIFICATIONS.
- SIGNAL ACTIVATION: COA ARTERIAL MANAGEMENT DIVISION OF ATD WILL DETERMINE IF WARRANTS ARE ADEQUATELY SATISFIED FOR ACTIVATION.
- CONTRACTOR TO REIMBURSE CITY FOR CABINET, CONTROLLER, CONFLICT MONITOR, BATTERY BACKUP SYSTEM, AND FIRMWARE LICENSE.
- CONTRACTOR SHALL REIMBURSE THE CITY OF AUSTIN FOR INSPECTING AND ACTIVATING THE SIGNAL.

ROADWAY, SIGNING & PAVEMENT MARKING ESTIMATE SUMMARY				
480S	RP-1B	CURB RAMP WITH PAVER (TYPE IB) or TXDOT CURB RAMPS (TY 7)	EA	6
824S		TRAFFIC SIGNS	EA	1
		REMOVE SM RD SN SUP&AM	EA	1
874S	A	ELIMINATING EXISTING PAVEMENT MARKINGS: 4 INCHES IN WIDTH	LF	108
874S	A	ELIMINATING EXISTING PAVEMENT MARKINGS: 24 INCHES IN WIDTH	LF	25
860S	C	PAVEMENT MARKING PAINT (REFLECTORIZED), 6 INCH, WHITE	LF	160
860S	C	PAVEMENT MARKING PAINT (REFLECTORIZED), 8 INCH, WHITE	LF	635
860S	C	PAVEMENT MARKING PAINT (REFLECTORIZED), 24 INCH, WHITE	LF	370
860S	C	PAVEMENT MARKING PAINT (REFLECTORIZED), 4 INCH, YELLOW	LF	400
860S	C	PAVEMENT MARKING PAINT (REFLECTORIZED), 6 INCH, YELLOW	LF	470



Ali Mozdabar

5/27/2022



AUSTIN TRANSPORTATION DEPARTMENT



LJA Engineering, Inc.
FRN - F-1386

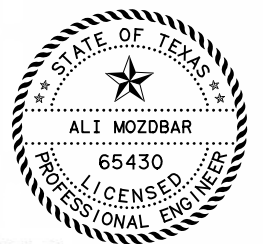
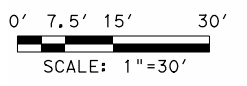
SIGNAL DESIGN
SW PKWY & AMARRA TRAIL
NOTES & QUANTITIES

SCALE HORIZONTAL:		SHEET		OF
DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	SHEET NO.	
AM			2	
DRAWN	STATE	DIST. NO.	COUNTY	
KA	TX	AUS	TRAVIS	
CHECK	CONTROL	SECTION	JOB	HIGHWAY NO.
AM				



LEGEND

-  EXISTING UTILITY WOOD POLE
-  EXISTING SIGN



Ali Mozdbar

5/27/2022



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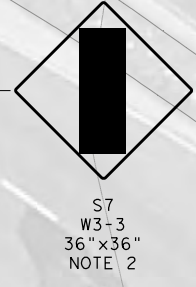
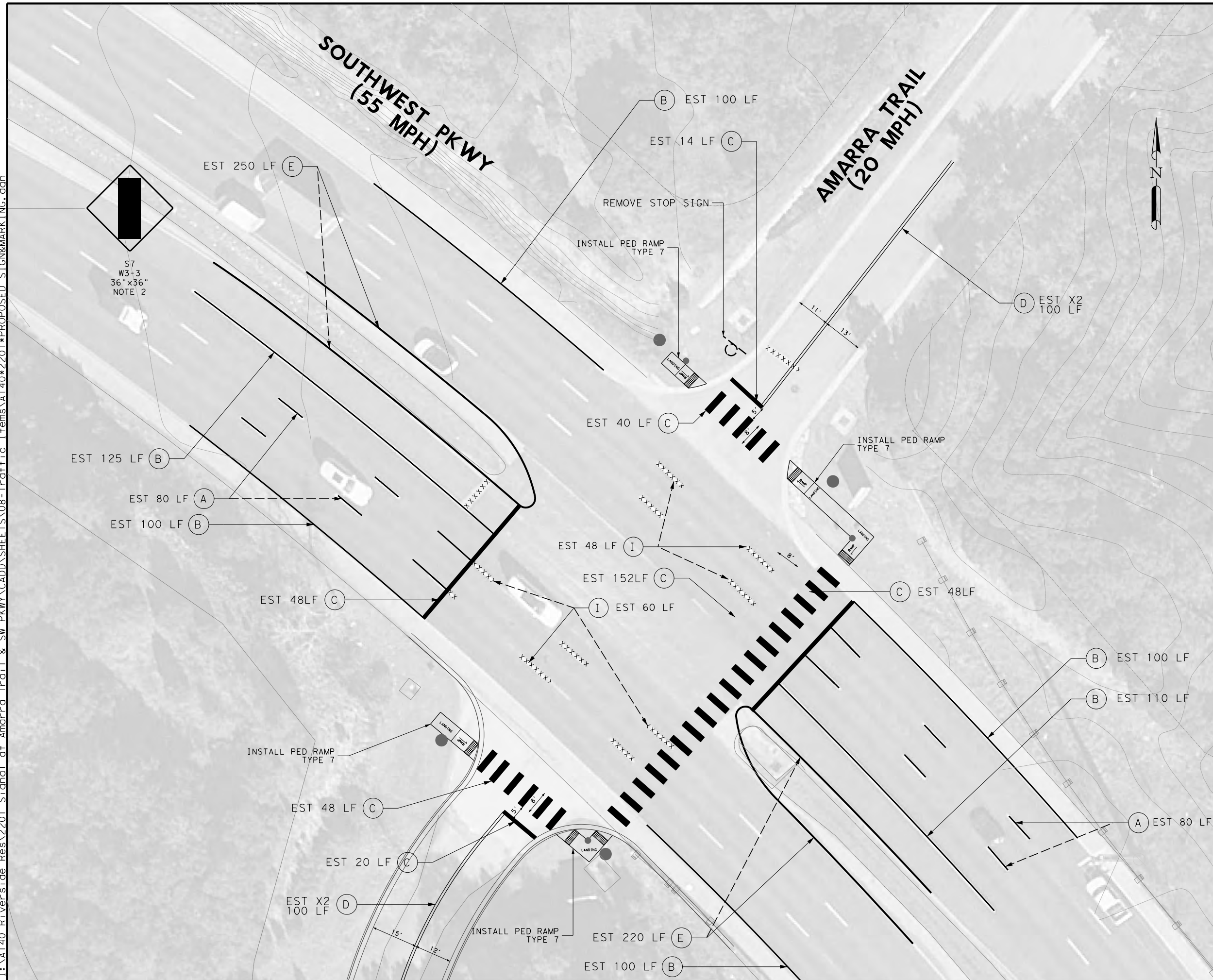
SIGNAL DESIGN
 SW PKWY & AMARRA TRAIL
 EXISTING CONDITION

SCALE HORIZONTAL: 30
 VERTICAL: SHEET 3 OF

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
AM				3
DRAWN	STATE	DIST. NO.	COUNTY	
KA	TX	AUSTIN	TRAVIS	
CHECK	CONTROL	SECTION	JOB	HIGHWAY NO.
AM				

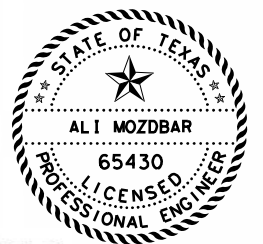
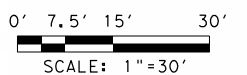
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5/27/2022 12:27:37 PM I:\A140 Riverside_Res\2201 Signal at Amarra Trail & SW PKWY\CADD\SHEETS\08-Traffic_Items\A140*2201*PROPOSED_SIGN&MARKING.dgn



- LEGEND**
- (A) REFL PAV MRK TY II(W)6" (BROKEN) (100 MIL)
 - (B) REFL PAV MRK TY II(W)8" (SLD) (100 MIL)
 - (C) REFL PAV MRK TY II(W)24" (SLD) (100 MIL)
 - (D) REFL PAV MRK TY II(Y)4" (SLD) (100 MIL)
 - (E) REFL PAV MRK TY II(Y)6" (SLD) (100 MIL)
 - (I) ELIM EXIST PAV MRK XXXXXXXX
 - (J) REFL PAV MRKR TY II-A-A
 - (K) REFL PAV MRKR TY I-C
 - SMALL SIGN ASSEMBLY
 - TRAFFIC SIGNAL

NOTE:
 1- ELIMINATE EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED PAVEMENT MARKINGS.
 2- INSTALL 720' IN ADVANCE OF STOPBAR



AL. Mozdar 5/27/2022



AUSTIN TRANSPORTATION DEPARTMENT



**SIGNAL DESIGN
 SW PKWY & AMARRA TRAIL
 PROPOSED SIGNS & MARKINGS**

SCALE HORIZONTAL: 30
 VERTICAL: SHEET OF

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
AM				4
DRAWN	STATE	DIST. NO.	COUNTY	
KA	TX	AUSTIN	TRAVIS	
CHECK	CONTROL	SECTION	JOB	HIGHWAY NO.
AM				