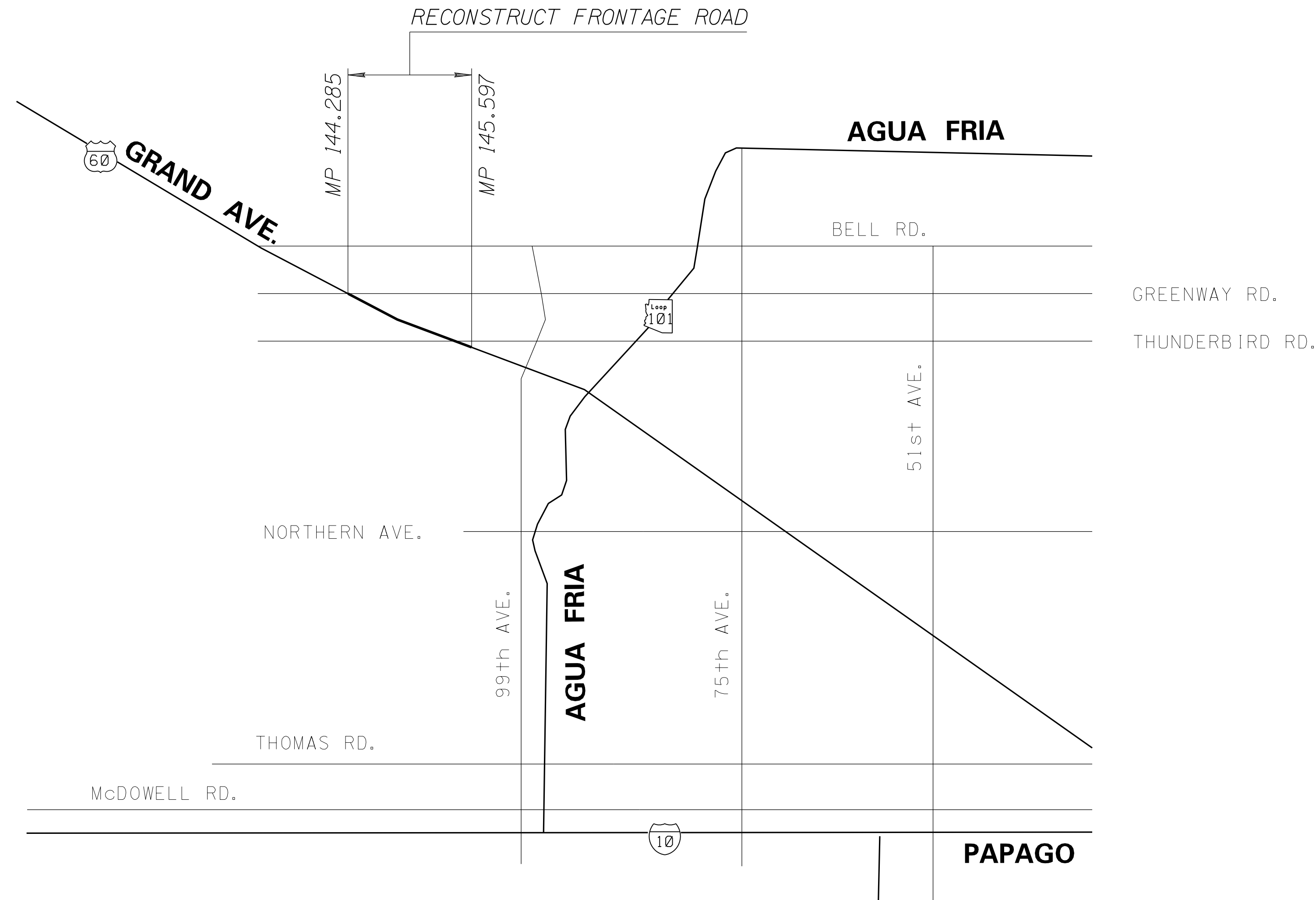
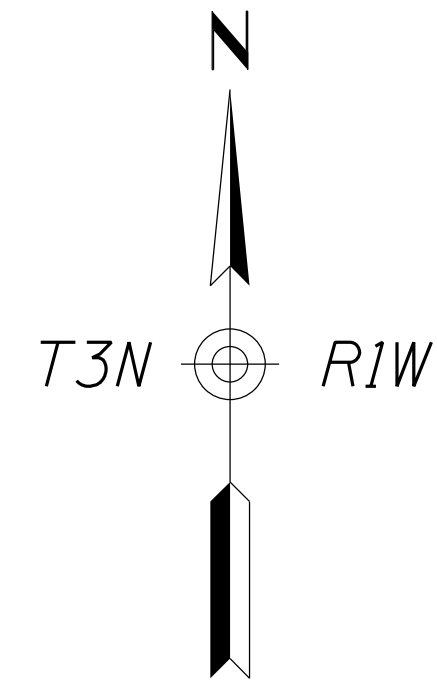
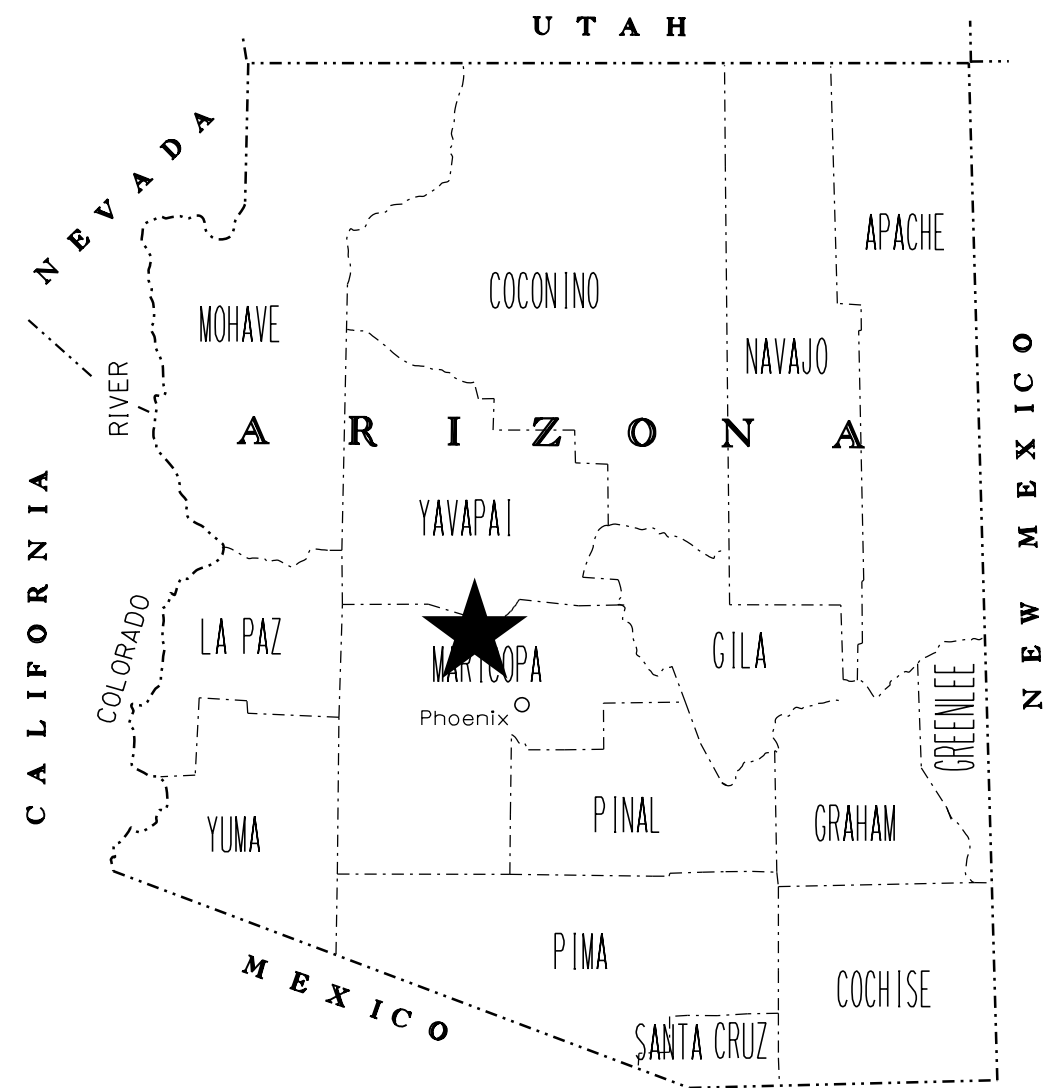


STATE OF ARIZONA
 DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
 PROJECT PLANS



STATE HIGHWAY
 WICKENBURG-PHOENIX HIGHWAY
 US 60



Constructed by:

Construction Company _____

Completion Date _____

Red-Lines by:

Construction Administrator Name & Company _____

Completion Date _____

Record Drawings by:

Record Drawings Designer Name & Company _____

Completion Date _____

**GREENWAY ROAD TO THOMPSON RANCH
 ROAD\THUNDERBIRD ROAD**
 PROJECT NO. 060 MA 144 H8874 01C
 FEDERAL AID NO. 060-B-NFA

ARIZONA DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
 DALLAS HAMMIT, P.E., STATE ENGINEER

REC. DWGS. DATA	REC. DWG. DATE	OF
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ADOT STANDARD DRAWINGS
C STANDARDS

ISSUE OR REVISION DATE	STANDARD NO.	SUBJECT	CONSTRUCTION	ISSUE OR REVISION DATE	STANDARD NO.	SUBJECT	CONSTRUCTION
5/12	C-01.10 SH 1	SYMBOL LEGEND		12/17	C-10.54 SH 1	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, CAST-IN-PLACE	
5/12	C-01.10 SH 2	SYMBOL LEGEND		12/17	C-10.54 SH 2	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, PRECAST	
5/12	C-01.10 SH 3	SYMBOL LEGEND		12/17	C-10.54 SH 3	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, LAYOUT	
5/12	C-01.10 SH 4	SYMBOL LEGEND		12/17	C-10.55 SH 1	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, CAST-IN-PLACE	
12/17	C-01.30 SH 1	GENERAL ABBREVIATIONS		12/17	C-10.55 SH 2	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, PRECAST	
5/12	C-01.30 SH 2	GENERAL ABBREVIATIONS		12/17	C-10.55 SH 3	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, LAYOUT	
5/12	C-01.30 SH 3	GENERAL ABBREVIATIONS		12/17	C-10.70 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS	
5/12	C-02.10	SLOPES, RURAL DIVIDED HIGHWAYS		12/17	C-10.70 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS	
5/12	C-02.20	SLOPES, RURAL UNDIVIDED AND FRINGE-URBAN HIGHWAYS		12/17	C-10.70 SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS	
5/12	C-02.30	SLOPES, MISCELLANEOUS ROADWAYS		12/17	C-10.71 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER	
5/12	C-03.10 SH 1	DITCHES, CHANNELS, DIKES AND BERMS, DITCHES AND CHANNELS		12/17	C-10.71 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER	
5/12	C-03.10 SH 2	DITCHES, CHANNELS, DIKES AND BERMS, DIKES		12/17	C-10.72 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS	
5/12	C-03.10 SH 3	DITCHES, CHANNELS, DIKES AND BERMS, DITCH DIKE		12/17	C-10.72 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS	
5/12	C-03.10 SH 4	DITCHES, CHANNELS, DIKES AND BERMS, PIPE BERMS		12/17	C-10.72 SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS	
5/12	C-03.10 SH 5	DITCHES, CHANNELS, DIKES AND BERMS, HEADWALL BERMS		12/17	C-10.73 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER	
12/17	C-04.10 SH 1	SPILLWAY, EMBANKMENT SINGLE INLET		12/17	C-10.73 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER	
12/17	C-04.10 SH 2	SPILLWAY, EMBANKMENT DOUBLE INLET		12/17	C-10.74	CONCRETE HALF-BARRIER TRANSITION, 42" TO 32" TYPE 'F'	
12/17	C-04.20 SH 1	DOWNDRAIN, EMBANKMENT SINGLE INLET		12/17	C-10.75 SH 1	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' TANGENT DEPARTURE TYPE 1	
12/17	C-04.20 SH 2	DOWNDRAIN, EMBANKMENT DOUBLE INLET		12/17	C-10.75 SH 2	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' TANGENT DEPARTURE TYPE 2	
12/17	C-04.30	SPILLWAY LENGTH TABLE		12/17	C-10.76	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' AT RADIUS, 32" TO 0"	
12/17	C-04.40	DOWNDRAIN LENGTH TABLE		12/17	C-10.77	CONCRETE BARRIER TRANSITION TO GUARDRAIL END TERMINAL LAYOUT WITH CURB	
5/12	C-04.50	DOWNDRAIN ENERGY DISSIPATOR		12/17	C-10.78	CONCRETE HALF-BARRIER TRANSITION, 32" TYPE 'F' LOW SPEED APPROACH	
5/12	C-05.10	CURB & GUTTER, CURB, GUTTER		12/17	C-10.79	CONCRETE HALF-BARRIER TRANSITION, 42" TYPE 'F' TANGENT DEPARTURE	
5/12	C-05.12 SH 1	CURB & GUTTER TRANSITIONS		5/12	C-11.10 SH 1	ROADWAY CATTLE GUARD	
5/12	C-05.12 SH 2	CURB & GUTTER TRANSITIONS		5/12	C-11.10 SH 2	ROADWAY CATTLE GUARD	
5/12	C-05.12 SH 3	CURB AND GUTTER TRANSITIONS		5/12	C-11.10 SH 3	ROADWAY CATTLE GUARD	
5/12	C-05.20 SH 1	CONCRETE DRIVEWAYS & SIDEWALKS, DRIVEWAYS		5/12	C-11.10 SH 4	ROADWAY CATTLE GUARD	
5/12	C-05.20 SH 2	CONCRETE DRIVEWAYS & SIDEWALKS, SIDEWALKS		5/12	C-11.20	CATTLE GUARD, DRAINAGE	
5/12	C-05.30 SH 1	SIDEWALK RAMP, TYPE A		5/12	C-12.10 SH 1	FENCE, WOVEN WIRE	
5/12	C-05.30 SH 2	SIDEWALK RAMP, TYPE B		5/12	C-12.10 SH 2	FENCE, BARBED WIRE	
5/12	C-05.30 SH 3	SIDEWALK RAMP, TYPE C		5/12	C-12.10 SH 3	FENCE, TYPE 1 AND 2 GATES, FLOOD GATE	
5/12	C-05.30 SH 4	SIDEWALK RAMP, TYPE D		5/12	C-12.10 SH 4	FENCE, FLOOD GATE INSTALLATION	
5/12	C-05.30 SH 5	SIDEWALK RAMP, TYPE E		5/12	C-12.10 SH 5	FENCE, MISCELLANEOUS DETAILS	
5/12	C-05.30 SH 6	SIDEWALK RAMP, TYPE F		5/12	C-12.20 SH 1	FENCE, CHAIN LINK, TYPE 1	
5/12	C-05.30 SH 7	SIDEWALK RAMP, DETECTABLE WARNING STRIP		5/12	C-12.20 SH 2	FENCE, CHAIN LINK, TYPE 2	
5/12	C-05.40	MEDIAN PAVING AND NOSE TAPER		5/12	C-12.20 SH 3	FENCE, CHAIN LINK, GATES	
5/12	C-05.50	CONCRETE BUS BAY		5/12	C-12.30 SH 1	FENCE, CHAIN LINK CABLE BARRIER	
5/12	C-06.10 SH 1	DRIVEWAY & TURNOUT LAYOUTS		5/12	C-12.30 SH 2	FENCE, CHAIN LINK CABLE BARRIER	
5/12	C-06.10 SH 2	DRIVEWAY & TURNOUT LAYOUTS		5/12	C-12.30 SH 3	FENCE, CHAIN LINK CABLE BARRIER	
5/12	C-07.01 SH 1	PCCP JOINTS		5/12	C-13.10 SH 1	PIPE CULVERT INSTALLATION	
5/12	C-07.01 SH 2	PCCP JOINTS		5/12	C-13.10 SH 2	PIPE CULVERT INSTALLATION	
5/12	C-07.02	LOAD TRANSFER DOWEL ASSEMBLY		5/12	C-13.15	TYPICAL PIPE INSTALLATION	
5/12	C-07.03 SH 1	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS		5/12	C-13.20	PIPE, REINFORCED CONCRETE END SECTION	
5/12	C-07.03 SH 2	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS		5/12	C-13.25	PIPE, CORRUGATED METAL END SECTION	
5/12	C-07.03 SH 3	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS		5/12	C-13.30	PIPE AND PIPE ARCH, CORRUGATED METAL, CONCRETE INVERT PAVING	
5/12	C-07.03 SH 4	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS		5/12	C-13.55	PIPE, CATTLE-VEHICLE PASS, MITERED END TREATMENT	
5/12	C-07.03 SH 5	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS		5/12	C-13.60	SLOTTED DRAIN DETAILS	
5/12	C-07.03 SH 6	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS		5/12	C-13.65	SLOTTED DRAIN INSTALLATION DETAILS	
5/12	C-07.03 SH 7	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS		5/12	C-13.70	STORM DRAIN CONNECTION DETAILS	
5/12	C-07.03 SH 8	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS		5/12	C-13.75	STORM DRAIN OUTLET BARRIER GATE	
5/12	C-07.04 SH 1	PCCP JOINT LOCATIONS, PARALLEL-TYPE ENTRANCE RAMP WITH AUXILIARY LANE		5/12	C-13.76	STORM DRAIN OUTLET AND STORM DRAIN PLUG	
5/12	C-07.04 SH 2	PCCP JOINT LOCATIONS, PARALLEL-TYPE EXIT RAMP WITH AUXILIARY LANE		5/12	C-13.80	PIPE COLLAR DETAILS	
5/12	C-07.04 SH 3	PCCP JOINT LOCATIONS, TAPER-TYPE ENTRANCE RAMP		5/12	C-15.10	CATCH BASIN, TYPE 1	
5/12	C-07.04 SH 4	PCCP JOINT LOCATIONS, TAPER-TYPE EXIT RAMP		5/12	C-15.20 SH 1	CATCH BASIN, TYPE 3	
5/12	C-07.04 SH 5	PCCP JOINT LOCATIONS, CROSSROAD AND RAMP TERMINI		5/12	C-15.20 SH 2	CATCH BASIN, TYPE 3	
5/12	C-07.06	TRENCH BACKFILL AND PAVEMENT REPLACEMENT		5/12	C-15.20 SH 3	CATCH BASIN, ACCESS FRAME AND COVER DETAILS	
5/12	C-08.20	PAVED GORE AREA		5/12	C-15.30	CATCH BASIN, TYPE 4	
12/17	C-10.00	GUARDRAIL MEASUREMENT LIMITS		5/12	C-15.40 SH 1	CATCH BASIN, TYPE 5	
12/17	C-10.01	GUARDRAIL INSTALLATION		5/12	C-15.40 SH 2	CATCH BASIN, TYPE 5	
12/17	C-10.03	W-BEAM GUARDRAIL, MGS BLOCKED-OUT TIMBER POST		5/12	C-15.50	CATCH BASIN, FRAME AND GRATE	
12/17	C-10.04	W-BEAM GUARDRAIL, MGS BLOCKED-OUT STEEL POST		5/12	C-15.70 SH 1	CATCH BASIN, MISCELLANEOUS DETAILS	
12/17	C-10.05 SH 1	W-BEAM GUARDRAIL (MODIFIED) WITH FREEWAY CURB AND GUTTER		5/12	C-15.70 SH 2	CATCH BASIN, MISCELLANEOUS DETAILS	
12/17	C-10.05 SH 2	W-BEAM GUARDRAIL (MODIFIED) WITH FREEWAY CURB AND GUTTER		5/12	C-15.75	CATCH BASIN, DROP INLET	
12/17	C-10.06	W-BEAM GUARDRAIL LONG-SPAN		5/12	C-15.80	CATCH BASIN, FLUSH	
12/17	C-10.07 SH 1	W-BEAM GUARDRAIL, BOX CULVERT GUARDRAIL POST		5/12	C-15.81	CATCH BASIN, SIDE SLOPE	
12/17	C-10.07 SH 2	W-BEAM GUARDRAIL, BOX CULVERT GUARDRAIL POST		5/12	C-15.90	CATCH BASIN, MEDIAN DIKE, PRECAST	
12/17	C-10.08 SH 1	W-BEAM GUARDRAIL, END ANCHOR		5/12	C-15.91 SH 1	FREEWAY CATCH BASIN DETAILS	
12/17	C-10.08 SH 2	W-BEAM GUARDRAIL, END ANCHOR		5/12	C-15.91 SH 2	FREEWAY CATCH BASIN DETAILS	
12/17	C-10.09	GUARDRAIL POST ROCK INSTALLATION		5/12	C-15.92 SH 1	CATCH BASIN WITH TYPE 'F' CONCRETE HALF BARRIER	
12/17	C-10.20 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP		5/12	C-15.92 SH 2	CATCH BASIN WITH TYPE 'F' CONCRETE HALF BARRIER	
12/17	C-10.20 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP		5/12	C-16.40	IRRIGATION SLEEVES	
12/17	C-10.21 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT		5/12	C-17.10	RAIL BANK PROTECTION FOR DRAINAGEWAYS, TYPES 1, 2 & 3	
12/17	C-10.21 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT		5/12	C-17.15	RAIL BANK PROTECTION AT ABUTMENTS, TYPES 4, 5 & 6	
12/17	C-10.30 SH 1	GUARDRAIL TRANSITION TO CONCRETE BARRIER, TIMBER POST		5/12	C-17.20	RAIL BANK PROTECTION FOR DRAINAGEWAYS, TYPES 7, 8 & 9	
12/17	C-10.30 SH 2	GUARDRAIL TRANSITION TO CONCRETE BARRIER, TIMBER POST		5/12	C-18.10 SH 1	MANHOLE, RISER DETAILS	
12/17	C-10.31 SH 1	GUARDRAIL TRANSITION TO CONCRETE BARRIER, STEEL POST		5/12	C-18.10 SH 2	MANHOLE, BASE DETAILS, NORMAL INSTALLATION	
12/17	C-10.31 SH 2	GUARDRAIL TRANSITION TO CONCRETE BARRIER, STEEL POST		5/12	C-18.10 SH 3	MANHOLE, FRAME AND COVER DETAILS	
12/17	C-10.38 SH 1	GUARDRAIL TAPER G4 TO MGS W-BEAM WITH STAGGERED POST		5/12	C-19.10 SH 1	FORD, CONCRETE WALLS	
12/17	C-10.38 SH 2	GUARDRAIL TAPER G4 TO MGS W-BEAM WITH OFFSET RAIL		5/12	C-19.10 SH 2	FORD, TYPES 1 AND 2	
12/17	C-10.40	CONCRETE MEDIAN BARRIER, 32" TYPE 'F', CAST-IN-PLACE		5/12	C-21.10	SURVEY MONUMENT FRAME AND COVER	
12/17	C-10.41	CONCRETE MEDIAN BARRIER, 42" TYPE 'F', CAST-IN-PLACE		5/12	C-21.20	SURVEY MARKER	
12/17	C-10.44 SH 1	CONCRETE MEDIAN BARRIER, 42" TYPE 'F' WITH VARIABLE HEIGHT SIDES, H=0° TO 26°					
12/17	C-10.44 SH 2	CONCRETE MEDIAN BARRIER, 42" TYPE 'F' WITH VARIABLE HEIGHT SIDES, H=0° TO 26°					
12/17	C-10.45 SH 1	CONCRETE MEDIAN BARRIER, 42" TYPE 'F' WITH VARIABLE HEIGHT SIDES, H=26° TO 60°					
12/17	C-10.45 SH 2	CONCRETE MEDIAN BARRIER, 42" TYPE 'F' WITH VARIABLE HEIGHT SIDES, H=26° TO 60°					
12/17	C-10.50 SH 1	CONCRETE HALF BARRIER, 32" TYPE 'F', CAST-IN-PLACE					
12/17	C-10.50 SH 2	CONCRETE HALF BARRIER, 32" TYPE 'F', PRECAST					
12/17	C-10.51	CONCRETE HALF BARRIER, 32" TYPE 'F' WITH SIDEWALK					
12/17	C-10.52	CONCRETE HALF BARRIER, 32" TYPE 'F' WITH GUTTER					
12/17	C-10.53	CONCRETE HALF BARRIER, 42" TYPE 'F' WITH GUTTER					

REV.: 12/17

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
CONSTRUCTION Standards	NAME	DATE	
PROJECT NO.	060 MA 144 H8874 O1C		1A OF 232
RECORD DRAWING DATA	FEDERAL AID NO. 060-B-NFA	REC. DWG. DATE	OF

speca1h.tbl

ADOT STANDARD DRAWINGS
TRAFFIC SIGNING & MARKING STANDARDS
(SHEET 1 OF 2)
EFFECTIVE MAY 2015

SUBJECT:

REVISION	STANDARD	SIGNING & MARKING DETAILS
6/14	M-1	CURB MARKINGS FOR RAISED MEDIAN AND ISLANDS
6/14	M-2 SHT 1	INTERSECTION STRIPING
5/15	M-2 SHT 2	INTERSECTION STRIPING (TWO-LANE RURAL)
6/14	M-2 SHT 3	CENTERLINE & REVERSE CURVE DETAILS
6/14	M-3	STRIPING AND DELINEATION FOR FREEWAY TERMINALS
6/14	M-4	PASSING LANE STRIPING DETAILS
6/14	M-5	RAILROAD PAVEMENT MARKINGS
6/14	M-6	WORD MARKINGS
6/14	M-7	PAVEMENT LETTERS
6/14	M-8	PAVEMENT LETTERS
6/14	M-9	PAVEMENT NUMBERS
6/14	M-10 SHT 1	PAVEMENT MARKING SYMBOLS
6/14	M-10 SHT 2	PAVEMENT MARKING SYMBOLS
6/14	M-11	TURN LANE PAVEMENT MARKINGS
6/14	M-12	WRONG-WAY ARROWS
6/14	M-13	PREFERENTIAL LANE PAVEMENT MARKINGS
6/14	M-14	STRIPING AND DELINEATION FOR TRUCK ESCAPE RAMPS
6/14	M-15 SHT 1	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - TAPERED ACCELERATION LANE
6/14	M-15 SHT 2	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - PARALLEL ACCELERATION LANE
6/14	M-15 SHT 3	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - PARALLEL ACCELERATION LANE WITH HOV BYPASS
6/14	M-15 SHT 4	PAVEMENT MARKING FOR FREEWAY PARALLEL - ACCELERATION LANE
6/14	M-16 SHT 1	PAVEMENT MARKING FOR FREEWAY EXIT RAMPS - TAPERED DECELERATION LANE
6/14	M-16 SHT 2	PAVEMENT MARKING FOR FREEWAY EXIT RAMP - PARALLEL DECELERATION LANE
5/15	M-17	FREEWAY LANE DROP PAVEMENT MARKINGS
6/14	M-18	RECESSED PAVEMENT MARKER DETAILS
6/14	M-19 SHT 1	RAISED PAVEMENT MARKER PLAN LEGEND
6/14	M-19 SHT 2	NON-REFLECTIVE RAISED PAVEMENT MARKER DETAILS
6/14	M-19 SHT 3	RETROREFLECTIVE RAISED PAVEMENT MARKER DETAILS
6/14	M-19 SHT 4	RETROREFLECTIVE RAISED PAVEMENT MARKER DETAILS
5/15	M-19 SHT 5	PAVEMENT MARKING DETAILS FOR UNDIVIDED HIGHWAYS
6/14	M-19 SHT 6	RETROREFLECTIVE RAISED PAVEMENT MARKERS (RPM) FOR UNDIVIDED HIGHWAYS
6/14	M-19 SHT 7	FREEWAY AND DIVIDED HIGHWAY EDGE LINE AND LANE STRIPING
5/15	M-19 SHT 8	LANE DROP MARKING AND RAMP OR INTERSECTION GUIDE STRIPING
6/14	M-19 SHT 9	PAVEMENT MARKING CROSS-SECTION DETAILS FOR HIGHWAYS AND FREEWAYS

SUBJECT:

REVISION	STANDARD	SIGNING & MARKING DETAILS
6/14	M-20 SHT 1	CHIP SEAL MARKER USAGE FOR TEMPORARY MARKERS
6/14	M-20 SHT 2	CHIP SEAL MARKER USAGE FOR TEMPORARY MARKERS
6/14	M-21	TRANSVERSE RUMBLE STRIP DETAILS
6/14	M-22 SHT 1	LONGITUDINAL RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
6/14	M-22 SHT 2	LONGITUDINAL RUMBLE STRIP EXCEPTION DETAILS
6/14	M-22 SHT 3	CENTERLINE RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
6/14	M-23	OBJECT MARKER DETAILS
6/14	M-24	OBJECT MARKER PLACEMENT DETAILS
6/14	M-26 SHT 1	DELINEATOR PLACEMENT AND SPACING
6/14	M-26 SHT 2	DELINEATOR PLACEMENT AND SPACING
6/14	M-26 SHT 3	FLEXIBLE DELINEATOR ASSEMBLIES
6/14	M-26 SHT 4	SQUARE STEEL POST DELINEATOR
6/14	M-26 SHT 5	DELINEATOR FOUNDATION DETAILS
6/14	M-27	DELINEATION DETAILS FOR MEDIAN CROSSOVERS
6/14	M-29	OFF-MAINLINE REFERENCE MARKER LOCATION DETAIL
6/14	M-30	OFF-MAINLINE REFERENCE MARKER DETAILS
6/14	M-32	BRIDGE AND BARRIER MARKER DETAILS
6/14	M-33	BRIDGE & BARRIER MARKER PLACEMENT AND INSTALLATION DETAILS
6/14	M-34	GUARDRAIL END TERMINAL DELINEATION DETAILS
6/14	M-35	OBJECT MARKER FOR SAND BARREL CRASH CUSHION

NO.1 DESCRIPTION OF REVISION, REVISED ALL DRAWINGS AND RE-ISSUED, CREATED SHEET 2. MADE BY L. LOPEZ DATE 6/14
 NO.2 DESCRIPTION OF REVISION, REVISED M2 SHT, M17, M19 SHTS S&S REVISED S1 SHT ON PG. UPDATED BORDER TITLE BLOCK. MADE BY L. LOPEZ DATE 5/15

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
SIGNING & MARKING STANDARDS		NAME	DATE
PROJECT NO.	060 MA 144 H8874 01C	IB-1	OF 232
RECORD DRAWING DATA	FEDERAL AID NO. 060-B-NFA	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS
 TRAFFIC SIGNING & MARKING STANDARDS
 (SHEET 2 OF 2)
 EFFECTIVE MAY 2015

SUBJECT:

REVISION	STANDARD	SIGNING & MARKING DETAILS
6/14	S-1 SHT 1	GENERAL SIGNING NOTES
6/14	S-2 SHT 1	S & W BREAKAWAY POST SELECTION CHART
6/14	S-2 SHT 2	S & W BREAKAWAY POST INSTALLATION DETAILS
6/14	S-3 SHT 1	FLAT SHEET SIGNS SQUARE TUBE POST GENERAL NOTES
6/14	S-3 SHT 2	SINGLE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 12, 18 AND 24 INCH WIDTHS
6/14	S-3 SHT 3	SINGLE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 30, 36, 42 AND 54 INCH WIDTHS
6/14	S-3 SHT 4	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 36, 42 AND 48 INCH WIDTHS
6/14	S-3 SHT 5	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 54, 60 AND 72 INCH WIDTHS
6/14	S-3 SHT 6	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 84 - 144 INCH WIDTHS
6/14	S-3 SHT 7	THREE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 48, 60 AND 72 INCH WIDTHS
6/14	S-3 SHT 8	THREE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 84 - 144 INCH WIDTHS
6/14	S-3 SHT 9	WARNING SIGN ASSEMBLY - SINGLE POST
6/14	S-3 SHT 10	WARNING SIGN ASSEMBLY - TWO POST
6/14	S-3 SHT 11	WARNING SIGN ASSEMBLY - THREE POST
6/14	S-3 SHT 12	MULTIPLE ROUTE MARKER ASSEMBLIES
6/14	S-3 SHT 13	SPECIAL SIGN ASSEMBLIES
6/14	S-3 SHT 14	STRINGER DETAILS FOR SQUARE TUBE POSTS
6/14	S-3 SHT 15	SQUARE TUBE SIGN POST FOUNDATION
6/14	S-3 SHT 16	SQUARE TUBE POST SLIP BASE DETAILS
6/14	S-4	W SHAPE BREAKAWAY POST FUSE PLATE AND HINGE DETAILS
6/14	S-5	W SHAPE BREAKAWAY POST DETAILS
6/14	S-6	S4x7.7 BREAKAWAY POST DETAILS
6/14	S-7 SHT 1	ALUMINUM EXTRUSION SIGN PANEL DETAILS
6/14	S-7 SHT 2	ALUMINUM EXTRUSION AUXILIARY SIGN INSTALLATION DETAILS
5/15	S-7 SHT 3	ALUMINUM EXTRUSION EXIT PANEL INSTALLATION DETAIL
6/14	S-8 SHT 1	FLAT SHEET ALUMINUM PANEL ON BREAKAWAY POSTS INSTALLATION DETAIL
6/14	S-8 SHT 2	ALUMINUM EXTRUSION SIGN TO PERFORATED POSTS INSTALLATION DETAIL
6/14	S-9 SHT 1	SIGN INSTALLATION ON POLE
6/14	S-9 SHT 2	SIGN INSTALLATION ON SIGNAL POLE
6/14	S-9 SHT 3	SIGN INSTALLATION ON POLE BAND-TYPE CLAMP
6/14	S-10	MILEPOST AND REFERENCE LOCATION SIGNS
6/14	S-11 SHT 1	TAPERED TUBE SIGN STRUCTURE CANTILEVER
6/14	S-11 SHT 2	TAPERED TUBE SIGN STRUCTURE CANTILEVER POST AND MAST ARM DETAILS
6/14	S-11 SHT 3	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM
6/14	S-11 SHT 4	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM POST AND BEAM DETAILS

SUBJECT:

REVISION	STANDARD	SIGNING & MARKING DETAILS
6/14	S-12 SHT 1	TYPE A, B, AND DOWN ARROWS
6/14	S-12 SHT 2	TYPE C AND D ARROWS
6/14	S-12 SHT 3	C2 ARROW DETAIL
6/14	S-13	SIGN IDENTIFICATION DETAILS
6/14	S-14 SHT 1	ROTATING OPEN/CLOSED SIGN
6/14	S-14 SHT 2	ROTATING OPEN/CLOSED SIGN DETAILS
6/14	S-14 SHT 3	ROTATING OPEN/CLOSED SIGN MOUNTING DETAILS
6/14	S-15 SHT 1	FOLDING RECTANGULAR SIGN ASSEMBLY
6/14	S-15 SHT 2	FOLDING RECTANGULAR SIGN OPERATION
6/14	S-15 SHT 3	FOLDING DIAMOND SIGN ASSEMBLY
6/14	S-16 SHT 1	TEMPORARY WOOD POSTS
6/14	S-16 SHT 2	TEMPORARY WOOD POSTS SELECTION CHART
6/14	S-17	END OF ROAD BARRICADE
6/14	C-1	SAND BARREL CRASH CUSHION
6/14	C-2	SAND BARREL CRASH CUSHION TYPICAL INSTALLATION
6/14	C-3 SHT 1	PRECAST CONCRETE BARRIER STRUCTURAL DETAILS
6/14	C-3 SHT 2	PRECAST CONCRETE BARRIER PIN AND LOOP ASSEMBLY
6/14	C-4 SHT 1	MEDIAN CROSSOVER
6/14	C-4 SHT 2	TYPICAL END TREATMENTS FOR DETOURS USING TEMPORARY CONCRETE BARRIER (TCB)
6/14	C-5 SHT 1	APPROACH PLATE AND TRANSITION SECTION FOR TEMPORARY CONCRETE BARRIER
6/14	C-5 SHT 2	APPROACH PLATE AND TRANSITION SECTION FOR TEMPORARY CONCRETE BARRIER

NO.1 | DESCRIPTION OF REVISION, REVISED ALL DRAWINGS AND RE-ISSUED, CREATED SHEET 2. | MADE BY | L. LOPEZ | DATE | 6/14 | NO.2 | DESCRIPTION OF REVISION, REVISED S1 SHT, REVISED M2 SHT, M1P SHT, S8 ON PCL, UPDATED BORDER TITLE BLOCK. | MADE BY | L. LOPEZ | DATE | 5/15

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
SIGNING & MARKING STANDARDS		NAME	DATE
PROJECT NO.	060 MA 144 H8874 01C		1B-2 OF 232
RECORD DRAWING DATA	FEDERAL AID NO. 060-B-NFA	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS
 TRAFFIC SIGNAL AND LIGHTING STANDARDS
 (SHEET 1 OF 2)
 EFFECTIVE MAY 2015

NO.1 | DESCRIPTION OF REVISION | REVISED STDS 1-2, 1-11, 2-7, 4-22, 5-0, 6-4. MADE BY: L. LOPEZ DATE: 03/15
 NO.2 | DESCRIPTION OF REVISION | REVISED TS 0-1, UPDATED BORDER TITLE BLOCK. MADE BY: L. LOPEZ DATE: 05/15

REVISION DATE	STANDARD NUMBER	SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T. S. 0	ABBREVIATIONS, SYMBOLS AND DEFINITIONS
05/15	0-1	STANDARD ABBREVIATIONS
01/12	0-2 SHT 1	PLAN SYMBOLS
01/12	0-2 SHT 2	PLAN SYMBOLS
01/12	0-2 SHT 3	PLAN SYMBOLS
03/10	0-3 SHT 1	STANDARD DEFINITIONS
03/10	0-3 SHT 2	STANDARD DEFINITIONS
03/10	0-4	REFERENCE DOCUMENTS AND GENERAL REQUIREMENTS
	T. S. 1	PULL BOXES
09/11	1-1 SHT 1	LIGHT DUTY - LIGHT WEIGHT NO. 5 AND NO. 7 PULL BOX
09/11	1-1 SHT 2	LIGHT DUTY - LIGHT WEIGHT NO. 5 AND NO. 7 SLOPE WALL BODY PULL BOX DETAILS
03/15	1-2	HEAVY DUTY NO. 5 AND NO. 7 STRAIGHT BODY WALL PULL BOX DETAILS
09/11	1-3	REPLACEMENT LID SIZING FOR EXISTING NO. 5 AND NO. 7 PULL BOXES
09/11	1-4 SHT 1	TYPICAL PULL BOX INSTALLATION AND WIRING DETAILS
09/11	1-4 SHT 2	TYPICAL PULL BOX INSTALLATION AND WIRING DETAILS
09/11	1-4 SHT 3	TYPICAL PULL BOX INSTALLATION DETAILS
09/11	1-5 SHT 1	ELECTRICAL CONDUIT COVER AND TRENCH REQUIREMENTS
09/11	1-5 SHT 2	CONDUIT EXPANSION COUPLINGS
09/11	1-6	CONDUCTOR REQUIREMENTS
03/10	1-7	TRAFFIC SIGNAL IMSA CABLE COLOR CODES
09/11	1-8 SHT 1	FRONT OF BARRIER JUNCTION BOX
09/11	1-8 SHT 2	BACK OF BARRIER JUNCTION BOX
09/11	1-9	TOP OF BARRIER JUNCTION BOX DETAILS
09/11	1-10	TOP OF BARRIER JUNCTION BOX DETAILS
10/13	1-11 SHT 1	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX
10/13	1-11 SHT 2	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX
03/15	1-11 SHT 3	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX LID
03/15	1-12 SHT 1	PRECAST HEAVY DUTY LIGHTING NO. 4B AND NO. 6B PULL BOX
03/15	1-12 SHT 2	PRECAST HEAVY DUTY LIGHTING NO. 4B AND NO. 6B PULL BOX
	T. S. 2	FOUNDATIONS
03/10	2-1	FOUNDATION FOR TYPE II LOAD CENTER CABINET
03/10	2-2	FOUNDATION FOR TYPE IV LOAD CENTER CABINET
03/10	2-3	FOUNDATION FOR TYPE III CONTROL CABINET
03/10	2-4	FOUNDATION FOR TYPE IV AND V CONTROL CABINETS
03/10	2-5	FOUNDATION FOR TYPE 340 CONTROL CABINET
03/10	2-6	METER PEDESTAL CABINET FOUNDATION AND BASE
03/15	2-7	TRAFFIC SIGNAL UPS CABINET FOUNDATION DETAIL
	T. S. 3	CABINETS
12/12	3-0	NOTES FOR TYPE II AND IV LOAD CENTER CABINETS
03/10	3-1	TYPE II LOAD CENTER CABINET
03/10	3-2	TYPE IV LOAD CENTER CABINET
03/10	3-3	TYPE II OR IV LOAD CENTER CABINET WIRING DETAILS 240/480 3W W/DISCONNECT
03/10	3-4 SHT 1	PHOTO ELECTRIC CELL MOUNTING DETAILS
03/10	3-4 SHT 2	PHOTO ELECTRIC CELL MOUNTING DETAILS
03/10	3-5 SHT 1	TYPE I AND II METER PEDESTAL CABINET
12/12	3-5 SHT 2	METER PEDESTAL CABINET
03/10	3-6	TYPE III CONTROL CABINET
03/10	3-7	POLE MOUNTED TYPE III CONTROL CABINET
03/10	3-8 SHT 1	POLE MOUNT DETAILS FOR TYPE III CONTROL CABINET
03/10	3-8 SHT 2	POLE MOUNT DETAILS FOR TYPE III CONTROL CABINET
03/10	3-9 SHT 1	TYPE IV AND V CONTROL CABINET NOTES
03/10	3-9 SHT 2	TYPE IV CONTROL CABINET
03/10	3-9 SHT 3	TYPE V CONTROL CABINET
03/10	3-10	CABINET EXTENSION OR ELEVATOR BASE
03/10	3-11	CONTROL CABINET MOUNTED SERVICE ENCLOSURE
03/10	3-12 SHT 1	120/240 OR 240/480 VOLT, SINGLE PHASE UTILITY PULL SECTION AND SERVICE DISCONNECT DETAILS
03/10	3-12 SHT 2	120/240 OR 240/480 VOLT, SINGLE PHASE UTILITY PULL SECTION AND SERVICE DISCONNECT DETAILS
03/10	3-13 SHT 1	TRAFFIC SIGNALS AND LIGHTING MODEL 345 CABINET DETAILS
03/10	3-13 SHT 2	TRAFFIC SIGNALS AND LIGHTING MODEL 345 CABINET DETAILS
03/10	3-13 SHT 3	TRAFFIC SIGNALS AND LIGHTING MODEL 345 CABINET CAGE DETAILS

REVISION DATE	STANDARD NUMBER	SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T. S. 4	POLES AND POSTS
10/13	4-1	TYPE "A" POLE
10/13	4-2	TYPE "E" POLE
10/13	4-3	TYPE "F" POLE
10/13	4-4	TYPE "G" POLE
10/13	4-5	ALUMINUM TYPE "G" POLE
10/13	4-6	ALUMINUM TYPE "H" POLE
10/13	4-7	ALUMINUM TYPE "I" POLE
10/13	4-8	TYPE "J" POLE
10/13	4-9	TYPE "K" POLE
10/13	4-10	TYPE "Q" POLE
10/13	4-11	TYPE "R" POLE
10/13	4-12	TYPE "S" POLE
10/13	4-13	ALUMINUM TYPE "S" POLE
10/13	4-14 SHT 1	TYPE "T" POLE
10/13	4-14 SHT 2	TYPE "S" AND "T" STEEL TWIN LUMINAIRE MOUNTING BRACKET AND EXTENSIONS
10/13	4-15	ALUMINUM TYPE "T" POLE
10/13	4-16	TYPE "U" POLE ELLIPTICAL BASE DETAILS
10/13	4-17 SHT 1	TYPE "U" POLE SQUARE BASE
10/13	4-17 SHT 2	TYPE "U" POLE ROUND POLE / SQUARE BASE
03/10	4-17 SHT 3	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-17 SHT 4	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-17 SHT 5	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-17 SHT 6	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-18	TYPE "V" POLE AND 60' OR 65' MAST ARM
10/13	4-19	TYPE "W" POLE AND 60' OR 65' MAST ARM
03/10	4-20	POLE HAND HOLE DETAIL
03/10	4-21	EQUIPMENT MOUNTING HEIGHT DETAILS
03/15	4-22	PEDESTRIAN PUSH BUTTON POST "TYPE PB POLE"
10/13	4-23	POLE FOUNDATION ANCHOR BOLTS
03/10	4-26	STEEL MAST ARM DETAILS LUMINAIRE AND SIGNAL ARMS TO 20'
03/10	4-27	ALUMINUM TRUSS ARM DETAILS TYPE G, H, AND I POLES
03/10	4-28	SIGNAL MAST ARM CONNECTION DETAIL TYPE J AND Q POLES
03/10	4-29	SIGNAL MAST ARM CONNECTION DETAIL TYPE K AND R POLES
03/10	4-30	MAST ARM CONNECTION DETAIL TYPE V AND W POLES
03/10	4-31	SIGNAL MAST ARM TENON DETAIL
12/12	4-32	TYPICAL HIGHWAY LIGHTING OFFSETS IN CUT AND FILL SECTIONS
	T. S. 5	POLE BASES - SPECIAL
03/15	5-0	TYPE 2 AND 3 CAST ALUMINUM BREAK-AWAY BASES
12/12	5-1	TYPE 2 CAST ALUMINUM BREAK-AWAY BASE
12/12	5-2	TYPE 3 CAST ALUMINUM BREAK-AWAY BASE
12/12	5-3	INSTALLATION DETAILS FOR POLE FOUNDATIONS WITH TYPE 2 AND 3 BREAK-AWAY BASES
	T. S. 6	HIGHWAY TRAFFIC DATA DETECTORS
03/10	6-1	TYPE C VEHICLE DETECTOR LOOPS FOR TRAFFIC COUNTERS
03/10	6-2 SHT 1	TYPE SA AND SB SPEED/VEHICLE CLASSIFICATION SYSTEMS
03/10	6-2 SHT 2	TYPE SA SPEED/VEHICLE CLASSIFICATION SYSTEMS
03/10	6-2 SHT 3	TYPE SB SPEED/VEHICLE CLASSIFICATION SYSTEMS
12/12	6-3	PIEZOELECTRIC WEIGHT SENSOR AND LOOP LANE LAYOUT
12/12	6-4 SHT 1	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
12/12	6-4 SHT 2	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
03/15	6-4 SHT 3	DETAIL A PIEZOELECTRIC SENSOR DETAILS
12/12	6-4 SHT 4	DETAIL B DETECTOR LOOP DETAILS
12/12	6-4 SHT 5	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
03/10	6-5	MICROLOOPS FOR SPEED/VEHICLE CLASSIFICATION
03/10	6-6	QUARTZ PIEZOELECTRIC WEIGHT SENSOR AND LOOP LANE LAYOUT
03/10	6-7	TRAFFIC DATA COLLECTION CABINET INSTALLATION DETAILS
03/10	6-8	TYPE MPD CABINET POLE, BASE AND FOUNDATION INSTALLATION DETAILS

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
TRAFFIC SIGNAL & LIGHTING STANDARDS		NAME	DATE
PROJECT NO.			
060 MA 144 H8874 01C		IC-1	OF 232
RECORD DRAWING DATA	FEDERAL AID NO.	REC. DWG. DATE	OF
	060-B-NFA		

ADOT STANDARD DRAWINGS
 TRAFFIC SIGNAL AND LIGHTING STANDARDS
 (SHEET 2 OF 2)
 EFFECTIVE MAY 2015

NO.1 | DESCRIPTION OF REVISION | REVISED STDS 7-1, 11-1, 11-2, 13-3, ADDED NEW STD 1-12, 3/15 | DATE | MADE BY | L. LOPEZ | 5/15
 NO.2 | DESCRIPTION OF REVISION | REVISED TS 0-1 ON SHT, UPDATED BORDER TITLE BLOCK, 3/15 | DATE | MADE BY | L. LOPEZ | 5/15

REVISION DATE	STANDARD NUMBER	SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T. S. 7	TRAFFIC SIGNAL DETECTORS
03/10	7-1 SHT 1	LOOP DETECTOR LOCATION SAWCUT PATTERNS AND INSTALLATION DETAILS
03/10	7-1 SHT 2	SAW CUT AND CORING DETAILS
03/15	7-1 SHT 3	SAW CUT AND CORING DETAILS
03/10	7-1 SHT 4	TYPICAL DETECTOR LOOP LEAD-IN ROAD TO PULL BOX DETAIL
03/10	7-1 SHT 5	LOOP DETECTOR LOCATION AND INSTALLATION DETAILS
03/10	7-2	PRE-FORMED LOOP DETECTORS FOR RAMP METERING AND COUNTING
03/10	7-3	PRE-FORMED LOOP DETECTORS IN BRIDGE DECK
03/10	7-4	PRE-FORMED LOOP DETECTORS IN PCCP
03/10	7-5	TYPICAL PRE-FORMED LOOP DETECTOR STUB-OUT DETAIL
	T. S. 8	SIGNAL ASSEMBLIES
01/12	8-0	TRAFFIC SIGNAL VEHICLE FACE ASSEMBLY REQUIREMENTS AND DETAILS
01/12	8-1	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
01/12	8-2	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
01/12	8-3	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
10/13	8-4 SHT 1	12- INCH VEHICLE TRAFFIC SIGNAL HOUSING/SECTION
01/12	8-4 SHT 2	12- INCH VEHICLE TRAFFIC SIGNAL HOUSING/SECTION NOTES
01/12	8-4 SHT 3	VEHICLE TRAFFIC SIGNAL HOUSING/SECTION DETAILS
03/10	8-4 SHT 4	VISORS FOR 8- INCH AND 12- INCH VEHICLE TRAFFIC SIGNAL FACE ASSEMBLIES
01/12	8-5	FLASHING BEACON SIGNAL FACE ASSEMBLY
01/12	8-6	LED LAMP FOR PROGRAMMED VISIBILITY SIGNAL
01/12	8-7 SHT 1	PEDESTRIAN SIGNAL ASSEMBLY REQUIREMENTS AND DETAILS
01/12	8-7 SHT 2	PEDESTRIAN SIGNAL ASSEMBLY HOUSING
01/12	8-7 SHT 3	PEDESTRIAN SIGNAL ASSEMBLY VISOR
	T. S. 9	MOUNTING ASSEMBLIES - SIGNAL
03/10	9-0 SHT 1	MOUNTING ASSEMBLY GENERAL REQUIREMENTS
03/10	9-0 SHT 2	MOUNTING ASSEMBLY GENERAL REQUIREMENTS
03/10	9-1	TYPE I AND II MOUNTING ASSEMBLIES
03/10	9-2	TYPE III AND IV MOUNTING ASSEMBLIES
10/13	9-3	TYPE V MOUNTING ASSEMBLY
03/10	9-4	TYPE VI MOUNTING ASSEMBLY
03/10	9-5	TYPE VII MOUNTING ASSEMBLY
03/10	9-6	TYPE VIII MOUNTING ASSEMBLY
03/10	9-7	TYPE IX MOUNTING ASSEMBLY
03/10	9-8	TYPE X MOUNTING ASSEMBLY
03/10	9-9	TYPE XI MOUNTING ASSEMBLY
	T. S. 10	MOUNTING CASTINGS - SIGNAL
03/10	10-1	MISCELLANEOUS SIGNAL MOUNTING PARTS
03/10	10-2	MAST ARM SIGNAL MOUNTING PLUMBIZER
03/10	10-3	SIGNAL MOUNTING POLE PLATE DETAILS
03/10	10-4	TERMINAL COMPARTMENT, SIDE MOUNTED AND POLE TOP MOUNTED
	T. S. 11	PEDESTRIAN DETAILS
03/15	11-1	TYPE I PEDESTRIAN PUSH BUTTON HOUSING ASSEMBLY
03/15	11-2	CAN STYLE PEDESTRIAN PUSH BUTTON
	T. S. 12	FLASHERS
03/10	12-1 SHT 1	ADVANCE WARNING FLASHER POLE DETAIL
03/10	12-1 SHT 2	ADVANCE WARNING FLASHER POLE SIGN MOUNTING DETAILS
03/10	12-1 SHT 3	ADVANCE WARNING FLASHER POLE DETAIL
	T. S. 13	ILLUMINATION - SIGNS
03/10	13-1	SIGN LIGHTING DETAIL FOR TUBULAR SIGN STRUCTURES
03/10	13-2	FUSE PANEL DETAILS FOR SIGN LIGHTING
03/15	13-3	PLACEMENT OF LIGHTING FIXTURES FOR OVERHEAD SIGNS
	T. S. 14	ILLUMINATION - SPECIAL
03/10	14-1 SHT 1	HIGH PRESSURE SODIUM (HPS) LAMPS
03/10	14-1 SHT 2	HIGH PRESSURE SODIUM (HPS) LAMPS
03/10	14-1 SHT 3	HIGH PRESSURE SODIUM (HPS) LAMPS
03/10	14-2	PEDESTRIAN BRIDGE LIGHTING DETAILS

REVISION DATE	STANDARD NUMBER	SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T. S. 15	SPAN WIRE SIGNALS AND LIGHTING
01/12	15-0 SHT 1	GENERAL NOTES
01/12	15-0 SHT 2	GENERAL NOTES
01/12	15-0 SHT 3	GENERAL NOTES
01/12	15-1 SHT 1	STEEL POLE TYPICAL DETAILS
01/12	15-1 SHT 2	STEEL POLE FOUNDATION DETAILS
01/12	15-1 SHT 3	STEEL POLE ATTACHMENT DETAILS
01/12	15-1 SHT 4	WOOD POLE TYPICAL DETAILS
01/12	15-1 SHT 5	WOOD POLE TYPICAL DETAILS
01/12	15-1 SHT 6	TYPICAL DETAILS
01/12	15-2	HANGER AND BALANCE ADJUSTER TYPICAL DETAILS
01/12	15-3 SHT 1	SIGNAL ASSEMBLY DETAILS
01/12	15-3 SHT 2	CONDUCTOR ENTRANCE HEADS TYPE A, B AND C
01/12	15-3 SHT 3	ALUMINUM PIPE EXTENSION AND TYPICAL DETAILS
01/12	15-4 SHT 1	ADJUSTABLE SIGN HANGER TYPICAL DETAILS
01/12	15-4 SHT 2	ADJUSTABLE SIGN HANGER TYPICAL DETAILS
01/12	15-4 SHT 3	ADJUSTABLE SIGN HANGER TYPICAL DETAILS
01/12	15-5	ADJUSTABLE HANGER TOP AND EXTENSION DETAILS
01/12	15-6	SIGNAL TETHER CLAMP TYPICAL DETAILS
01/12	15-7	POLE BAND TYPICAL DETAILS
01/12	15-8	WEATHERHEAD TYPICAL DETAILS

ADOT STANDARD DRAWINGS			
REVISION DATES AND STANDARD NO.'s REVIEW			
TRAFFIC SIGNAL AND LIGHTING STANDARDS		NAME	DATE
PROJECT NO.	060 MA 144 H8874 01C	1C-2	OF 232
RECORD DRAWING	FEDERAL AID NO. 060-B-NFA	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

STRUCTURE DETAIL DRAWINGS

REVISION DATE	SD NUMBER	SUBJECT
RAILINGS		
6/12	SD 1.01	F-SHAPE BRIDGE CONCRETE BARRIER AND TRANSITION (34")
6/12	SD 1.02	F-SHAPE BRIDGE CONCRETE BARRIER AND TRANSITION (44")
6/12	SD 1.03	THREE BEAM GUARD RAIL TRANSITION SYSTEM
3/09	SD 1.04	COMBINATION PEDESTRIAN-TRAFFIC BRIDGE RAILING
3/09	SD 1.05	PEDESTRIAN FENCE FOR BRIDGE RAILING SD1.04
6/09	SD 1.06 (1 OF 4)	TWO TUBE BRIDGE RAIL
6/09	SD 1.06 (2 OF 4)	TWO TUBE BRIDGE RAIL
6/09	SD 1.06 (3 OF 4)	TWO TUBE BRIDGE RAIL
6/09	SD 1.06 (4 OF 4)	TWO TUBE BRIDGE RAIL
4/10	SD 1.11	BARRIER JUNCTION BOX
APPROACHES		
12/07	SD 2.01	APPROACH SLAB DETAILS
12/07	SD 2.02	TYPE 1 ANCHOR SLAB DETAILS
12/07	SD 2.03	TYPE 2 ANCHOR SLAB DETAILS
9/09	SD 2.04	SLOPE PAVING DETAILS
DECK JOINTS		
6/09	SD 3.01	DECK JOINT ASSEMBLY - COMPRESSION SEAL
12/09	SD 3.02	DECK JOINT ASSEMBLY - STRIP SEAL
12/09	SD 3.03	DECK JOINT ASSEMBLY - RAISED STRIP SEAL
SUBSTRUCTURE		
11/12	SD 5.01	STRUCTURAL EXCAVATION - PAYMENT LIMITS
11/12	SD 5.02	STRUCTURE BACKFILL - PAYMENT LIMITS
DRAINAGE STRUCTURES		
5/15	SD 6.01 (1 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS
2/12	SD 6.01 (2 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS
2/12	SD 6.01 (3 OF 5)	REINFORCED CONCRETE BOX CULVERTS - EXTENSION DETAILS
2/12	SD 6.01 (4 OF 5)	REINFORCED CONCRETE BOX CULVERTS - STRUCTURAL EXCAVATION & STRUCTURE BACKFILL
5/15	SD 6.01 (5 OF 5)	REINFORCED CONCRETE BOX CULVERTS - SINGLE BARREL (0'-30' FILLS)
5/15	SD 6.02 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (0'-15' FILLS)
5/15	SD 6.02 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (15'-30' FILLS)
5/15	SD 6.03 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (0'-15' FILLS)
5/15	SD 6.03 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (15'-30' FILLS)
5/15	SD 6.04 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (0'-15' FILLS)
5/15	SD 6.04 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (15'-30' FILLS)
5/15	SD 6.05 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (0'-15' FILLS)
5/15	SD 6.05 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (15'-30' FILLS)
5/15	SD 6.06 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (0'-15' FILLS)
5/15	SD 6.06 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (15'-30' FILLS)
2/12	SD 6.07	REINFORCED CONCRETE BOX CULVERTS - 16' x 14' EQUIPMENT PASS (0'-20' FILLS)
5/15	SD 6.08 (1 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 3' to 7'
2/12	SD 6.08 (2 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 8' to 12'
5/15	SD 6.08 (3 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 3' to 7'
2/12	SD 6.08 (4 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 8' to 12'
5/15	SD 6.08 (5 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 3' to 7'
2/12	SD 6.08 (6 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 8' to 12'
5/15	SD 6.08 (7 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 3' to 7'
2/12	SD 6.08 (8 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 8' to 12'
5/15	SD 6.09 (1 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 2 : 1 SLOPE
5/15	SD 6.09 (2 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 4 : 1 SLOPE
5/15	SD 6.09 (3 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 6 : 1 SLOPE
5/15	SD 6.10 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 3' to 7'
2/12	SD 6.10 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 8' to 12'
2/12	SD 6.11 (1 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON DETAILS
5/15	SD 6.11 (2 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (2 : 1 SLOPE)
5/15	SD 6.11 (3 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (4 : 1 SLOPE)
5/15	SD 6.11 (4 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (6 : 1 SLOPE)
7/12	SD 6.30 (1 OF 5)	PIPE CULVERT HEADWALLS - MISCELLANEOUS DETAILS
7/12	SD 6.30 (2 OF 5)	PIPE CULVERT HEADWALLS - INLET AND OUTLET - 18" to 42" PIPES
7/12	SD 6.30 (3 OF 5)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET AND OUTLET - 48" to 84" PIPES
7/12	SD 6.30 (4 OF 5)	PIPE CULVERT HEADWALLS - SKEWED INLET AND OUTLET - 48" to 84" PIPES
7/12	SD 6.30 (5 OF 5)	PIPE CULVERT HEADWALLS - MULTI-PIPE - 48" to 84" PIPES
7/12	SD 6.31 (1 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET
7/12	SD 6.31 (2 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 2 : 1 SLOPE
7/12	SD 6.31 (3 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 4 : 1 SLOPE
7/12	SD 6.31 (4 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 6 : 1 SLOPE
7/12	SD 6.31 (5 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET
7/12	SD 6.31 (6 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 2 : 1 SLOPE
7/12	SD 6.31 (7 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 4 : 1 SLOPE
7/12	SD 6.31 (8 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 6 : 1 SLOPE

STRUCTURE DETAIL DRAWINGS

REVISION DATE	SD NUMBER	SUBJECT
DRAINAGE STRUCTURES (Continued)		
7/12	SD 6.32 (1 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET
7/12	SD 6.32 (2 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 2 : 1 SLOPE
7/12	SD 6.32 (3 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 4 : 1 SLOPE
7/12	SD 6.32 (4 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 6 : 1 SLOPE
7/12	SD 6.32 (5 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET
7/12	SD 6.32 (6 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 2 : 1 SLOPE
7/12	SD 6.32 (7 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 4 : 1 SLOPE
7/12	SD 6.32 (8 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 6 : 1 SLOPE
7/12	SD 6.33 (1 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET
7/12	SD 6.33 (2 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 2 : 1 SLOPE
7/12	SD 6.33 (3 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 4 : 1 SLOPE
7/12	SD 6.33 (4 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 6 : 1 SLOPE
7/12	SD 6.33 (5 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET
7/12	SD 6.33 (6 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 2 : 1 SLOPE
7/12	SD 6.33 (7 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 4 : 1 SLOPE
7/12	SD 6.33 (8 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 6 : 1 SLOPE
7/12	SD 6.34 (1 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET
7/12	SD 6.34 (2 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 2 : 1 SLOPE
7/12	SD 6.34 (3 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 4 : 1 SLOPE
7/12	SD 6.34 (4 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 6 : 1 SLOPE
7/12	SD 6.34 (5 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET
7/12	SD 6.34 (6 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 2 : 1 SLOPE
7/12	SD 6.34 (7 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 4 : 1 SLOPE
7/12	SD 6.34 (8 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 6 : 1 SLOPE
7/12	SD 6.35 (1 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITHOUT APRON
7/12	SD 6.35 (2 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITH OUTLET APRON
7/12	SD 6.36 (1 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRONS
7/12	SD 6.36 (2 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 2 : 1 SLOPE
7/12	SD 6.36 (3 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 4 : 1 SLOPE
7/12	SD 6.36 (4 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 6 : 1 SLOPE
RETAINING WALLS		
1/15	SD 7.01 (1 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
1/15	SD 7.01 (2 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
1/15	SD 7.01 (3 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
1/15	SD 7.01 (4 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
1/15	SD 7.01 (5 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
9/10	SD 7.02 (1 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
9/10	SD 7.02 (2 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
SOUND BARRIER WALLS		
4/10	SD 8.01	SOUND BARRIER WALL (CONCRETE)
1/13	SD 8.02 (1 OF 2)	SOUND BARRIER WALL (MASONRY)
1/13	SD 8.02 (2 OF 2)	SOUND BARRIER WALL (MASONRY)
TRAFFIC STRUCTURES		
11/04	SD 9.01 (1 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - ELEVATION & NOTES
4/00	SD 9.01 (2 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - FOUNDATION DETAILS
4/00	SD 9.01 (3 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE A SIGN MOUNT ASSEMBLY
4/00	SD 9.01 (4 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE B SIGN MOUNT ASSEMBLY
4/00	SD 9.01 (5 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - LIGHT SUPPORT AND MISC. DETAILS
11/04	SD 9.02 (1 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - ELEVATION & NOTES
5/00	SD 9.02 (2 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - FOUNDATION DETAILS
5/00	SD 9.02 (3 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE A SIGN MOUNT ASSEMBLY
5/00	SD 9.02 (4 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE B SIGN MOUNT ASSEMBLY
5/00	SD 9.02 (5 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - LIGHT SUPPORT AND MISC. DETAILS
3/11	SD 9.10 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - GENERAL PLAN
3/11	SD 9.10 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - FOUNDATION DETAILS
3/11	SD 9.10 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - POST AND MAST ARM DETAILS
3/11	SD 9.10 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - SIGN SUPPORT DETAILS
3/11	SD 9.10 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - LIGHT SUPPORT DETAILS
3/11	SD 9.20 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - GENERAL PLAN
3/11	SD 9.20 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - FOUNDATION DETAILS
3/11	SD 9.20 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - POST AND MAST ARM DETAILS
3/11	SD 9.20 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - SIGN SUPPORT DETAILS
3/11	SD 9.20 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - LIGHT SUPPORT AND MISC. DETAILS
8/02	SD 9.50 (1 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
8/02	SD 9.50 (2 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
8/02	SD 9.50 (3 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING & SIGN BRACKET DETAILS
7/00	SD 9.50 (4 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
7/00	SD 9.50 (5 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
8/02	SD 9.51	DUAL VARIABLE MESSAGE SIGN - TUBULAR FRAME
5/07	SD 9.52 (1 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
5/07	SD 9.52 (2 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
5/07	SD 9.52 (3 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
5/07	SD 9.52 (4 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
5/07	SD 9.52 (5 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
1/15	SD 9.53 (1 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - PLAN & ELEVATION
1/15	SD 9.53 (2 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
1/15	SD 9.53 (3 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
1/15	SD 9.53 (4 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - HANDRAIL DETAILS
1/15	SD 9.53 (5 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - MISCELLANEOUS DETAILS

REV.: 5/15

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
STRUCTURES Standards		NAME	DATE
PROJECT NO.	060 MA 144 H8874 01C		
RECORD DRAWING DATA	FEDERAL AID NO. 060-B-NFA	REC. DWG. DATE	10 OF 232

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	2	232	

060 MA 144

MIDPOINT OF PROJECT

Central Zone
State Plane Coordinates

X=381,000
Y=950,000

REFERENCES

F-022-2(37)
TEA-022-2(52)
060-B(201)A
City of El Mirage PW01-ST015
060-B-NFA

DESIGN DATA

Frontage Road
2013 ADT (NW of Acoma Drive) = 2,800
2014 ADT (NW of Thompson Ranch Road) = 1,130
Design Speed = 25 MPH

US 60 (Grand Avenue)
2036 ADT = 28,900
Design Speed = 45 MPH

GENERAL NOTES

The roadway plans have been designed utilizing the 2017 Construction Standard Drawings (C-Series) and current revisions. Refer to the 1A sheet for a listing of current revision dates.

R/W markers will be furnished and placed by ADOT R/W Plans Section On-Call Consultant.

The project roadway shall be striped by the contractor in accordance with the current edition of the Signing and Marking Standard Drawings (M&S-Series) and the pavement marking plans.

For R/W information not shown, see Right-of-Way Project No. 060 MA 145 H8874.

Bench markers will be furnished by the State and shall be placed by the Contractor: Std C-21.20.

Pavement lift thickness is nominal.

Where only the horizontal location of an existing utility is shown, the location is approximate. Where both the horizontal and vertical location of an existing utility is shown, the location has been verified by field survey methods. The contractor shall comply with all current Blue Stake laws and Section 107.15 of the Specifications.

Delineators, object markers and mile post markers shall be removed and reset as required.

The average project elevation is 1,140.

EARTHWORK QUANTITIES	
Roadway Excavation	2575 CY
Shrink	14 CY
Structural Excavation	100 CY
Shrink	5 CY
Pipe Excavation	270 CY
Shrink	14 CY
Pipe Backfill	96 CY
Structure Backfill	101 CY
Embankment (Incl Gnd Comp)	410 CY
Waste	2305 CY

EARTHWORK FACTORS		
Station	Shrink/Swell	Ground Compaction
Project Wide	5% Shrink	0.10'

LENGTH OF PROJECT

Sta 100+32.68 to 167+83.28 = 6,750.60' = 1.28 Miles

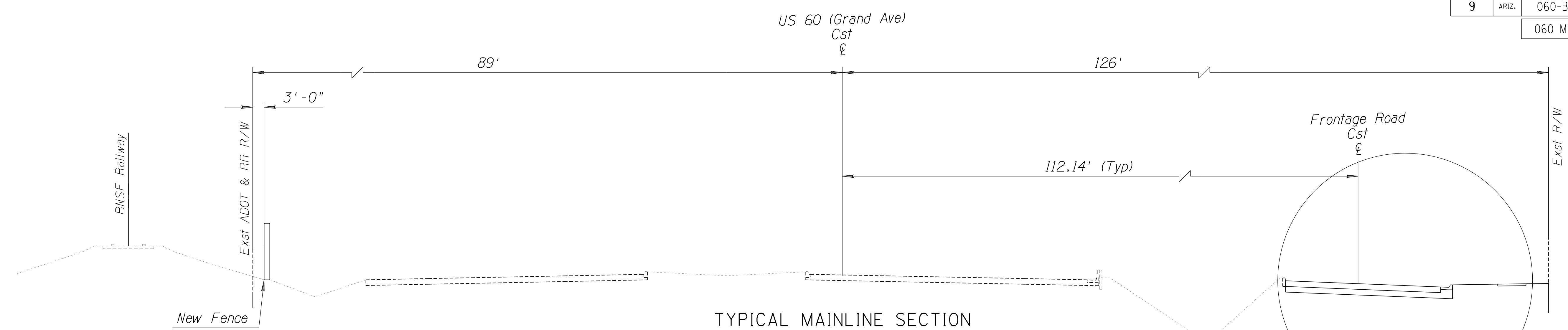
INDEX OF SHEETS

Dwg No.	Sheet No.	Sheet Type
	1	Face Sheet
1A-1B1-1B2-1C1-1C2-1D	1A - 1D	ADOT Standard Drawings
G-01.01	2	Index of Sheets and Design Data Sheet
G-02.01 - G-02.02	3 - 4	Typical Sections
G-03.01	5	Barrier Summary Sheet
G-04.01	6	New Pipe Summary Sheet
G-04.02 - G-04.05	7 - 10	Pipe Sleeve Summary Sheets
G-05.01	11	Culvert Summary Sheet
G-06.01 - G-06.20	12 - 31	Roadway Summary Sheets
G-07.01 - G-07.37	32 - 68	Detail Sheets
C-01.01 - C-01.03	69 - 71	Survey and Geometric Control
C-02.01 - C-02.14	72 - 85	Removal Sheets
C-03.01 - C-03.29	86 - 114	Roadway Plans and Profiles
C-04.01 - C-04.04	115 - 118	Grand/Acoma Plan/Staking
D-01.01	119	Storm Drain Profiles
D-02.01 - D-02.03	120 - 122	Drainage Details
T-01.01 - T-01.02	123 - 124	Traffic Control Notes & Quantities
T-01.03	125	Maintenance of Traffic
T-02.01 - T-02.05	126 - 130	Sequence of Construction Sheets
T-03.01 - T-03.26	131 - 156	Traffic Control Plans
T-04.01 - T-04.02	157 - 158	Signing & Pavement Marking Notes & Quantities
T-04.03 - T-04.10	159 - 166	Sign Summary Sheet
T-05.01 - T-05.14	167 - 180	Signing & Pavement Marking Plans
T-06.01 - T-06.19	181 - 199	Lighting Plans
R-01.01 - R-01.11	200 - 210	Landscape Plans
R-02.01 - R-02.14	211 - 224	Irrigation Plans
R-03.01 - R-03.08	225 - 232	Erosion Control

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			INDEX OF SHEETS AND DESIGN DATA SHEET	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-01.01
TRACS NO. H8874 01C				OF

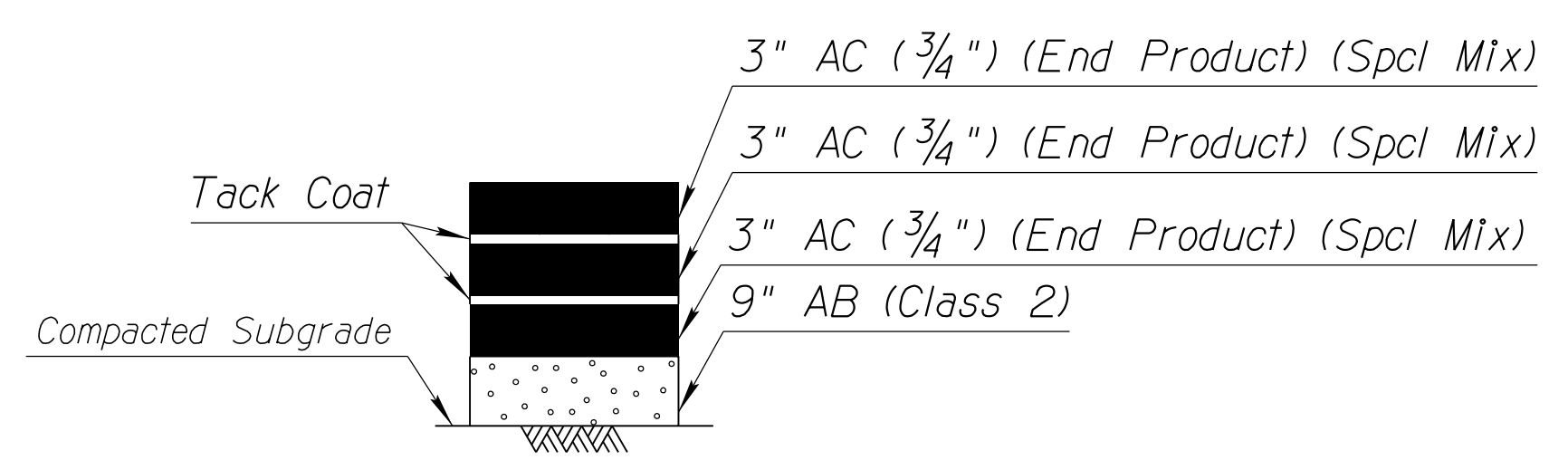
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	3	232	

060 MA 144

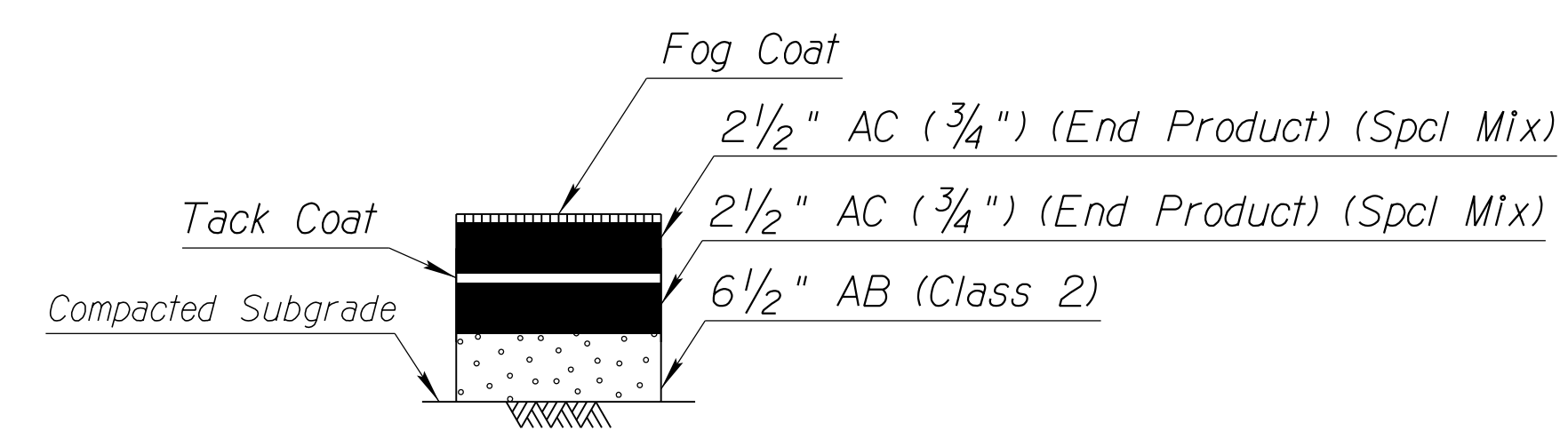


TYPICAL MAINLINE SECTION

Sta 369+65.00 to 395+15.00 (*)
Sta 398+40.00 to 433+95.00 (*)



Total Thickness = 18"
SECTION NO. 2

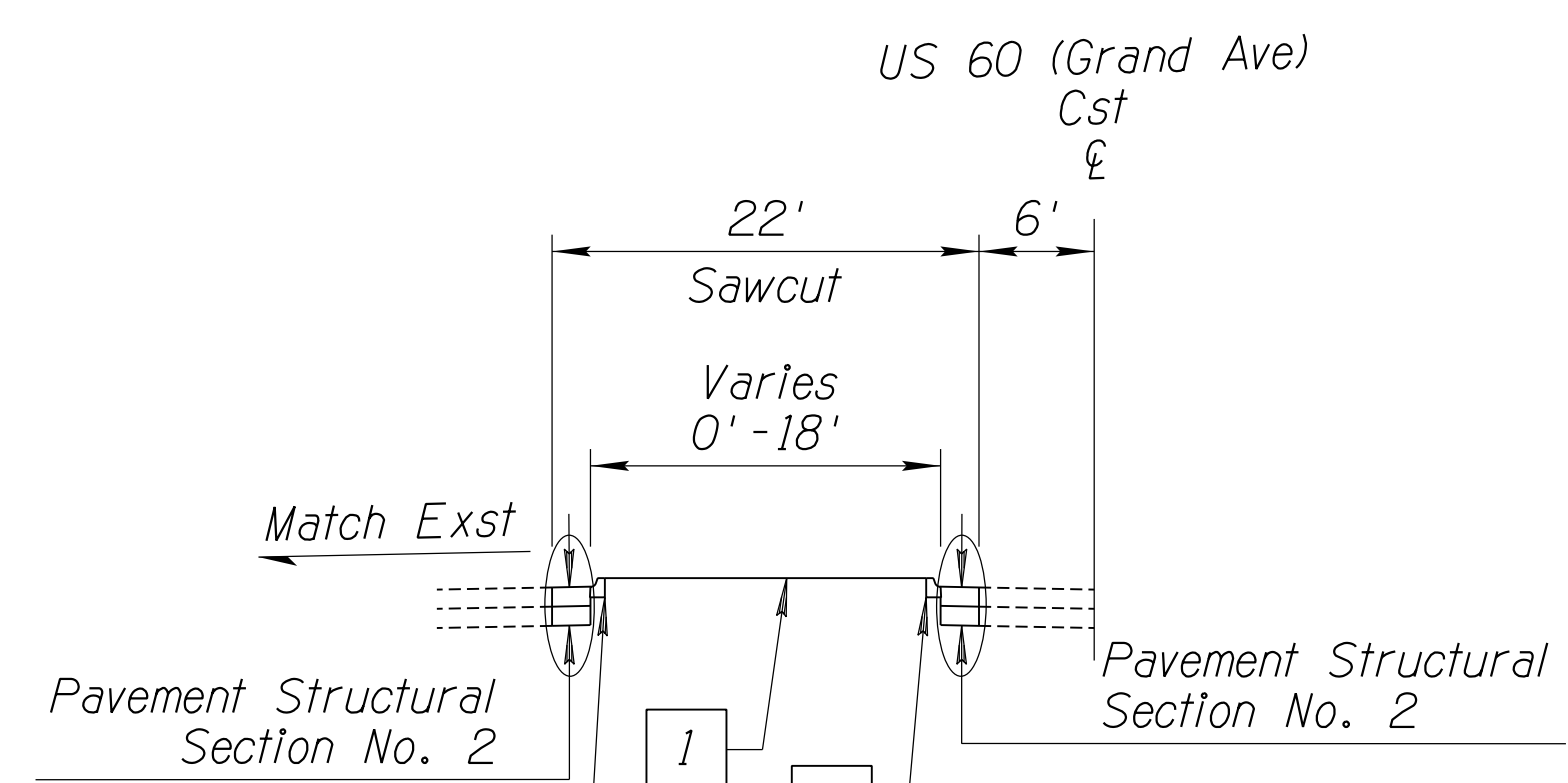


Total Thickness = 11 1/2"
SECTION NO. 1

PAVEMENT STRUCTURAL SECTIONS

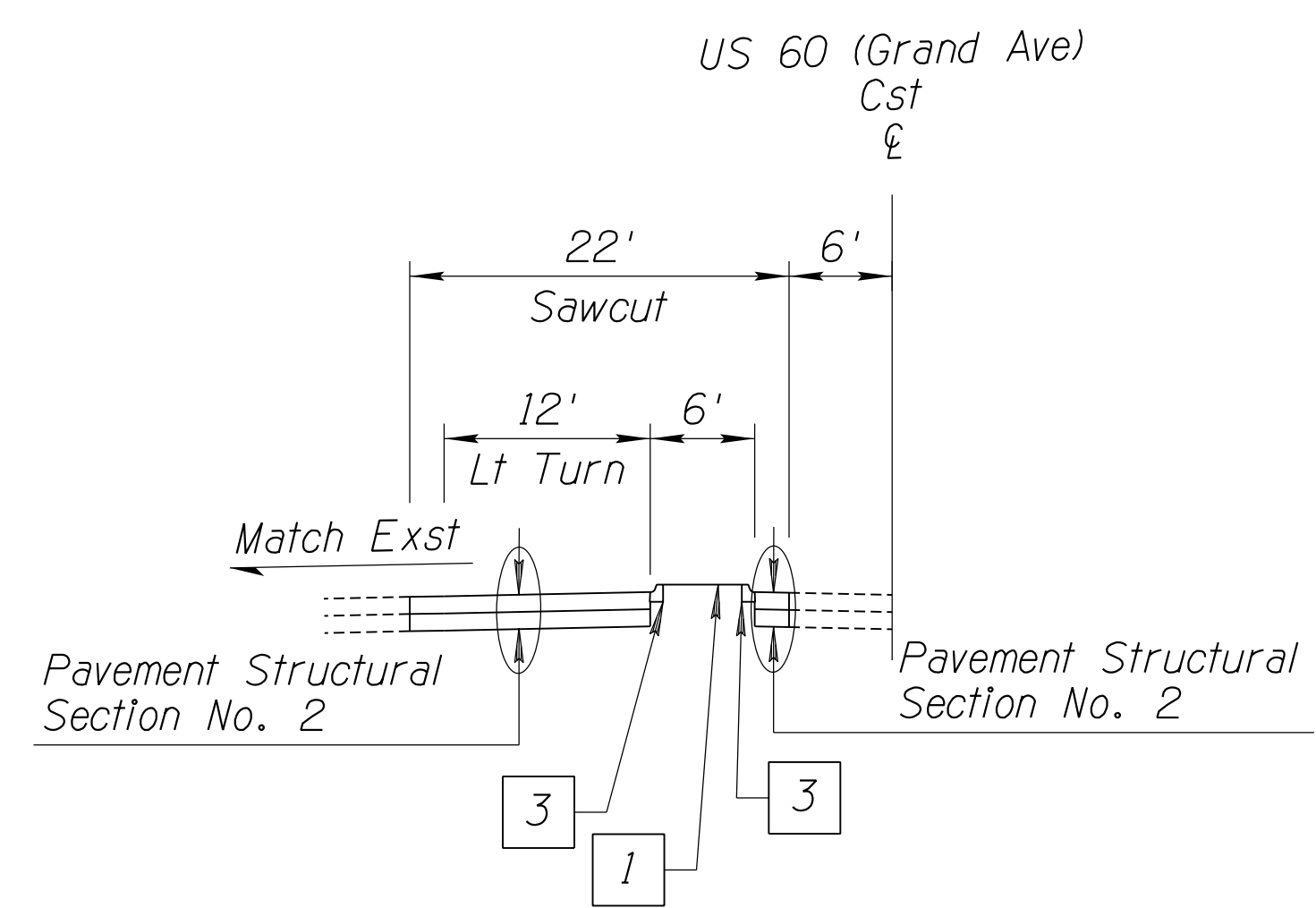
All stations are referenced to Frontage Rd Cst ξ unless otherwise noted.

* US 60 Grand Ave Cst ξ Station



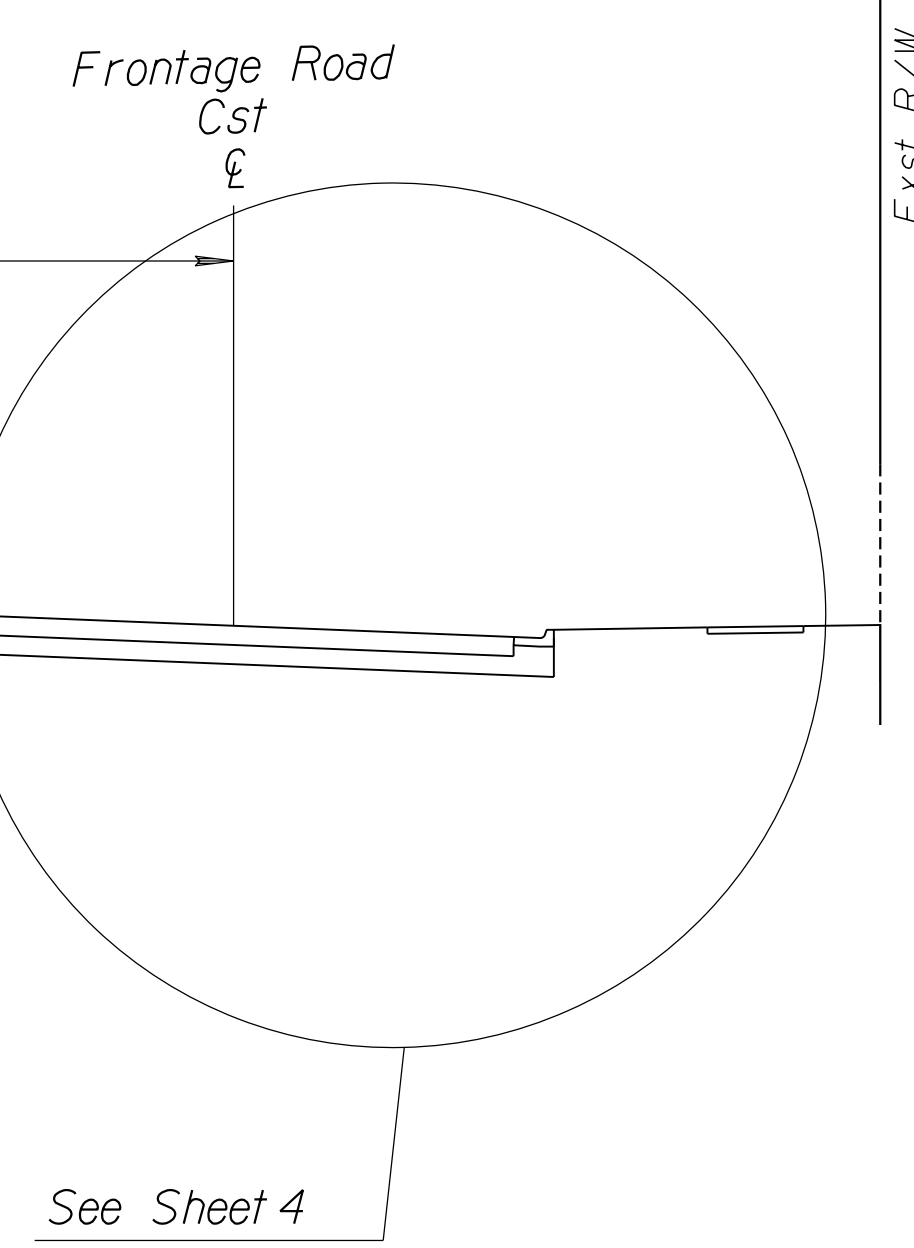
TYPICAL SECTION WB LT TURN LANE

Sta 383+45.98 to 384+14.43 (*)



TYPICAL SECTION WB LT TURN LANE

Sta 384+14.43 to 386+32.89 (*)

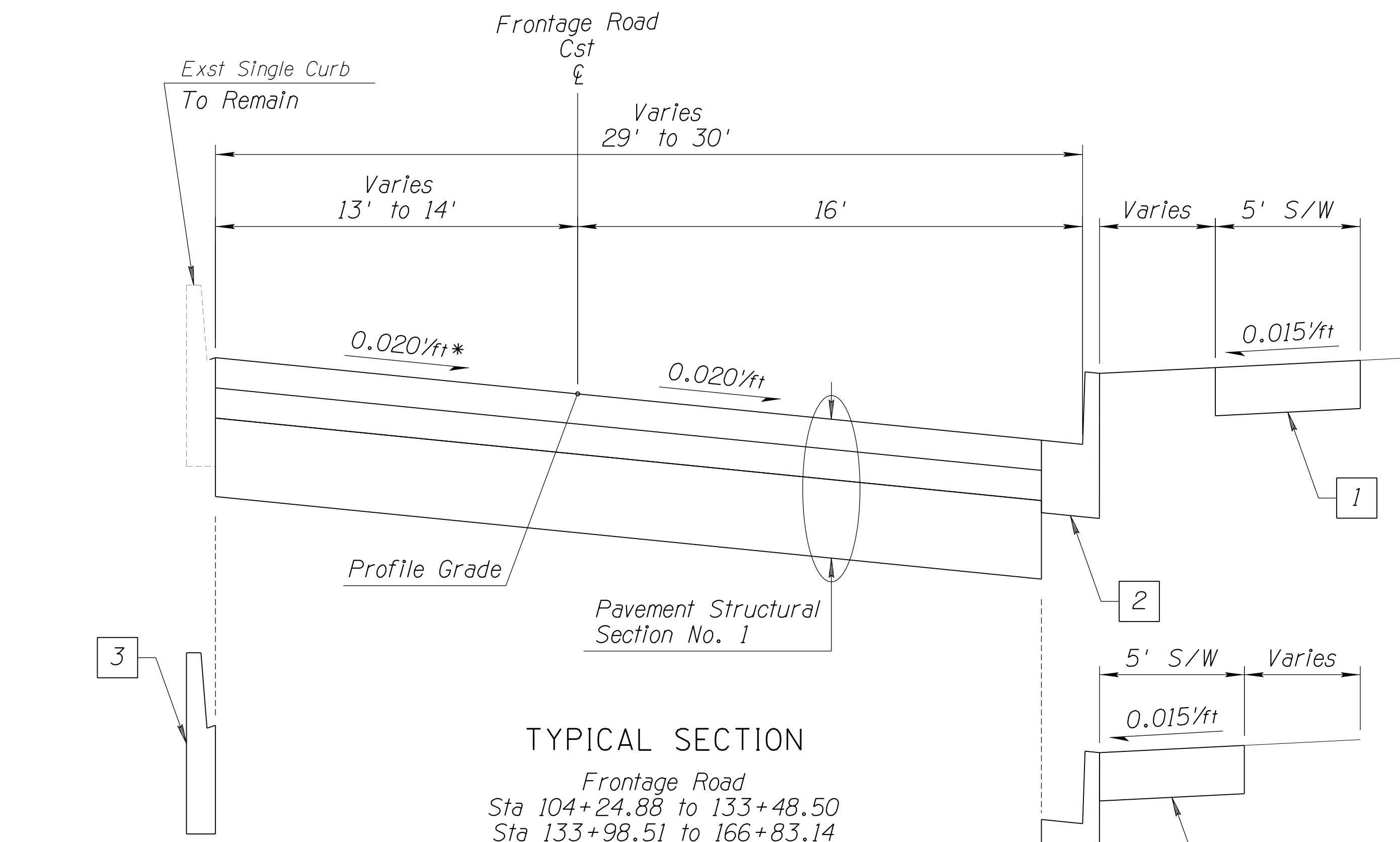


- 1 New Median Treatment (See Plans for Type & Location)
- 3 New Curb ADOT Std C-05.10 (See Plans for Type & Location)

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			TYPICAL SECTIONS	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-02.01
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	4	232	

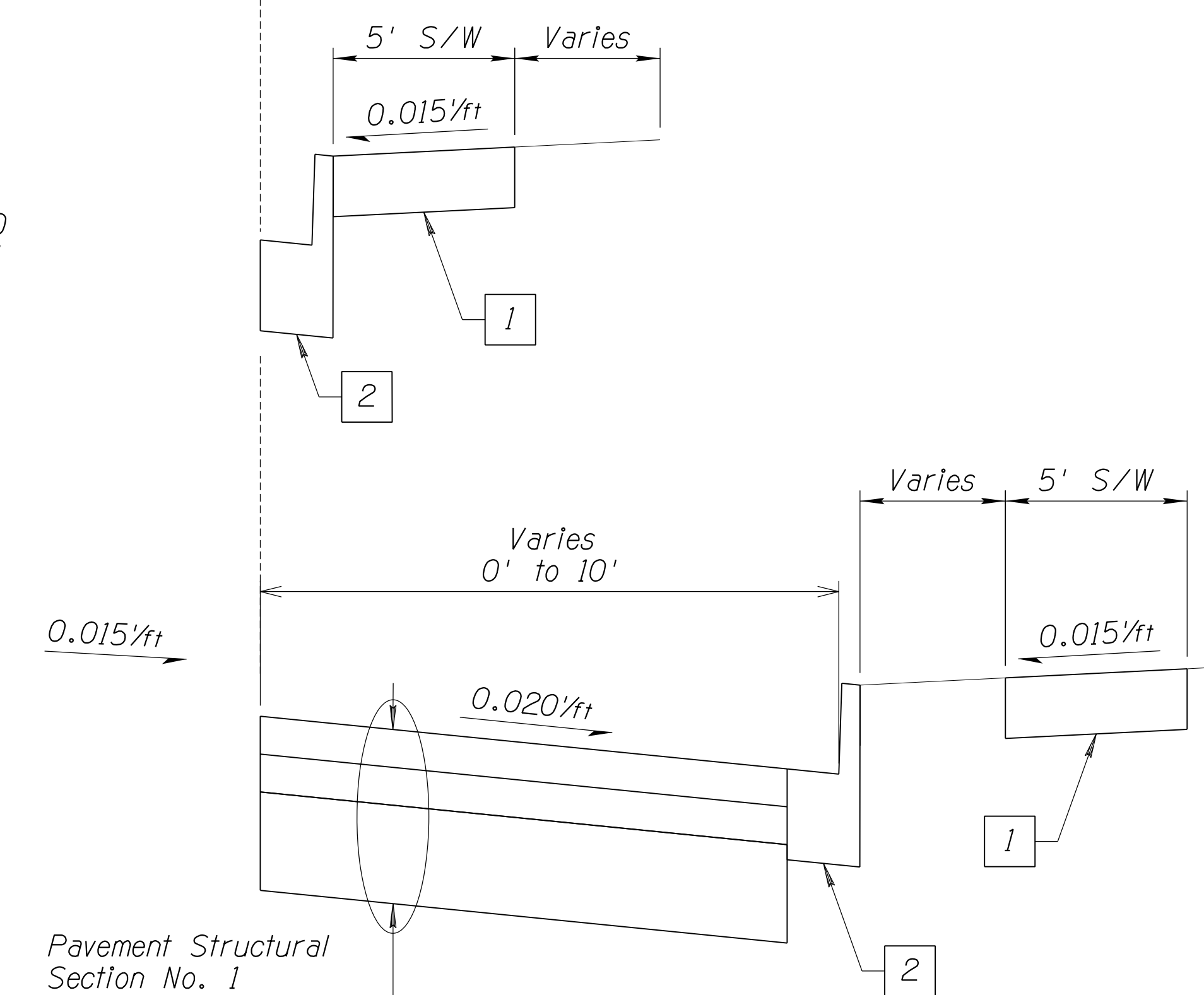
060 MA 144



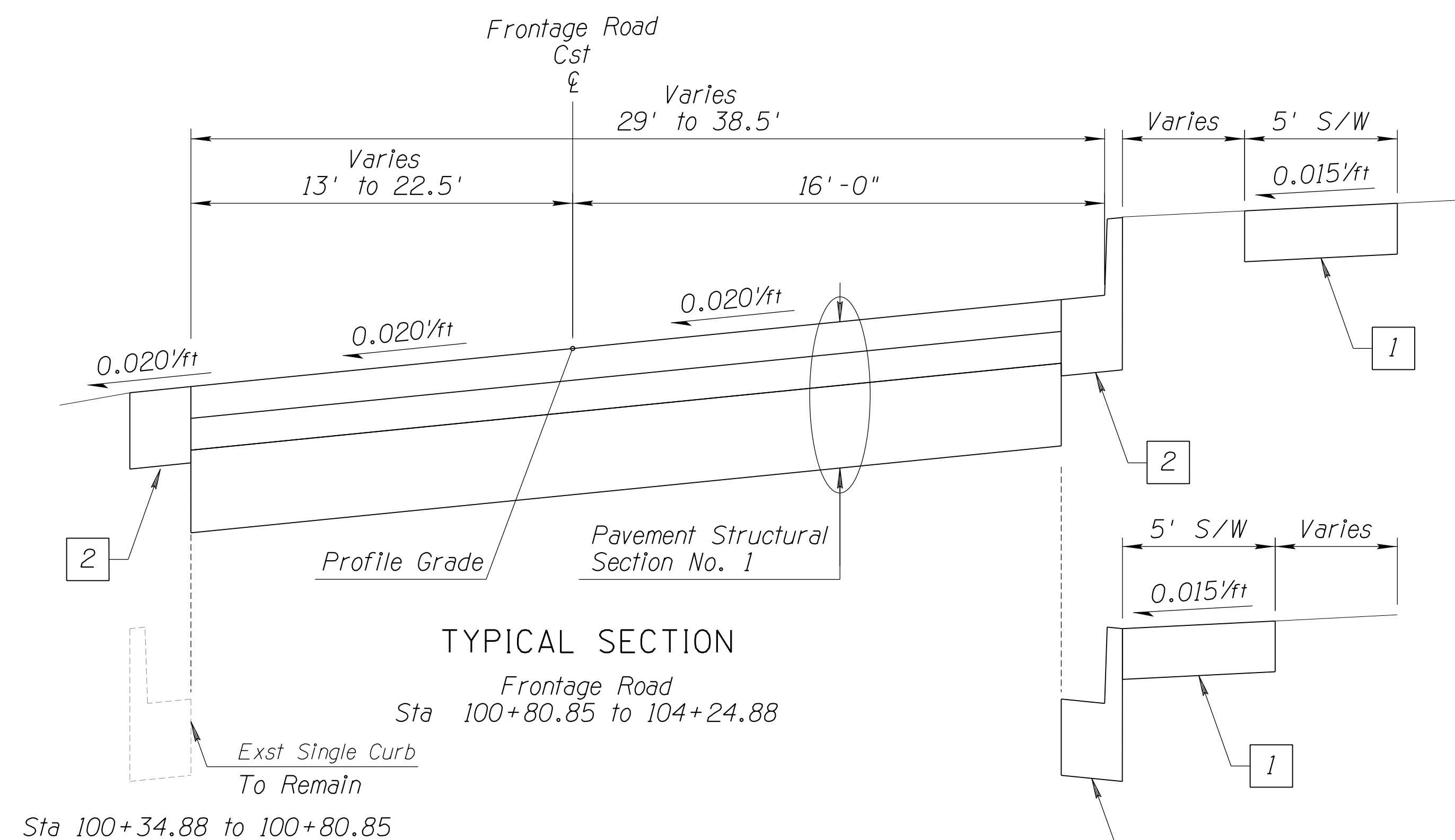
TYPICAL SECTION

Frontage Road
Sta 104+24.88 to 133+48.50
Sta 133+98.51 to 166+83.14

Sta 124+65.34 to 125+68.66
Sta 133+48.50 to 133+98.51



Sta 119+18.53 to 120+68.33
Sta 120+68.33 to 122+47.34



TYPICAL SECTION

Frontage Road
Sta 100+80.85 to 104+24.88

Sta 100+34.88 to 100+80.85

- 1 New Conc Sidewalk
MAG Std Dtl 230
(See Plans for Type & Location)
- 2 New Curb & Gutter
MAG Std Dtl 220-1
(See Plans for Type & Location)
- 3 New Curb
ADOT Std C-05.10
(See Plans for Type & Location)

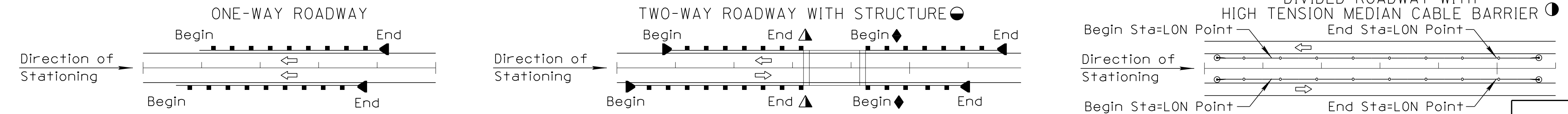
* Cross slope varies between 0.016'/ft and 0.024'/ft

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			TYPICAL SECTIONS	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60		TRACS NO. H8874 01C		
				DWG NO. G-02.02
				OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	5	232	

060 MA 144



LOCATION	Plan Reference Number	Type	Length (Linear Feet)	BARRIER										TRANSITION		NEW		EXISTING		REMARKS
				GUARDRAIL	CONCRETE BARRIER	CABLE	RAIL	CONCRETE BARRIER	Each	Action	Each									
122+66.30 Lt	22	X	87.5																See Removal Sheets	
125+42.93 Lt	27	X	40																See Removal Sheets	
123+57.99 Lt	901	X	37.5												X					
124+55.00	902	X	125																	
Sheet Total			162.5																	

THE ZEROS IN PARENTHESES (0.0) INDICATE THE DIMENSIONAL PRECISION FOR THAT COLUMN.

▲ THE LENGTH OF NESTED W-BEAM IS FOR TYPES 2 OR 3 (37.5). DETERMINATION OF TYPE (1, 2 or 3) TO USE IS MADE IN THE FIELD. THE PAY QUANTITY IS THE LENGTH INSTALLED PER STD. C-10.06 (25.0' or 37.5').

▲ END STATION BEFORE BRIDGE TRANSITION
◆ BEGIN STATION AFTER BRIDGE TRANSITION
△ SPECIFY GUTTER WIDTH UNDER "REMARKS"

● SEE BRIDGE SHEETS FOR BRIDGE BARRIER DETAILS AND QUANTITIES
● LENGTH IS FROM LENGTH OF NEED (LON) POINT TO LON POINT. ACTUAL SEGMENT LENGTH VARIES DEPENDING ON TERMINAL TYPE. SEE SPECIAL PROVISIONS.
◆ SPECIFY TYPE 1 OR 2 UNDER 'REMARKS'

■ ALLOWABLE END TREATMENT OPTIONS ARE INDICATED WITH THE NUMBER '1' IN THE SPACE. BLANK SPACES ARE NOT VIABLE ALTERNATIVES
■ ARRAY TYPE AND ANGLE IS NOTED UNDER 'REMARKS'
■ NOTE: FOR AS-BUILT PREPARATION - CIRCLE END TREATMENT INSTALLED

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			BARRIER SUMMARY SHEET	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-03.01
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	9	232	

060 MA 144

NOTE:
THE ZEROS IN PARENTHESES (0, 0.0 & 0.000) INDICATE THE DIMENSIONAL PRECISION FOR THAT COLUMN

NOTE:
FOR PIPE CULVERT PLACEMENT SEE STANDARD DRAWINGS C-13.10 AND C-13.15

NOTE:
PIPE OPTIONS SELECTED ARE THOSE REQUIRED TO MEET MINIMUM SERVICE LIFE. ALLOWABLE PIPE OPTIONS ARE INDICATED WITH THE LETTER 'X' IN THE SPACE. BLANK SPACES ARE NOT ALLOWABLE ALTERNATES.

CSP - CORRUGATED STEEL PIPE
CAP - CORRUGATED ALUMINUM PIPE
BSP - BLACK STEEL PIPE
CHDPEP - CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE

NOTE:
PIPE OPTIONS SELECTED ARE THOSE REQUIRED TO MEET MINIMUM SERVICE LIFE. ALLOWABLE PIPE OPTIONS ARE INDICATED WITH THE LETTER 'X' IN THE SPACE. BLANK SPACES ARE NOT ALLOWABLE ALTERNATES.

Station	Plan Reference Number	Controlling Fill Height Range	C-Corrugated / S-Smooth	Size	Length (0)	Skew (0)	C-16.40 Irrigation Detail 112- Irrigation Sleeve	Degree	DESCRIPTION			CSP		CAP	BSP	
									In.	Ft.	Degree	In.	Coating	In.	In.	
US60 GRAND AVE FRONTAGE RD € 145+72, 30' RT TO 146+04, 30' RT	53	I	S	6	32	0	X									
US60 GRAND AVE FRONTAGE RD € 146+09, 19' RT	54	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 146+44, 30' RT TO 146+91, 30' RT	55	I	S	6	47	0	X									
US60 GRAND AVE FRONTAGE RD € 146+92, 19' RT	56	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 147+21, 30' RT TO 147+66, 30' RT	57	I	S	6	45	0	X									
US60 GRAND AVE FRONTAGE RD € 147+67, 19' RT	58	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 148+92, 19' RT	59	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 148+93, 30' RT TO 149+32, 30' RT	60	I	S	6	39	0	X									
US60 GRAND AVE FRONTAGE RD € 149+33, 19' RT	61	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 149+83 RT	62	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 149+89, 29' RT TO 150+23, 29' RT	63	I	S	6	34	0	X									
US60 GRAND AVE FRONTAGE RD € 150+64, 32' RT TO 151+10, 32' RT	64	I	S	12	46	0	X									
US60 GRAND AVE FRONTAGE RD € 151+51, 29' RT TO 152+17, 29' RT	65	I	S	6	66	0	X									
Sheet Total					357											

Station	Plan Reference Number	Controlling Fill Height Range	C-Corrugated / S-Smooth	Size	Length (0)	Skew (0)	C-16.40 Irrigation Detail 112- Irrigation Sleeve	Degree	DESCRIPTION			CSP		CAP	BSP	
									In.	Ft.	Degree	In.	Coating	In.	In.	
US60 GRAND AVE FRONTAGE RD € 152+26, 29' RT TO 152+64, 29' RT	66	I	S	6	38	0	X									
US60 GRAND AVE FRONTAGE RD € 152+98, 20' RT	67	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 153+00, 29' RT TO 153+42, 29' RT	68	I	S	6	42	0	X									
US60 GRAND AVE FRONTAGE RD € 153+48, 20' RT	69	I	S	3	8	0	X									
US60 GRAND AVE FRONTAGE RD € 154+00, 21' RT TO 154+21, 22' RT	70	I	S	6	21	0	X									
US60 GRAND AVE FRONTAGE RD € 154+68, 30' RT TO 155+34, 30' RT	71	I	S	12	66	0	X									
US60 GRAND AVE FRONTAGE RD € 155+56, 22' RT TO 156+51, 22' RT	72	I	S	6	95	0	X									
US60 GRAND AVE FRONTAGE RD € 158+21, 28' RT TO 158+41, 28' RT	73	I	S	6	20	0	X									
US60 GRAND AVE FRONTAGE RD € 159+00, 29' RT TO 159+20, 29' RT	74	I	S	6	20	0	X									
US60 GRAND AVE FRONTAGE RD € 159+66, 29' RT TO 160+32, 29' RT	75	I	S	12	66	0	X									
US60 GRAND AVE FRONTAGE RD € 160+57, 30' RT TO 160+77, 30' RT	76	I	S	6	20	0	X									
US60 GRAND AVE FRONTAGE RD € 161+38, 30' RT TO 161+58, 30' RT	77	I	S	6	20	0	X									
US60 GRAND AVE FRONTAGE RD € 162+08, 19' RT	78	I	S	3	8	0	X									
Sheet Total					432											

RANGE NO.	1	2	3	4	5	6	7	8	9	10	11	12	
FILL	>	1	3	5	8	11	15	20	25	30	40	55	70
HEIGHT (Ft.)	≤	3	5	8	11	15	20	25	30	40	55	70	90

SHOULD FIELD CONDITIONS VARY FROM THE RANGE INDICATED, CONTACT DESIGN FOR RE-EVALUATION OF PIPE DESIGN REQUIREMENTS.

<input checked="" type="checkbox"/> A	2 2/3 x 1/2	D	6 x 2
B	3 x 1	E	3 x 1 or 9 x 2 1/2
C	9 x 2 1/2		

DESIGN	DH	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	DH		03/18	
CHECKED	DD		03/18	
				PIPE SLEEVE SUMMARY
ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD				
TRACS NO. H8874 01C				
				DWG NO. G-4.04


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	20	232	

060 MA 144

STATION	LOCATION	SINGLE CURB	CURB & GUTTER		VALLEY GUTTER, DRIVEWAY, SIDEWALK, RAMPS & SLABS	FENCE	REMARKS
			TRANSITIONS (EA)				
Rt 155+80.34	157+49.65	242		169			G-07.10
Rt 157+49.65	157+54.65	243	1				G-07.11
Rt 157+54.65	158+67.59	244		113			G-07.10
Rt 158+89.84	159+71.95	245		89			G-07.10
Rt 159+71.95	159+75.36	246	1				G-07.11
Rt 160+28.86	160+30.32	247	1				G-07.11
Rt 160+28.86	163+85.62	248		385			G-07.10
Rt 163+96.87	164+70.47	249		81			G-07.10
Rt 164+70.47	164+74.43	250	1				G-07.10
Rt 165+24.98	165+27.98	251	1				G-07.11
Rt 165+24.98	166+83.14	252		184			G-07.11
Lt 123+35.02	123+36.60	253	1				G-07.10
Sheet Total			5	1	852	169	

REV. DATE: 07/27/2012

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE			ROADWAY SUMMARY SHEET	
ROUTE	LOCATION			
US 60	GRAND AVENUE FRONTAGE ROAD			
TRACS NO. H8874 01C				DWG NO. G-06.09
				OF


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	27	232	

060 MA 144

STATION	LOCATION	SINGLE CURB	CURB & GUTTER			VALLEY GUTTER, DRIVEWAY, SIDEWALK, RAMPS & SLABS				FENCE	REMARKS		
			TRANSITIONS (EA)										
Rt 155+31.71	155+38.11	416								1		G-07.35	
Rt 159+53.61	159+66.98	417									1	G-07.36	
Rt 160+26.99	160+37.48	418								1		G-07.36	
Rt 164+46.36	164+70.54	419								1		G-07.37	
Rt 165+24.47	165+35.32	420								1		G-07.37	
Rt 101+51.28		501						447				G-07.16	
Rt 104+54.00		502						691				G-07.15	
Rt 106+00.54		503						290				G-07.15	
Rt 109+40.88		504						470				G-07.15	
Rt 110+11.78		505						470				G-07.15	
Rt 117+11.67		506						646				G-07.15	
Rt 119+03.51		507						368				G-07.15	
Sheet Total								2645	737		4	1	

REV. DATE: 07/27/2012

SURVEY NO. FINISHED PLANS- REVISIONS- LOCATION- DATE- SURVEY NO. FINISHED PLANS- REVISIONS- LOCATION- DATE-

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE			ROADWAY SUMMARY SHEET	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60		TRACS NO. H8874 01C		
			DWG NO. G-06.16	
			OF	

060 MA 144

STATION	LOCATION	SINGLE CURB	CURB & GUTTER			VALLEY GUTTER, DRIVEWAY, SIDEWALK, RAMPS & SLABS								REMARKS																
			TRANSITIONS (EA)	Remove Exst Concrete Curb & Gutter (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)		Concrete Driveway (Sq Ft)	Concrete Driveway (Sq Ft)														
Lt 369+65.00 *	395+15.00	601																		2550	G-07.01 See Note 1									
Lt 398+40.00 *	433+95.00	602																			3555	G-07.01 See Note 1								
Lt 435+85.00 *	437+90.00	603																			205	G-07.01 See Note 1								
Lt 383+62.34 *	383+73.98	701																				127	See Note 1							
Lt 383+73.98 *	383+81.38	702																				28	See Note 1							
Lt 384+15.37 *	384+22.43	703																				19	See Note 1							
Lt 384+22.43 *	386+23.89	704																				952	See Note 1							
Rt 122+47.35	123+76.22	801																					1043	G-07.14						
Rt 133+36.65	134+41.60	802																						658	G-07.14					
Rt 135+49.21	136+41.10	803																							469	G-07.14				
Rt 139+48.72	140+48.95	804																								631	G-07.14			
Sheet Total																									2801		1079	47	6314	

NOTE:
1. * Denotes US 60 Grand Ave Cst & Station

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	DCL	02/18	
CHECKED	WWS	02/18	
			BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small> ROADWAY SUMMARY SHEET
ROUTE	LOCATION	DATE	
US 60	GRAND AVENUE FRONTAGE ROAD	02/18	
TRACS NO. H8874 01C			
			DWG NO. G-06.19
			OF

REV. DATE: 07/27/2012


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	31	232	

060 MA 144

STATION	LOCATION	SINGLE CURB	CURB & GUTTER		VALLEY GUTTER, DRIVEWAY, SIDEWALK, RAMPS & SLABS	FENCE	REMARKS
			TRANSITIONS (EA)				
Rt 144+47.23	145+45.51	805			624		G-07.14
Rt 150+50.11	151+24.13	806			382		G-07.14
Rt 154+48.79	155+38.11	807			540		G-07.14
Rt 159+48.41	160+37.48	808			569		G-07.14
Rt 164+42.42	465+35.32	809			595		G-07.14
Sheet Total					2710		

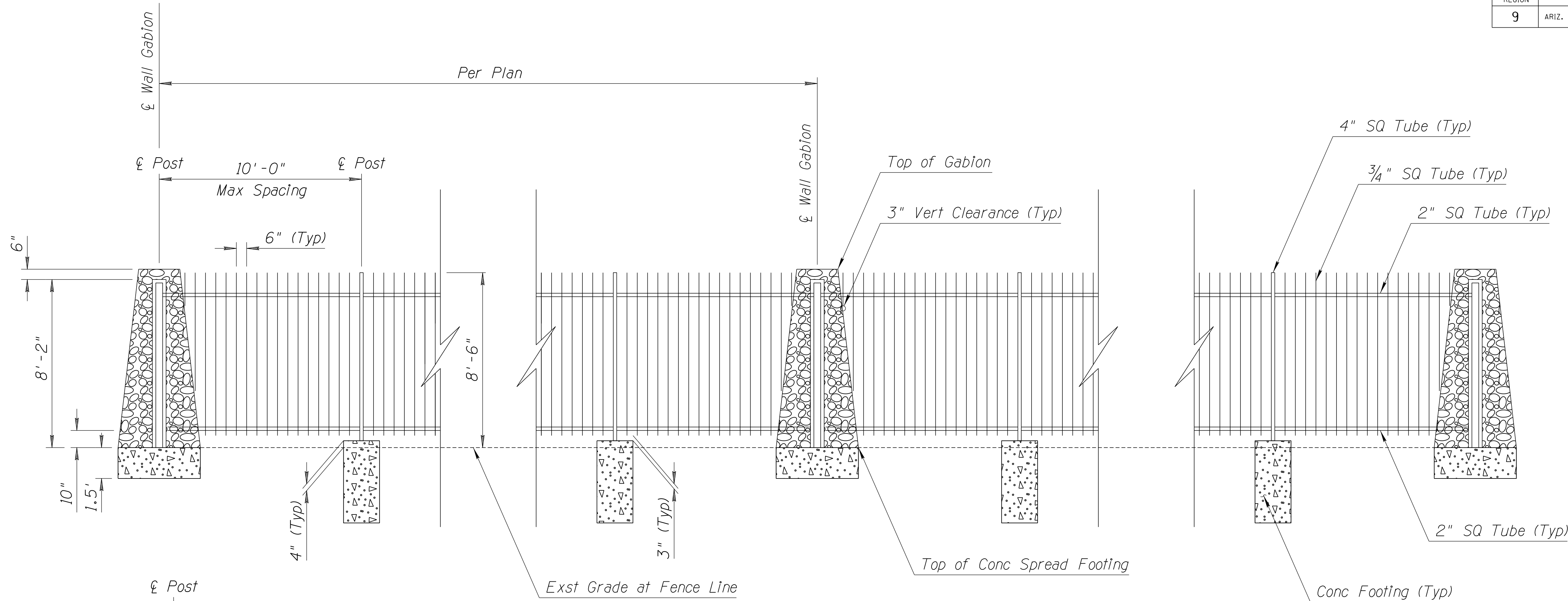
REV. DATE: 07/27/2012

DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO.

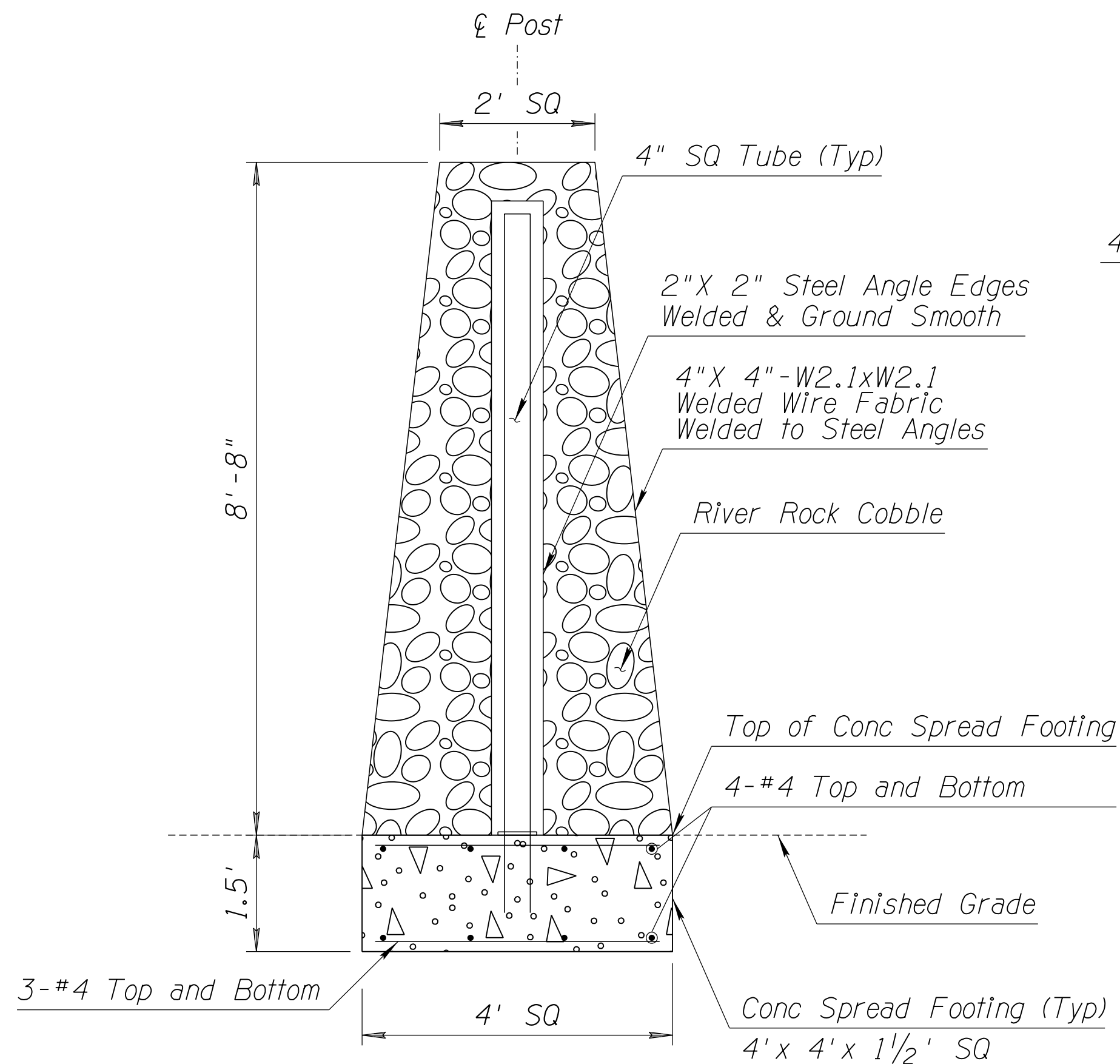
DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE			ROADWAY SUMMARY SHEET	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60				
TRACS NO. H8874 01C			DWG NO. G-06.20	
			OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	32	232	

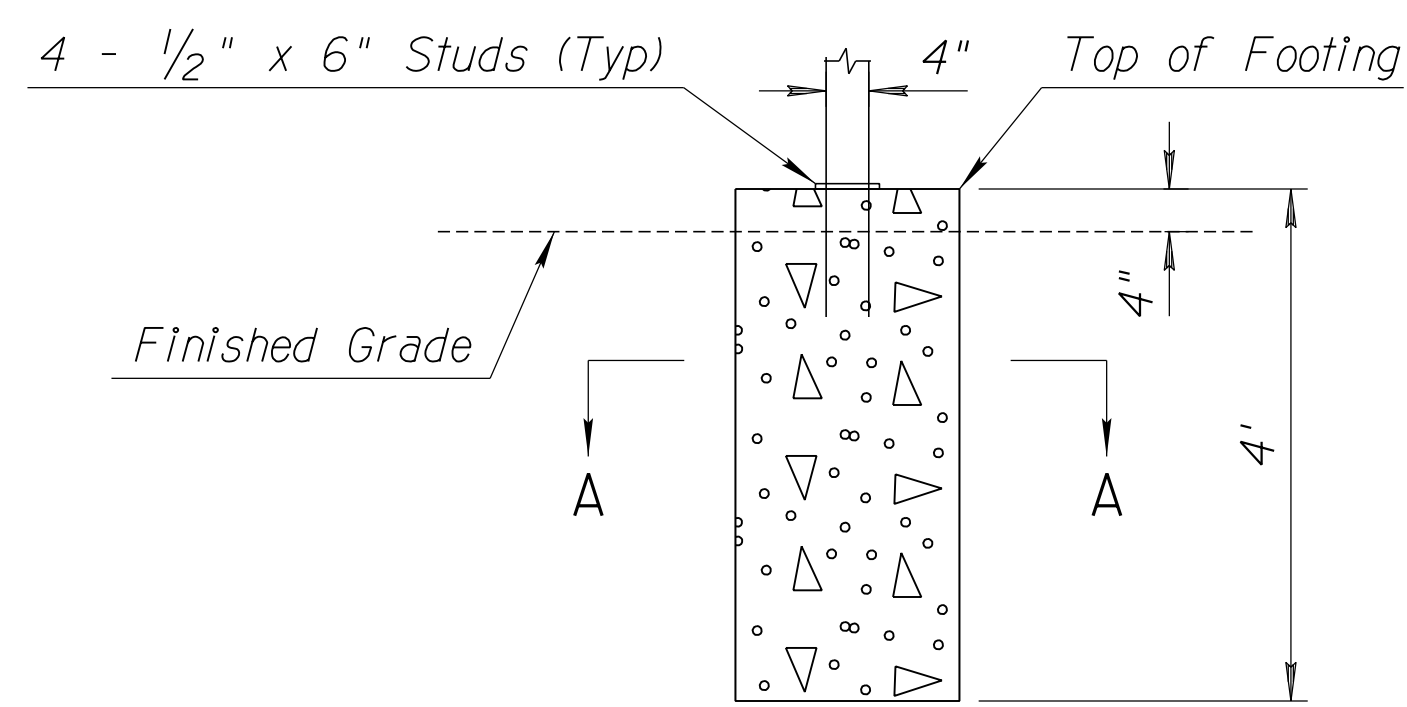
060 MA 144



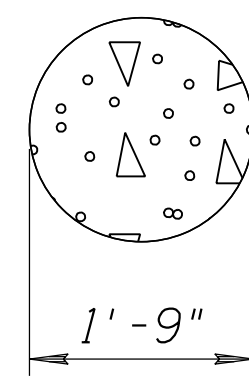
8FT FENCE ELEVATION



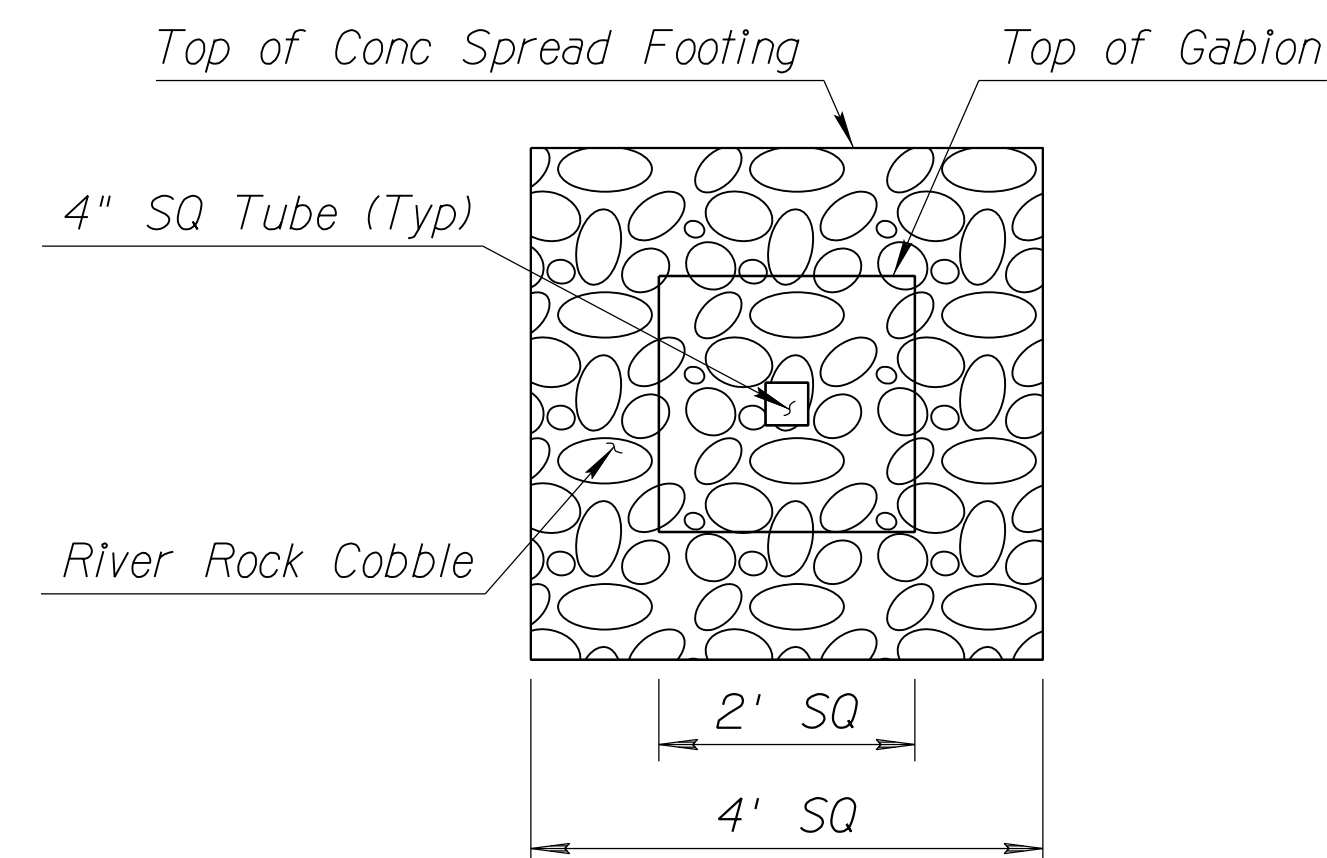
8FT FENCE GABION PILASTER DETAIL
4'x4' BASE WITH 2'x2' CAP GABION BASKET



8FT FENCE BASE DETAIL
CONCRETE FOOTING



SECTION A-A



TOP VIEW

- Fence Construction Sequence
- 1 Place 4" SQ tubes and cast foundations.
 - 2 Weld 2" SQ tube crossbars to 4" SQ tube posts
 - 3 Weld 3/4" SQ tubes to 2" SQ tube crossbars.
 - 4 Cut 3/4" SQ tubes to meet 3" vert clearance at gabion pilaster locations.
 - 5 Place gabion baskets and bolt in place.
 - 6 Fill gabion baskets with river rock cobble.

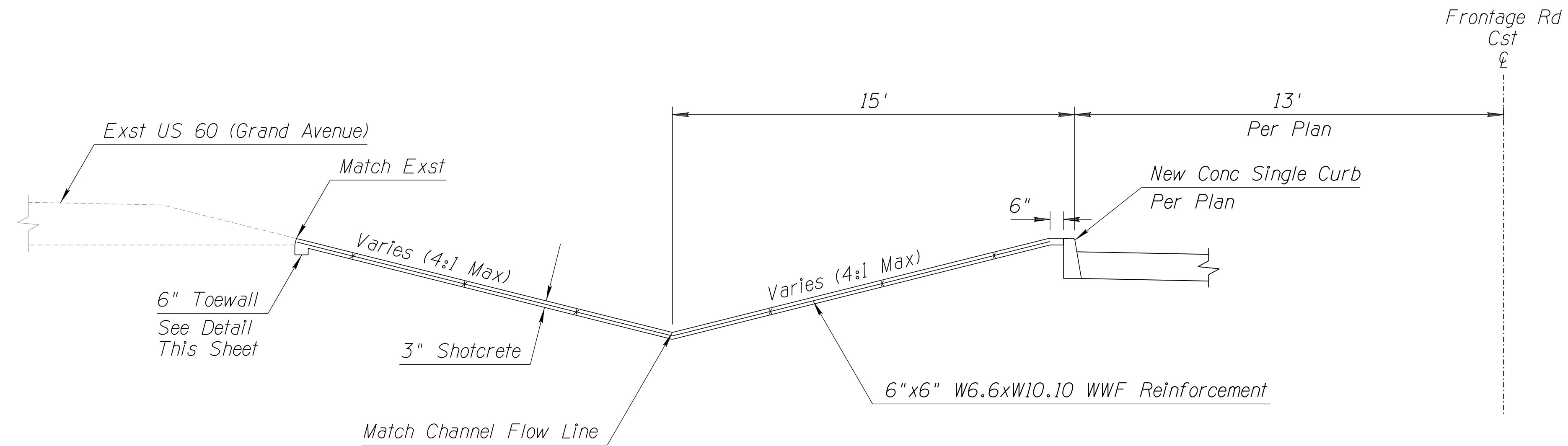
DETAIL A

FENCE DETAIL

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL A FRONTAGE RD RAILWAY FENCE DETAIL	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-07.01
TRACS NO. H8874 01C				OF

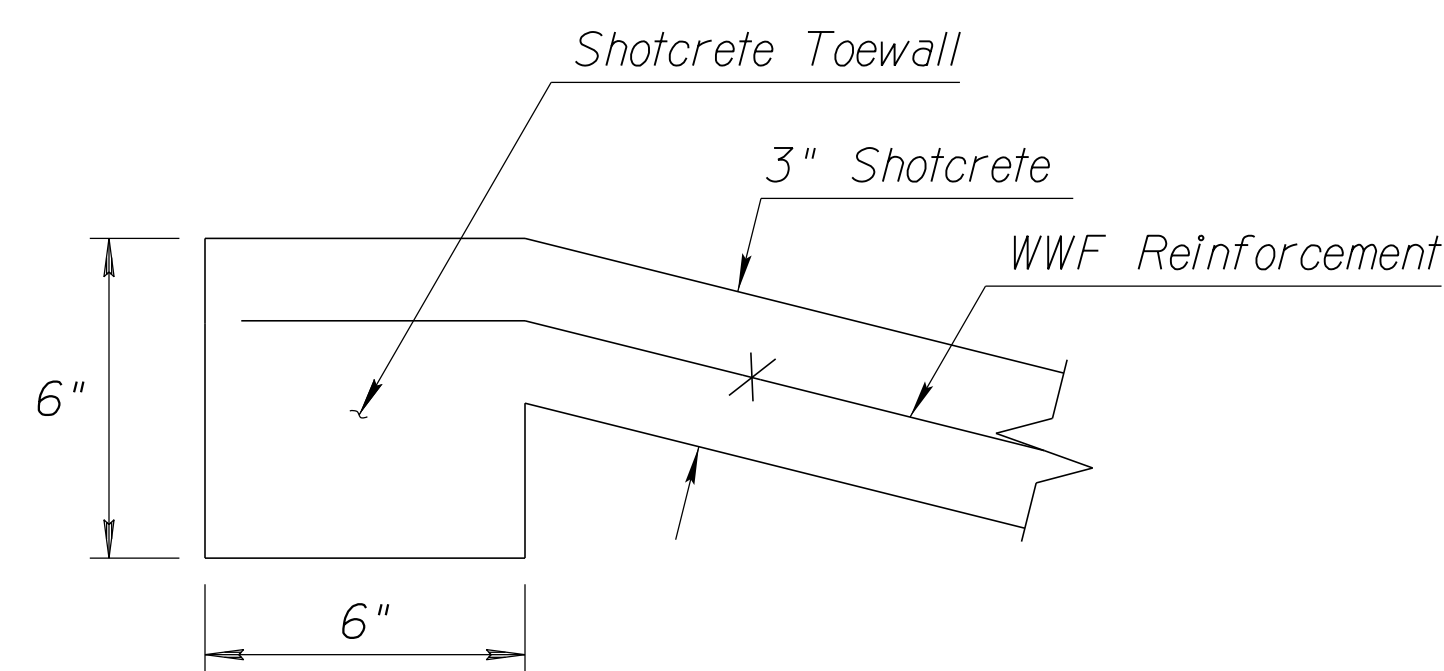
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	33	232	

060 MA 144



SECTION VIEW

Frontage Rd Cst @ Sta 124+65.34 to Sta 126+68.66



TOEWALL DETAIL

NOTES:

- The cost of Welded Wire Fabric Reinforcement will not be measured or paid separately and will be included with the contract Pay Item 9120003 - Shotcrete (3").
- Welded Wire Fabric Reinforcement shall conform to the requirements of Section 1003 of the Standard Specifications.

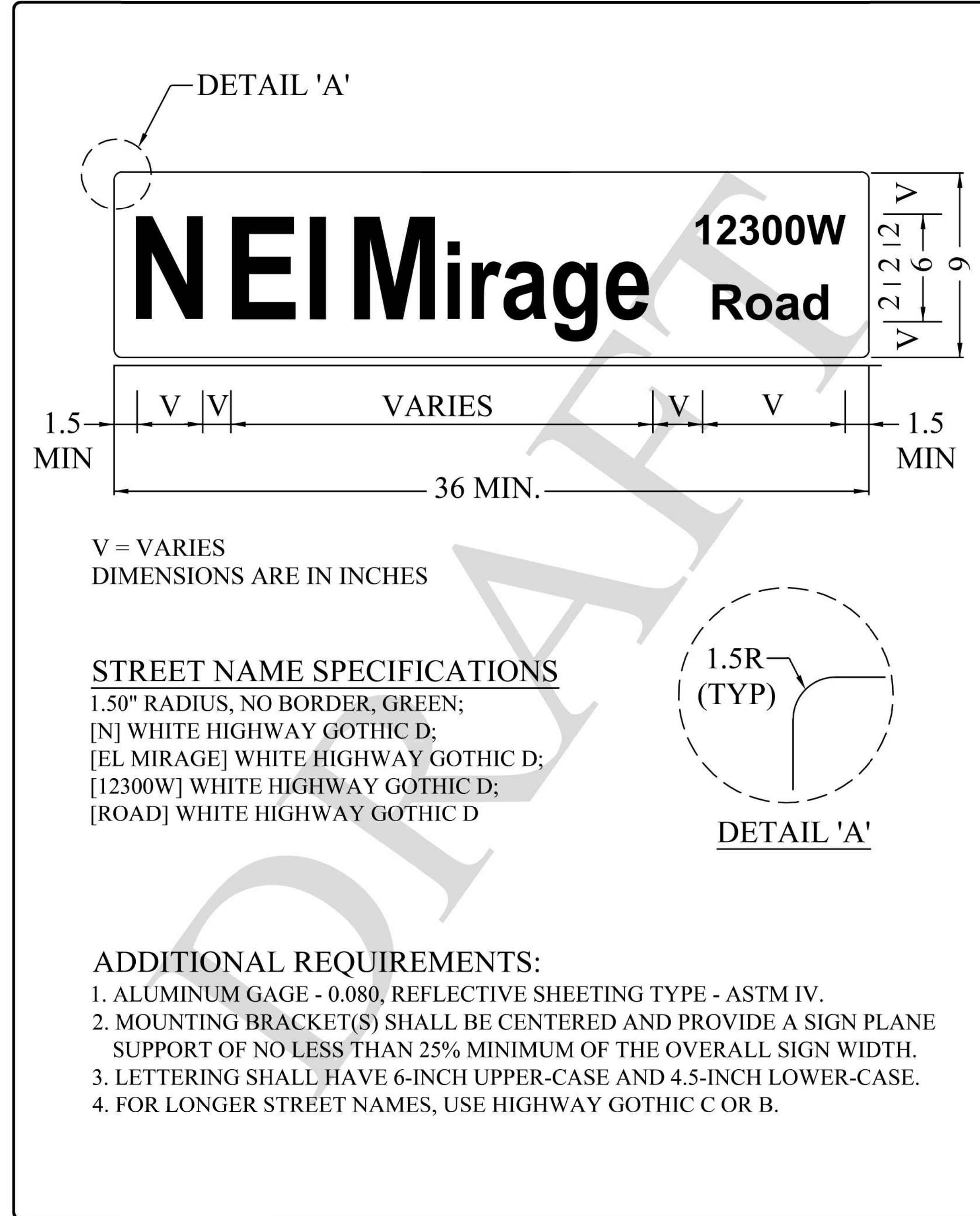
DETAIL B
SHOTCRETE CHANNEL DETAIL

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL B FRONTAGE RD SHOTCRETE CHANNEL DETAIL	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-07.02
TRACS NO. H8874 01C				OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	34	232	

060 MA 144



POST MOUNTED STREET SIGNS 40 MPH OR LESS	
APPROVED BY:	REVISION DATE: 01/2018
CITY ENGINEER	STANDARD DETAIL NO. 131-1

NOTE:
 The details shown hereon are the product of the City of El Mirage who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the City details have been noted to address specific requirements of this project.

DETAIL C1

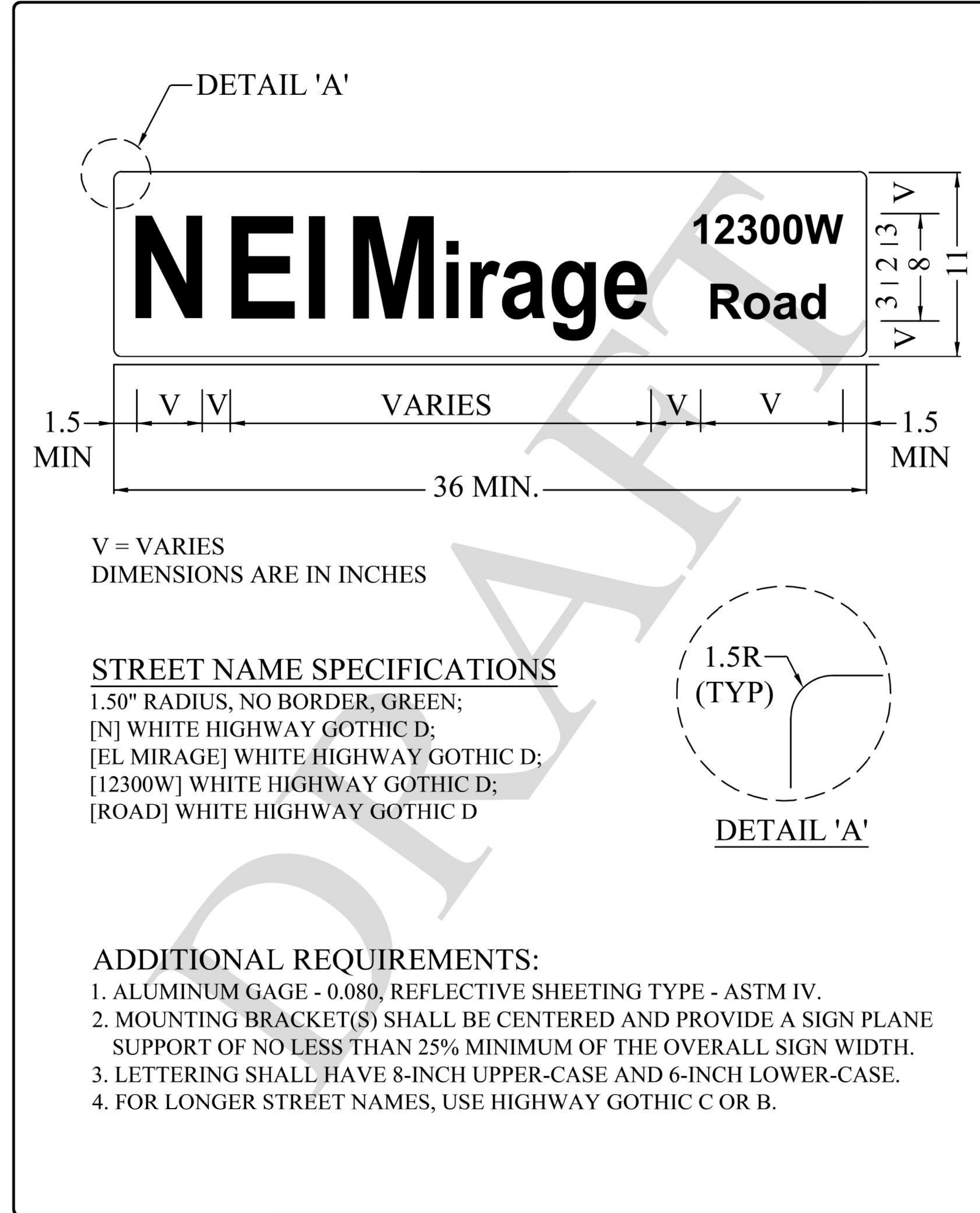
COEM STD DTL 131-1

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL C1 FRONTAGE RD COEM STD DTL 131-1	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.03
TRACS NO. H8874 01C				OF

SURVEY NO. DATE FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	35	232	

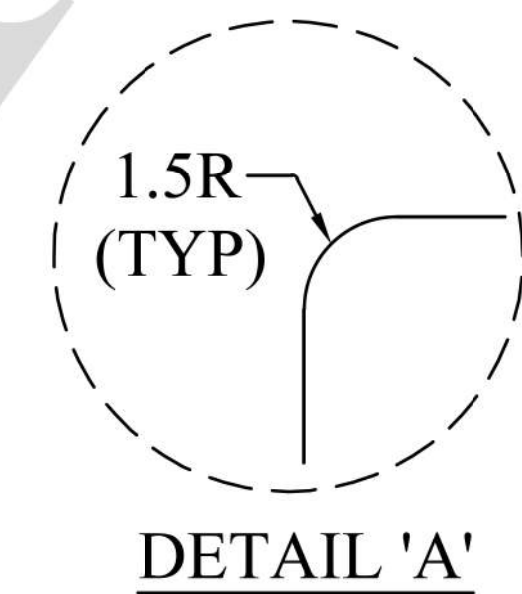
060 MA 144



V = VARIES
DIMENSIONS ARE IN INCHES

STREET NAME SPECIFICATIONS

- 1.50" RADIUS, NO BORDER, GREEN;
- [N] WHITE HIGHWAY GOTHIC D;
- [EL MIRAGE] WHITE HIGHWAY GOTHIC D;
- [12300W] WHITE HIGHWAY GOTHIC D;
- [ROAD] WHITE HIGHWAY GOTHIC D



ADDITIONAL REQUIREMENTS:

1. ALUMINUM GAGE - 0.080, REFLECTIVE SHEETING TYPE - ASTM IV.
2. MOUNTING BRACKET(S) SHALL BE CENTERED AND PROVIDE A SIGN PLANE SUPPORT OF NO LESS THAN 25% MINIMUM OF THE OVERALL SIGN WIDTH.
3. LETTERING SHALL HAVE 8-INCH UPPER-CASE AND 6-INCH LOWER-CASE.
4. FOR LONGER STREET NAMES, USE HIGHWAY GOTHIC C OR B.



POST MOUNTED STREET SIGNS OVER 40 MPH	
APPROVED BY:	REVISION DATE: 01/2018
CITY ENGINEER	STANDARD DETAIL NO. 131-2

NOTE:
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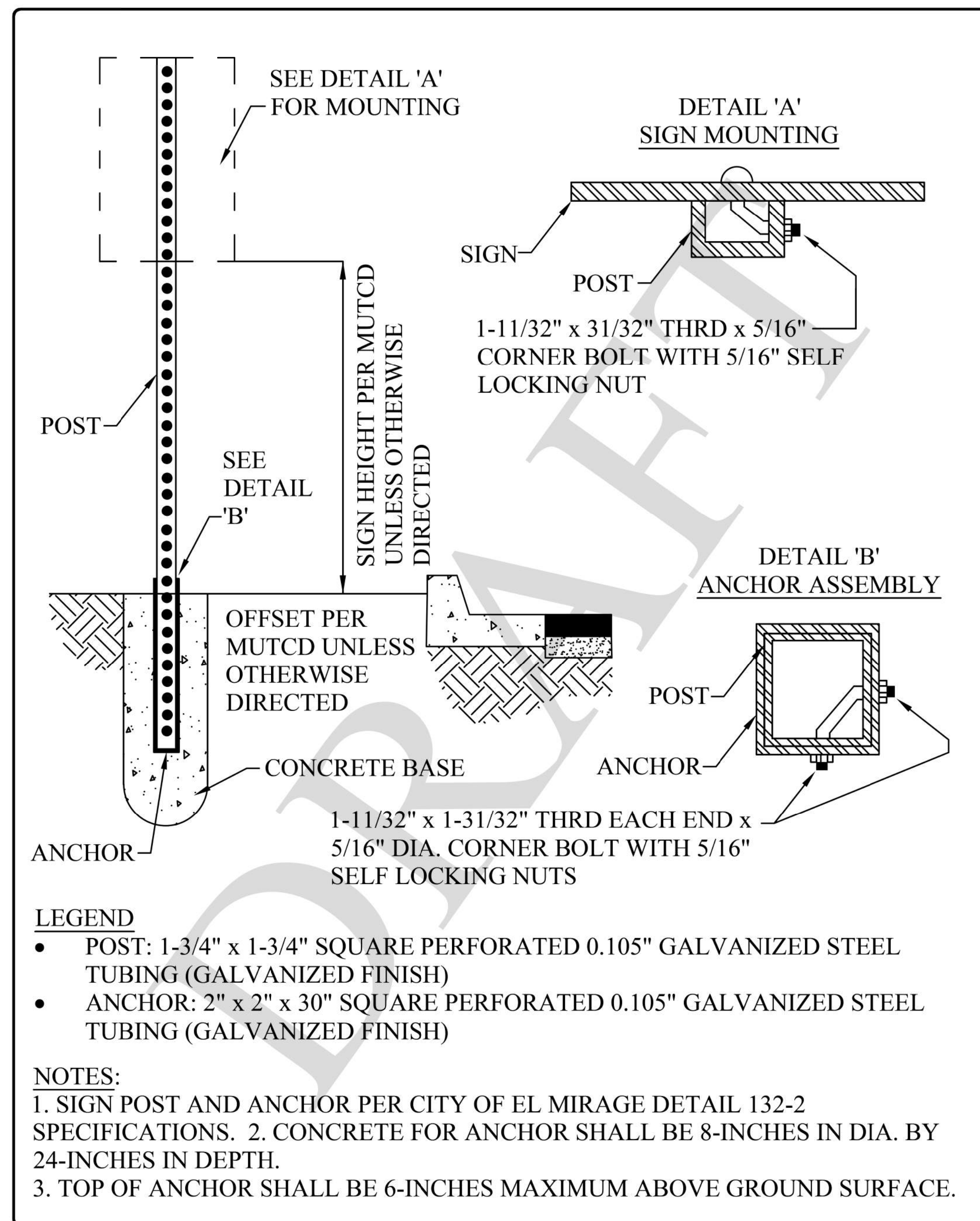
DETAIL C2
COEM STD DTL 131-2

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			DETAIL C2 FRONTAGE RD COEM STD DTL 131-2	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.04
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS LOCATION DATE REVISIONS FINISHED PLANS LOCATION DATE REVISIONS FINISHED PLANS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	36	232	

060 MA 144



SIGN POST INSTALLATION	
APPROVED BY:	REVISION DATE: 08/2014
CITY ENGINEER	STANDARD DETAIL NO. 132-1

NOTE:
The details shown hereon are the product of the City of El Mirage who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the City details have been noted to address specific requirements of this project.

DETAIL C3

COEM STD DTL 132-1

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL C3 FRONTAGE RD COEM STD DTL 132-1	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.05
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	37	232	

060 MA 144

SPECIFICATIONS:

- THE CITY OF EL MIRAGE REQUIRES SQUARE TUBING FOR POST MOUNTED SIGN INSTALLATIONS.
- TUBING SHALL HAVE A GALVANIZED FINISH AND BE ROLL FORMED FROM TWELVE (12) GAGE (.105 USS GAGE) COLD ROLLED STEEL, BE PERFORATED, AND HAVE A HOLE SIZE OF 7/16" IN DIAMETER AND 1" ON CENTER ON ALL SIDES.
- ALL POSTS REQUIRE A 2" x 2" x 30" ANCHOR TO BE CONCRETED INTO ANY GROUND SURFACE AT A DEPTH OF 24".
- FOR SINGULAR SIGNS A 1-3/4" x 1-3/4" x 10' POST IS REQUIRED. FOR DUAL SIGNS A 1-3/4" x 1-3/4" x 12' POST IS REQUIRED.
- ALSO FOR SIGNS THAT EXCEED 42" IN WIDTH, DUAL POSTS AND ANCHORS ARE REQUIRED.
- ATTACHMENT OF THE POST TO THE ANCHOR REQUIRES A 1-11/32" x 31/32" x 5/16" CORNER BOLT (THREADED AT EACH END) WITH 5/16" SELF LOCKING NUTS.
- ATTACHMENT OF THE SIGN TO THE POST REQUIRES A 1-11/32" x 31/32" x 5/16" CORNER BOLT WITH SELF LOCKING NUTS.
- THE ANCHOR SHALL BE PROTECTED (TAPED) PRIOR TO THE CONCRETE PLACEMENT. THE CONCRETE BASE SHALL BE 8" IN DIAMETER x 24" IN DEPTH, WITH 4" MINIMUM TO 6" MAXIMUM ABOVE FINISH GROUND LEVEL.
- ALL STOP SIGN POSTS MUST BE EQUIPPED WITH A RED VIS-Z-SHIELD OR APPROVED EQUAL.



SIGN POST SPECIFICATIONS

APPROVED BY:	REVISION DATE: 08/2014
CITY ENGINEER	STANDARD DETAIL NO. 132-2

NOTE:

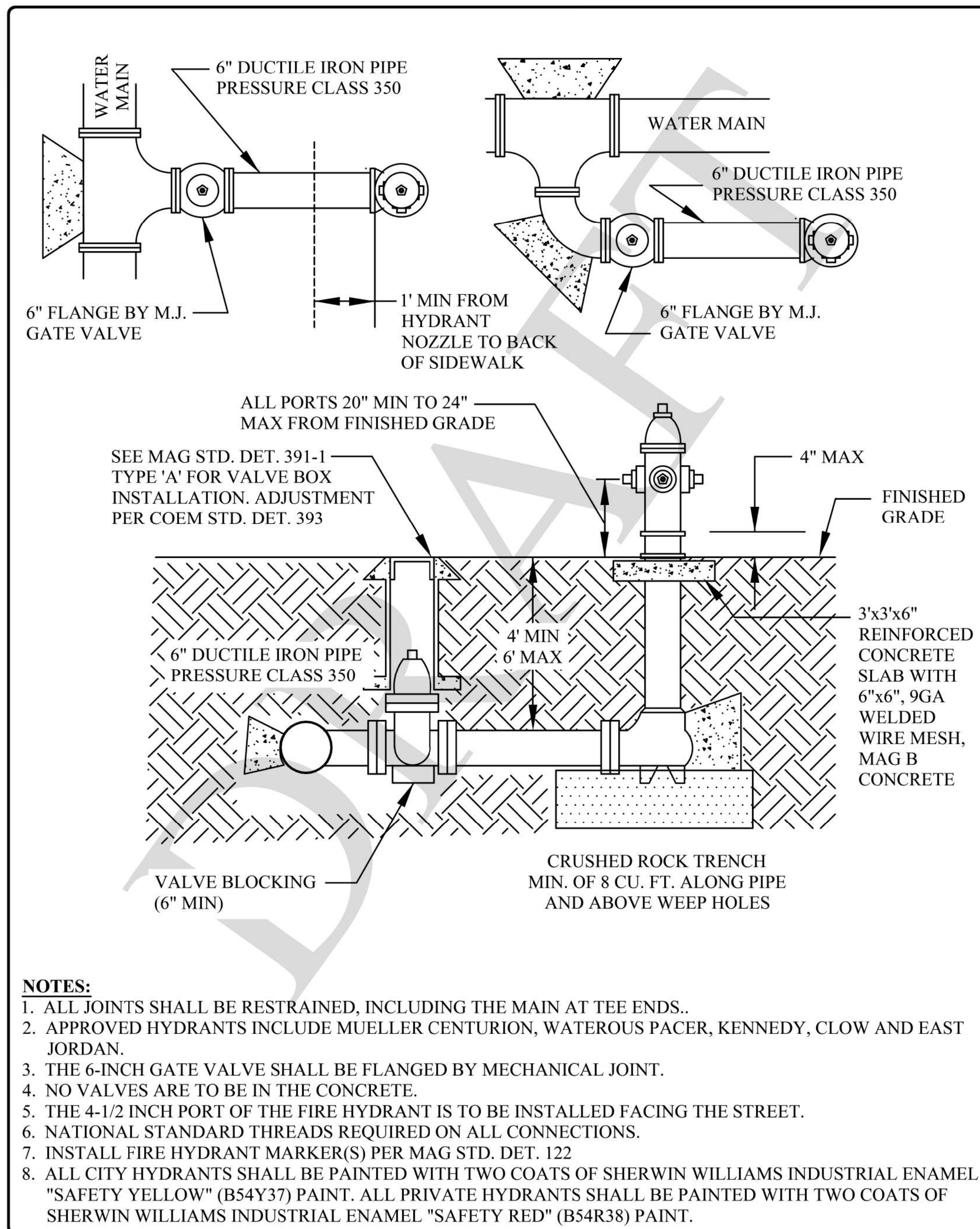
The details shown hereon are the product of the City of El Mirage who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the City details have been noted to address specific requirements of this project.

DETAIL C4
COEM STD DTL 132-2

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL C4 FRONTAGE RD COEM STD DTL 132-2	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.06
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	38	232	

060 MA 144



FIRE HYDRANT INSTALLATION	
APPROVED BY:	REVISION DATE: 01/2018
CITY ENGINEER	STANDARD DETAIL NO. 360

DETAIL C5

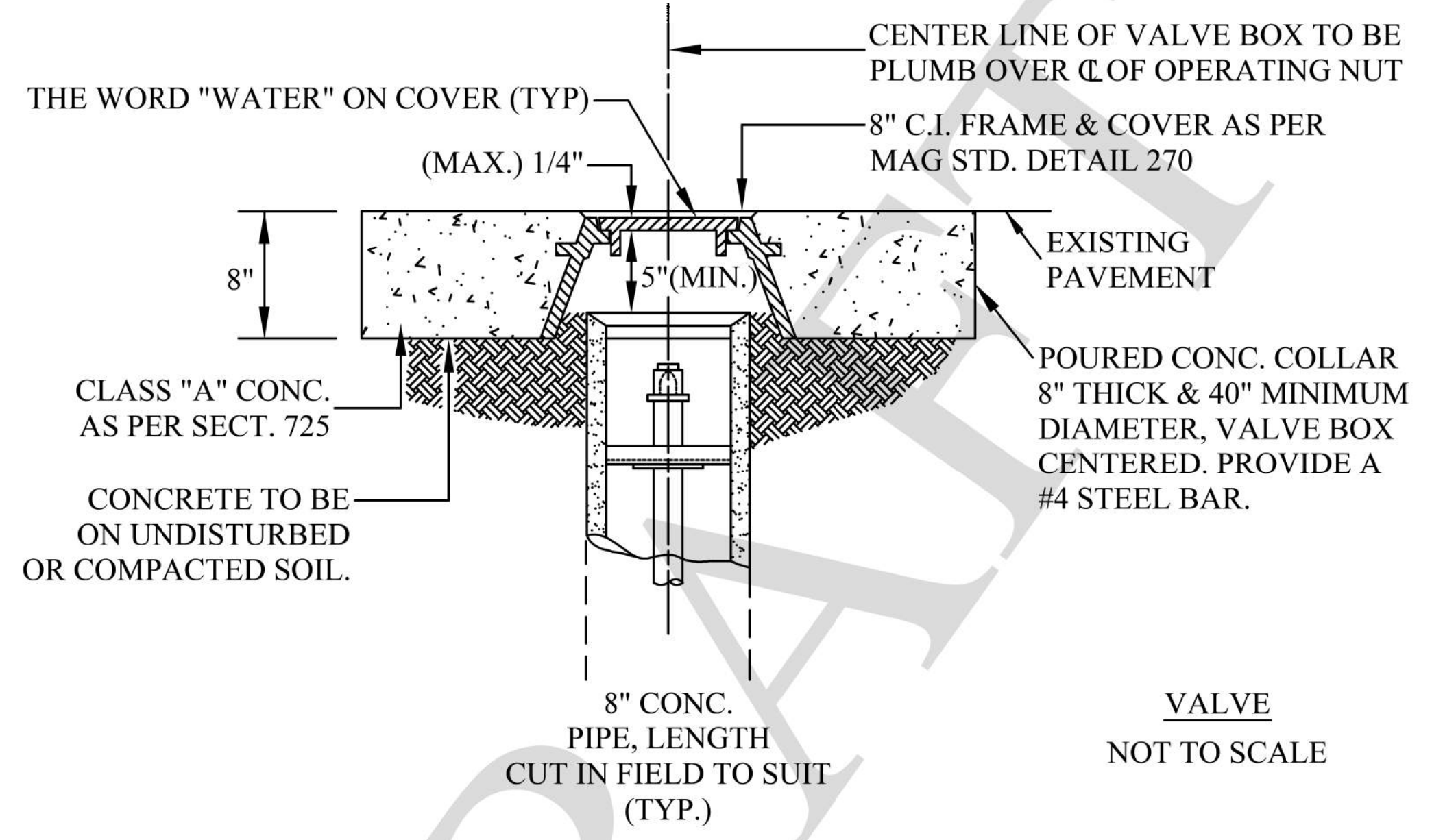
COEM STD DTL 360

NOTE:
The details shown hereon are the product of the City of El Mirage who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the City details have been noted to address specific requirements of this project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL C5 FRONTAGE RD COEM STD DTL 360	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.07
US 60				
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	39	232	

060 MA 144



- NOTES:**
1. COMPACTION BELOW CONCRETE ADJUSTMENT TO BE COMPACTED AT 95% MIN.
 2. CONCRETE ADJUSTMENTS ARE REQUIRED ON (BOTH) PAVED AND UNPAVED SURFACES.
 3. CONCRETE SHALL HAVE A MEDIUM BROOM FINISH WITH FOUR SCORE MARKS MINIMUM.
 4. VALVE BOX SHALL BE ADJUSTED TO FINISHED GRADE PRIOR TO CONCRETE PLACEMENT.
 5. EXTENSION STEM IS REQUIRED FOR STEM DEPTHS EXCEEDING 5-FEET.
 6. ASPHALT SURFACE (CRACKSEAL) IS REQUIRED AT CONCRETE JOINTS.
 7. DEBRIS CAPS ARE REQUIRED.



WATER VALVE ADJUSTMENT	
APPROVED BY:	REVISION DATE: 11/2017
CITY ENGINEER	STANDARD DETAIL NO. 393

DETAIL C6

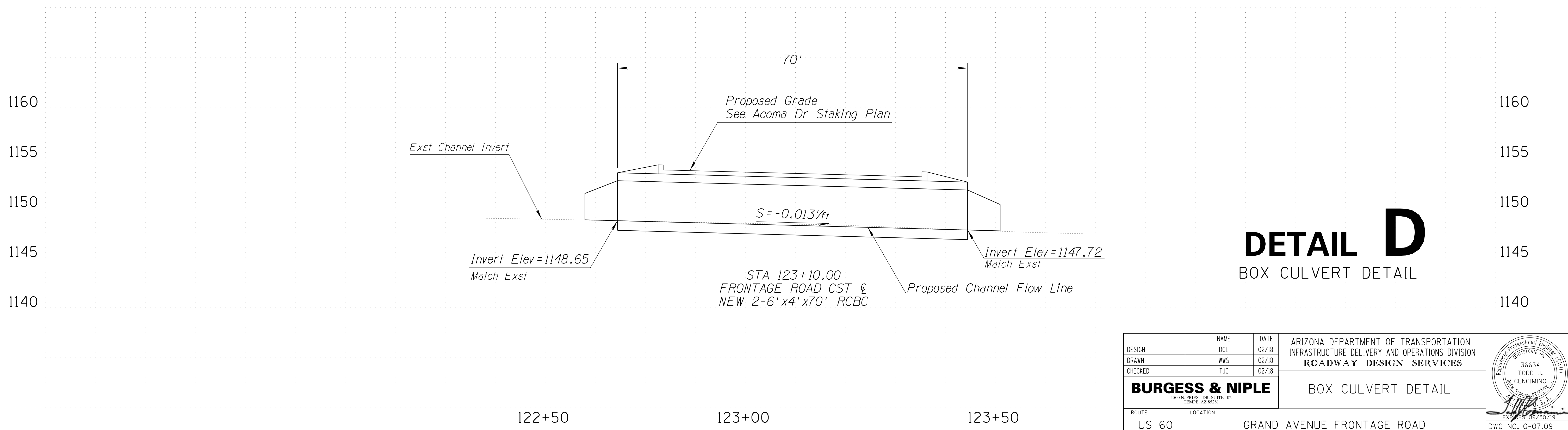
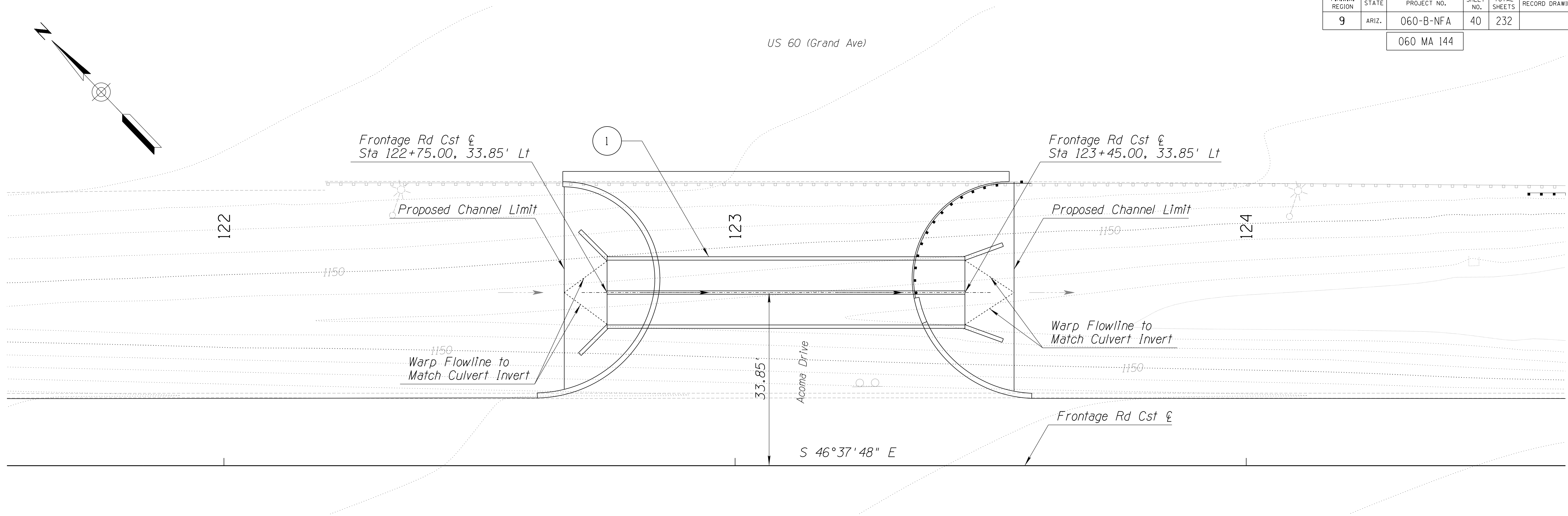
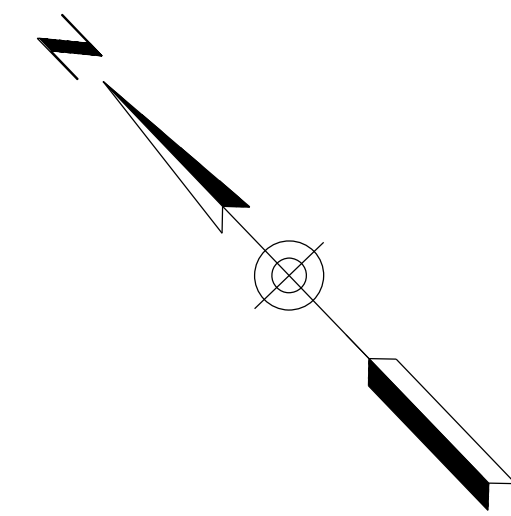
COEM STD DTL 393

NOTE:
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DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL C6 FRONTAGE RD COEM STD DTL 393	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.08
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	40	232	

060 MA 144



DETAIL D

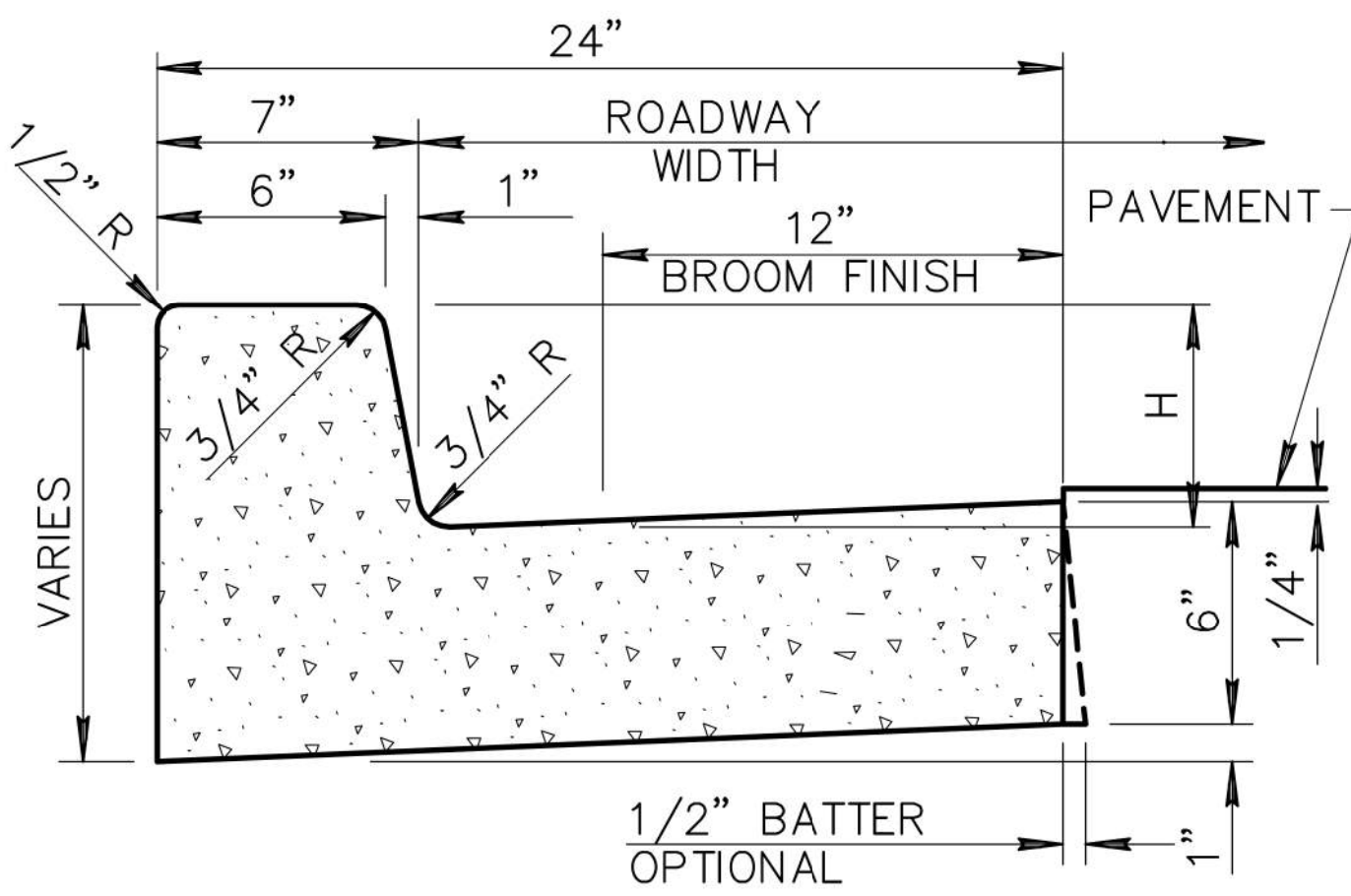
BOX CULVERT DETAIL

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			BOX CULVERT DETAIL	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. 6-07.09
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	41	232	

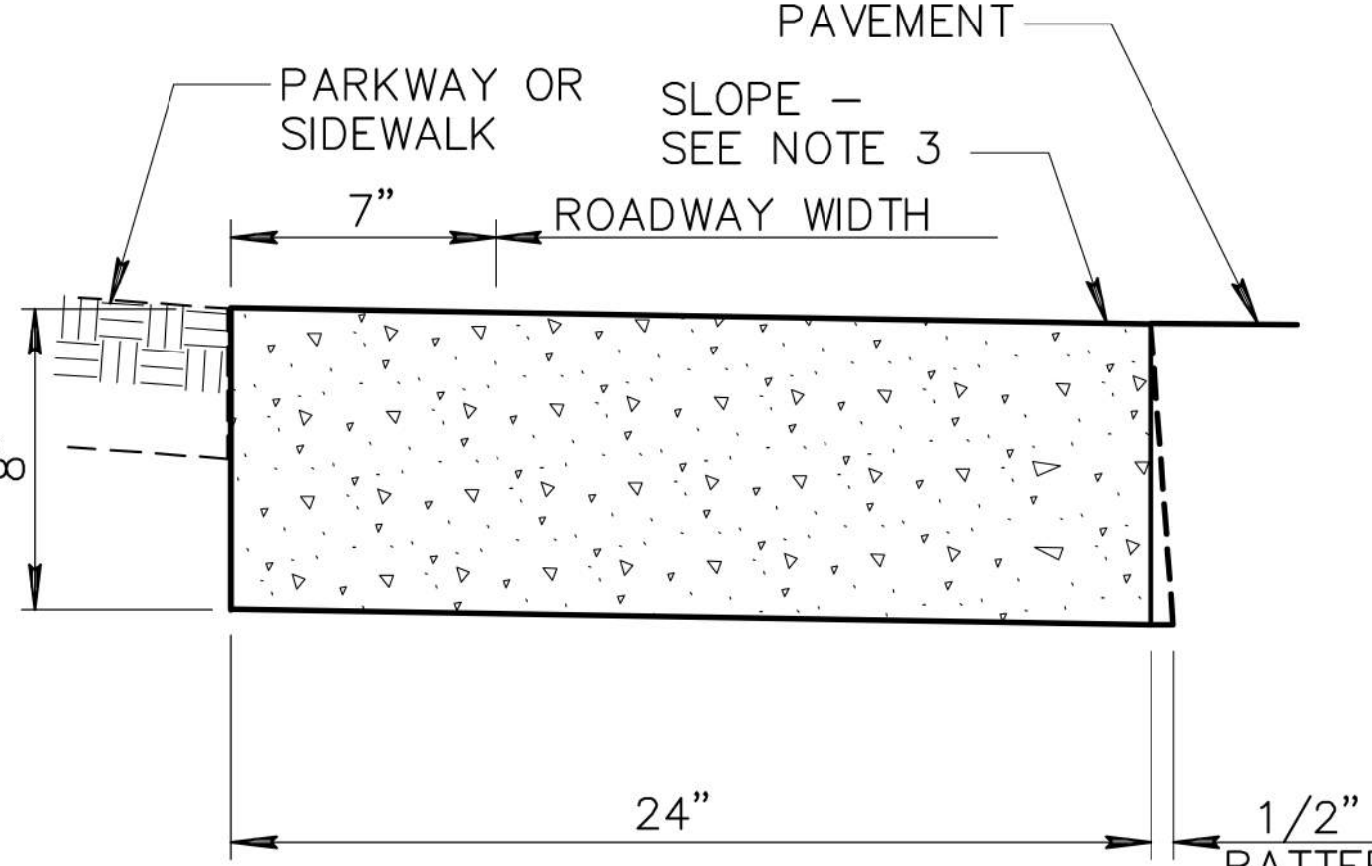
060 MA 144



**VERTICAL CURB AND GUTTER
(TYPE A)**

NOTES: (TYPE A)

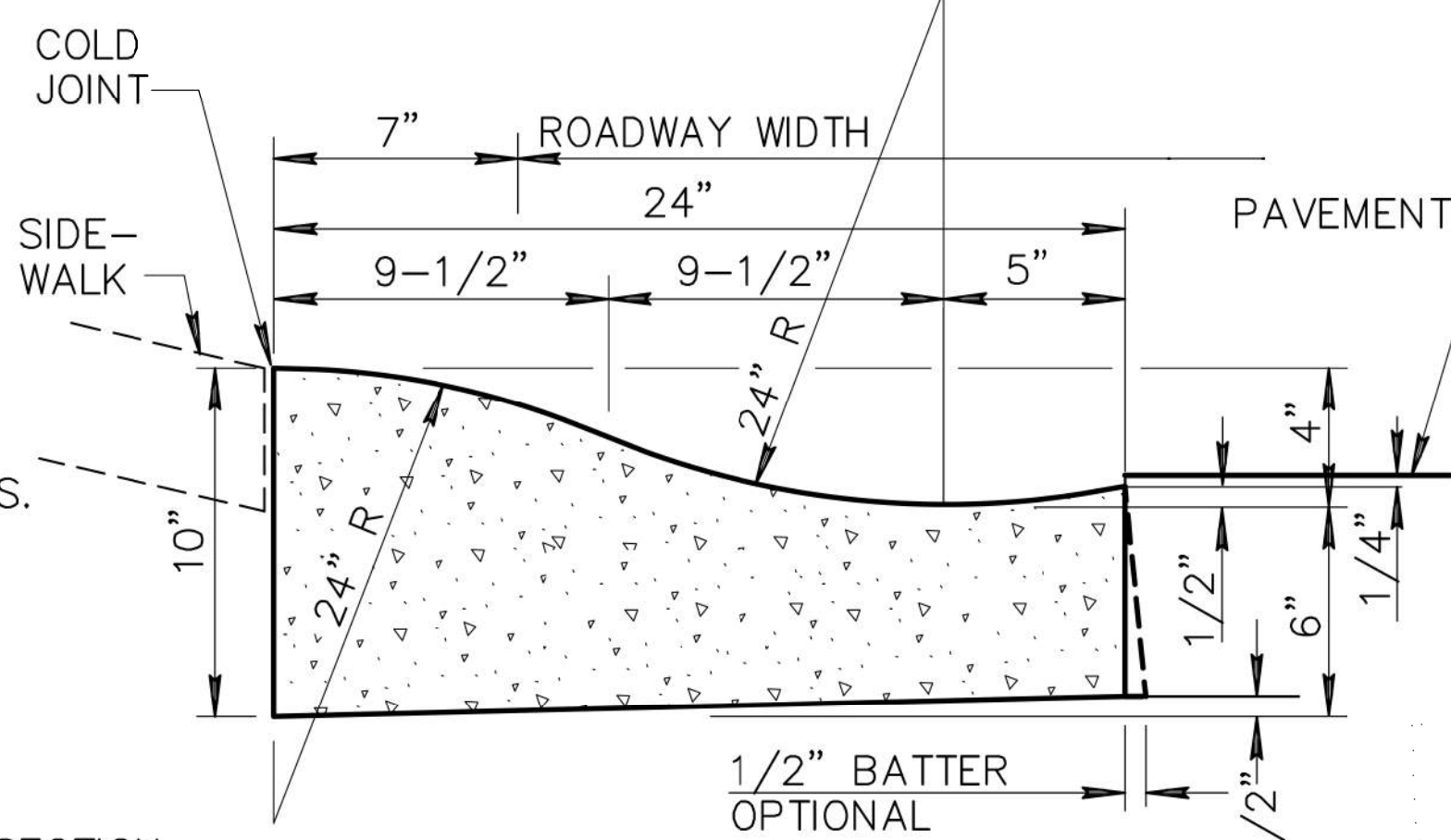
1. ALL EXPOSED SURFACES TO BE TROWEL FINISHED EXCEPT AS SHOWN. SEE SECT. 340.
2. H=6" OR AS SPECIFIED ON PLANS.
3. CONTRACTION JOINT SPACING 10' MAXIMUM.
4. EXPANSION JOINTS AS PER SECT. 340.
5. CLASS 'B' CONCRETE PER 725.
6. WHEN THE ADJACENT PAVEMENT SECTION SLOPES AWAY FROM THE GUTTER, THE SLOPE OF THE GUTTER PAN SHALL MATCH PAVEMENT CROSS SLOPE.



**RIBBON CURB
(TYPE B)**

NOTES: (TYPE B)

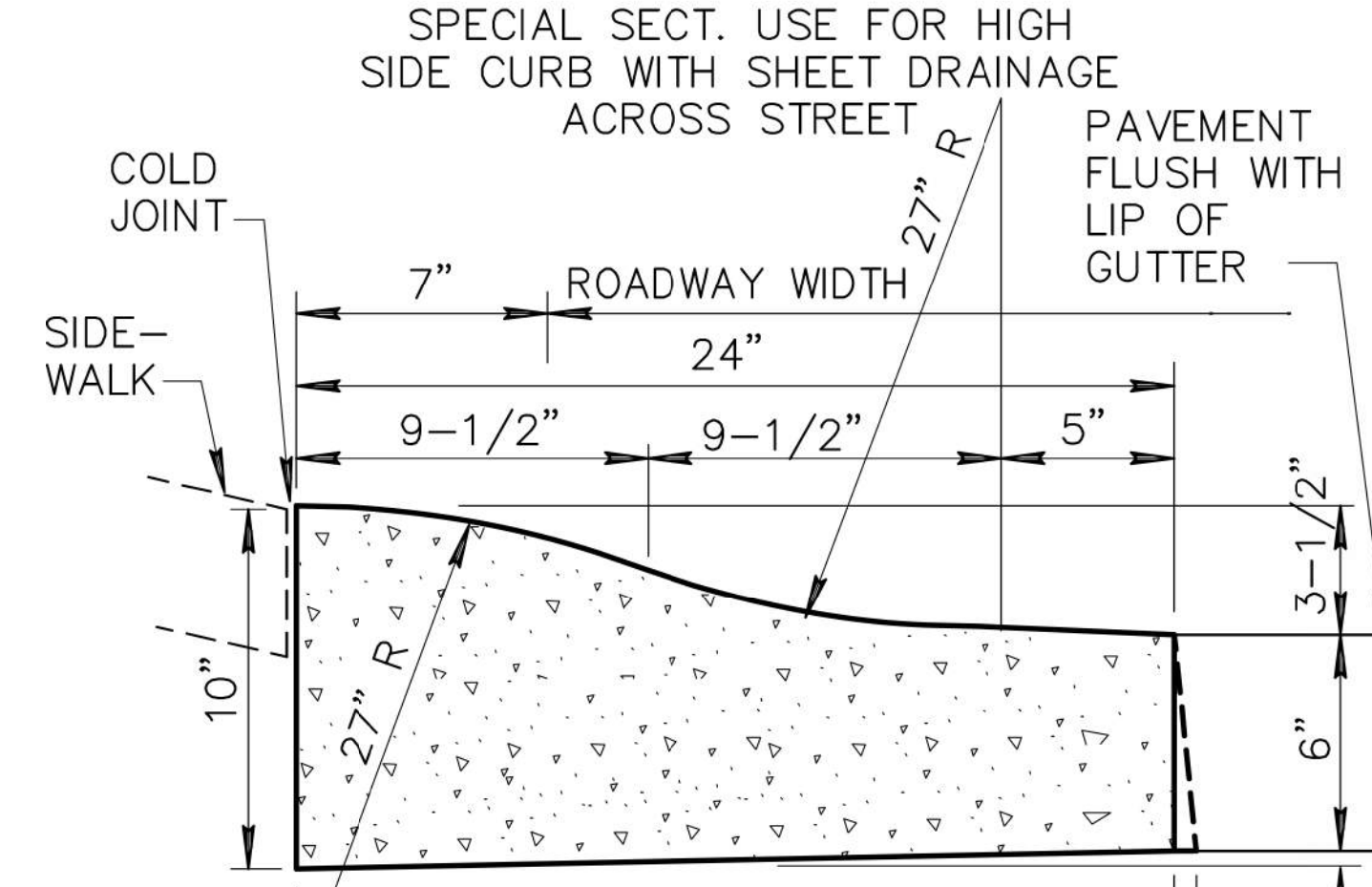
1. CONSTRUCT CURB AND INSTALL 1/2" MASTIC EXPANSION JOINTS, A.S.T.M. D-1751. SECT. 340.
2. BROOM FINISH ALL SURFACES.
3. RIBBON CURB MAY SLOPE TOWARDS PAVEMENT OR PARKWAY AS INDICATED ON PLANS.
4. CONTRACTION JOINT SPACING 10' MAXIMUM.
5. CONCRETE SHALL BE CLASS 'B' PER SECT. 725 AND INSTALLED PER SECT. 505.



**ROLL CURB AND GUTTER
(TYPE C)**

NOTES: (C & D)


1. ALL WORK AND MATERIALS SHALL CONFORM TO SECT. 304, 505 AND 725. BROOM FINISH TO EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAXIMUM.
3. EXPANSION JOINTS AS PER SECT. 340.
4. CLASS 'B' CONCRETE PER 725.



(TYPE D)

NOTES: (C & D)


1. ALL WORK AND MATERIALS SHALL CONFORM TO SECT. 304, 505 AND 725. BROOM FINISH TO EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAXIMUM.
3. EXPANSION JOINTS AS PER SECT. 340.
4. CLASS 'B' CONCRETE PER 725.

DETAIL NO. 220-1	 MARICOPA ASSOCIATION of GOVERNMENTS	STANDARD DETAIL ENGLISH	CURB AND GUTTER TYPES A, B, C AND D	REVISED 01-01-2007	DETAIL NO. 220-1
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DETAIL M1

MAG STD DTL 220-1

NOTE:
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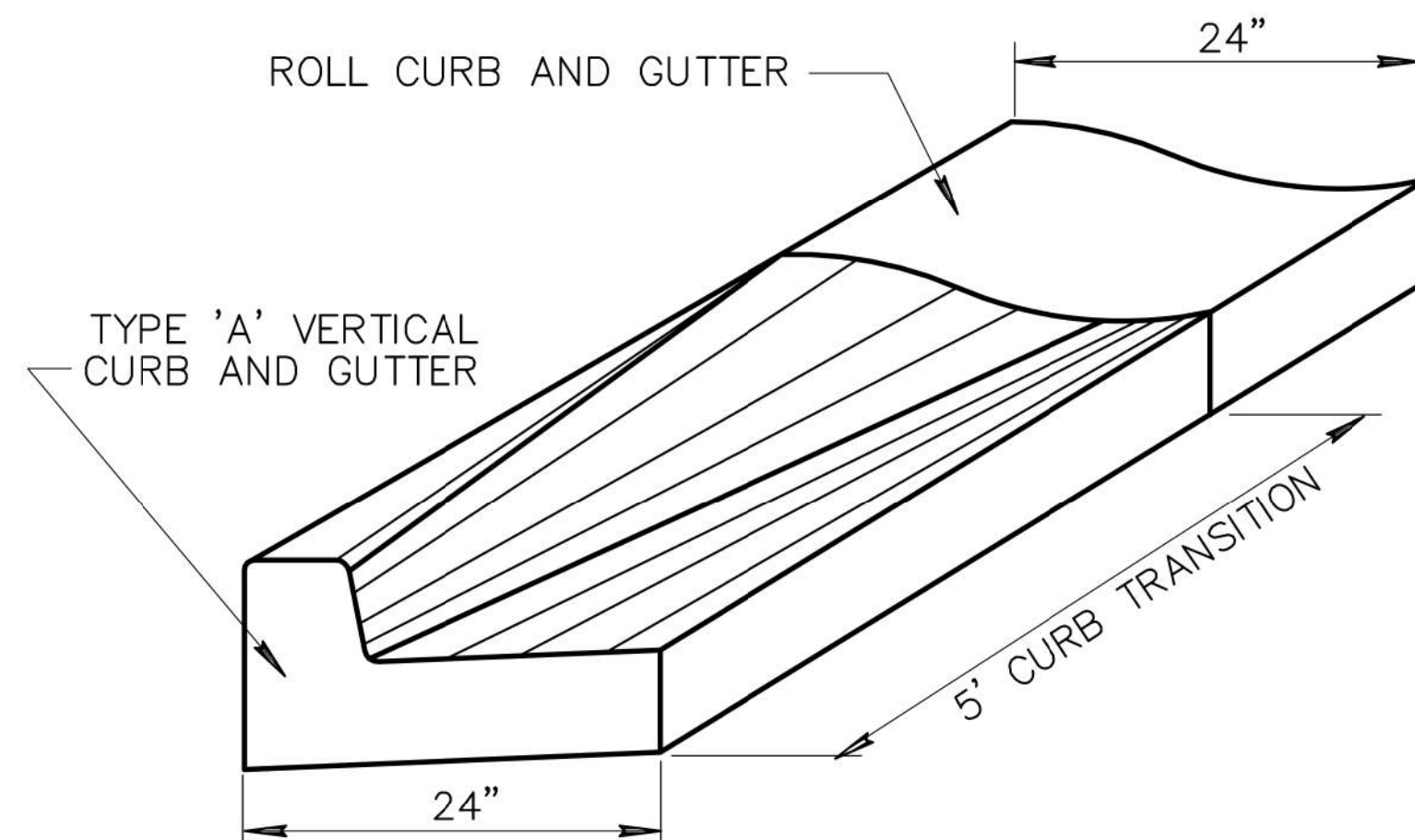
DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	 36634 TODD J. CENCIMINO State Engineer 09/28/18 EXPIRES 09/30/19
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE			DETAIL M1 FRONTAGE RD MAG STD DTL 220-1	
ROUTE	LOCATION		DWG NO. G-07.10	
US 60	GRAND AVENUE FRONTAGE ROAD			
TRACS NO. H8874 01C			OF	

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

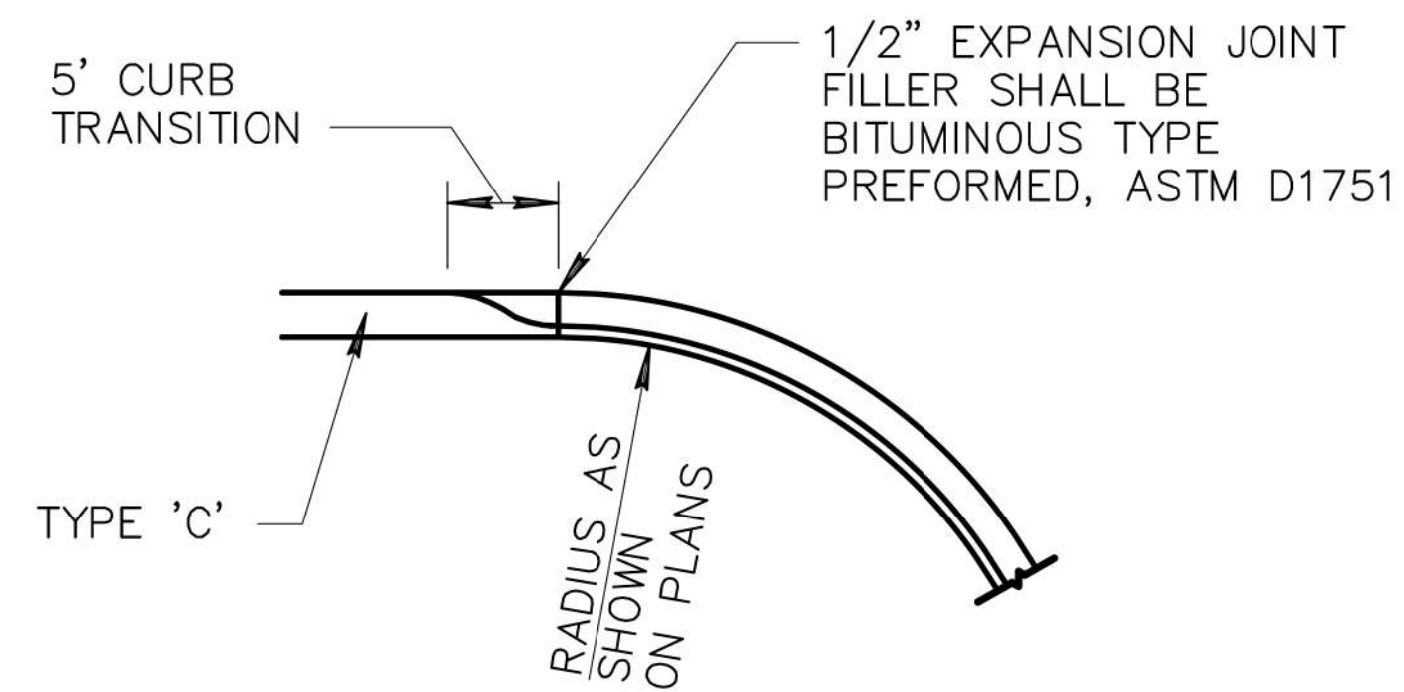
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	42	232	

060 MA 144

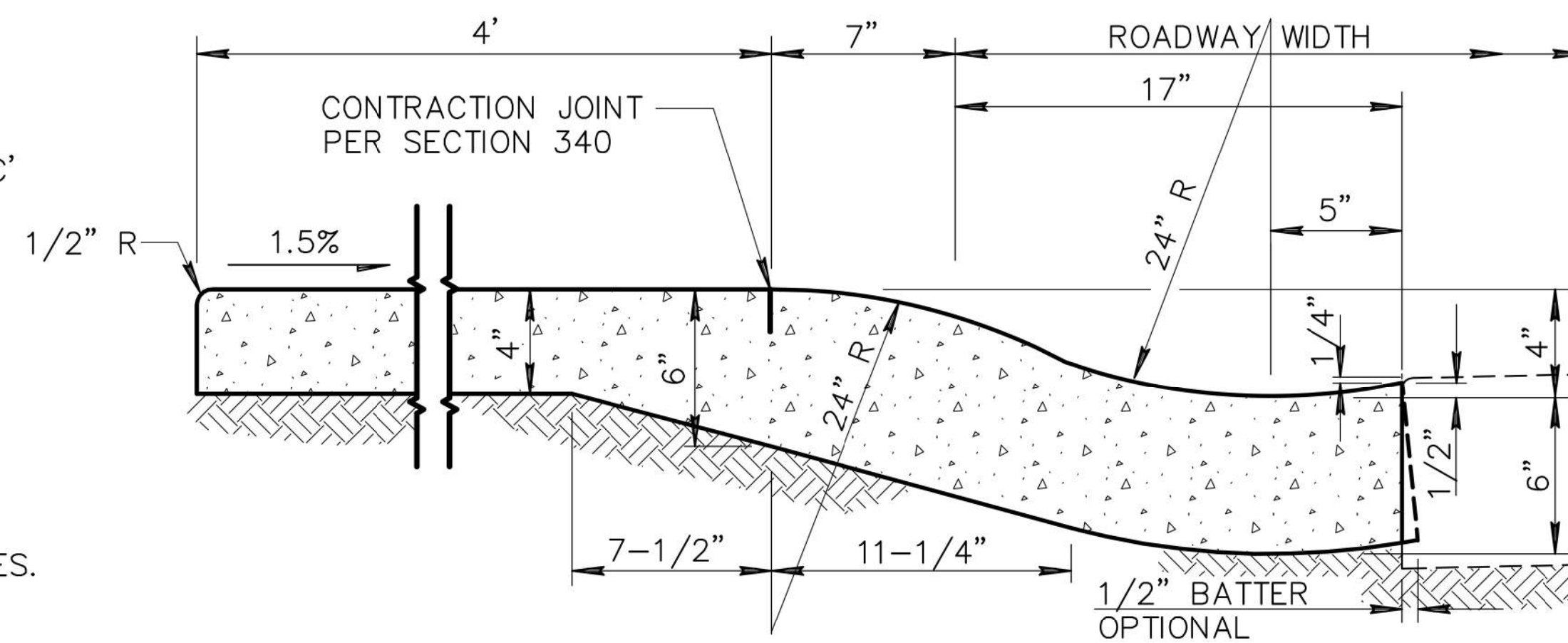
CURB TRANSITION TO ROLL CURB



CURB AND GUTTER TRANSITION



INTEGRAL ROLL CURB, GUTTER AND SIDEWALK



NOTES: (CURB AND GUTTER TRANSITIONS)

1. TRANSITIONS WILL BE PAID FOR AS THE PREDOMINANT TYPE OF CURB AND GUTTER BEING TRANSITIONED. WHEN TYPE 'A' CURB AND GUTTER ARE USED AT CURB RETURNS AND TYPE 'C' CURB AND GUTTER IS PREDOMINANTLY USED ELSEWHERE, THE TYPE 'A' TO TYPE 'C' TRANSITION SHALL BE MEASURED AND PAID FOR AS TYPE 'C' CURB AND GUTTER.
2. WHERE PROPOSED CONSTRUCTION IS TO BE CONNECTED TO EXISTING CURB AND GUTTER, THE TRANSITION SHALL BE INDICATED ON PLANS.
3. CLASS 'B' CONCRETE PER SECTION 725.
4. TRANSITION BETWEEN TYPICAL SECTIONS SHALL BE ACCOMPLISHED BY THE USE OF DIRECT STRAIGHT LINE TRANSITIONS OF THE FLOW LINE AND OTHER SURFACE FEATURES.

NOTES: (INTEGRAL ROLL CURB, GUTTER AND SIDEWALK)

1. CONCRETE TO BE MONOLITHIC POUR. EXPOSED SURFACE FINISH AS PER SIDEWALK AND GUTTER DETAIL.
2. CONTRACTION JOINT SPACING 5' MAXIMUM.
3. EXPANSION JOINTS PER SECTION 340.
4. CLASS 'B' CONCRETE PER SECTION 725.

DETAIL NO. 221	MARICOPA ASSOCIATION of GOVERNMENTS	STANDARD DETAIL ENGLISH	CURB AND GUTTER TRANSITION AND INTEGRAL ROLL CURB, GUTTER AND SIDEWALK	DRAFT 01-01-2018	DETAIL NO. 221
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DETAIL M2

MAG STD DTL 221

NOTE:

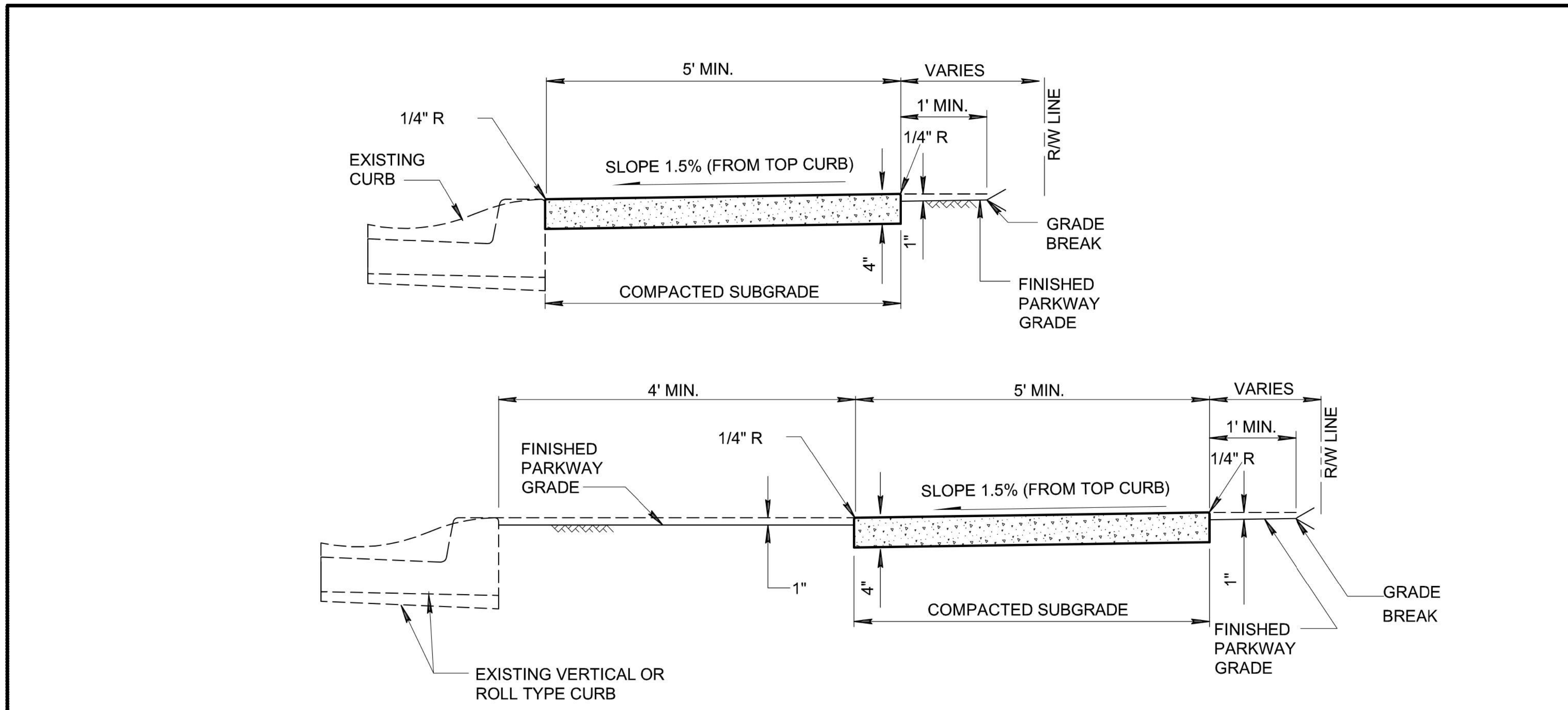
The details shown hereon are the product of the Maricopa Association of Governments (MAG) who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the MAG details have been noted to address specific requirements of this project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIST DR. SUITE 102 TEMPE, AZ 85281			DETAIL M2 FRONTAGE RD MAG STD DTL 221	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.11
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	43	232	

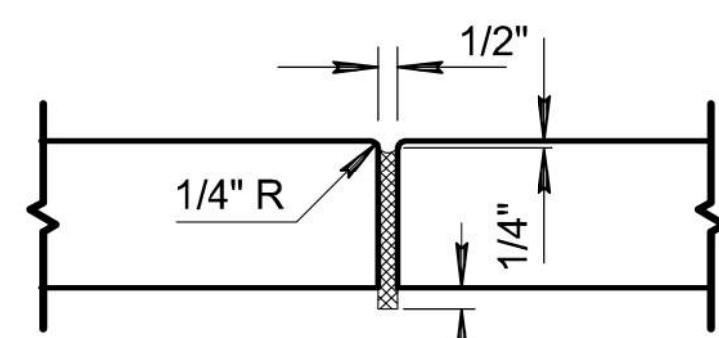
060 MA 144

DATE- LOCATION- REVISIONS- SURVEY NO. DATE- LOCATION- REVISIONS- SURVEY NO. DATE- LOCATION- REVISIONS- SURVEY NO.

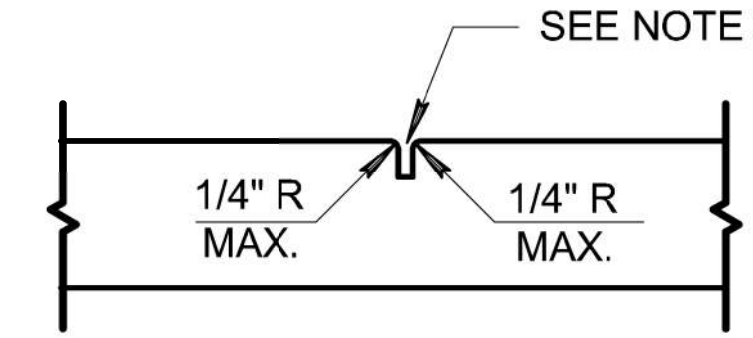


NOTES:

1. SIDEWALK CONSTRUCTION SHALL CONFORM TO SECTION 340.
2. EXPANSION JOINTS SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER, PER SECTION 729.
3. LARGE AGGREGATE, IN CONTRACTION JOINT SHALL BE SEPARATED TO A DEPTH OF 1", FINISH DEPTH SHALL BE A MINIMUM OF 3/4".
4. EXPANSION JOINTS SHALL CONFORM TO SECTION 340, BE INSTALLED PRIOR TO CONCRETE PLACEMENT, AND AT A MAXIMUM SPACING OF 50'.
5. CONCRETE SHALL BE CLASS 'B' PER SECTION 725.
6. WHEN SIDEWALK AND ADJACENT CURB ARE CONSTRUCTED MONOLITHICALLY, ALL EXPANSION AND CONTRACTION JOINTS SHALL EXTEND ACROSS THE CURB.



EXPANSION JOINT



CONTRACTION JOINT

DETAIL NO. 230	MARICOPA ASSOCIATION of GOVERNMENTS	STANDARD DETAIL ENGLISH	SIDEWALKS	REVISED 01-01-2014	DETAIL NO. 230
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DETAIL M3

MAG STD DTL 230

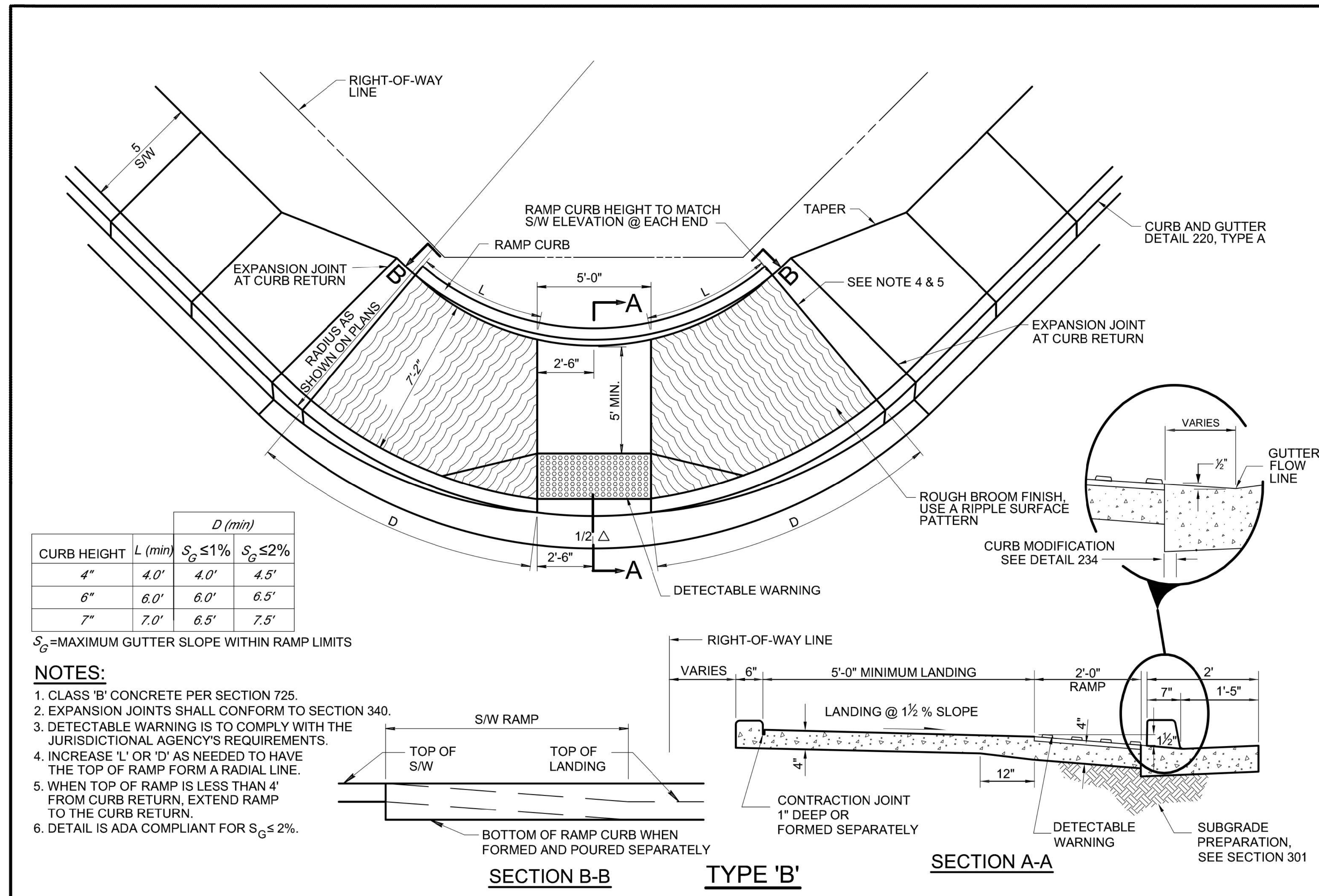
NOTE:

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DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PROJECT DR. SUITE 102 TEMPE, AZ 85281</small>			DETAIL M3 FRONTAGE RD MAG STD DTL 230	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.12
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	44	232	

060 MA 144

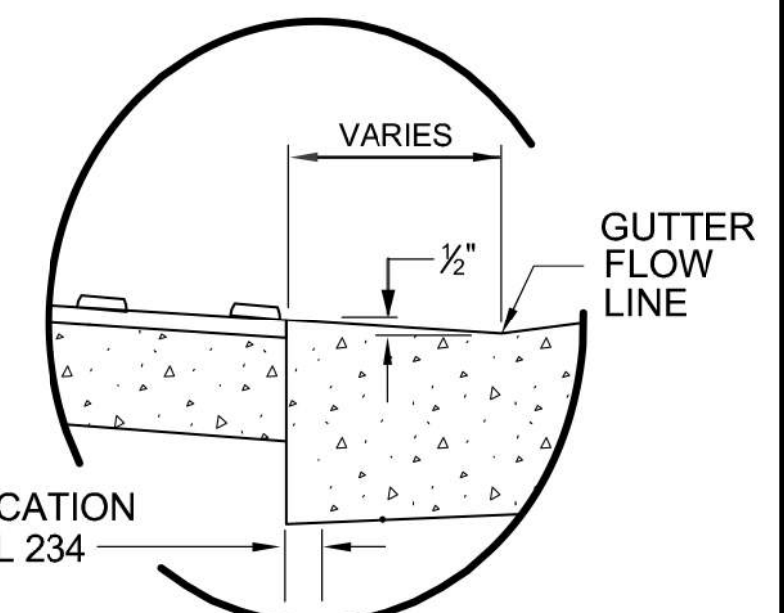
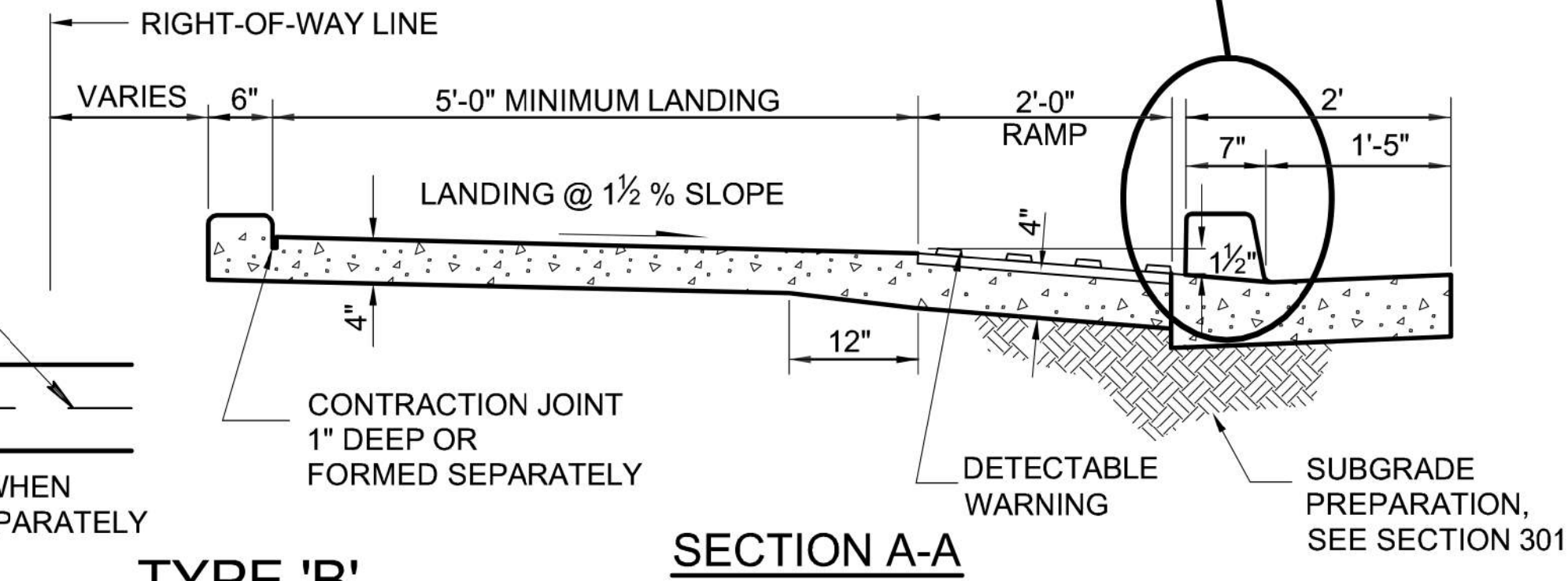
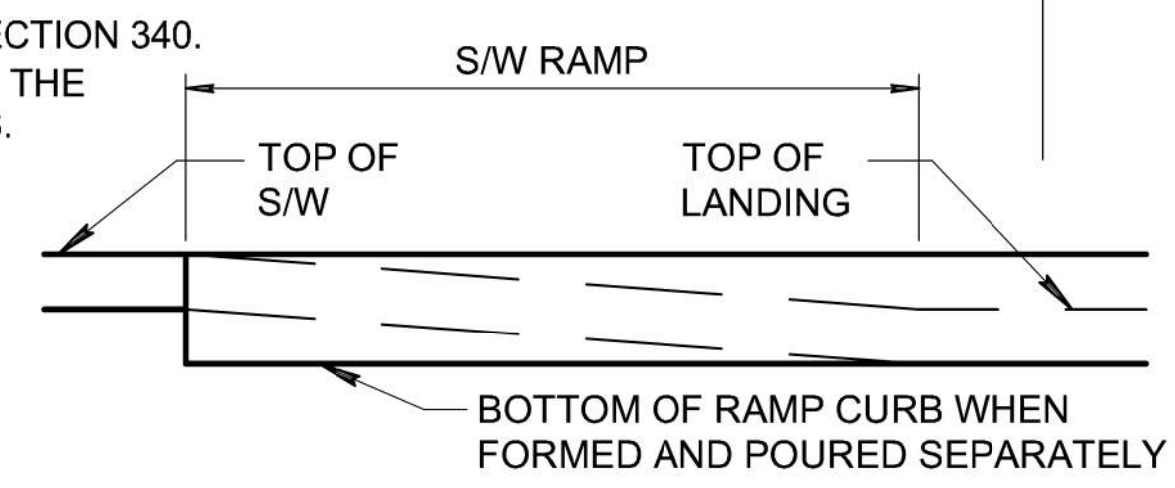


CURB HEIGHT	L (min)	D (min)	
		$S_G \leq 1\%$	$S_G \leq 2\%$
4"	4.0'	4.0'	4.5'
6"	6.0'	6.0'	6.5'
7"	7.0'	6.5'	7.5'

S_G = MAXIMUM GUTTER SLOPE WITHIN RAMP LIMITS

NOTES:

1. CLASS 'B' CONCRETE PER SECTION 725.
2. EXPANSION JOINTS SHALL CONFORM TO SECTION 340.
3. DETECTABLE WARNING IS TO COMPLY WITH THE JURISDICTIONAL AGENCY'S REQUIREMENTS.
4. INCREASE 'L' OR 'D' AS NEEDED TO HAVE THE TOP OF RAMP FORM A RADIAL LINE.
5. WHEN TOP OF RAMP IS LESS THAN 4' FROM CURB RETURN, EXTEND RAMP TO THE CURB RETURN.
6. DETAIL IS ADA COMPLIANT FOR $S_G \leq 2\%$.



DETAIL NO. 235-2	MARICOPA ASSOCIATION OF GOVERNMENTS	STANDARD DETAIL ENGLISH	CURB RAMPS	REVISED 01-01-2012	DETAIL NO. 235-2
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DETAIL M4

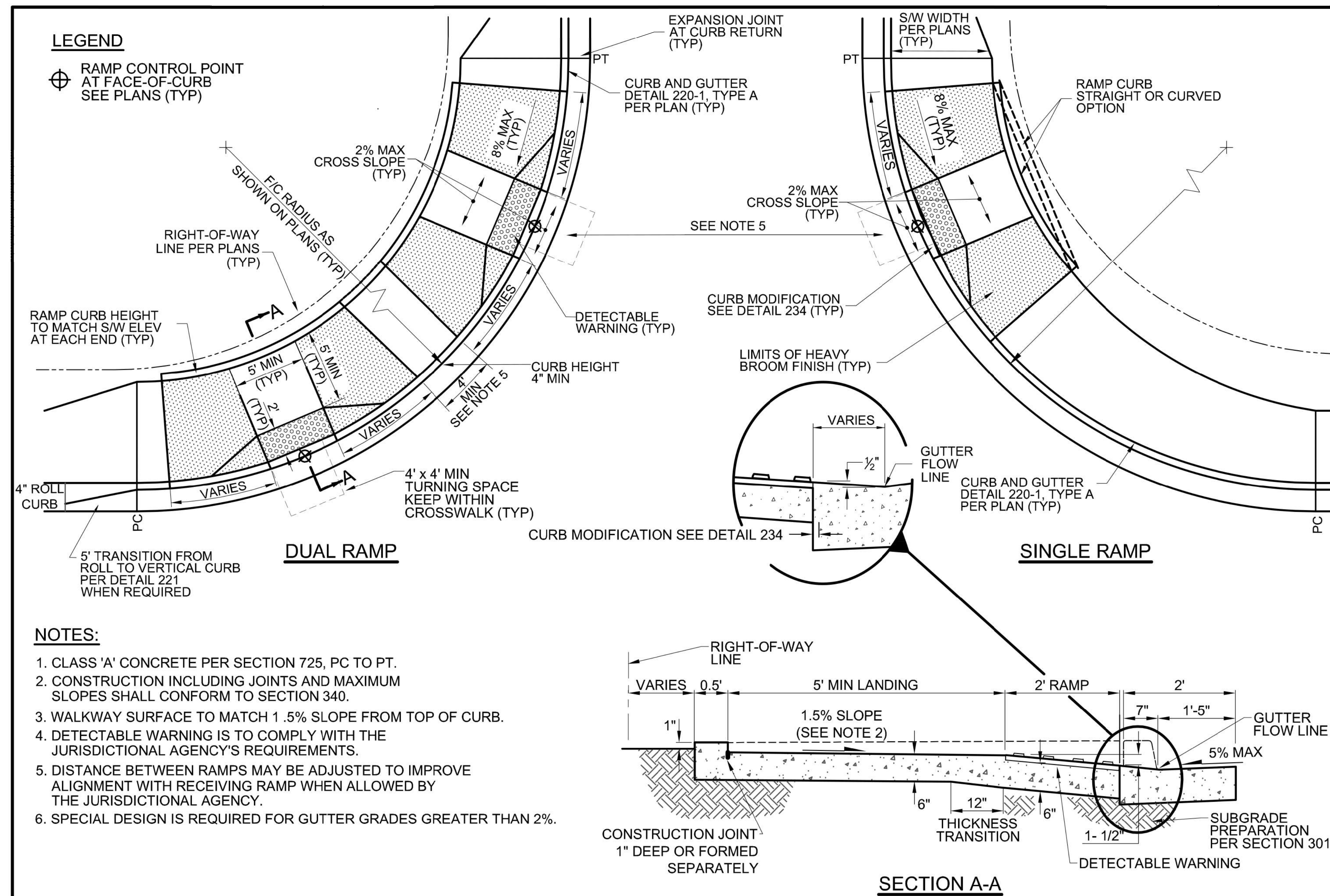
MAG STD DTL 235-2

NOTE:
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DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		1500 N. PROJECT DR. SUITE 102 TEMPE, AZ 85281		DETAIL M4 FRONTAGE RD MAG STD DTL 235-2	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO.	H8874 01C			DWG NO. G-07.13	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	45	232	

060 MA 144



DETAIL NO. 236-4	MARICOPA ASSOCIATION OF GOVERNMENTS	STANDARD DETAIL ENGLISH	25' - 35' R - RADIAL COMBINATION CURB RAMP	DRAFT 01-01-2018	DETAIL NO. 236-4
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DETAIL M5

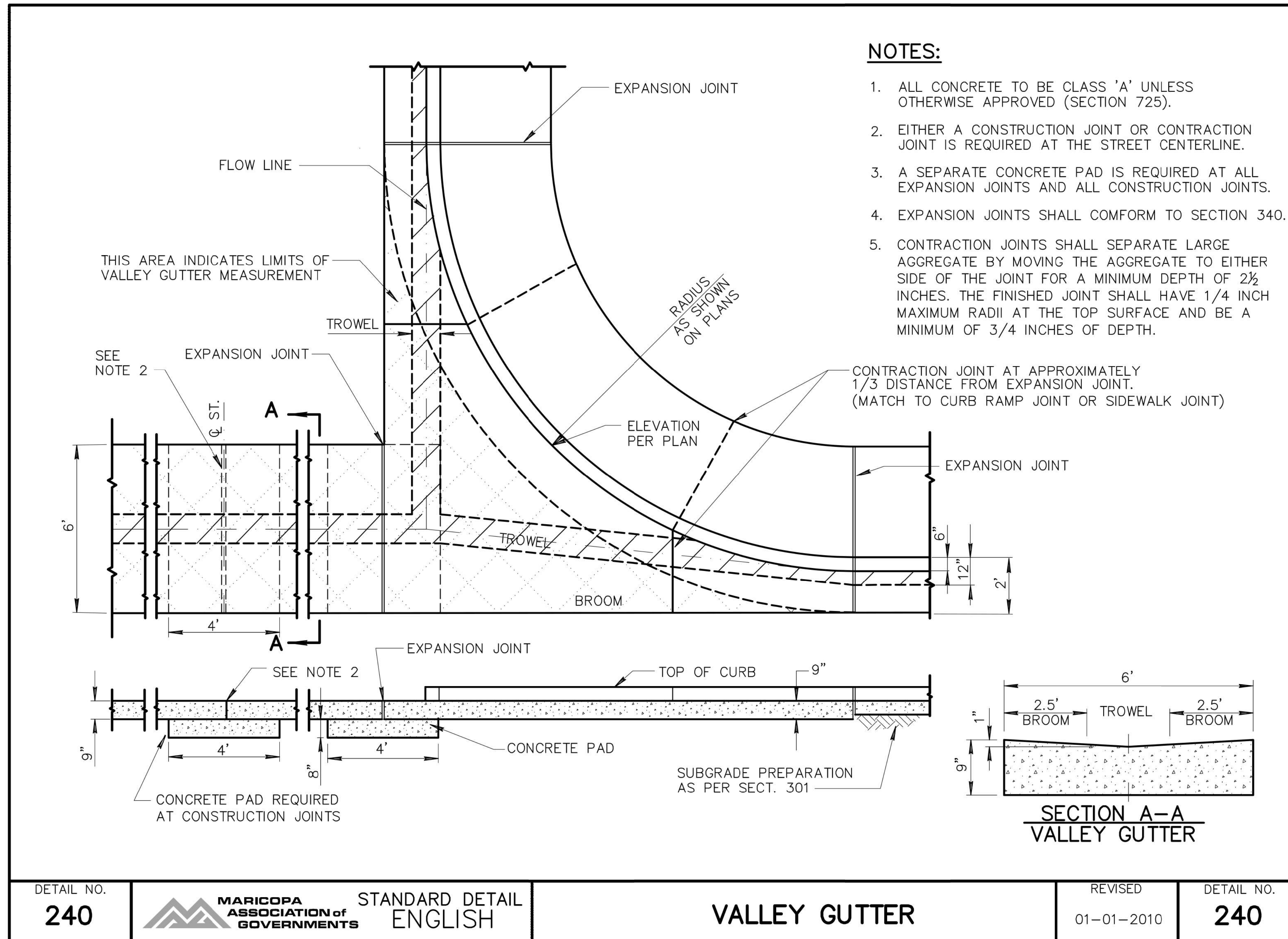
MAG STD DTL 236-4

NOTE:
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DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL M5 FRONTAGE RD MAG STD DTL 236-4	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C			DWG NO. G-07.14	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	46	232	

060 MA 144



DETAIL NO. 240	MARICOPA ASSOCIATION of GOVERNMENTS	STANDARD DETAIL ENGLISH	VALLEY GUTTER	REVISED 01-01-2010	DETAIL NO. 240
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DETAIL M6

MAG STD DTL 240

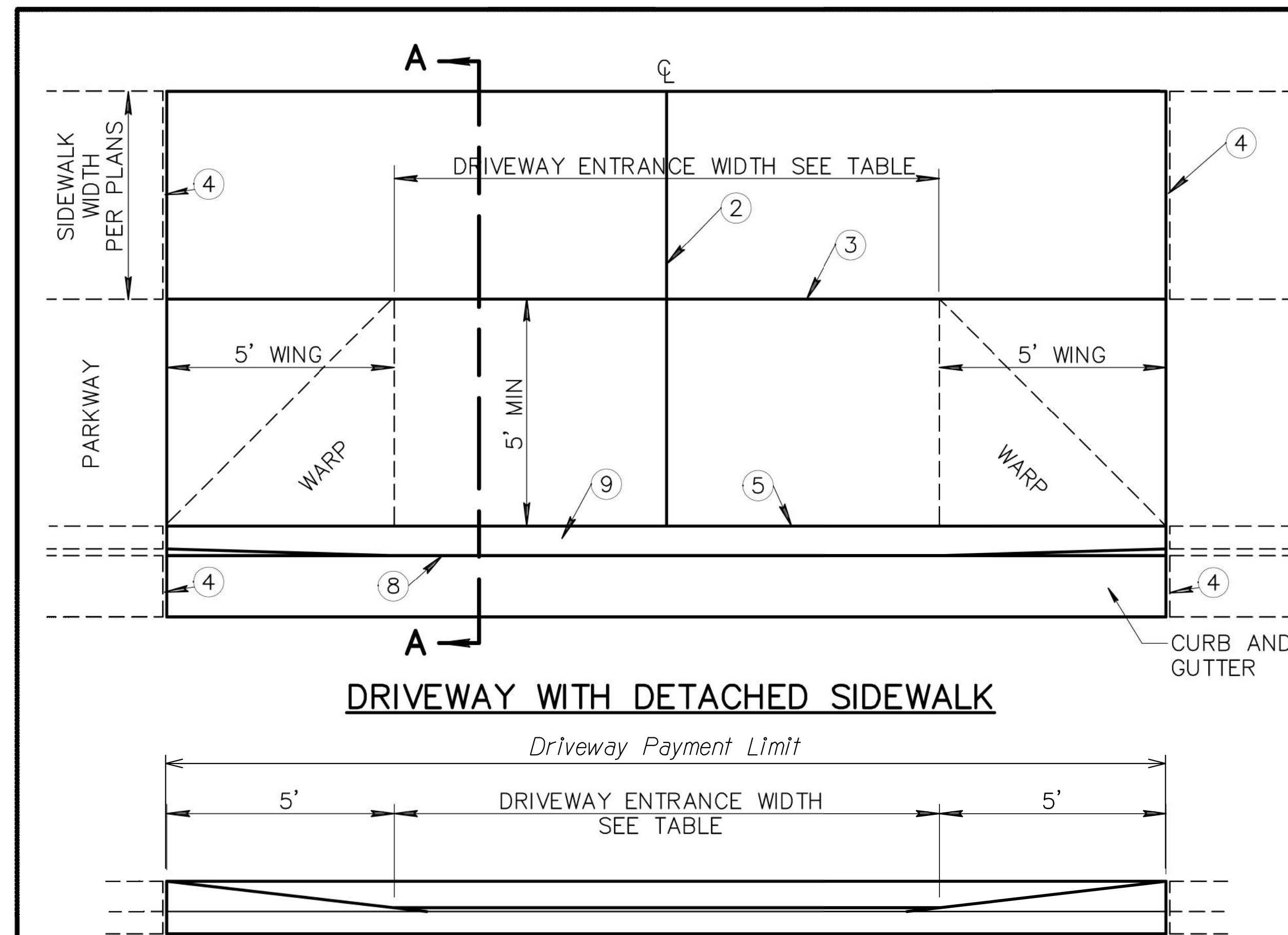
NOTE:
The details shown hereon are the product of the Maricopa Association of Governments (MAG) who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the MAG details have been noted to address specific requirements of this project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PROJECT DR. SUITE 102 TEMPE, AZ 85281			DETAIL M6 FRONTAGE RD MAG STD DTL 240	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.15
US 60				
TRACS NO. H8874 01C				OF

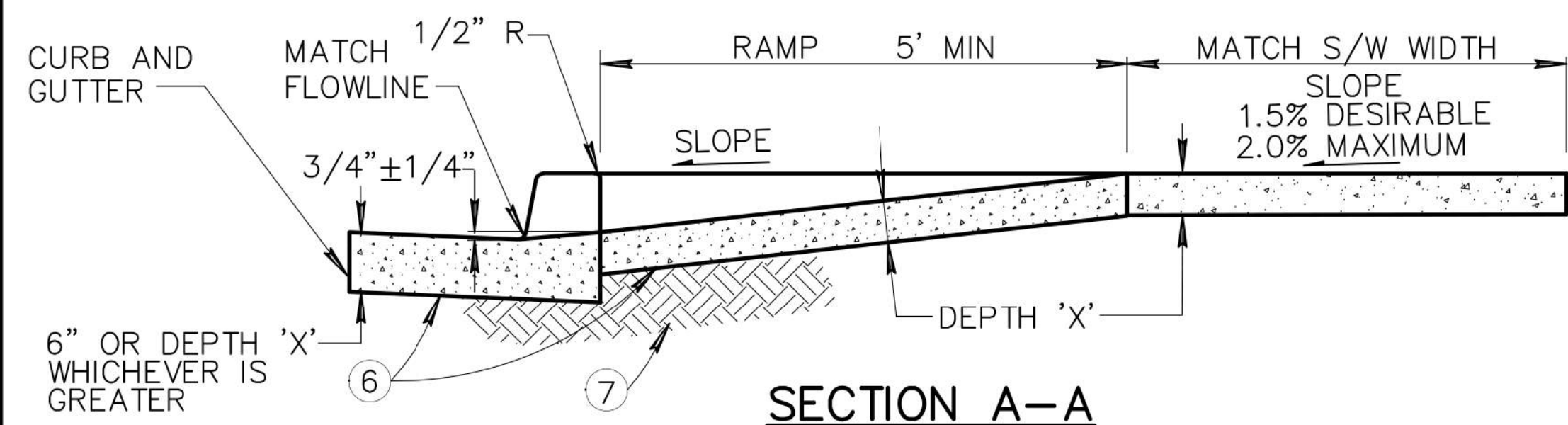
DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	47	232	

060 MA 144



DRIVEWAY WITH DETACHED SIDEWALK



SECTION A-A

NOTES:

1. DEPRESSED CURB SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE TYPE OF CURB USED AT THAT LOCATION.
2. CONTRACTION JOINT ON D/W CENTERLINE.
3. CONTRACTION JOINT.
4. 1/2-INCH EXPANSION JOINTS SHALL COMPLY WITH SECTION 340.
5. BACK OF CURB - CONSTRUCTION JOINT.
6. CONCRETE CLASS AS NOTED IN TABLE. CONCRETE PER SECTION 725.
7. SUBGRADE PREPARATION, SECT. 301.
8. FLOW LINE OF GUTTER.
9. DEPRESSED CURB.
10. SECT. A-A AND ELEVATION: D/W SHOWN WITH VERTICAL CURB AND GUTTER, ROLL TYPE CURB AND GUTTER TREATED SIMILARLY.
11. ROUGH BROOM FINISH FULL WIDTH OF RAMP AND WINGS.
12. TROWEL AND USE LIGHT HAIR BROOM FINISH FOR WALKWAY AREA.
13. 'DRIVEWAY ENTRANCE WIDTH' IS THE DRIVEWAY WIDTH PLUS ADDITIONAL WIDENING REQUIRED BY THE LOCAL JURISDICTION.
14. ELEVATION AT TOP OF DRIVEWAY RAMP SHALL BE EQUAL TO OR HIGHER THAN NORMAL CURB ELEVATION.

** Driveways wider than 40' may require multiple contraction.

DRIVEWAY METRICS

Ref No	Station	Width	Depth
**502	104+54.00	61'	9"
504	109+40.88	37'	9"
505	110+11.78	37'	9"
506	117+11.67	40'	9"
507	119+03.51	20'	9"
509	125+23.15	40'	9"
510	128+79.13	40'	9"
517	143+36.41	33'	9"
518	145+87.69	20'	9"
519	146+67.87	35'	9"
520	147+43.56	33'	9"
521	149+12.49	27'	9"
522	150+05.52	30'	9"
523	151+65.18	16'	9"
524	152+03.18	16'	9"
525	152+44.68	25'	9"
526	153+20.74	30'	9"
531	162+32.63	28'	9"
532	163+44.12	16'	9"
533	164+17.11	17'	9"

COMMERCIAL AND INDUSTRIAL

DRIVEWAY ENTRANCE WIDTH	MIN.	MAX.	CLASS	DEPTH 'X'
COMMERCIAL	* 16'	40'	A	9"
INDUSTRIAL	* 16'	40'	A	9"
*24' MIN. FOR TWO WAY TRAFFIC				

RESIDENTIAL

DRIVEWAY ENTRANCE WIDTH	MIN.	MAX.	CLASS	DEPTH 'X'
MAJOR STREET	16'	30'	B	5"
COLLECTOR STREET	* 12'	30'	B	5"
LOCAL STREET	12'	30'	B	5"
*16' DESIRABLE				

DETAIL NO. 250-1	MARICOPA ASSOCIATION OF GOVERNMENTS	STANDARD DETAIL ENGLISH	DRIVEWAY ENTRANCES WITH DETACHED SIDEWALK	REVISED 01-01-2014	DETAIL NO. 250-1
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NOTE:

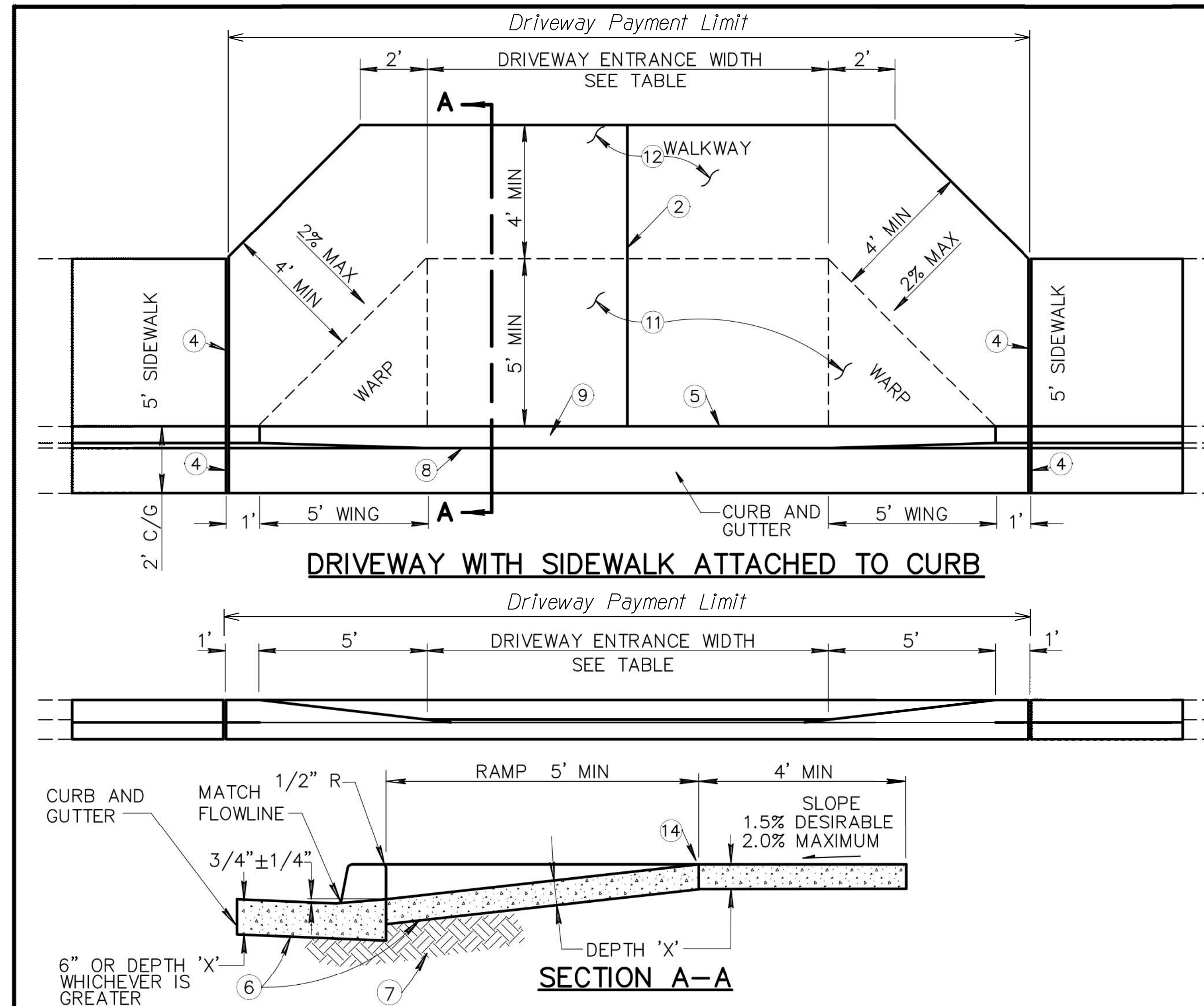
The details shown hereon are the product of the Maricopa Association of Governments (MAG) who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the MAG details have been noted to address specific requirements of this project.

DETAIL M7
MAG STD DTL 250-1

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PROJECT DR. SUITE 102 TEMPE, AZ 85281			DETAIL M7 FRONTAGE RD MAG STD DTL 250-1	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60				
TRACS NO. H8874 01C			DWG NO. G-07.16	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	48	232	

060 MA 144



NOTES:

- DEPRESSED CURB SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE TYPE OF CURB USED AT THAT LOCATION.
- CONTRACTION JOINT(S) FOR DRIVEWAY ENTRANCE: WIDTH LESS THAN 22' NONE REQUIRED; WIDTH GREATER THAN 22' AND LESS THAN 30' LOCATE SINGLE JOINT ON D/W CENTERLINE; WIDTH OF 30' OR GREATER LOCATE TWO JOINTS TO EQUALLY DIVIDE THE DRIVEWAY ENTRANCE WIDTH.
- DETAIL GEOMETRICS ARE BASED ON A CURB HEIGHT OF SIX INCHES (6"), AN ATTACHED SIDEWALK WIDTH OF FIVE FEET (5'), AND A DRIVEWAY RAMP LENGTH NOT EXCEEDING SIX FEET (6"). GEOMETRIC MODIFICATIONS MAY BE REQUIRED WHEN CONDITIONS ARE MODIFIED.
- 1/2-INCH EXPANSION JOINTS SHALL COMPLY WITH SECTION 340.
- BACK OF CURB - CONSTRUCTION JOINT.
- CONCRETE CLASS AS NOTED IN TABLE. CONCRETE PER SECTION 725.
- SUBGRADE PREPARATION, SECT. 301.
- FLOW LINE OF GUTTER.
- DEPRESSED CURB.
- SECT. A-A AND ELEVATION: D/W SHOWN WITH VERTICAL CURB AND GUTTER, ROLL TYPE CURB AND GUTTER TREATED SIMILARLY.
- ROUGH BROOM FINISH FULL WIDTH OF RAMP AND WINGS.
- TROWEL AND USE LIGHT HAIR BROOM FINISH FOR WALKWAY AREA.
- 'DRIVEWAY ENTRANCE WIDTH' IS THE DRIVEWAY WIDTH PLUS ADDITIONAL WIDENING REQUIRED BY THE LOCAL JURISDICTION.
- ELEVATION AT TOP OF DRIVEWAY RAMP SHALL BE EQUAL TO OR HIGHER THAN NORMAL CURB ELEVATION.

Ref No	Station	Width	Depth
501	101+51.28	38'	9"
503	106+00.54	22'	9"
508	123+97.15	25'	9"
512	135+21.01	40'	9"
513	136+94.93	40'	9"
514	137+84.46	40'	9"
515	141+99.41	25'	9"
529	160+66.98	16'	9"
530	161+47.37	16'	9"


COMMERCIAL AND INDUSTRIAL					RESIDENTIAL				
DRIVEWAY ENTRANCE WIDTH	MIN.	MAX.	CLASS	DEPTH 'X'	DRIVEWAY ENTRANCE WIDTH	MIN.	MAX.	CLASS	DEPTH 'X'
COMMERCIAL	* 16'	40'	A	9"	MAJOR STREET	16'	30'	B	5"
INDUSTRIAL	* 16'	40'	A	9"	COLLECTOR STREET	* 12'	30'	B	5"
					LOCAL STREET	12'	30'	B	5"
					* 16' DESIRABLE				

DETAIL NO. **250-2**  **STANDARD DETAIL ENGLISH** **DRIVEWAY ENTRANCES WITH SIDEWALK ATTACHED TO CURB** REVISED 01-01-2013 DETAIL NO. **250-2**

DETAIL M8

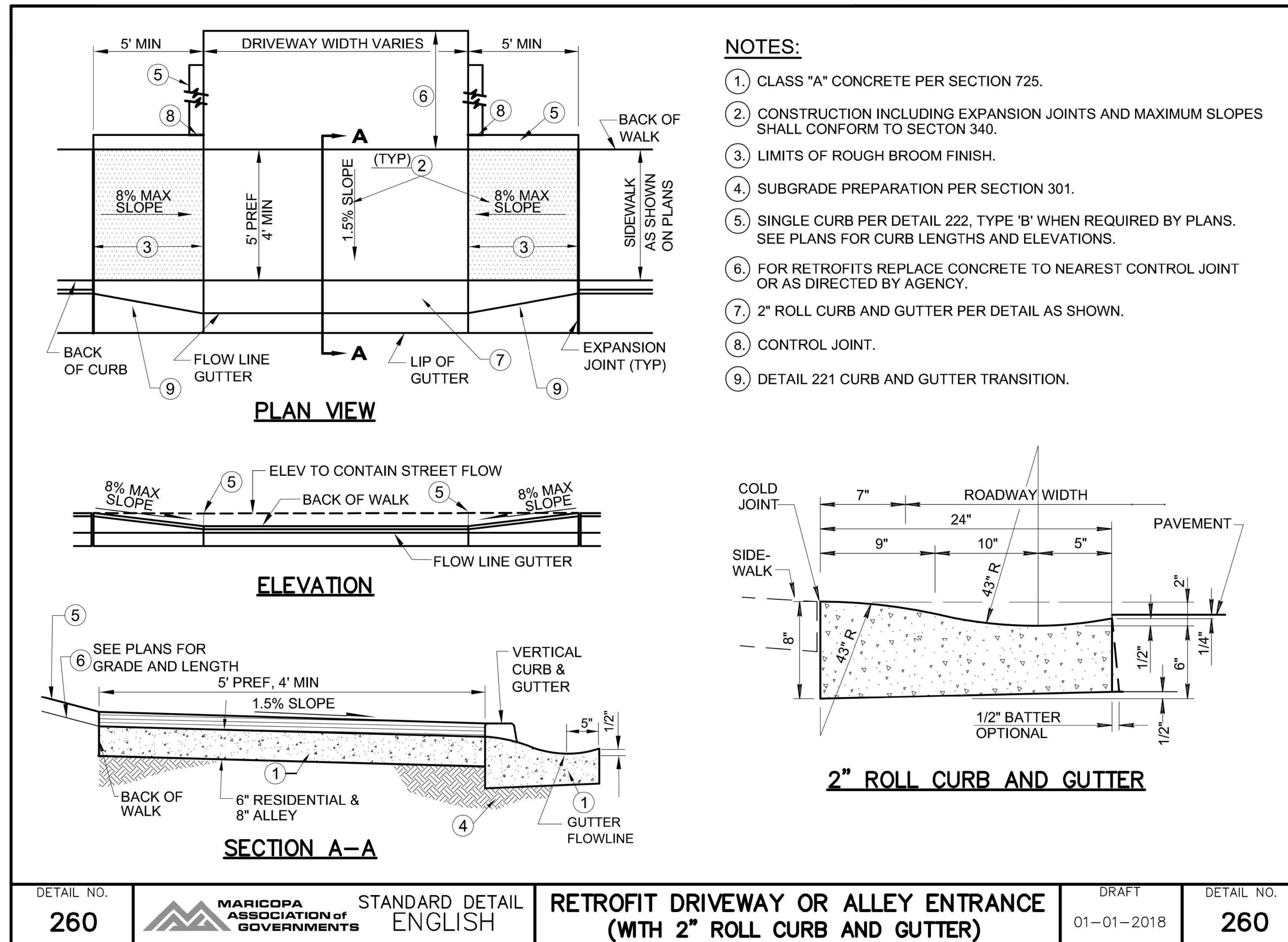
MAG STD DTL 250-2

NOTE:
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DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL M8 FRONTAGE RD MAG STD DTL 250-2	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60			DWG NO. G-07.17	
TRACS NO. H8874 01C			OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	49	232	

060 MA 144



NOTES:

1. CLASS "A" CONCRETE PER SECTION 725.
2. CONSTRUCTION INCLUDING EXPANSION JOINTS AND MAXIMUM SLOPES SHALL CONFORM TO SECTION 340.
3. LIMITS OF ROUGH BROOM FINISH.
4. SUBGRADE PREPARATION PER SECTION 301.
5. SINGLE CURB PER DETAIL 222, TYPE 'B' WHEN REQUIRED BY PLANS. SEE PLANS FOR CURB LENGTHS AND ELEVATIONS.
6. FOR RETROFITS REPLACE CONCRETE TO NEAREST CONTROL JOINT OR AS DIRECTED BY AGENCY.
7. 2" ROLL CURB AND GUTTER PER DETAIL AS SHOWN.
8. CONTROL JOINT.
9. DETAIL 221 CURB AND GUTTER TRANSITION.

ALLEY ENTRANCE METRICS			
Ref No	Station	Width	Depth
511	133+83.20	14'	9"
516	143+36.41	31'	9"
527	158+30.85	16'	9"
528	159+09.56	16'	9"

DETAIL NO. 260	MARICOPA ASSOCIATION OF GOVERNMENTS	STANDARD DETAIL ENGLISH	RETROFIT DRIVEWAY OR ALLEY ENTRANCE (WITH 2" ROLL CURB AND GUTTER)	DRAFT 01-01-2018	DETAIL NO. 260
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NOTE:
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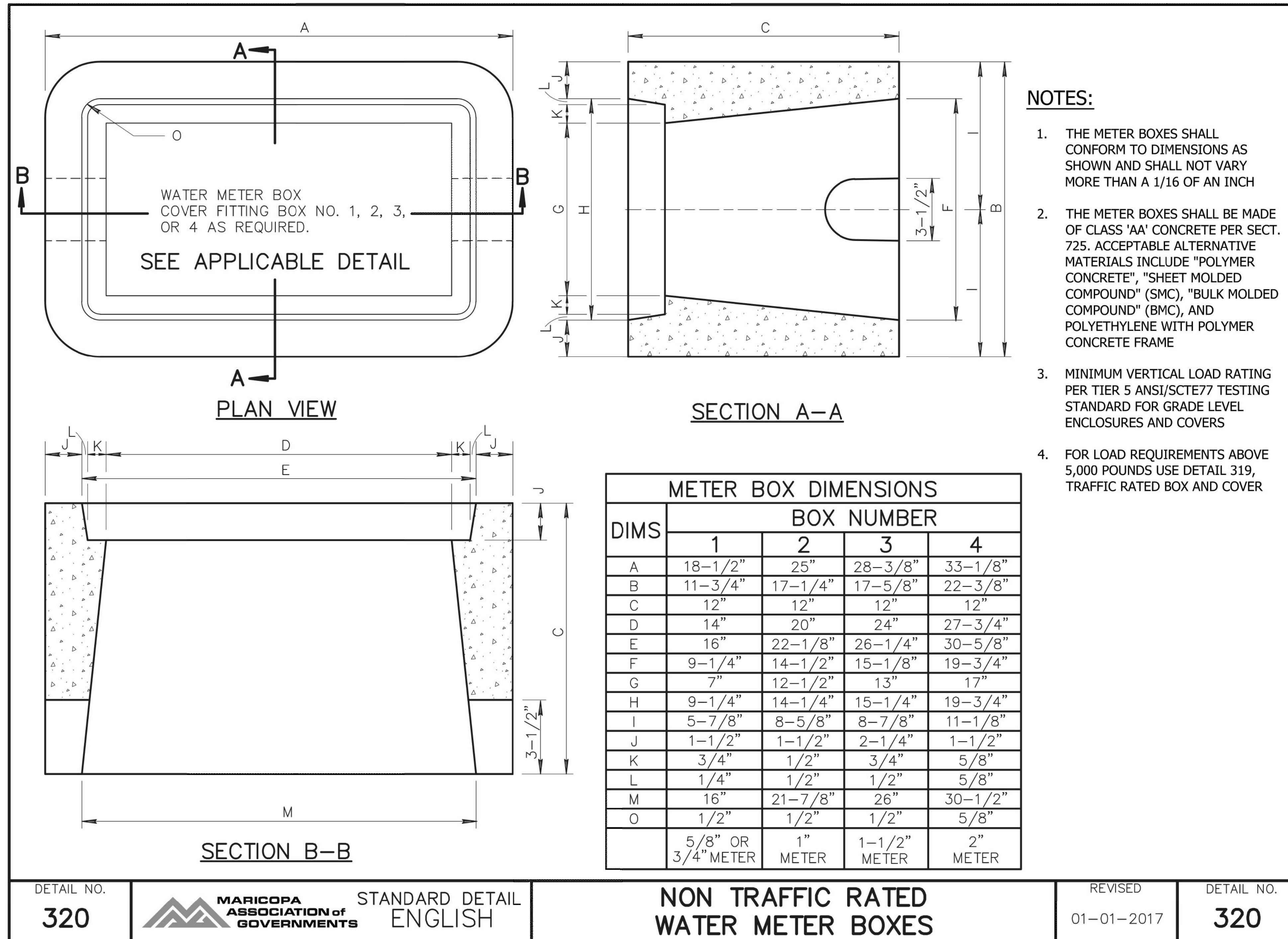
DETAIL M9

MAG STD DTL 260

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE		DETAIL M9 FRONTAGE RD MAG STD DTL 260		
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.18
US 60				
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	50	232	

060 MA 144



NOTES:

1. THE METER BOXES SHALL CONFORM TO DIMENSIONS AS SHOWN AND SHALL NOT VARY MORE THAN A 1/16 OF AN INCH
2. THE METER BOXES SHALL BE MADE OF CLASS 'AA' CONCRETE PER SECT. 725. ACCEPTABLE ALTERNATIVE MATERIALS INCLUDE "POLYMER CONCRETE", "SHEET MOLDED COMPOUND" (SMC), "BULK MOLDED COMPOUND" (BMC), AND POLYETHYLENE WITH POLYMER CONCRETE FRAME
3. MINIMUM VERTICAL LOAD RATING PER TIER 5 ANSI/SCTE77 TESTING STANDARD FOR GRADE LEVEL ENCLOSURES AND COVERS
4. FOR LOAD REQUIREMENTS ABOVE 5,000 POUNDS USE DETAIL 319, TRAFFIC RATED BOX AND COVER

DETAIL NO. 320	MARICOPA ASSOCIATION OF GOVERNMENTS	STANDARD DETAIL ENGLISH	NON TRAFFIC RATED WATER METER BOXES	REVISED 01-01-2017	DETAIL NO. 320
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DETAIL M10

MAG STD DTL 320

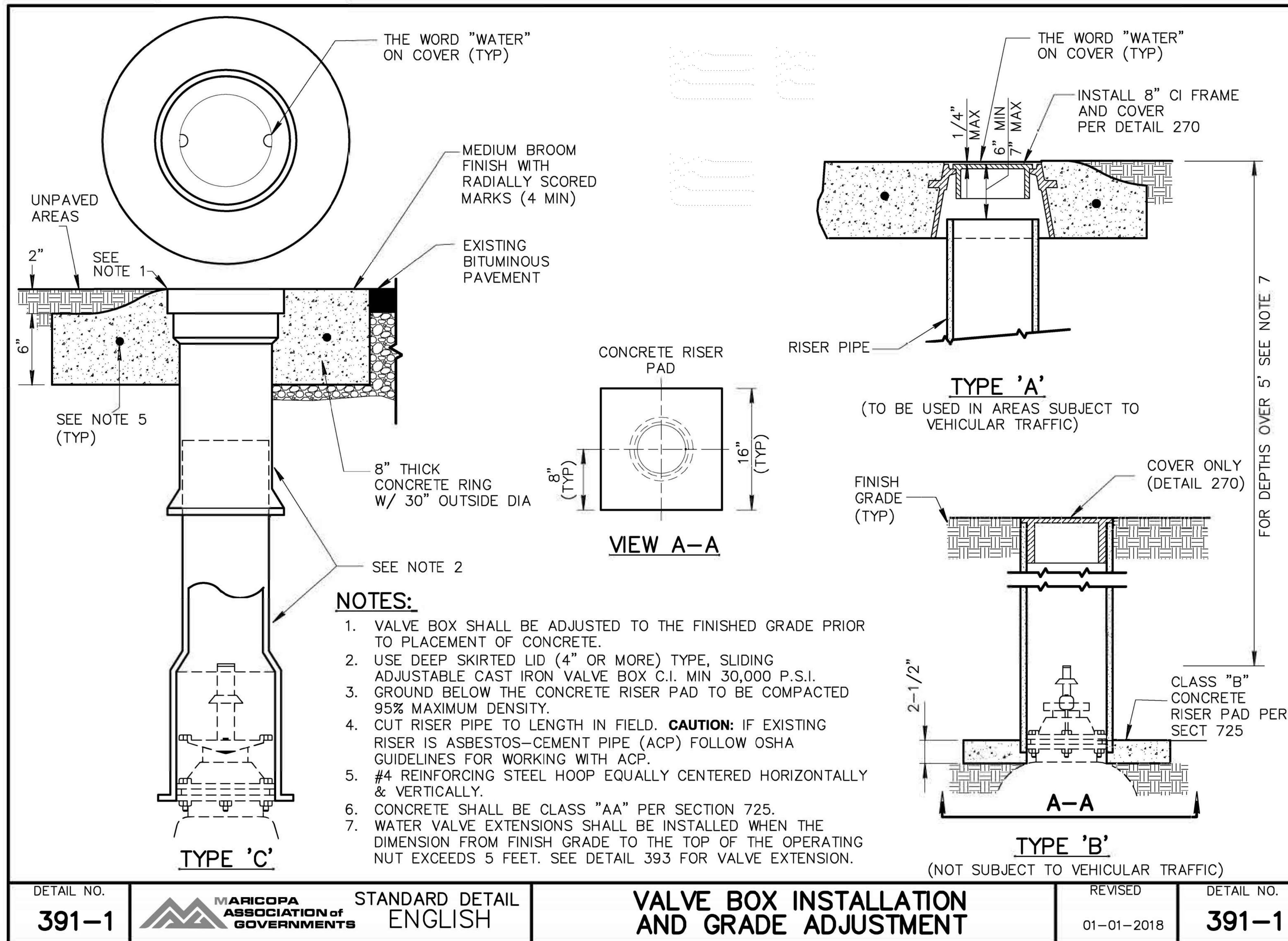
NOTE:

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DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE <small>1500 N. PROJECT DR. SUITE 102 TEMPE, AZ 85281</small>				DETAIL M10 FRONTAGE RD MAG STD DTL 320	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.19
TRACS NO. H8874 01C					OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	51	232	

060 MA 144



DETAIL M11

MAG STD DTL 391-1
Sheet 1 of 2

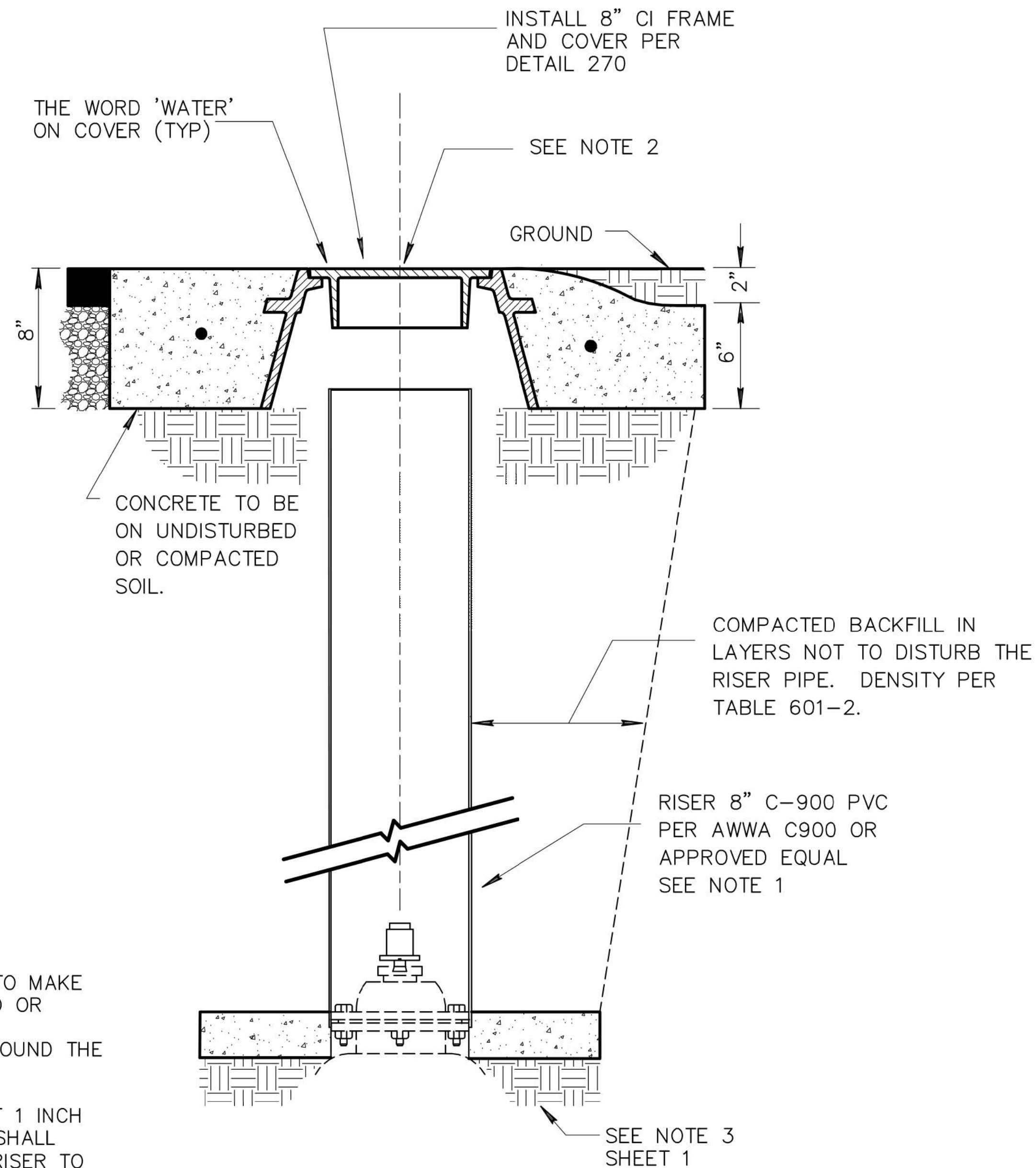
NOTE:

The details shown hereon are the product of the Maricopa Association of Governments (MAG) who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the MAG details have been noted to address specific requirements of this project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL M11 FRONTAGE RD MAG STD DTL 391-1	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-07.20
TRACS NO. H8874 01C				OF


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	52	232	

060 MA 144



NOTES:

1. IF TWO OR MORE SECTIONS OF PIPE ARE USED TO MAKE THE VALVE BOX RISER, THEY SHALL BE COUPLED OR BONDED TO FORM DEBRIS-TIGHT JOINTS.
2. VALVE BOX SHALL BE PLUMB AND CENTERED AROUND THE OPERATING NUT.
3. THE TOP OF THE VALVE SHALL BE KEPT CLEAN.
4. THE TOP OF THE RISER SHALL BE A MINIMUM OF 1 INCH ABOVE UNDISTURBED OR COMPACTED SOIL AND SHALL HAVE A MINIMUM CLEARANCE OF 2" FROM THE RISER TO THE LID SKIRT.


DRAFT		STANDARD DETAIL ENGLISH	VALVE BOX INSTALLATION AND GRADE ADJUSTMENT	REVISED	DETAIL NO.
391-2				01-01-2017	391-2

DETAIL M12

MAG STD DTL 391-2
Sheet 2 of 2

NOTE:

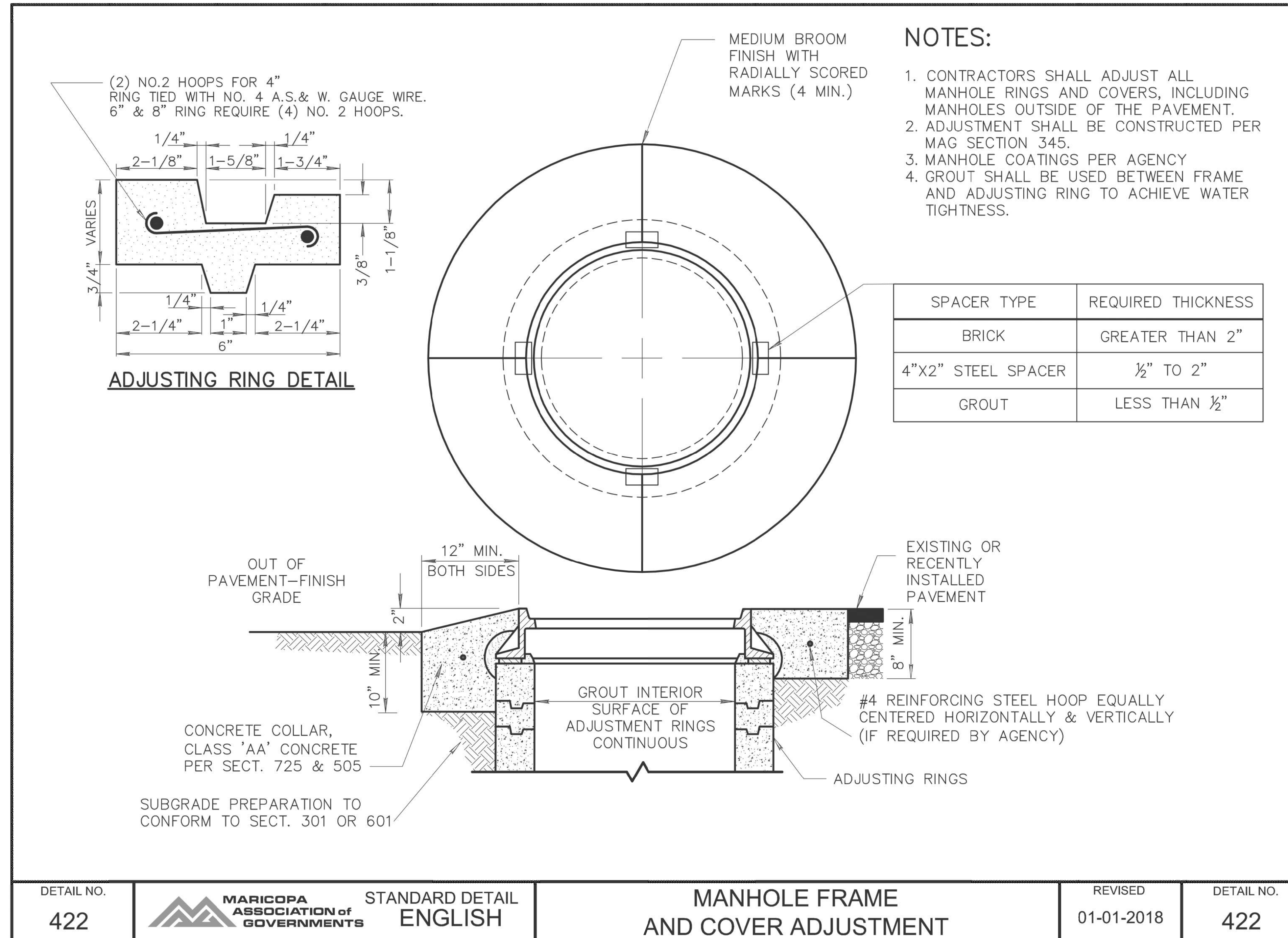
The details shown hereon are the product of the Maricopa Association of Governments (MAG) who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the MAG details have been noted to address specific requirements of this project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			DETAIL M12 FRONTAGE RD MAG STD DTL 391-2	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.21
US 60				OF
TRACS NO. H8874 01C				

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	53	232	

060 MA 144



NOTE:

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DETAIL M13

MAG STD DTL 422

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL M13 FRONTAGE RD MAG STD DTL 422	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.22
TRACS NO. H8874 01C				OF

DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	54	232	

060 MA 144

CITY OF PEORIA
STANDARD DETAIL PE-241-6
STANDARD SINGLE CURB RAMP (DIMENSIONS)

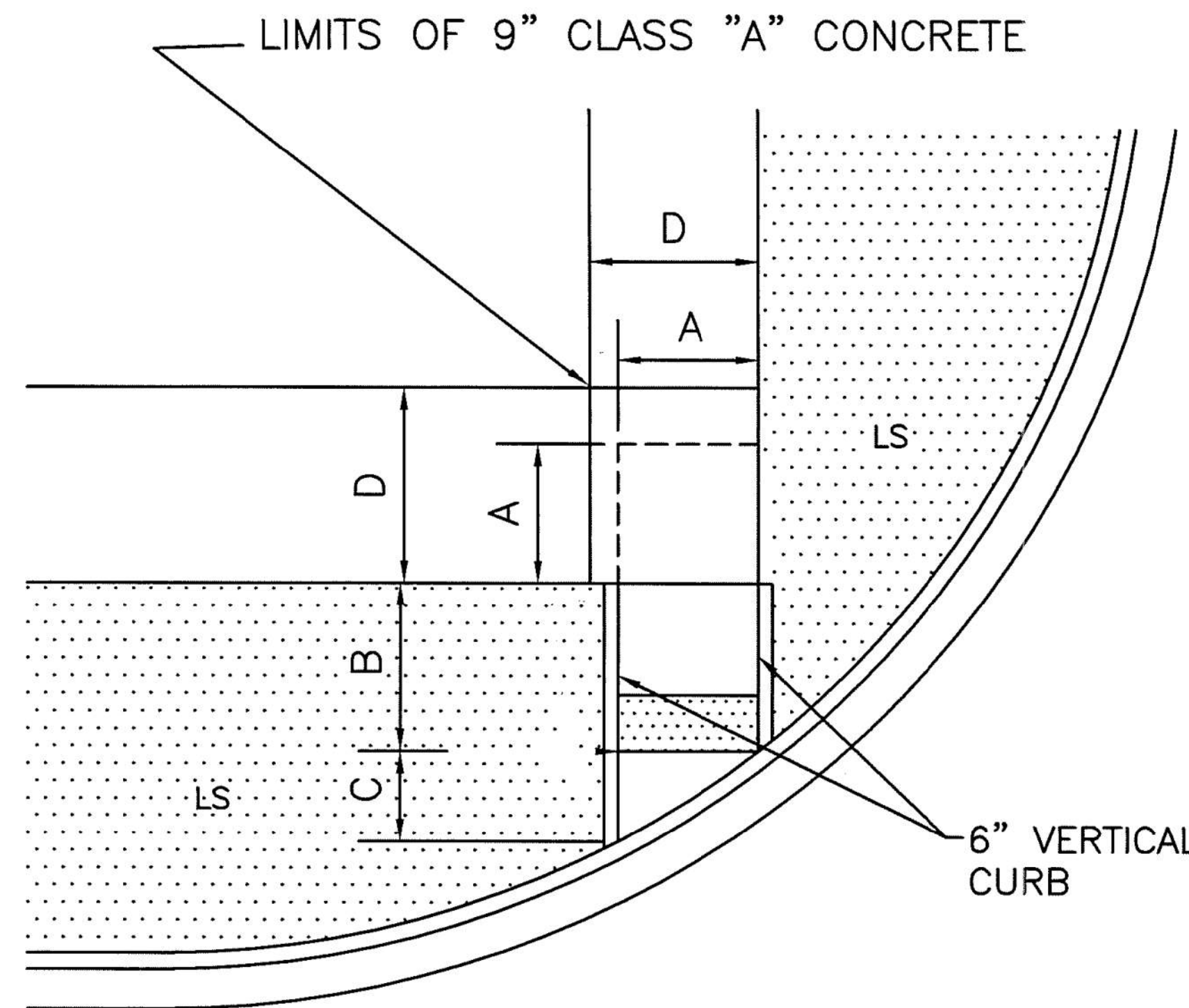
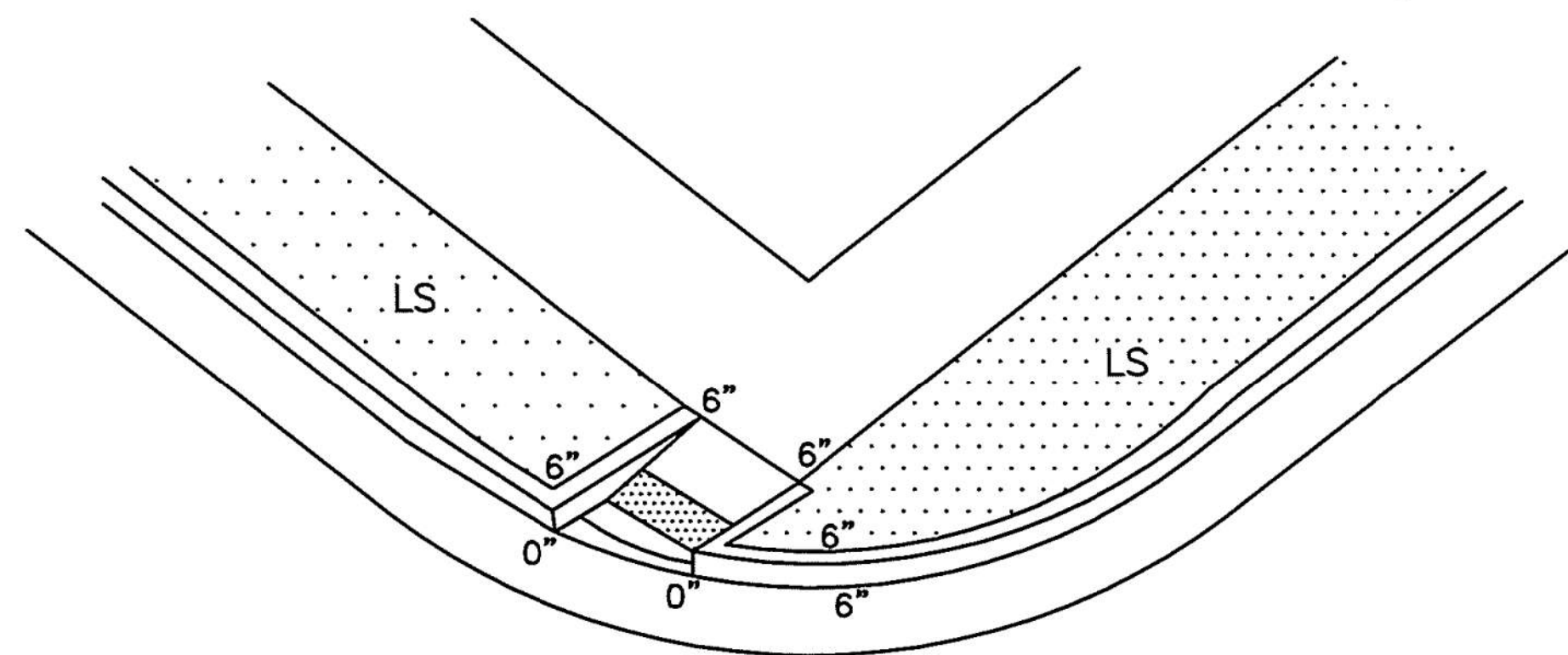


APPROVALS:  3/7/2016
ENGINEERING DIRECTOR DATE

 3/2/16
PW-UTILITIES DIRECTOR DATE

DIMENSION TABLE				
Radius (FC)	A (ft)	B (ft)	C (ft)	D (ft)
20	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
25	5' PREF 4' MIN	6' MIN	5' MAX	6' PREF 5' MIN
30	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN
35	5' PREF 4' MIN	6' MIN	5' MAX	8' PREF 5' MIN

- NOTES:
1. Refer to PE-241-1 for Construction Notes.
2. Refer to PE-241-2 for slope requirements.




3/1/2016

NOTE:

The details shown hereon are the product of the City of Peoria who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the City of Peoria details have been noted to address specific requirements of this project.

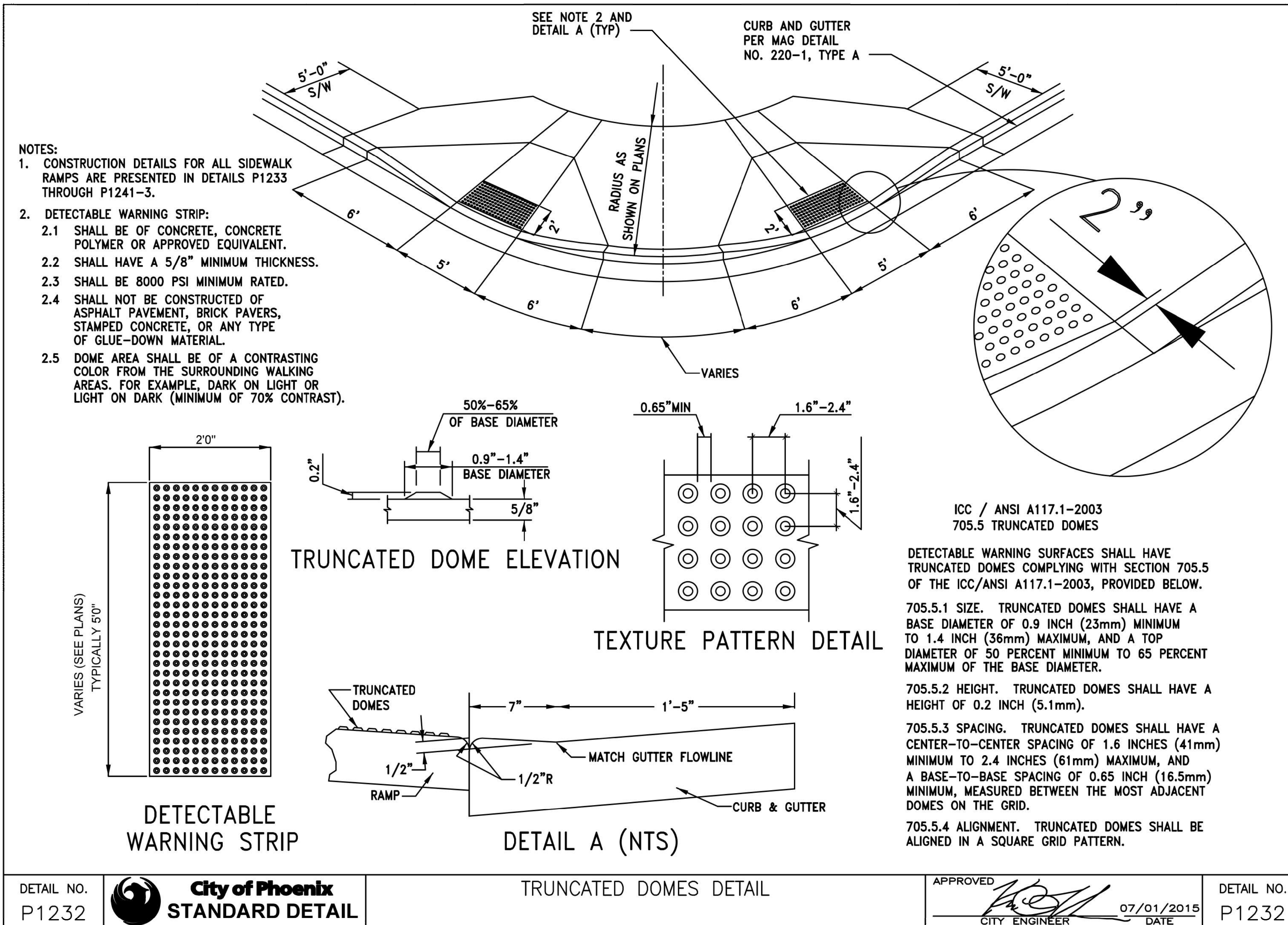
DETAIL P
CITY OF PEORIA STD DTL PE-241-6

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	 36634 TODD J. CENCIMINO PE, AZ 02/18/18
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE		1500 N. PRIST DR. SUITE 102 TEMPE, AZ 85281		DETAIL P FRONTAGE RD CITY OF PEORIA STD DTL PE-241-6
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.23
TRACS NO. H8874 01C				OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	55	232	

060 MA 144



DETAIL NO. P1232	City of Phoenix STANDARD DETAIL	TRUNCATED DOMES DETAIL	APPROVED CITY ENGINEER	DATE 07/01/2015	DETAIL NO. P1232
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DETAIL P1

CITY OF PHOENIX STD DTL P1232

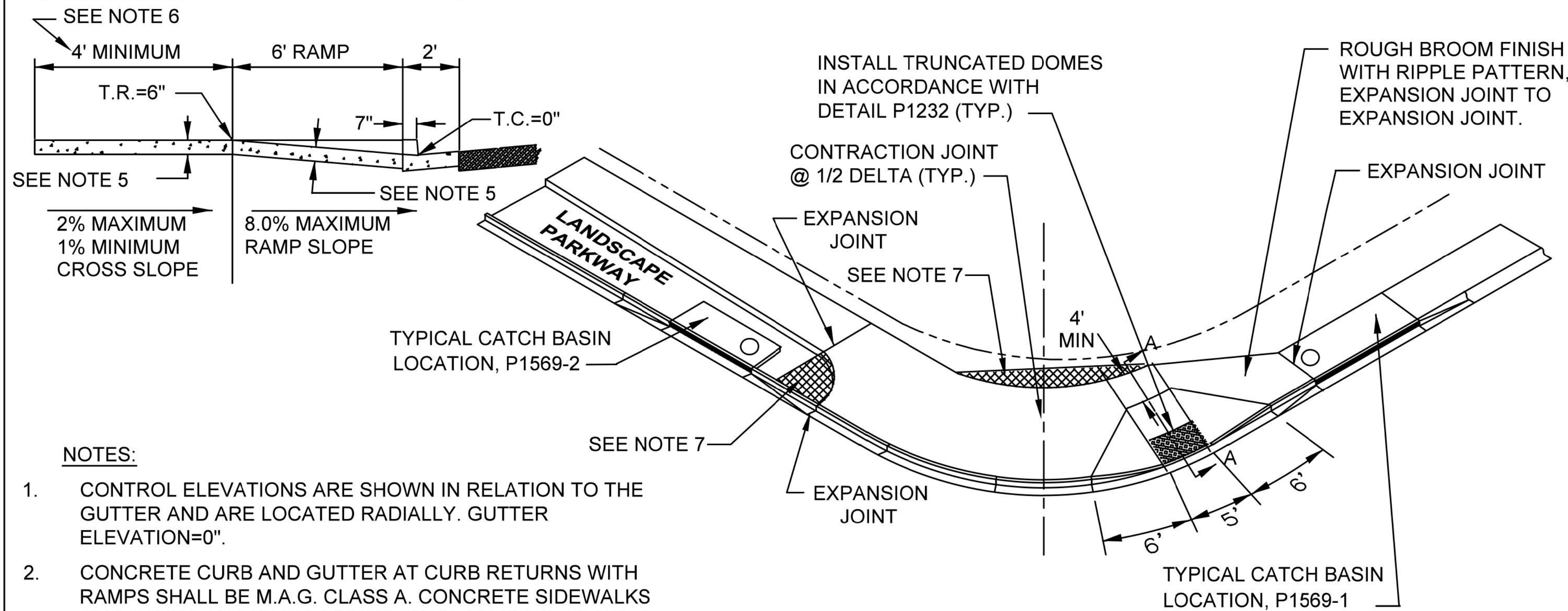
NOTE:
The details shown hereon are the product of the City of Phoenix who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the City of Phoenix details have been noted to address specific requirements of this project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL P1 FRONTAGE RD CITY OF PHOENIX STD DTL P1232	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.24
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	56	232	

060 MA 144

SECTION A-A (TYP.)



NOTES:

- CONTROL ELEVATIONS ARE SHOWN IN RELATION TO THE GUTTER AND ARE LOCATED RADIALLY. GUTTER ELEVATION=0".
- CONCRETE CURB AND GUTTER AT CURB RETURNS WITH RAMPS SHALL BE M.A.G. CLASS A. CONCRETE SIDEWALKS AND RAMPS AT CURB RETURNS SHALL BE M.A.G. CLASS A.
- RAMP CURBS MAY BE POURED MONOLITHIC WITH A CONTRACTION JOINT.
- EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER A.S.T.M. D-1751
- 9" THICK LANDING, RAMPS, AND CURBS FROM EXPANSION JOINT TO EXPANSION JOINT ON MAJOR OR COLLECTOR STREETS. 4" THICK LANDING AND RAMPS ON LOCAL STREETS.
- MAINTAIN THE PLANE OF THE LANDING ONE FOOT (1ft.) BEYOND THE TOP OF LANDING.
- ADDITIONAL SIDEWALK PER NOTE 2 & 5 WHEN SIGNAL POLES ARE LOCATED IN THESE AREAS.

DETAIL NO. P1240	City of Phoenix STANDARD DETAIL	SINGLE CURB RAMP DETAIL ALL RADIUS CURB RETURNS	APPROVED CITY ENGINEER	07/01/2015 DATE	DETAIL NO. P1240
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DETAIL P2

CITY OF PHOENIX STD DTL P1240

NOTE:

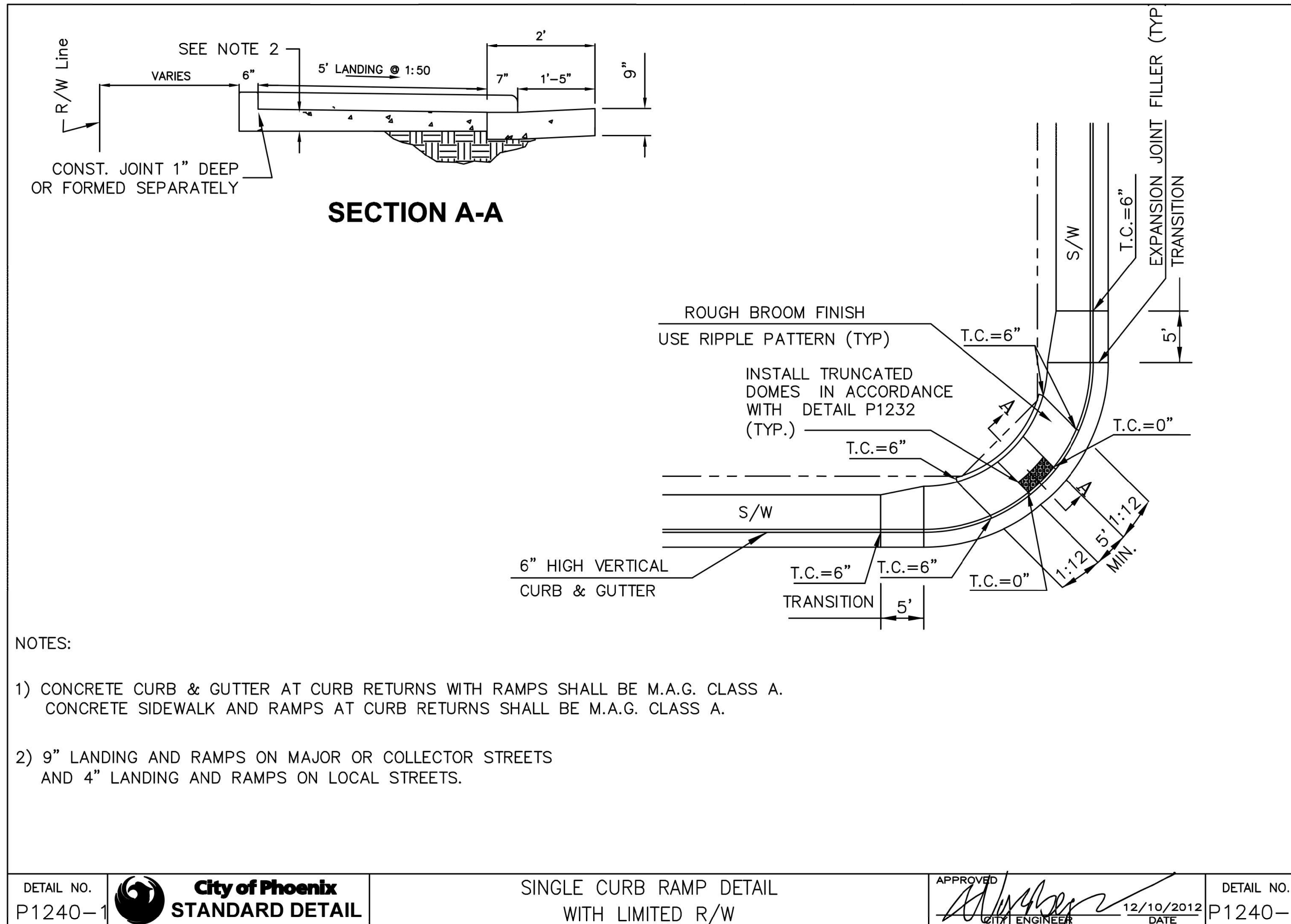
The details shown hereon are the product of the City of Phoenix who is solely responsible for their design, content and any specifications or other information referenced therein. Exceptions to the City of Phoenix details have been noted to address specific requirements of this project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE		DETAIL P2 FRONTAGE RD CITY OF PHOENIX STD DTL P1240		
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. G-07.25
US 60		TRACS NO. H8874 01C		OF

DATE- LOCATION- FINISHED PLANS- REVISIONS- SURVEY NO.-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	57	232	

060 MA 144



DETAIL P3

CITY OF PHOENIX STD DTL P1240-1

NOTE:

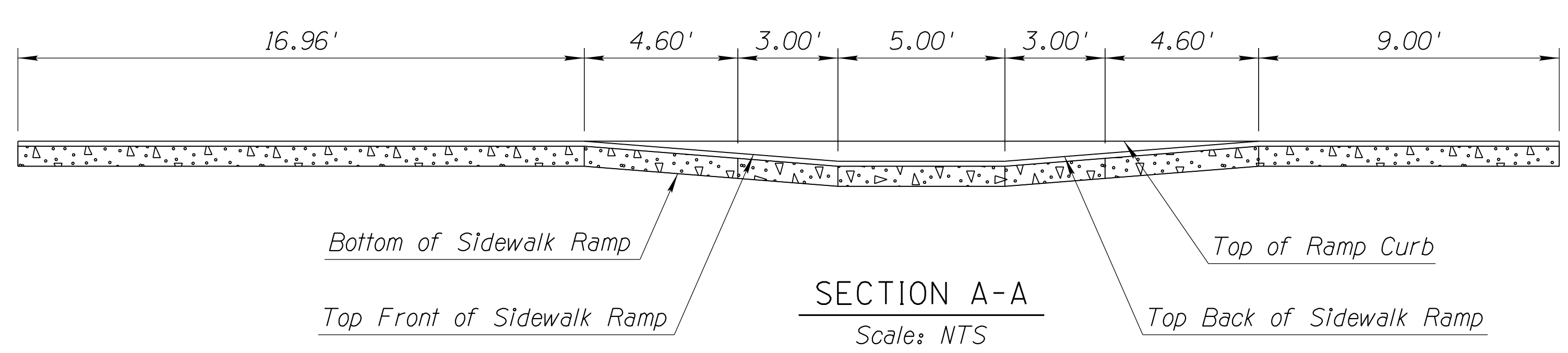
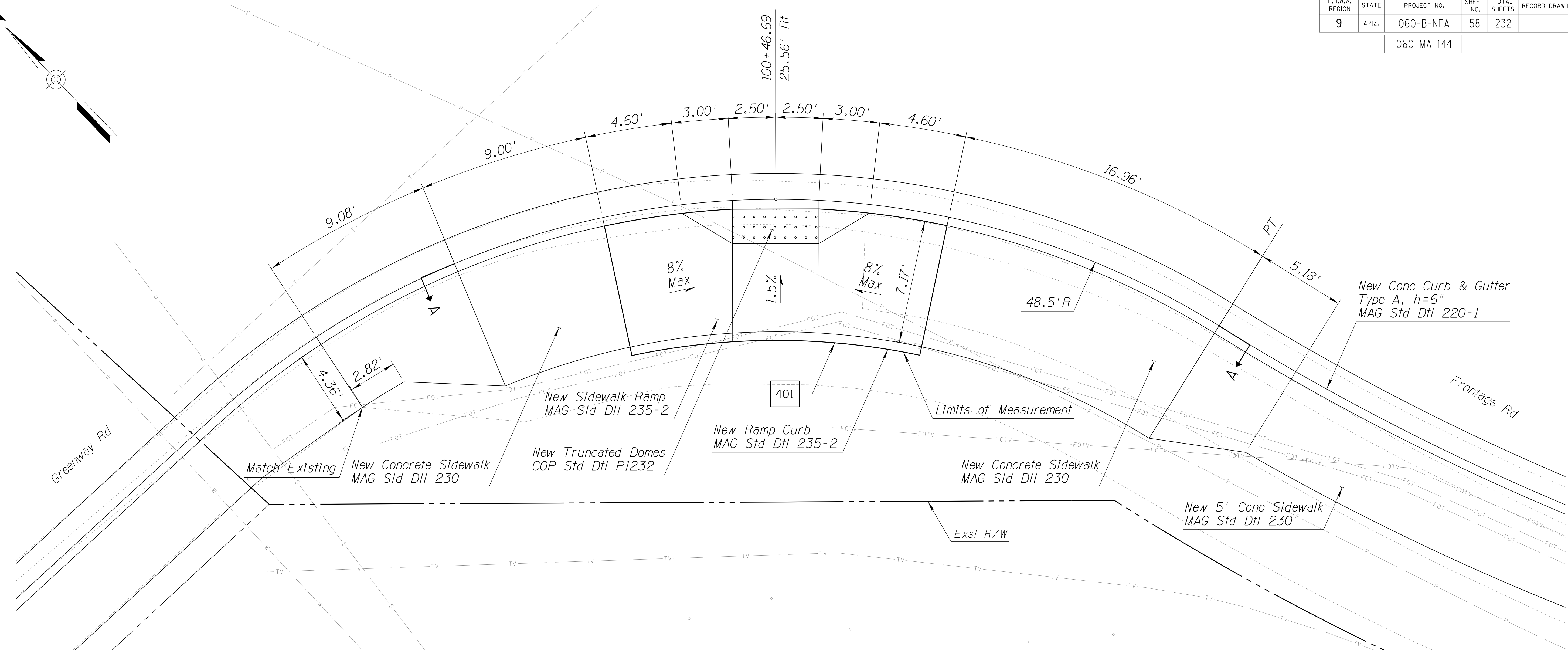
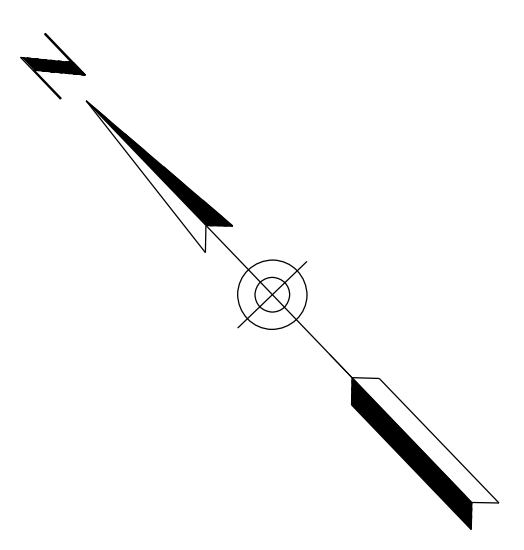
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DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIST DR. SUITE 102 TEMPE, AZ 85281			DETAIL P3 FRONTAGE RD CITY OF PHOENIX STD DTL P1240-1	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-07.26
TRACS NO. H8874 01C				OF

DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	58	232	

060 MA 144



NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see MAG Std Dtl 235-2, Detail M4.
4. Ramp curb will not be measured or paid separately and will be included in the cost of adjacent sidewalk ramps.

DETAIL S1

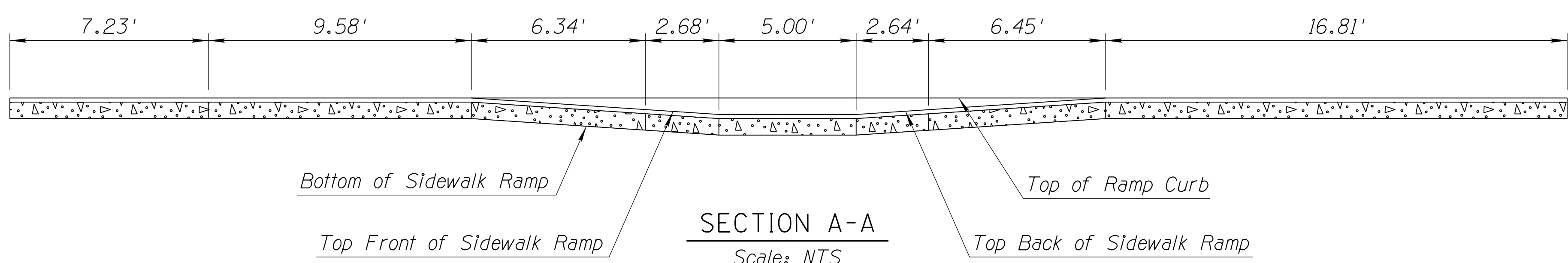
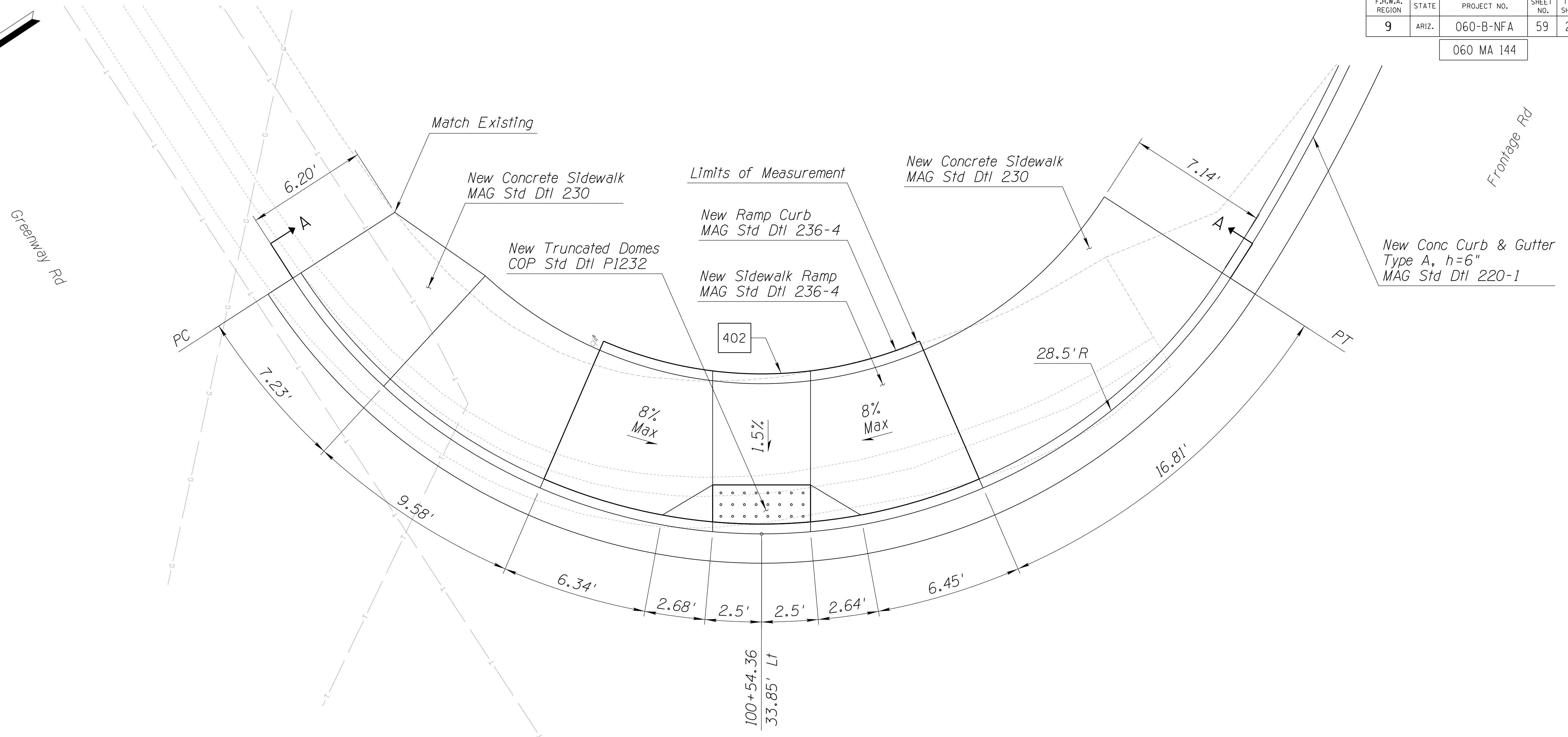
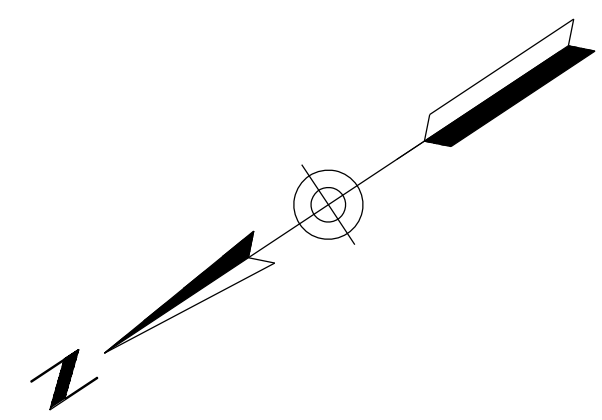
SIDEWALK RAMP DETAIL

DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281		DETAIL S1 FRONTAGE RD SIDEWALK RAMP DETAILS	36634 TODD J. CENCIMINO State Engineer License No. 36634 State of Arizona EXPIRES 09/30/19 DWG NO. G-07.27
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C					

SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	59	232	

060 MA 144



NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see MAG Std Dtl 235-2, Detail M4.
4. Ramp curb will not be measured or paid separately and will be included in the cost of adjacent sidewalk ramps.

DETAIL S2

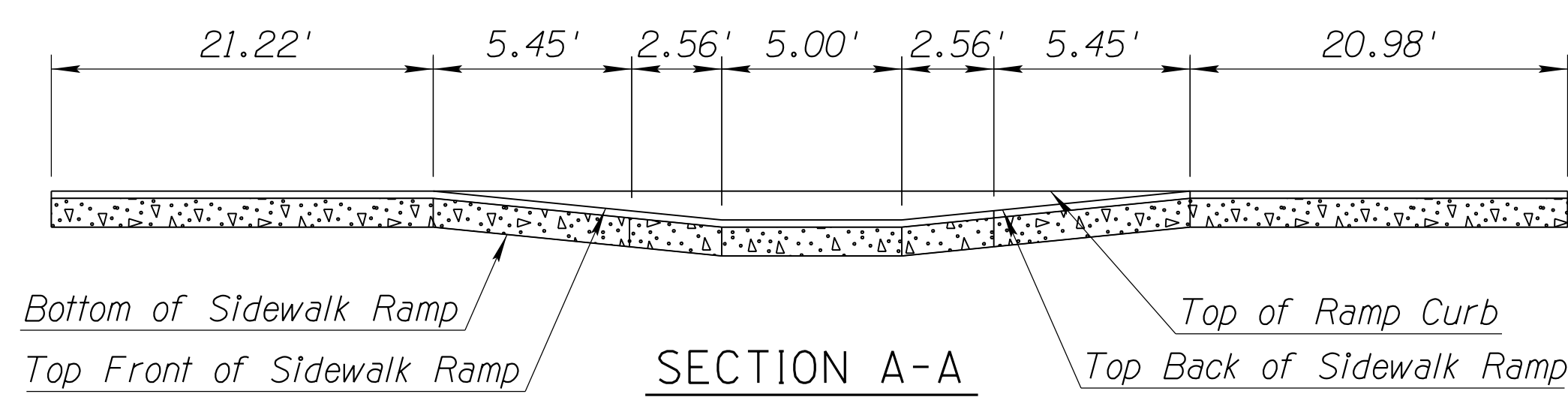
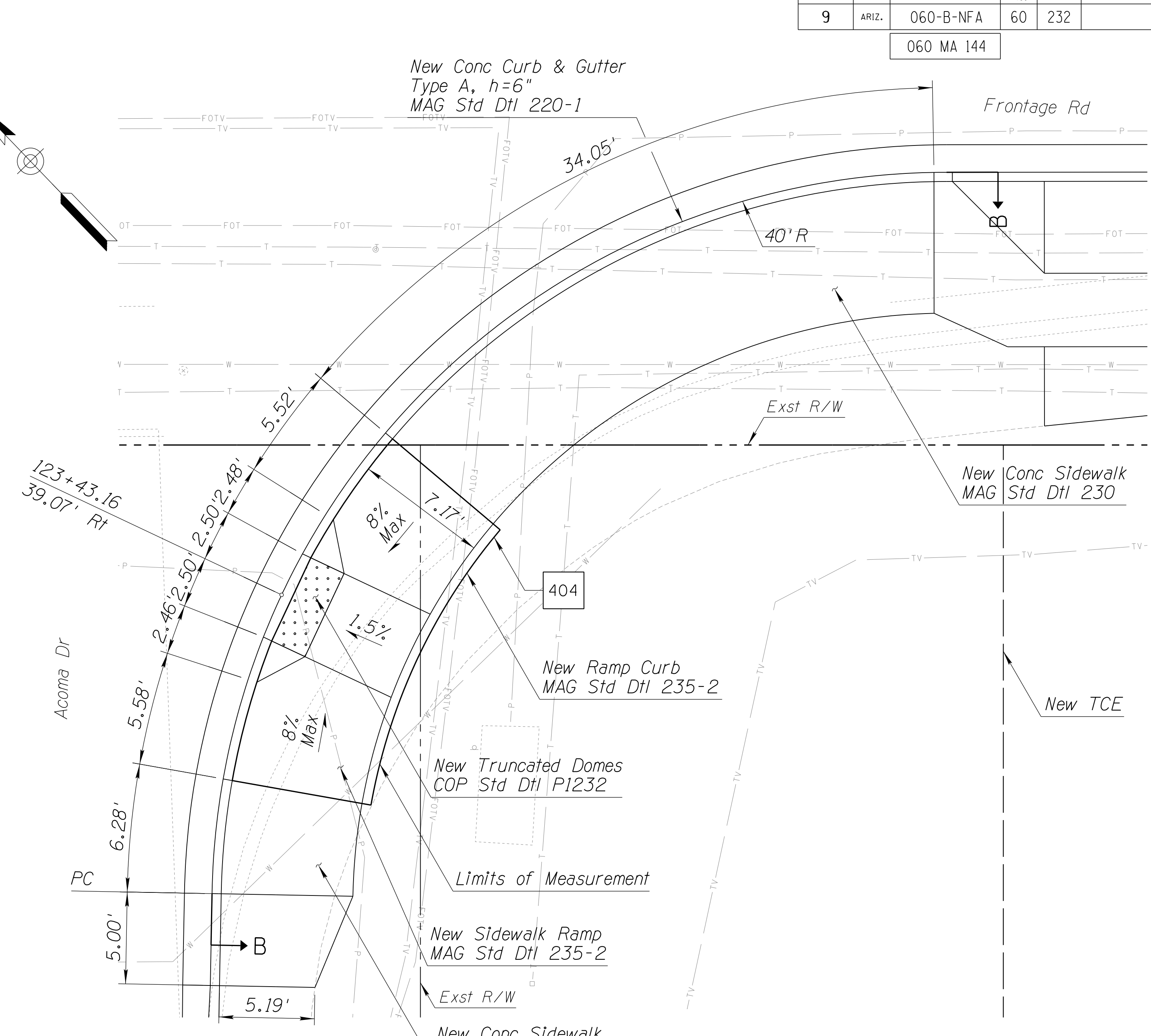
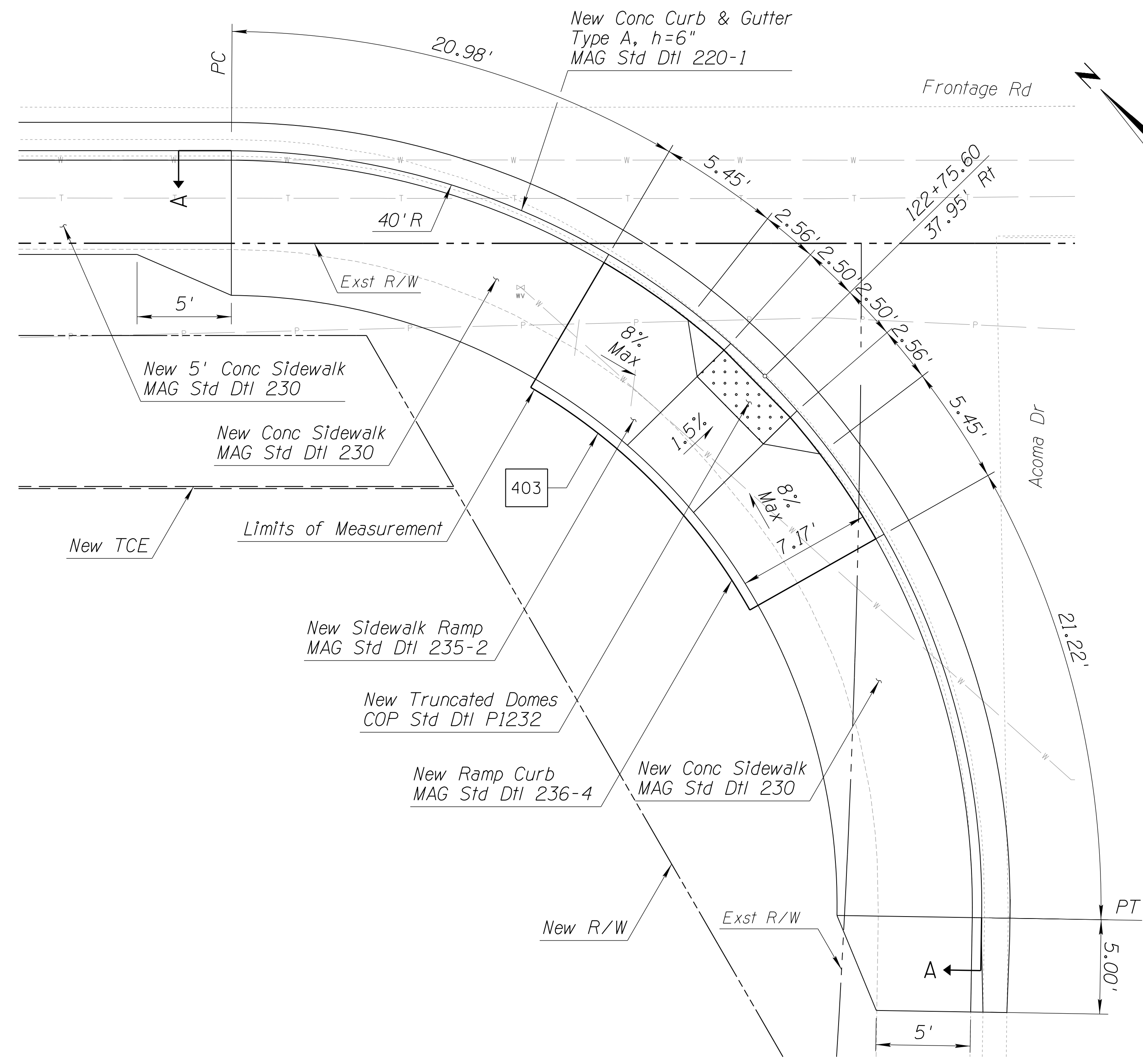
SIDEWALK RAMP DETAIL

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL S2 FRONTAGE RD SIDEWALK RAMP DETAILS	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-07.28
TRACS NO. H8874 01C				OF

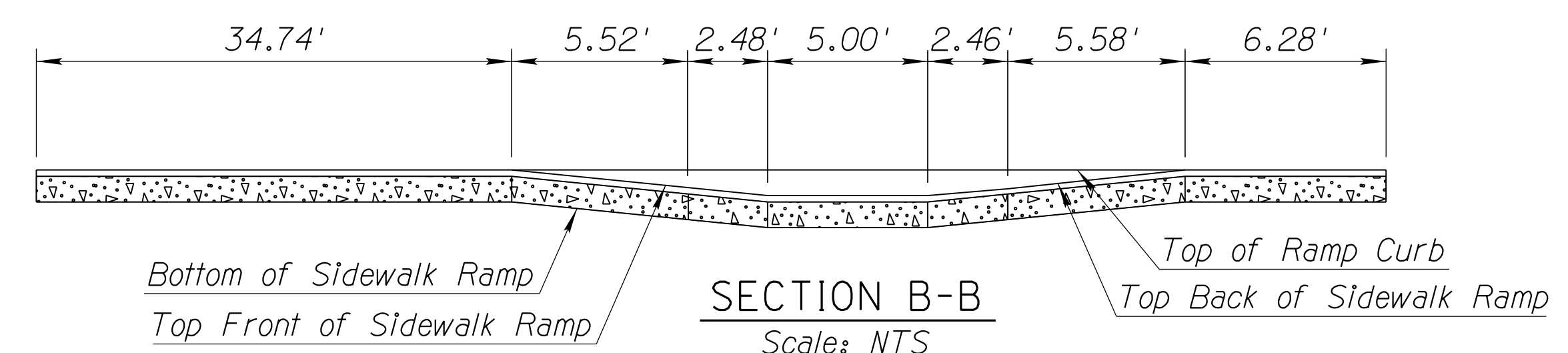
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	60	232	

060 MA 144



SECTION A-A
Scale: NTS



SECTION B-B
Scale: NTS

NOTES:

1. Stations and offsets reference the Frontage Rd Cst &.
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see MAG Std Dtl 235-2, Detail M4.
4. Ramp curb will not be measured or paid separately and will be included in the cost of adjacent sidewalk ramps.

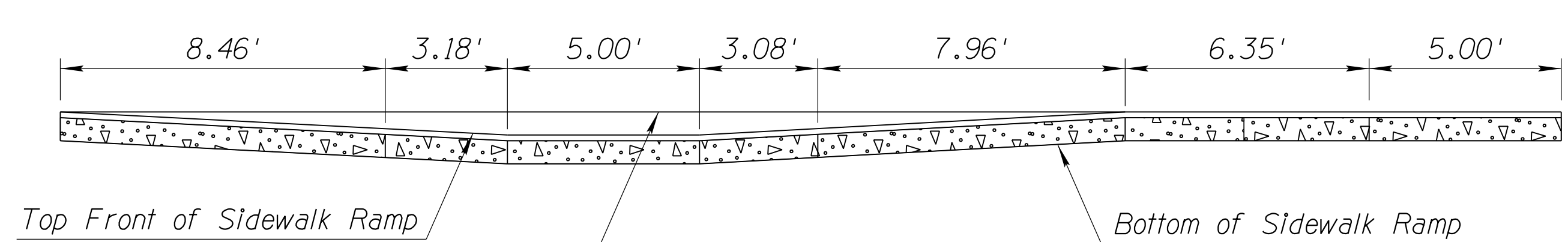
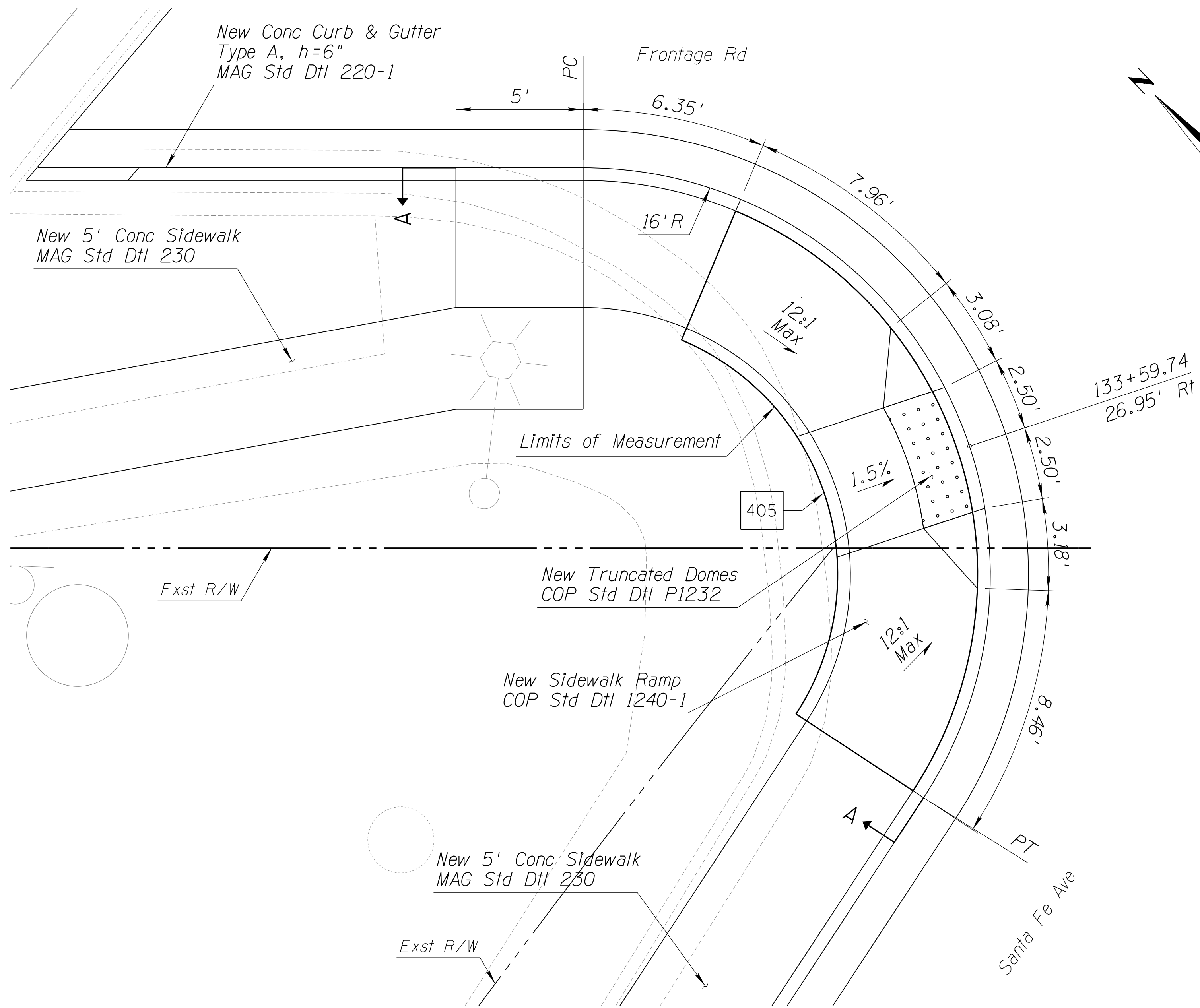
DETAIL S3

SIDEWALK RAMP DETAILS

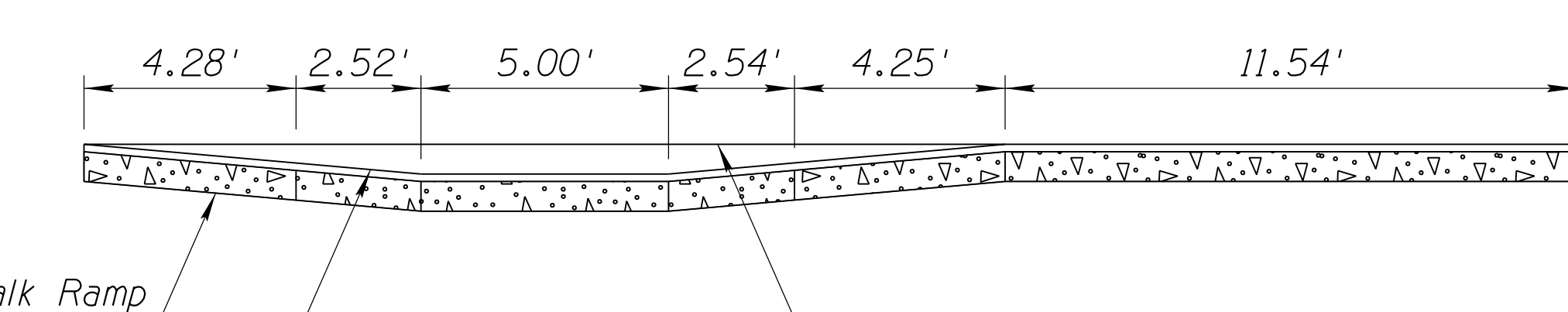
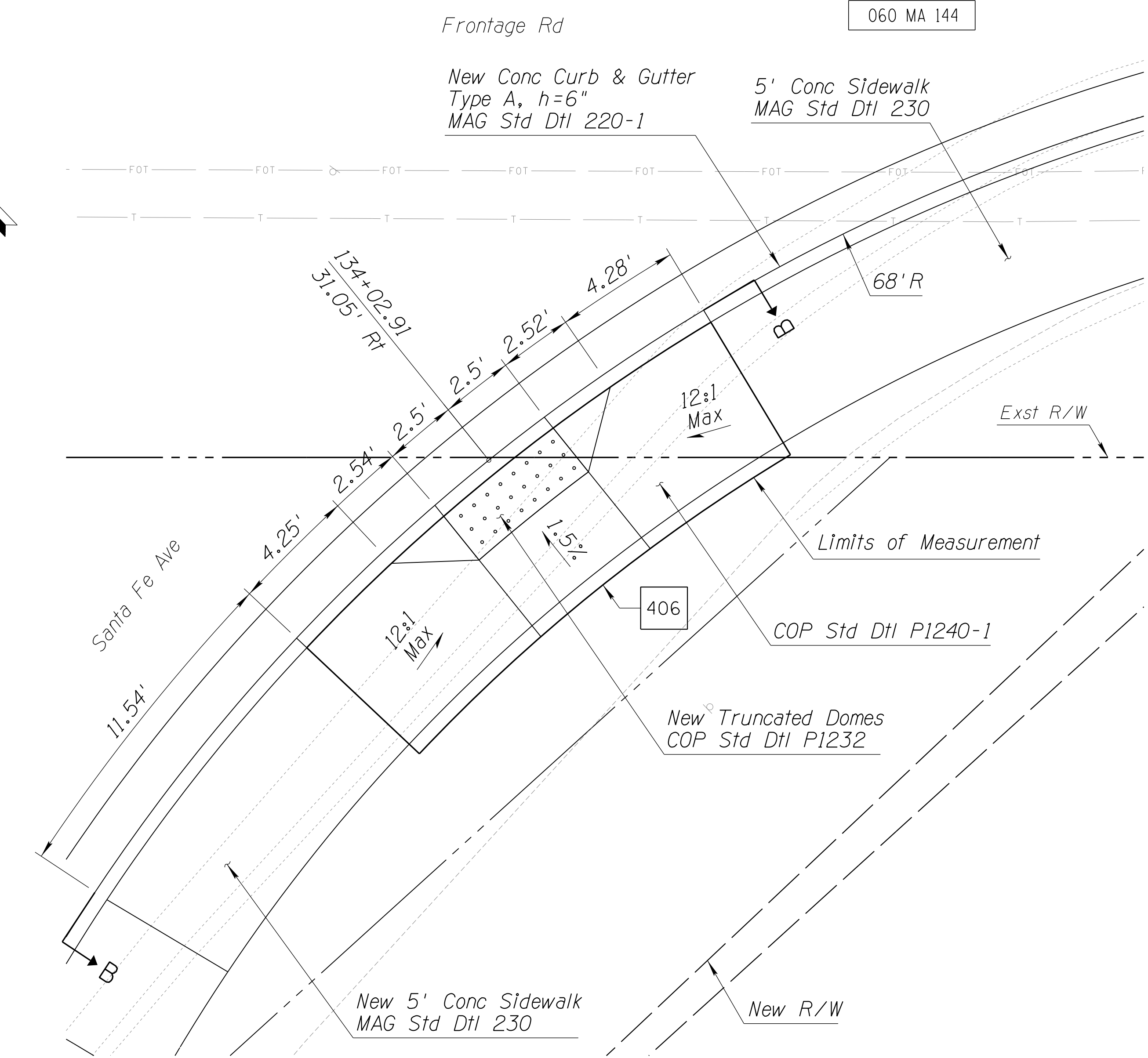
DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES DETAIL S3 FRONTAGE RD SIDEWALK RAMP DETAILS	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. G-07.29	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	61	232	

060 MA 144



SECTION A-A
Scale: NTS



SECTION B-B
Scale: NTS

NOTES:

1. Stations and offsets reference the Frontage Rd Cst &.
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see City of Phoenix Std Dtl P1240, Detail P2.

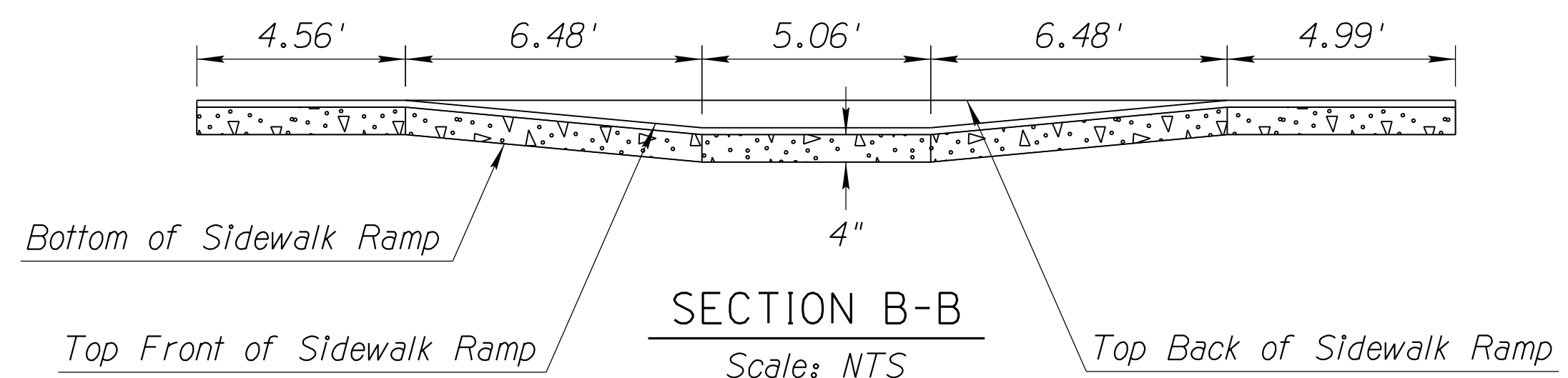
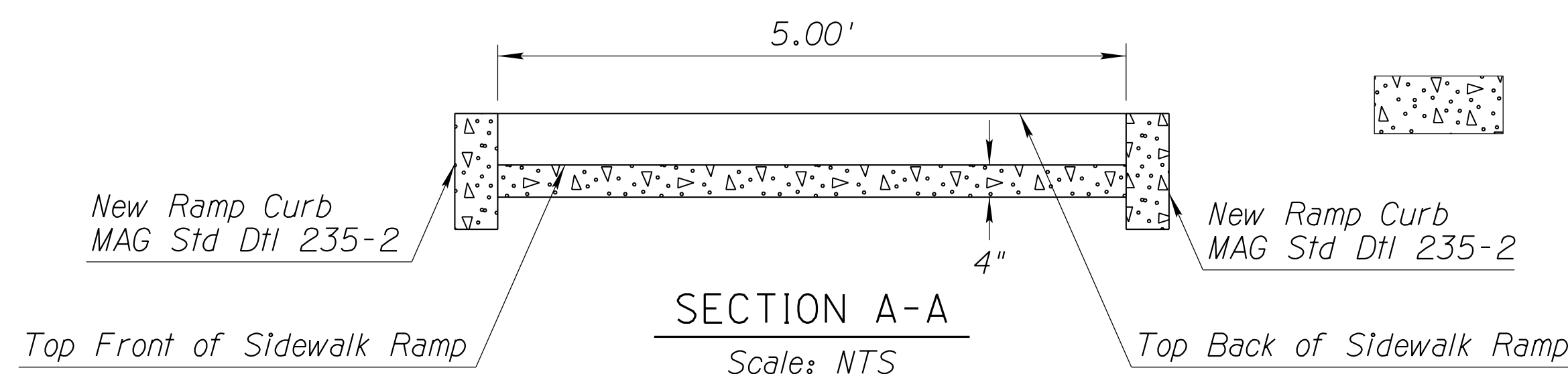
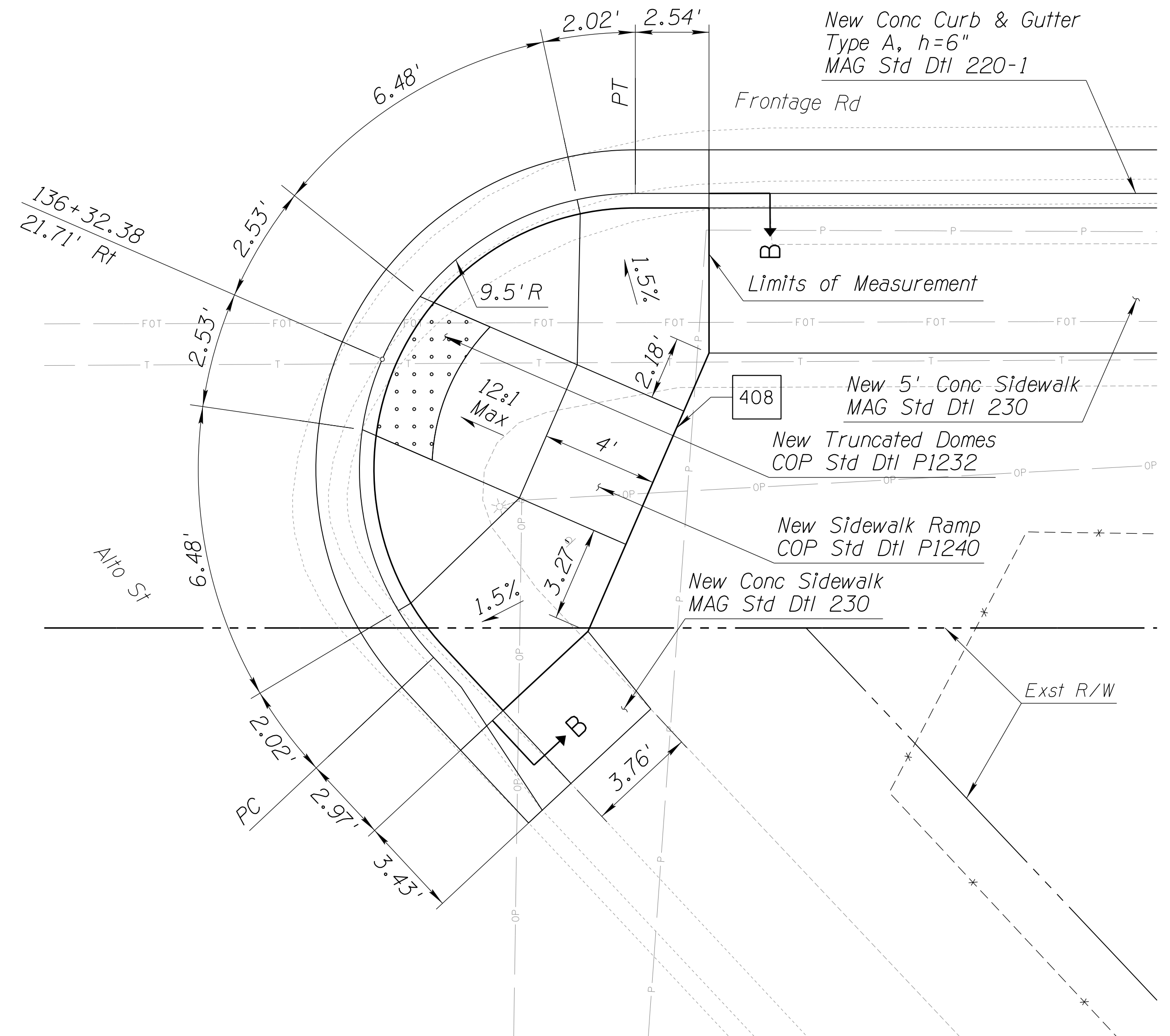
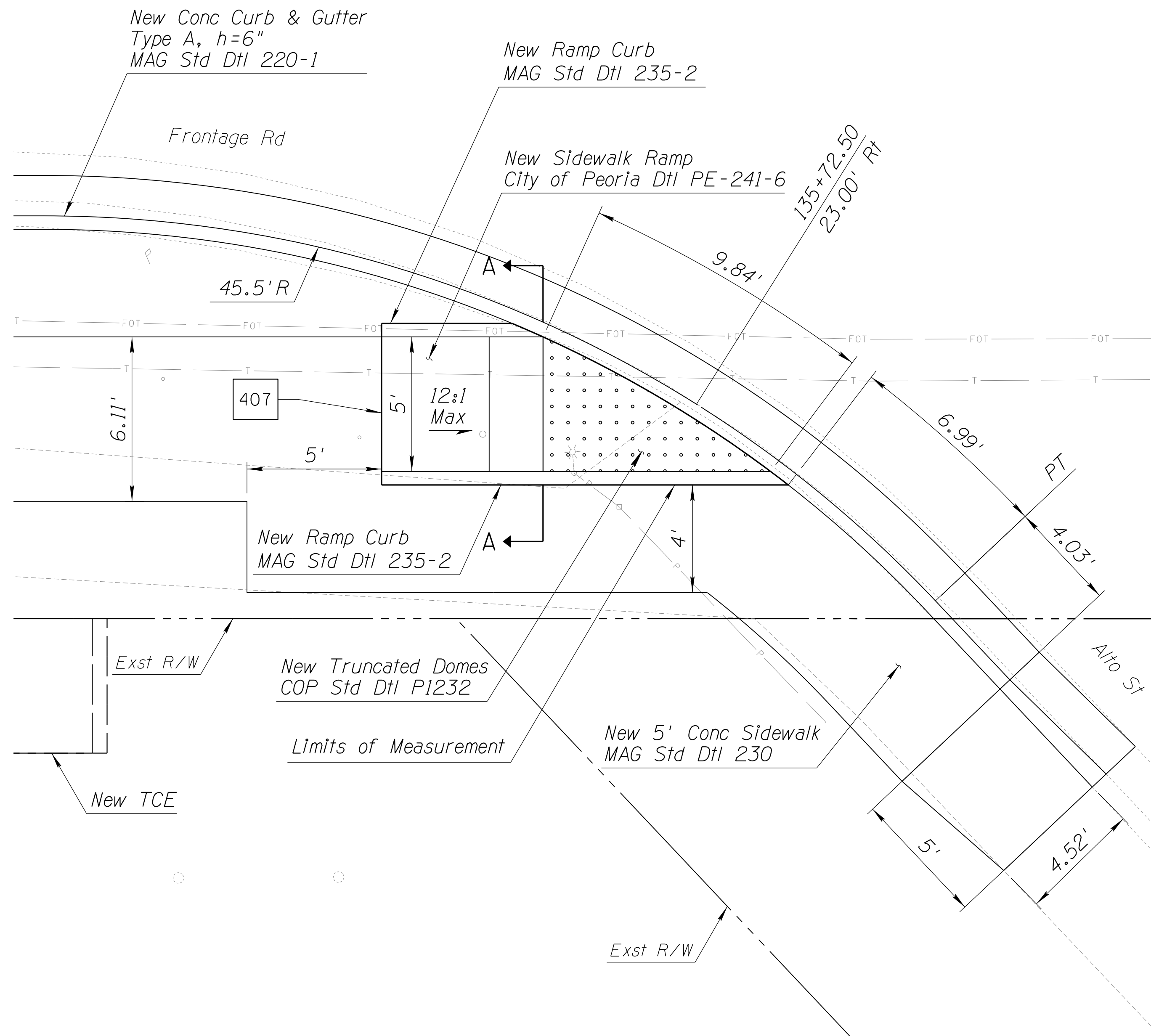
DETAIL S4

SIDEWALK RAMP DETAILS

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL S4 FRONTAGE RD SIDEWALK RAMP DETAILS	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. G-07.30
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	62	232	

060 MA 144



NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see City of Peoria Dtl PE-241-6, Detail P, and City of Phoenix Std Dtl P1240, Detail P2.
4. Ramp curb will not be measured or paid separately and will be included in the cost of adjacent sidewalk ramps.

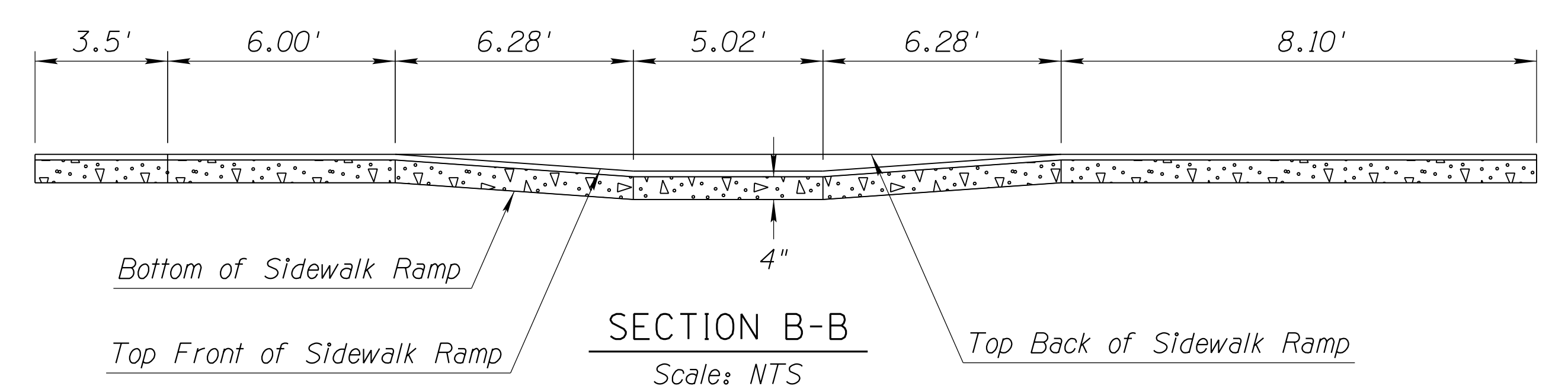
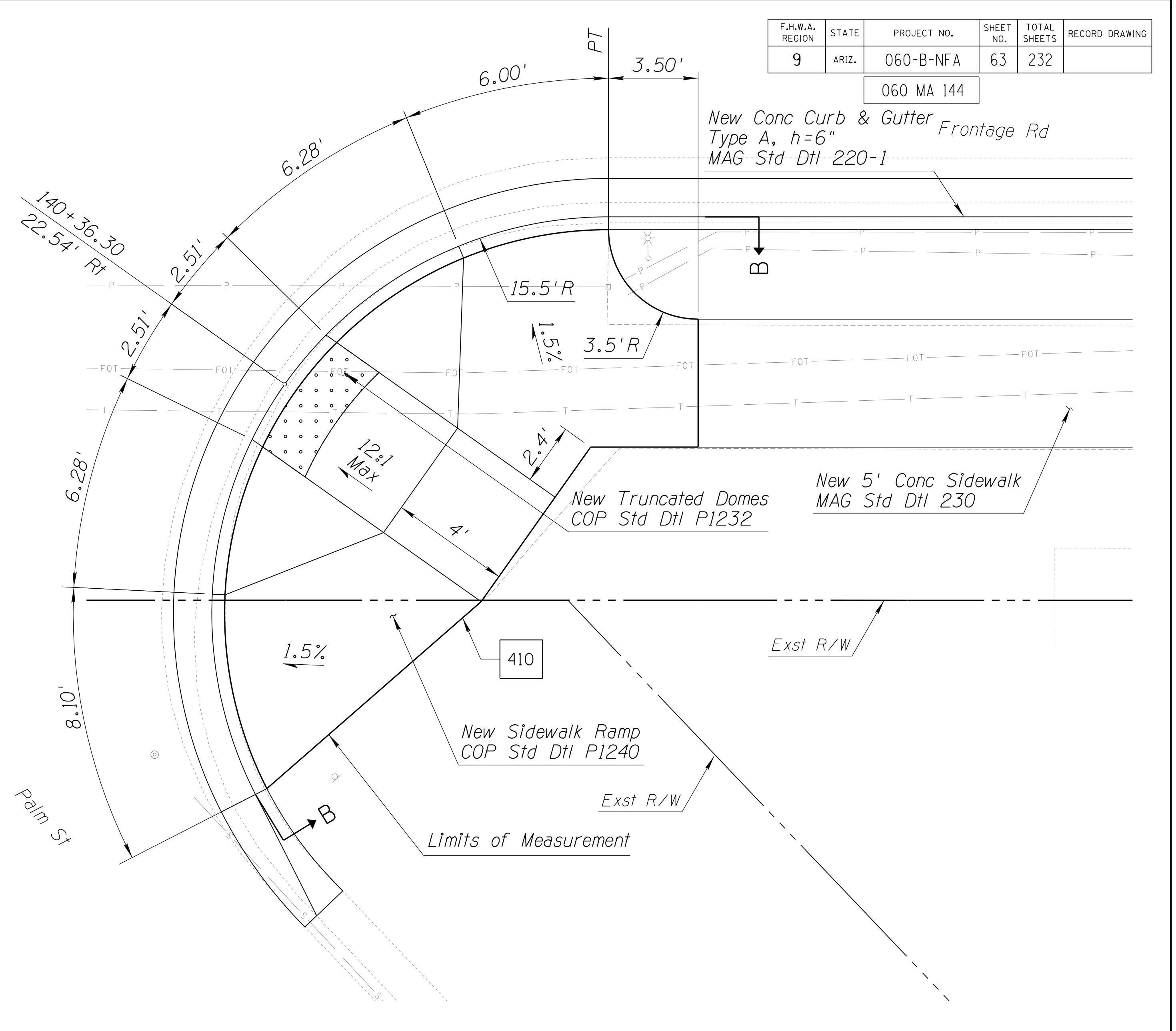
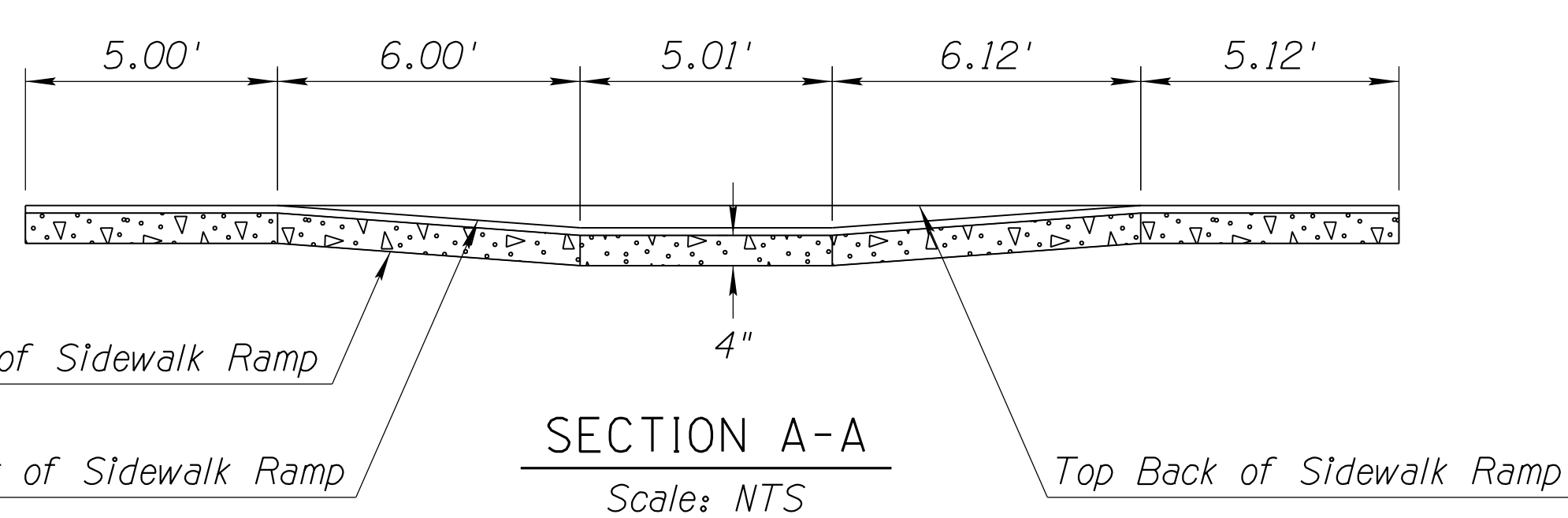
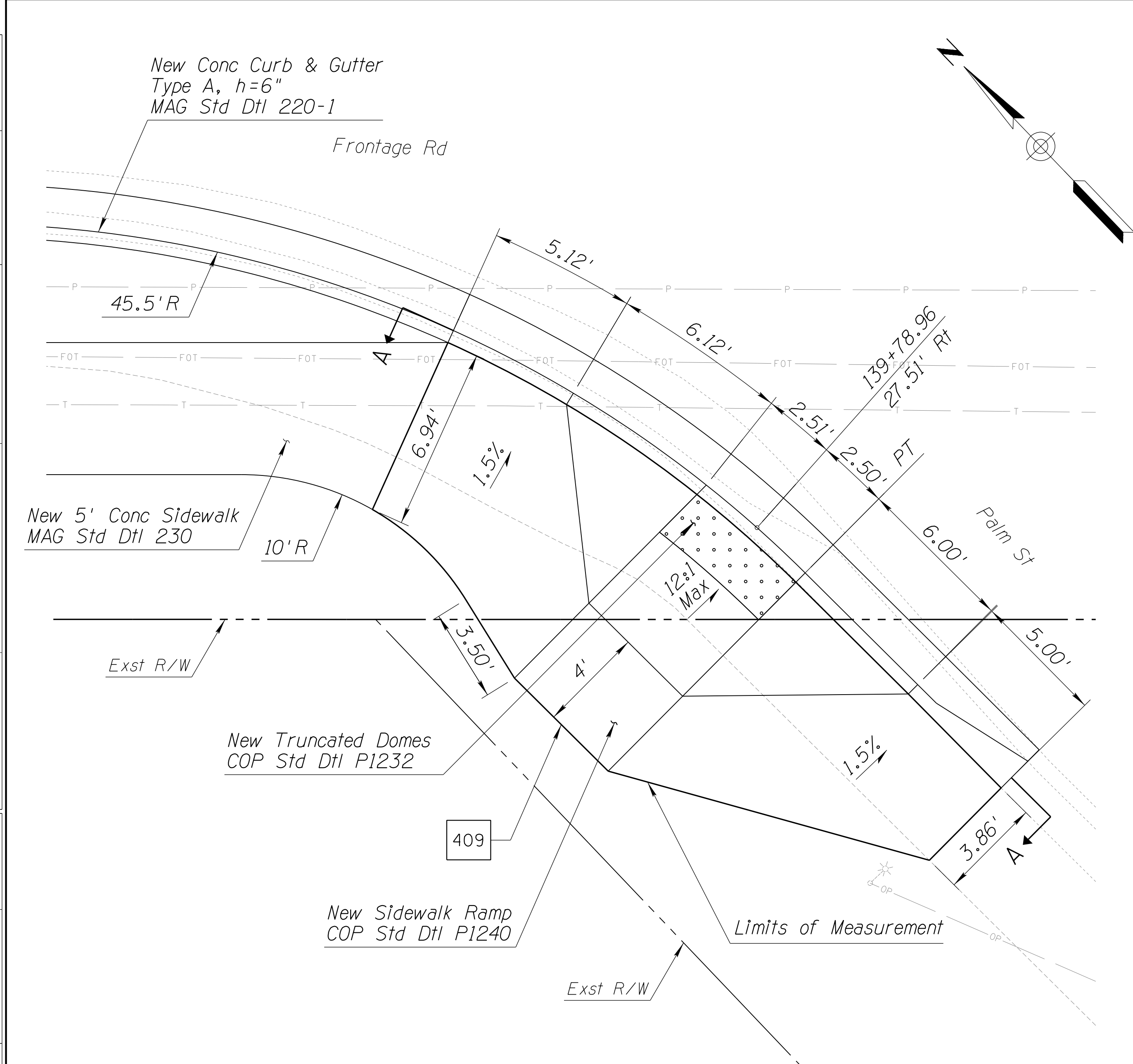
DETAIL S5

SIDEWALK RAMP DETAILS

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	DCL	02/18	
CHECKED	WWS	02/18	
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			DETAIL S5 FRONTAGE RD SIDEWALK RAMP DETAILS
ROUTE	LOCATION		
US 60	GRAND AVENUE FRONTAGE ROAD		 <small>36634 TODD J. CENCIMINO No. Expires 09/30/19</small>
TRACS NO. H8874 01C			DWG NO. G-07.31

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	63	232	

060 MA 144



NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see City of Phoenix Std Dtl P1240, Detail P2.

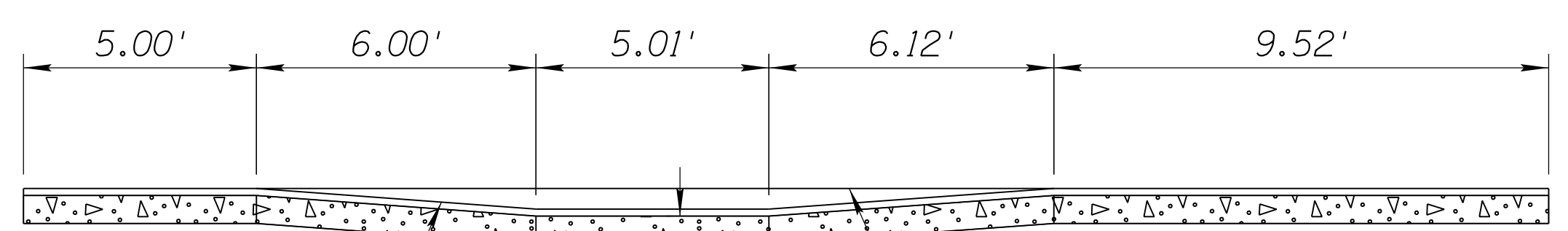
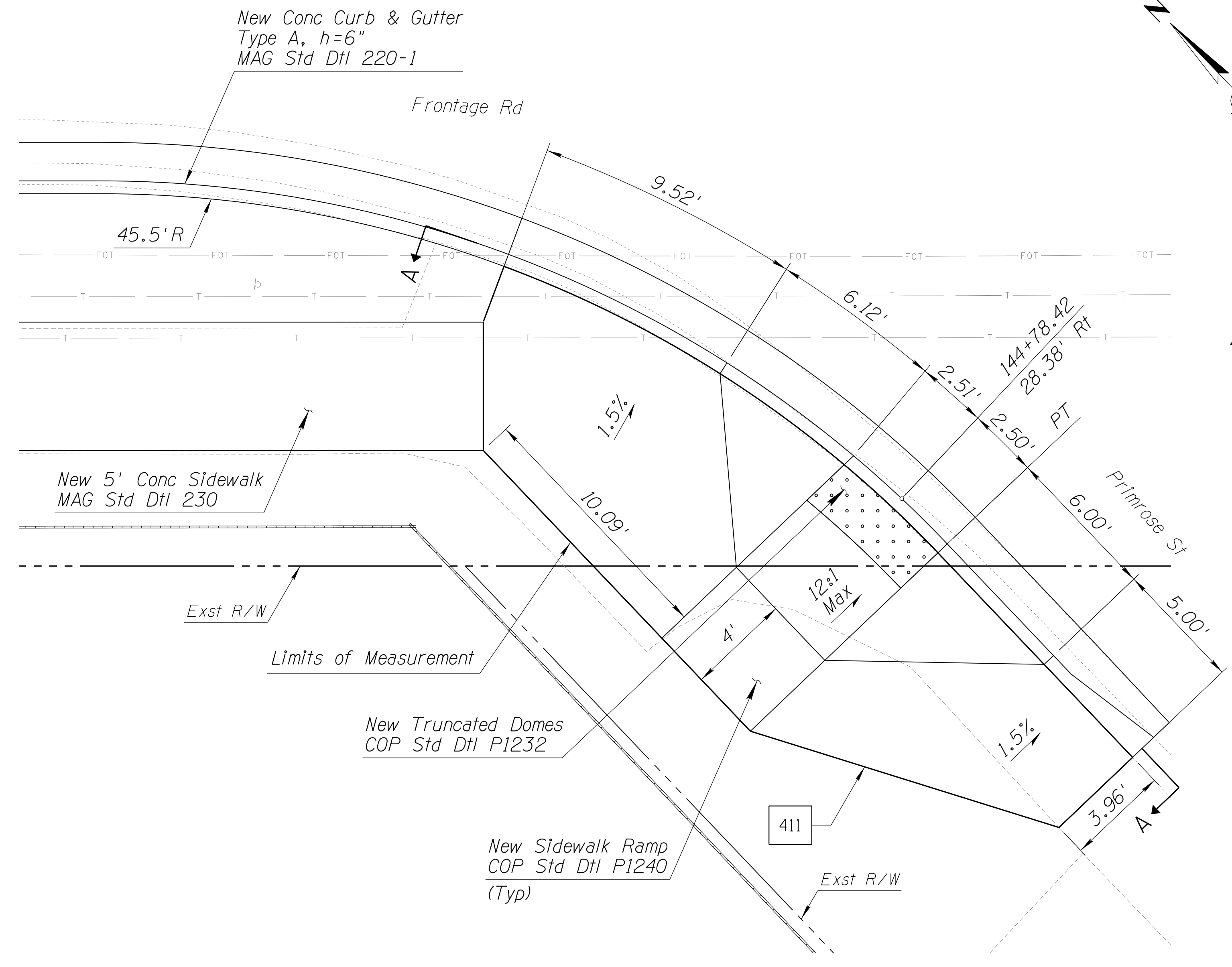
DETAIL S6

SIDEWALK RAMP DETAILS

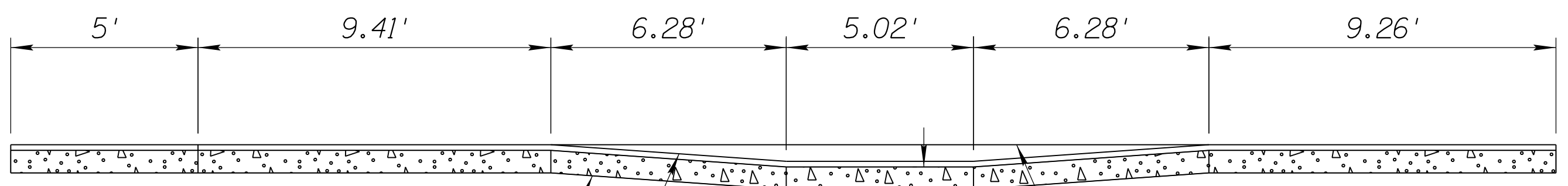
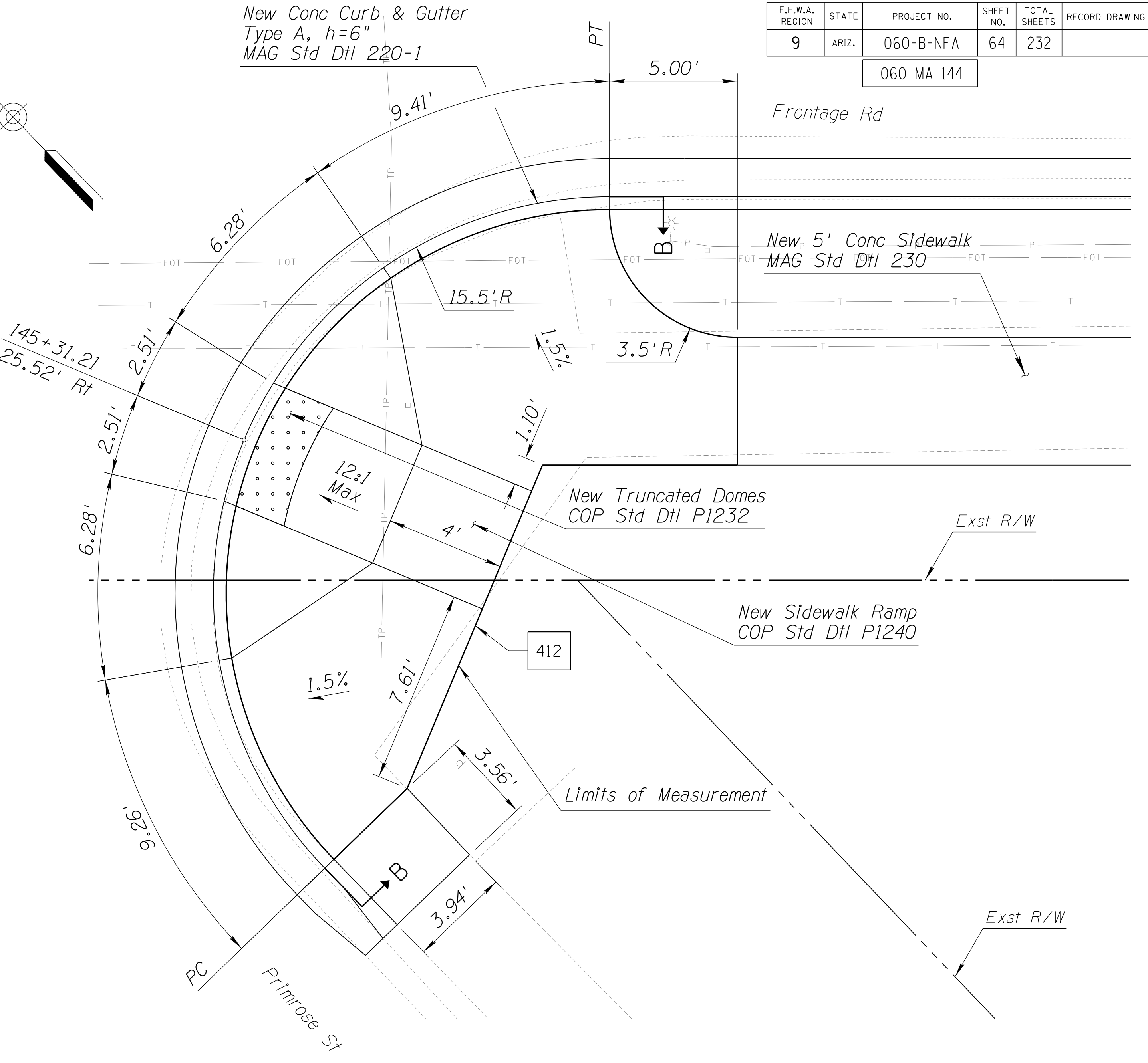
DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			DETAIL S6 FRONTAGE RD SIDEWALK RAMP DETAILS	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60			DWG NO. G-07.32	
TRACS NO. H8874 01C			OF	

DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO. DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO. DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	64	232	
060 MA 144					



SECTION A-A
Scale: NTS



SECTION B-B
Scale: NTS

NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see City of Phoenix Std Dtl P1240, Detail P2.

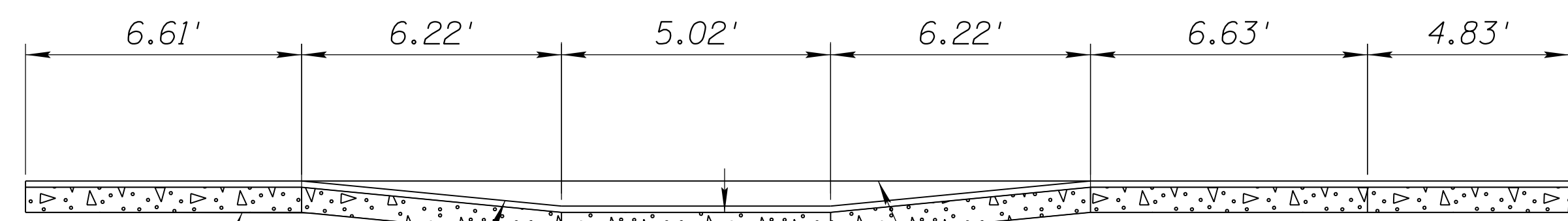
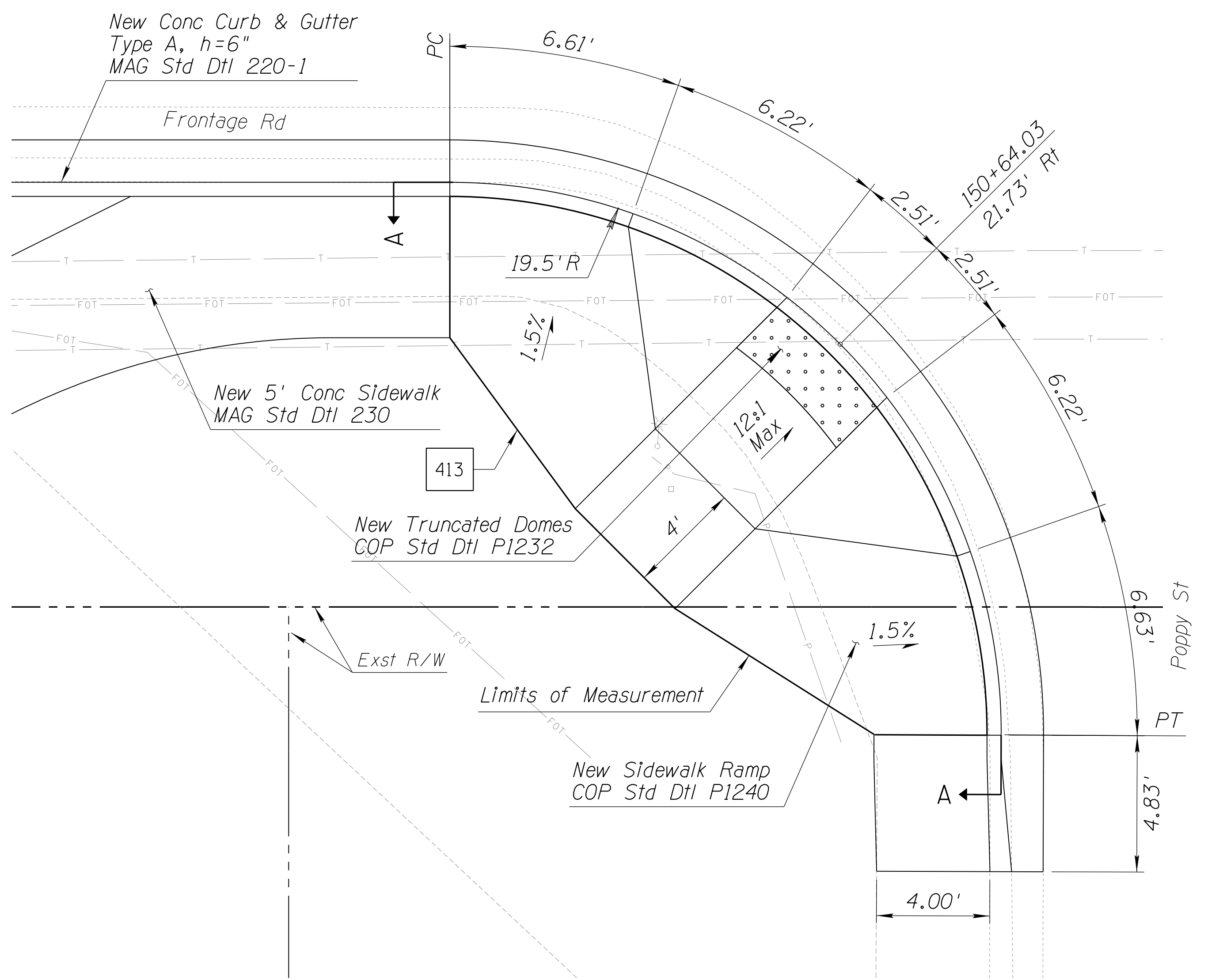
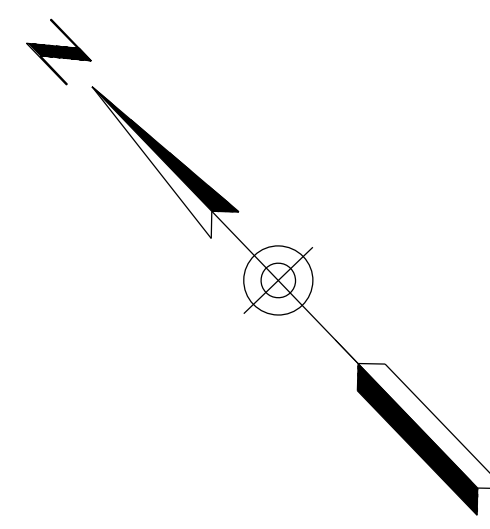
DETAIL S7

SIDEWALK RAMP DETAILS

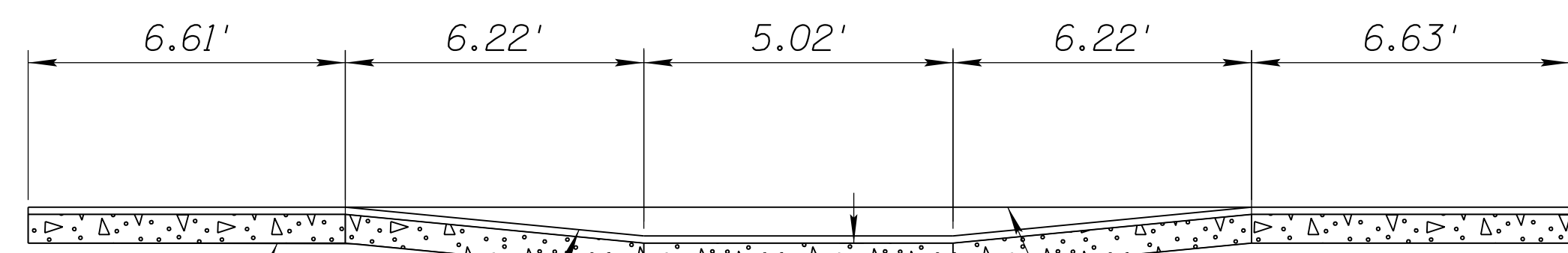
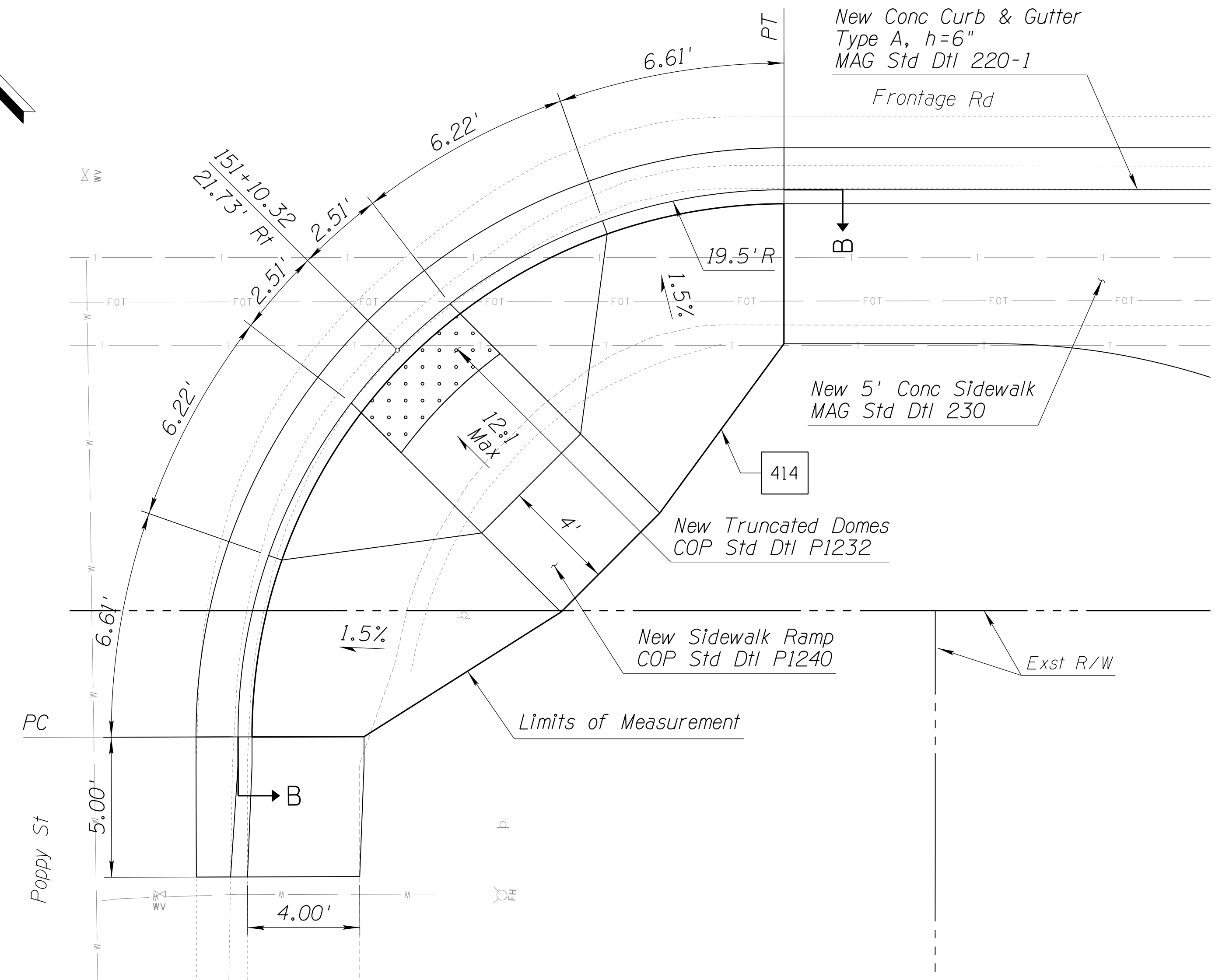
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE			DETAIL S7 FRONTAGE RD SIDEWALK RAMP DETAILS	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60				
TRACS NO. H8874 01C			DWG NO. G-07.33	
			OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	65	232	

060 MA 144



SECTION A-A
Scale: NTS



SECTION B-B
Scale: NTS

NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see City of Phoenix Std Dtl P1240, Detail P2.

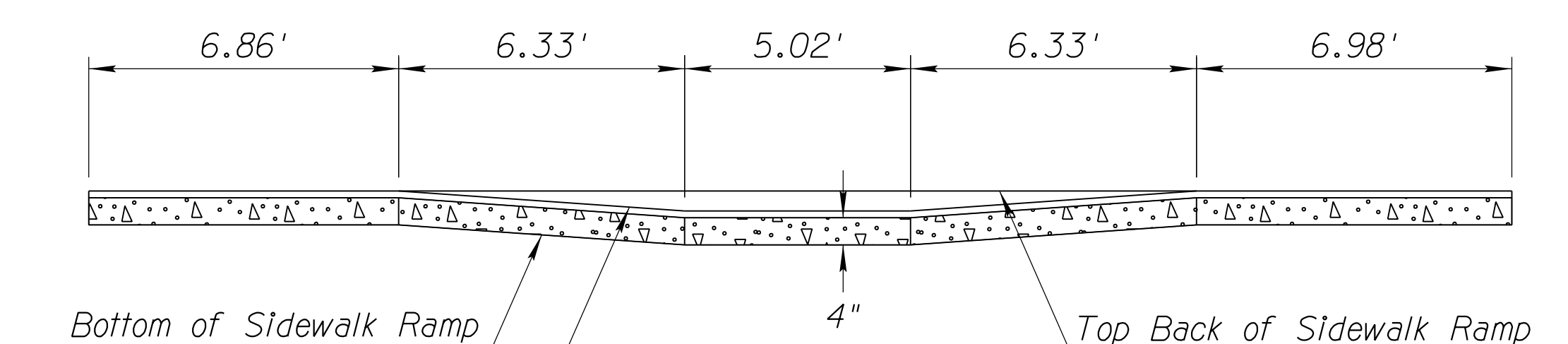
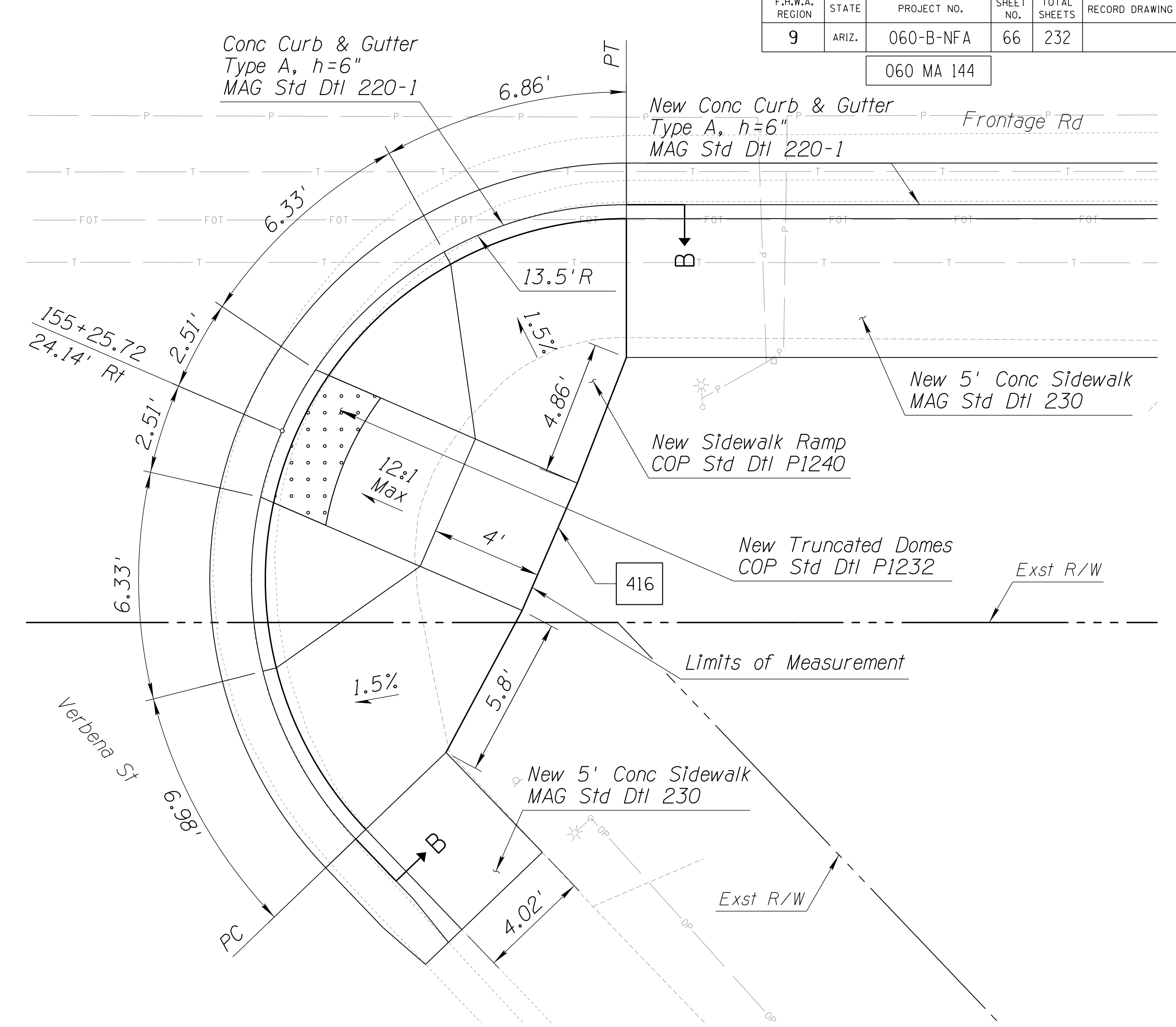
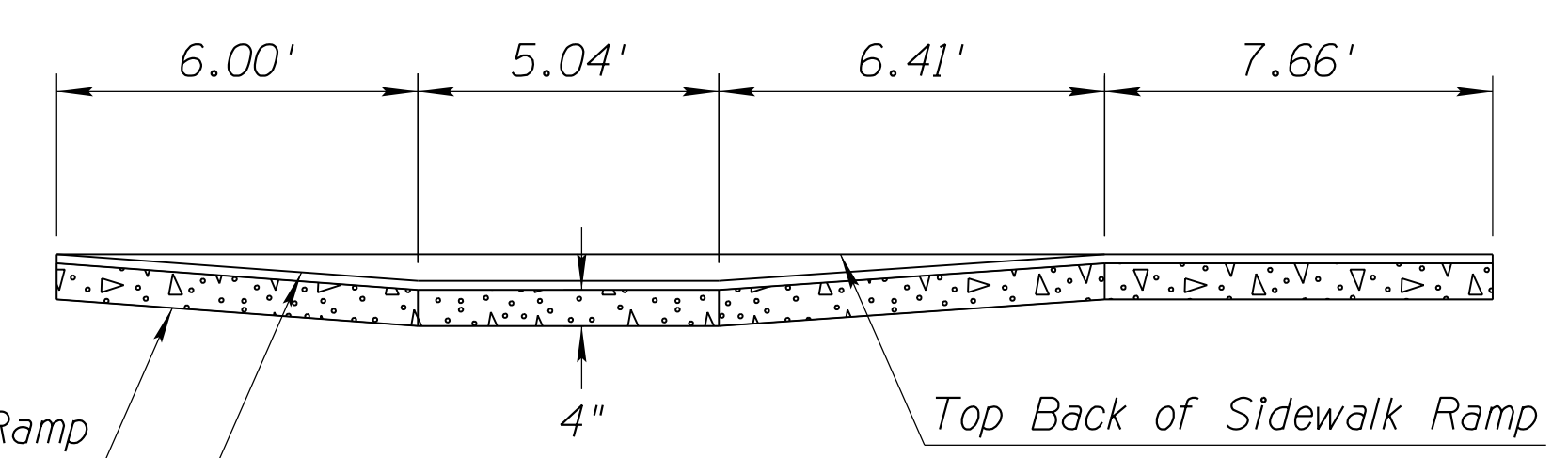
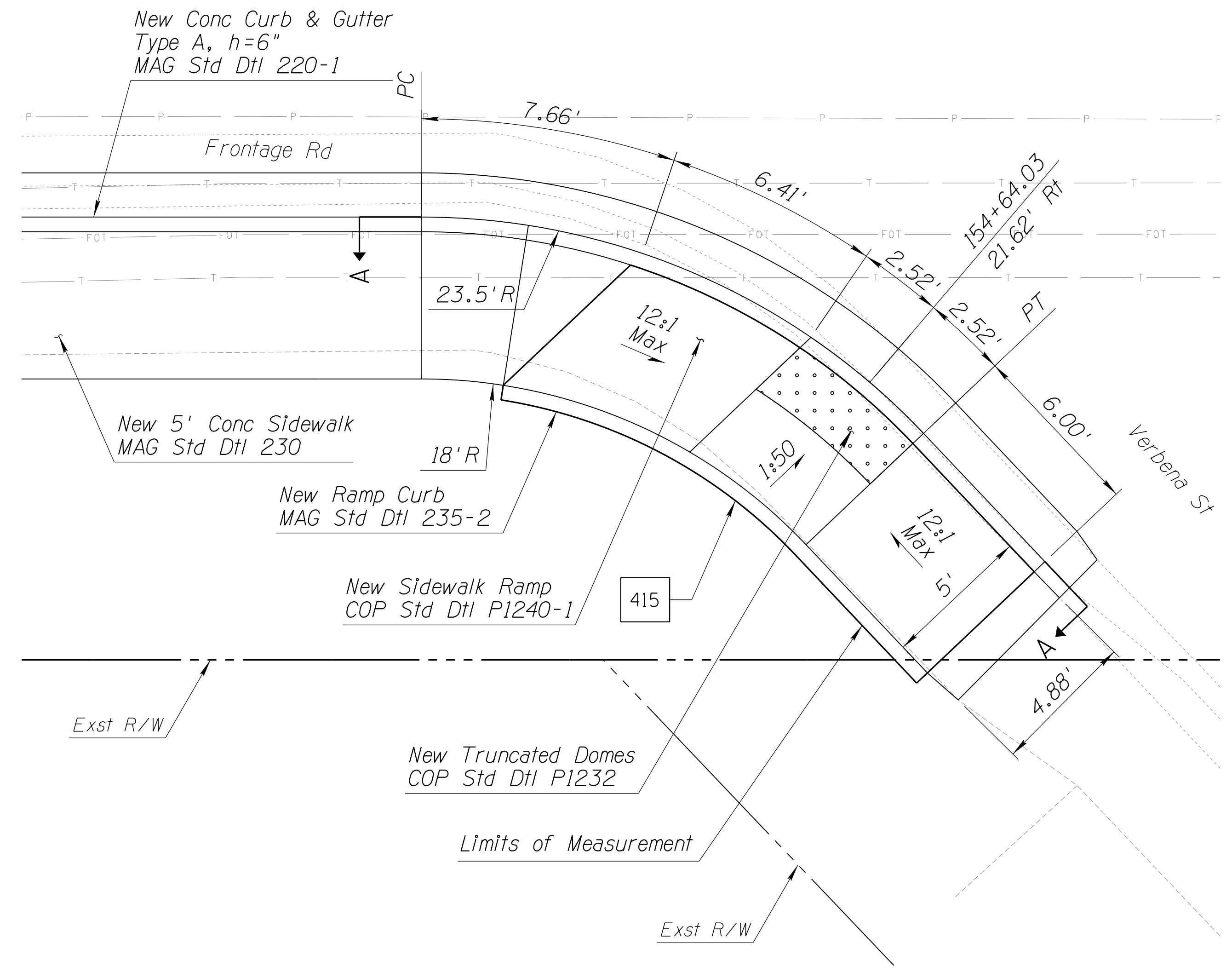
DETAIL S8

SIDEWALK RAMP DETAILS

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES DETAIL S8 FRONTAGE RD SIDEWALK RAMP DETAILS	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			GRAND AVENUE FRONTAGE ROAD TRACS NO. H8874 01C	DWG NO. G-07.34 OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	66	232	

060 MA 144



NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see City of Phoenix Std Dtl P1240, Detail P2, and City of Phoenix Std Dtl P1240-1, Detail P3.
4. Ramp curb will not be measured or paid separately and will be included in the cost of adjacent sidewalk ramps.

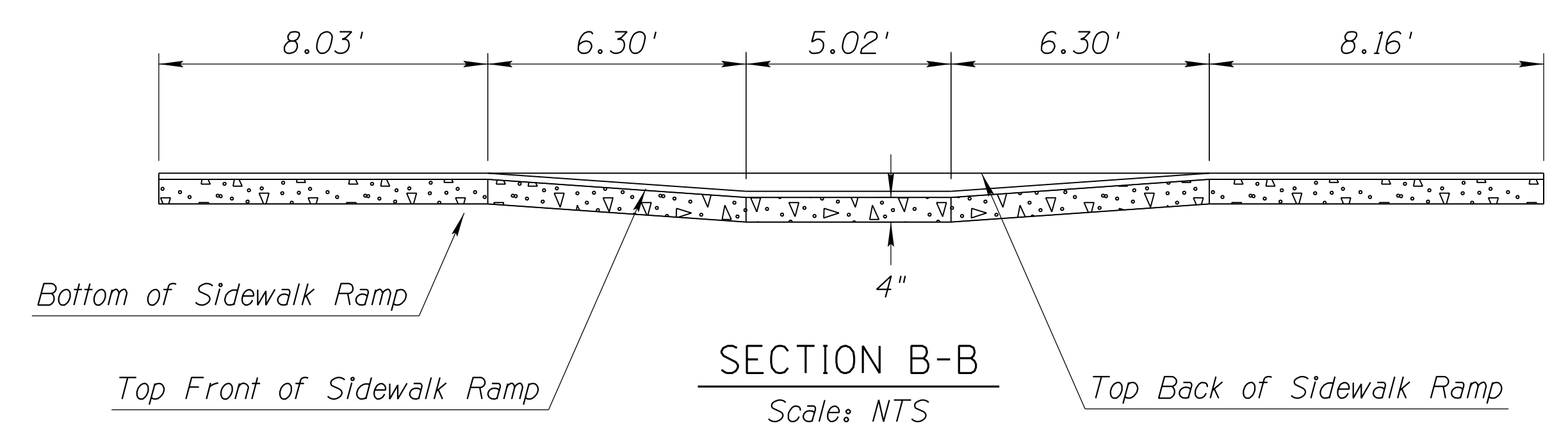
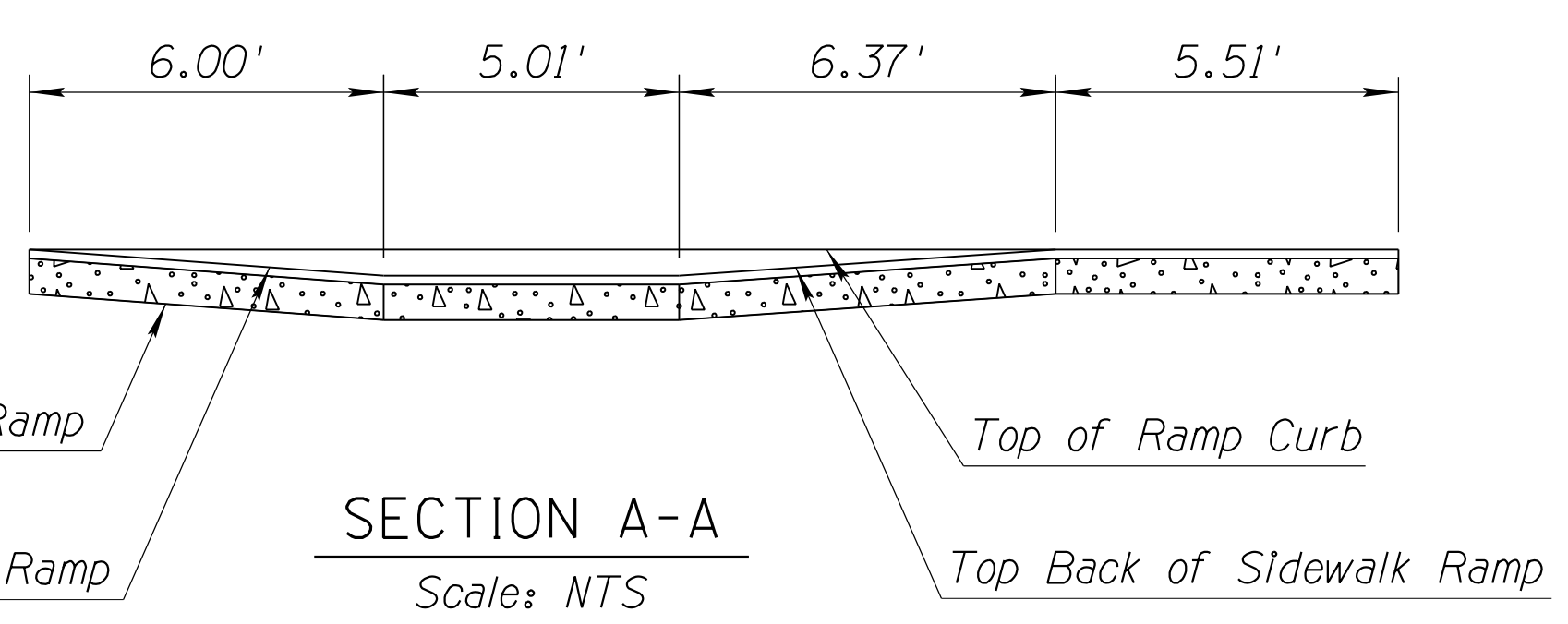
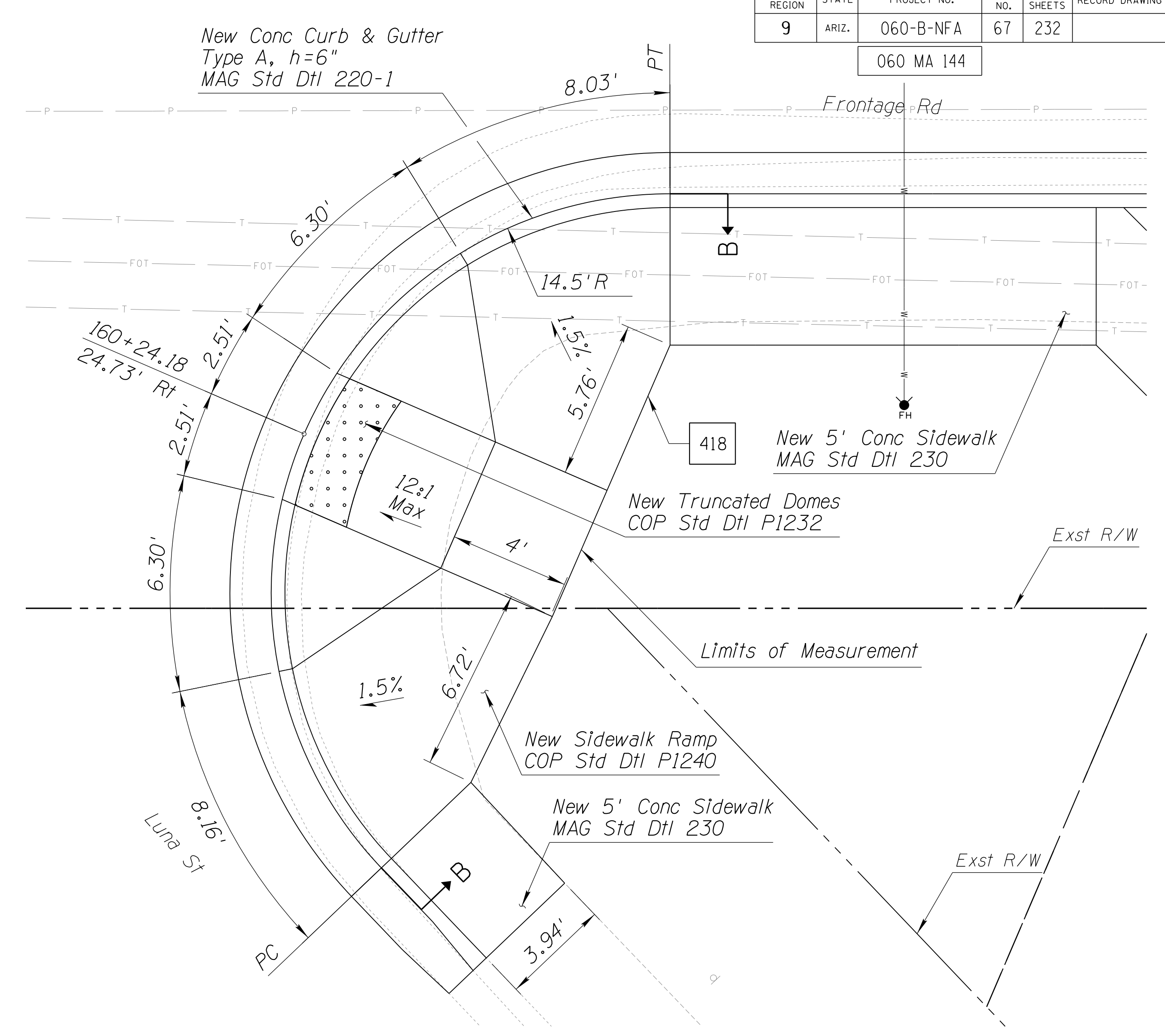
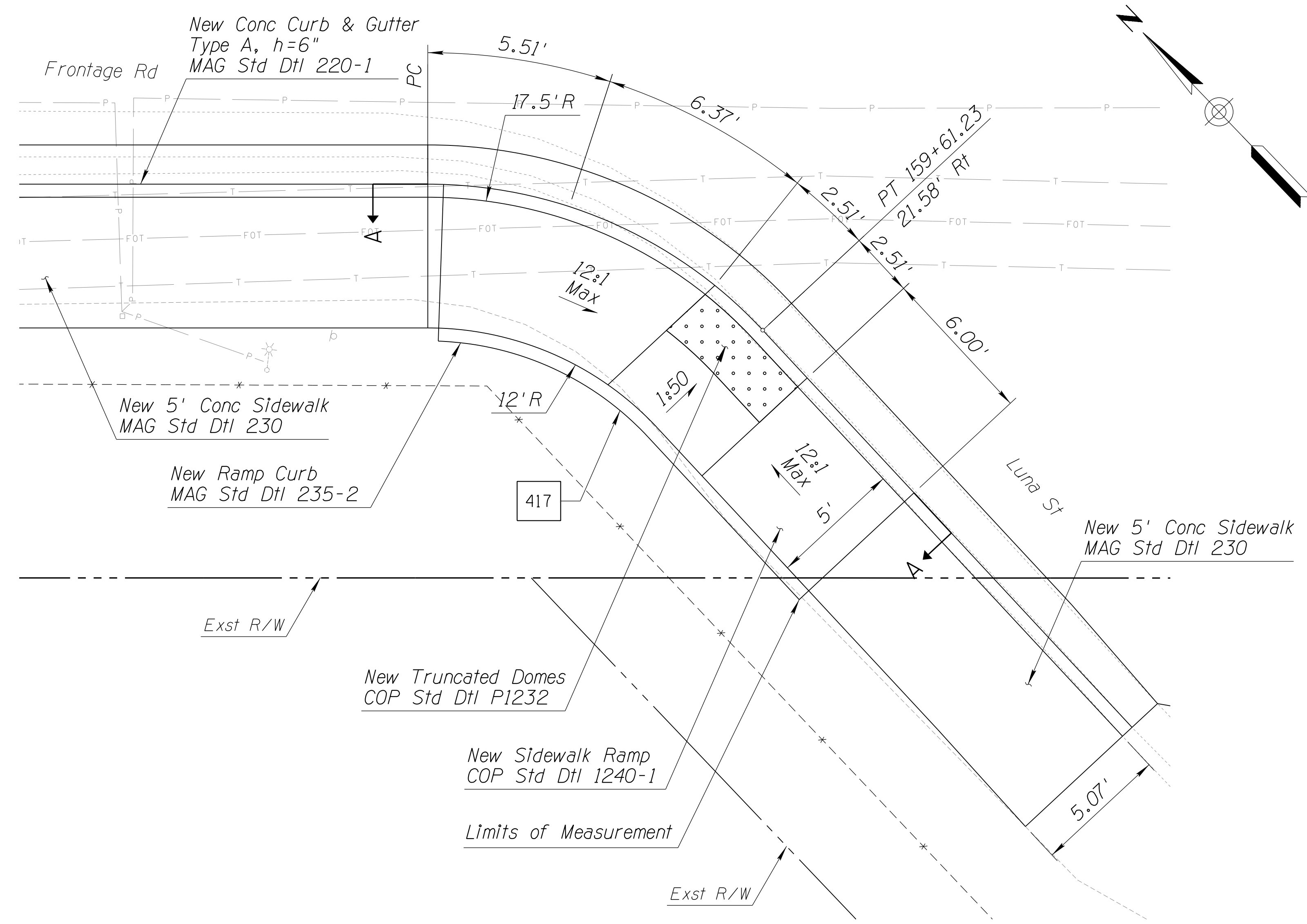
DETAIL S9

SIDEWALK RAMP DETAILS

DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES DETAIL S9 FRONTAGE RD SIDEWALK RAMP DETAILS	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281		GRAND AVENUE FRONTAGE ROAD TRACS NO. H8874 01C DWG NO. G-07.35 OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	67	232	

060 MA 144



NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see MAG Std Dtl 235-2, Detail M4, and City of Phoenix Std Dtl P1240, Detail P2.
4. Ramp curb will not be measured or paid separately and will be included in the cost of adjacent sidewalk ramps.

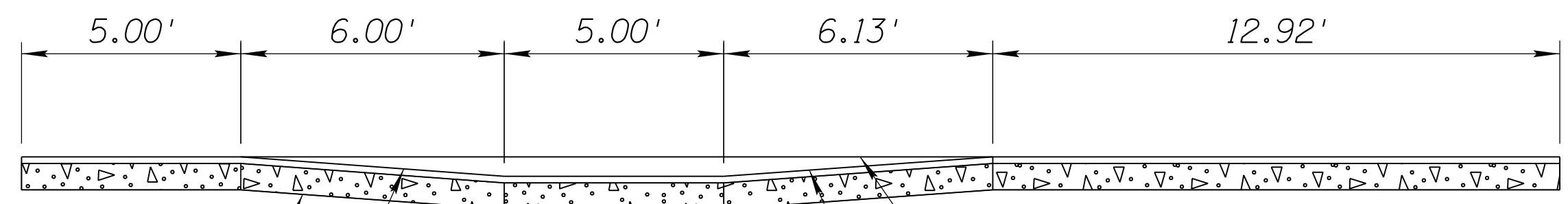
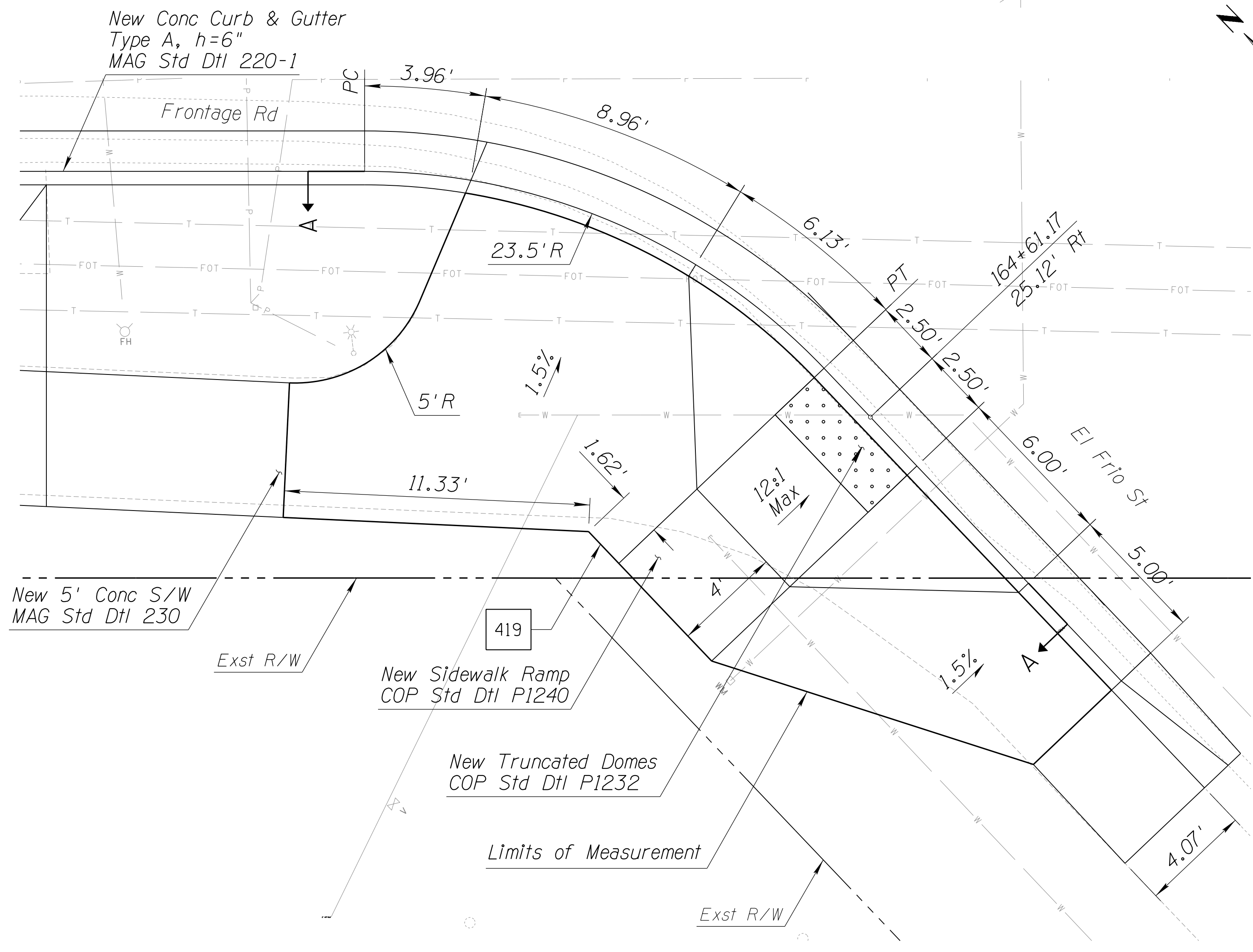
DETAIL S10

SIDEWALK RAMP DETAILS

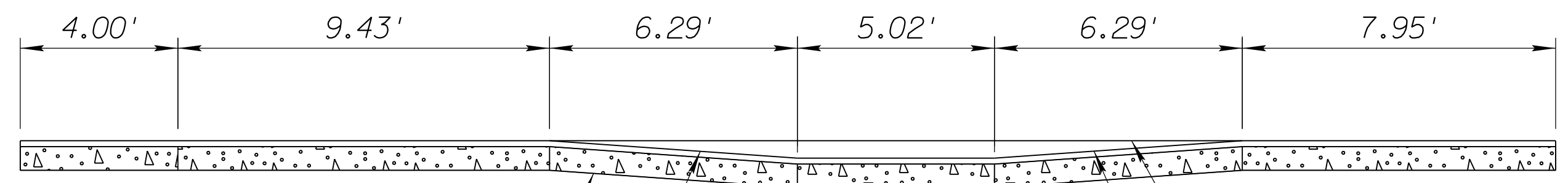
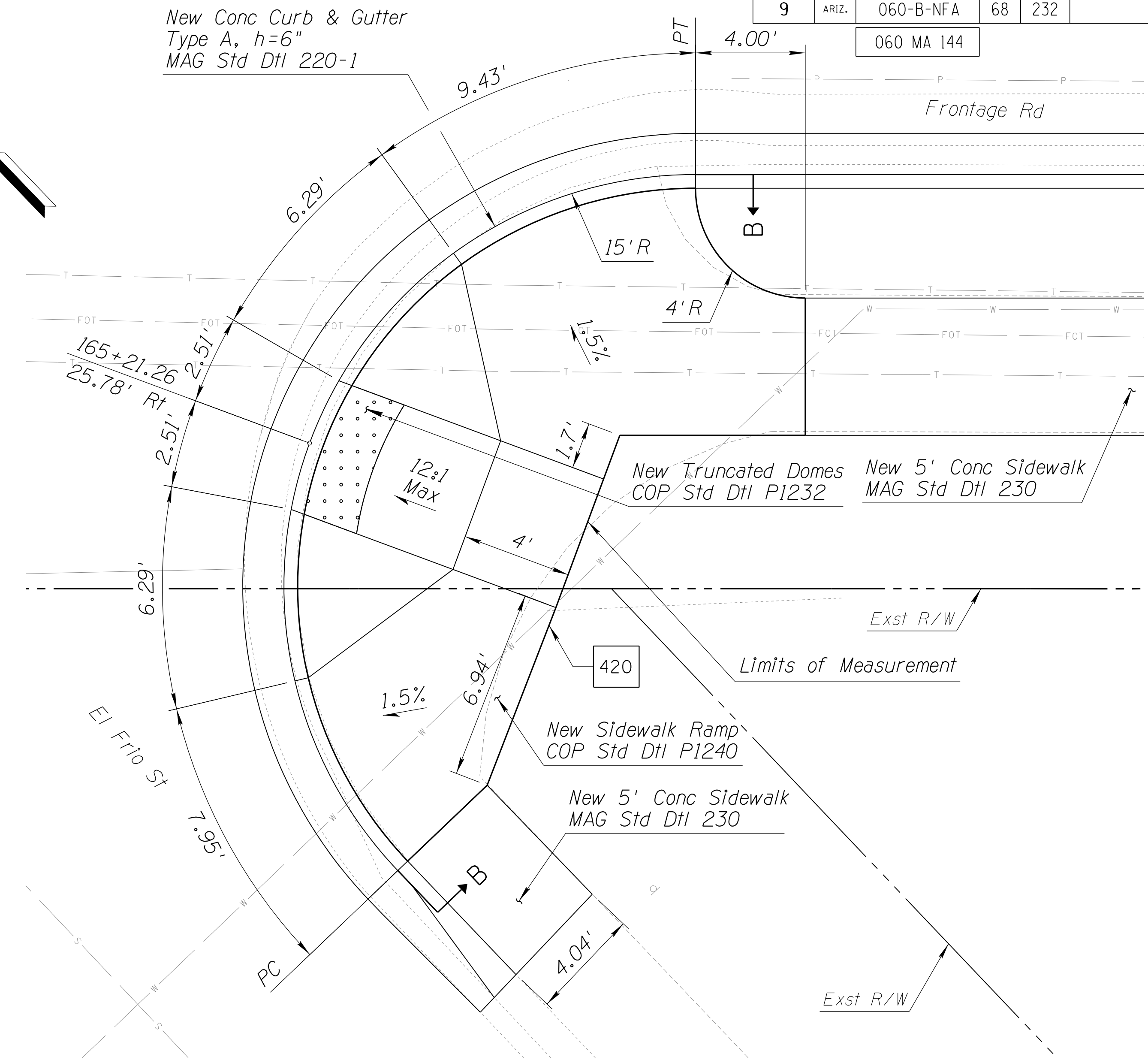
DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281		DETAIL S10 FRONTAGE RD SIDEWALK RAMP DETAILS	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO.	H8874 01C				DWG NO. G-07.36

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	68	232	

060 MA 144



SECTION A-A
Scale: NTS



SECTION B-B
Scale: NTS

NOTES:

1. Stations and offsets reference the Frontage Rd Cst ϕ .
2. Distances are measured along face of curb, unless noted otherwise.
3. For additional details and dimensions not shown, see City of Phoenix Std Dtl P1240, Detail P2.

DETAIL S11

SIDEWALK RAMP DETAILS

DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES DETAIL S11 FRONTAGE RD SIDEWALK RAMP DETAILS	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. G-07.37	

GEOMETRIC CONTROL PLAN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	69	232	

060 MA 144

GENERAL NOTES

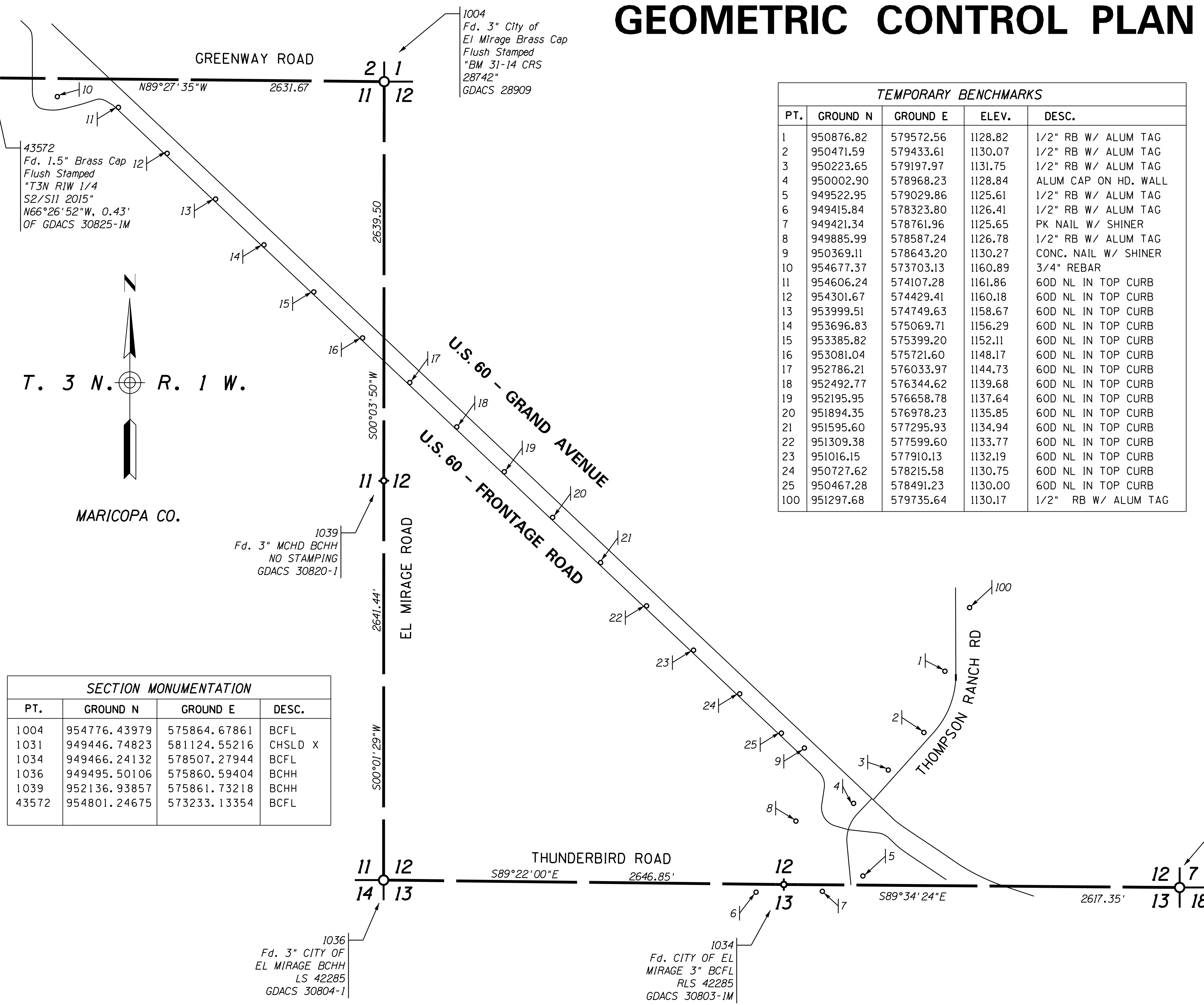
- ALL COORDINATES LISTED ARE 1983 (2007 EPOCH) STATE PLANE GROUND COORDINATES ARIZONA CENTRAL ZONE, STANDARD TRANSVERSE MERCATOR PROJECTION, WITH A SCALE OF ORIGIN POINT OF X=0.0000 Y=0.0000, USING A GRID ADJUSTMENT FACTOR OF 1.00016 AS PROVIDED BY ADOT. THESE COORDINATES CAN BE UTILIZED AS GROUND DATUM. TO CONVERT BACK TO GRID COORDINATES DIVIDE EACH COORDINATE VALUE BY 1.00016.
- THIS RESULTS OF SURVEY CONFORMS TO THE "ADOT REGIONAL TRANSPORTATION PLAN FREeway PROGRAM". DESIGN PROCEDURE MEMORANDUM. REVISION NO. 1" DATED OCTOBER 27, 2005.
- ALL SECTIONAL CONTROL HAS BEEN FIELD VERIFIED AND FOUND TO BE WITHIN A POSITIONAL TOLERANCE OF 0.25' OF THE GDACS PUBLISHED VALUE AND EXCEPT WHERE OTHERWISE NOTED, THE PUBLISHED VALUES HAVE BEEN ACCEPTED.
- UNITS = INTERNATIONAL FEET
1 FOOT = 0.3048 METER EXACTLY
- ALL BEARINGS ARE GRID BEARINGS, DISTANCES ARE GROUND DISTANCES AND COORDINATES ARE GROUND COORDINATES.
- THE FIELD PORTION OF THIS SURVEY WAS PERFORMED DURING MARCH AND APRIL, 2016.
- THIS MAP WAS PREPARED SOLELY FOR THE PURPOSES OF SHOWING THE LOCATION OF SECTIONAL CORNERS IN RELATIONSHIP TO SELECTED FOUND OR CALCULATED SECTIONAL CORNERS. THE BEARINGS AND DISTANCES SHOWN HEREIN ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT REFLECT THE DEPENDANT RESURVEY METHOD FOR RETRACEMENT OF PLSS SECTIONAL LINES.
- THE BASIS OF COORDINATES AND ELEVATIONS FOR THIS PROJECT ARE NATIONAL GEODETIC SURVEY DATASHEETS PUBLISHED FOR THE FOLLOWING MONUMENTS:

DESIGNATION	4FB1
MONUMENT TYPE	AL. CAP ON METAL ROD
NAD 83(11) LAT	33° 35' 50.38640" N
NAD 83(11) LONG	112° 21' 02.02322" W
ELLIPSOIDAL HT.	1035.83 FT.
GRID NORTHING	945141.03
GRID EASTING	567881.88
GROUND NORTH	945292.25
GROUND EAST	567972.74
NAVD 88 ELEV.	1135.0 FT.

REFERENCE DOCUMENTS

- BOOK 688 OF MAPS, PAGE 41 M. C. R.
- BOOK 863 OF MAPS, PAGE 07 M. C. R.

TEMPORARY BENCHMARKS				
PT.	GROUND N	GROUND E	ELEV.	DESC.
1	950876.82	579572.56	1128.82	1/2" RB W/ ALUM TAG
2	950471.59	579433.61	1130.07	1/2" RB W/ ALUM TAG
3	950223.65	579197.97	1131.75	1/2" RB W/ ALUM TAG
4	950002.90	578968.23	1128.84	ALUM CAP ON HD. WALL
5	949522.95	579029.86	1125.61	1/2" RB W/ ALUM TAG
6	949415.84	578323.80	1126.41	1/2" RB W/ ALUM TAG
7	949421.34	578761.96	1125.65	PK NAIL W/ SHINER
8	949885.99	578587.24	1126.78	1/2" RB W/ ALUM TAG
9	950369.11	578643.20	1130.27	CONC. NAIL W/ SHINER
10	954677.37	573703.13	1160.89	3/4" REBAR
11	954606.24	574107.28	1161.86	60D NL IN TOP CURB
12	954301.67	574429.41	1160.18	60D NL IN TOP CURB
13	953999.51	574749.63	1158.67	60D NL IN TOP CURB
14	953696.83	575069.71	1156.29	60D NL IN TOP CURB
15	953385.82	575399.20	1152.11	60D NL IN TOP CURB
16	953081.04	575721.60	1148.17	60D NL IN TOP CURB
17	952786.21	576033.97	1144.73	60D NL IN TOP CURB
18	952492.77	576344.62	1139.68	60D NL IN TOP CURB
19	952195.95	576658.78	1137.64	60D NL IN TOP CURB
20	951894.35	576978.23	1135.85	60D NL IN TOP CURB
21	951595.60	577295.93	1134.94	60D NL IN TOP CURB
22	951309.38	577599.60	1133.77	60D NL IN TOP CURB
23	951016.15	577910.13	1132.19	60D NL IN TOP CURB
24	950727.62	578215.58	1130.75	60D NL IN TOP CURB
25	950467.28	578491.23	1130.00	60D NL IN TOP CURB
100	951297.68	579735.64	1130.17	1/2" RB W/ ALUM TAG



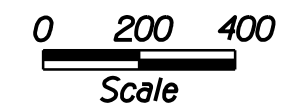
SECTION MONUMENTATION			
PT.	GROUND N	GROUND E	DESC.
1004	954776.43979	575864.67861	BCFL
1031	949446.74823	581124.55216	CHSLD X
1034	949466.24132	578507.27944	BCFL
1036	949495.50106	575860.59404	BCHH
1039	952136.93857	575861.73218	BCHH
43572	954801.24675	573233.13354	BCFL

LEGEND

- 300 Calculated Monument
- 300 Found Monument

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DESIGN	SAT	DATE	4/16	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION PROJECT MANAGEMENT
DRAWN	SAT	DATE	4/16	
CHECKED	SG	DATE	4/16	
				GEOMETRIC CONTROL PLAN
ROUTE: US 60 LOCATION: US 60 FRONTAGE ROAD				
TRACS NO. H8874 OID				EXP. 6-30-2017 DWG NO. OF _____

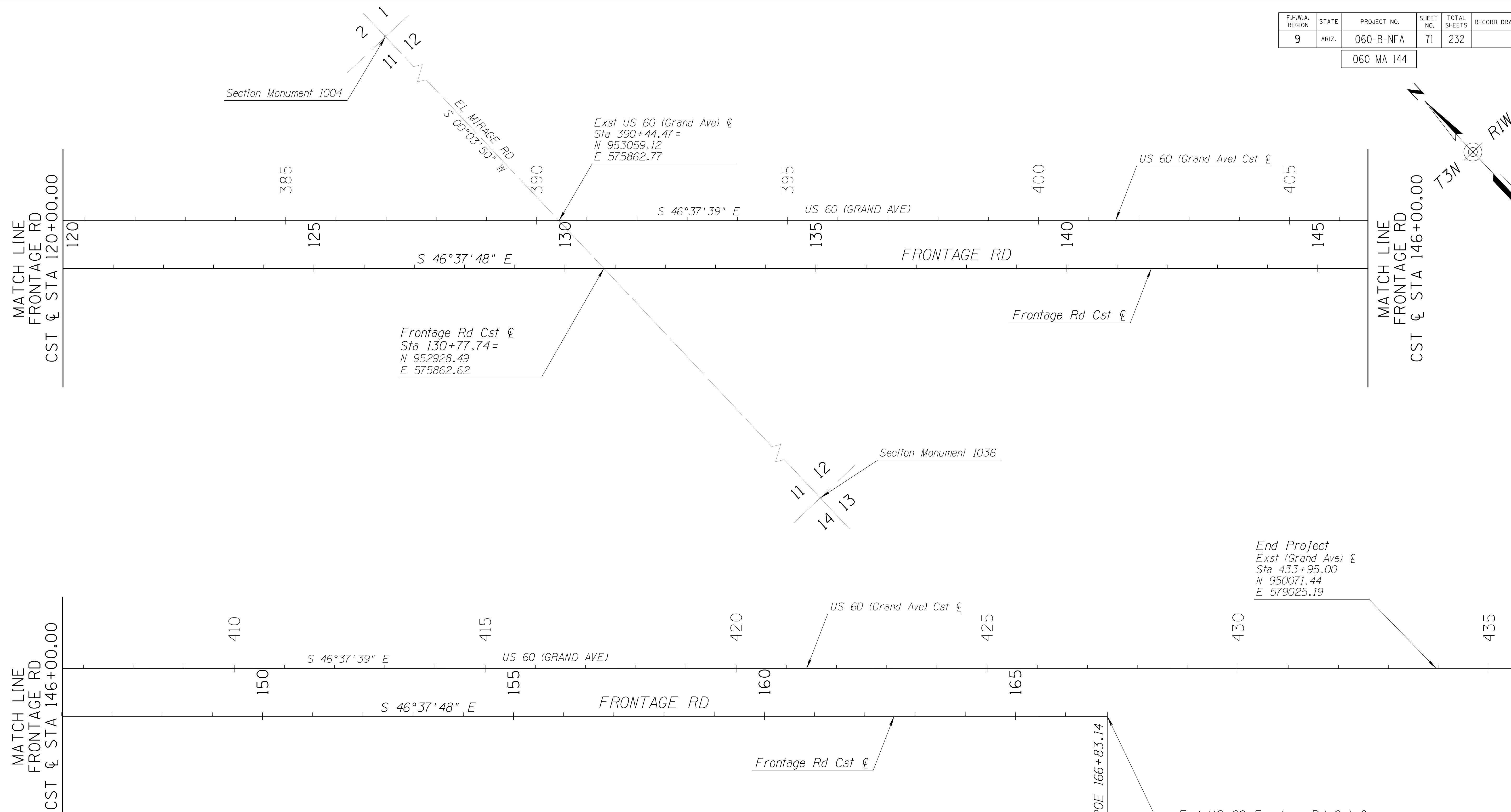


US60r001_r001



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	71	232	

060 MA 144



Description	Point Type	Station	Ground (N)	Ground (E)
Prop Frontage Rd ξ -Begin	POB	100+00.00	954799.83	573591.05
Prop Frontage Rd ξ	PC	100+34.80	954765.04	573590.73
Prop Frontage Rd ξ	PT	102+62.87	954642.58	573745.96
Prop Frontage Rd ξ	PC	104+24.43	954681.67	573902.73
Prop Frontage Rd ξ	PT	105+79.64	954643.95	574046.67
Prop Frontage Rd ξ -End	POE	166+83.14	950452.63	578483.51

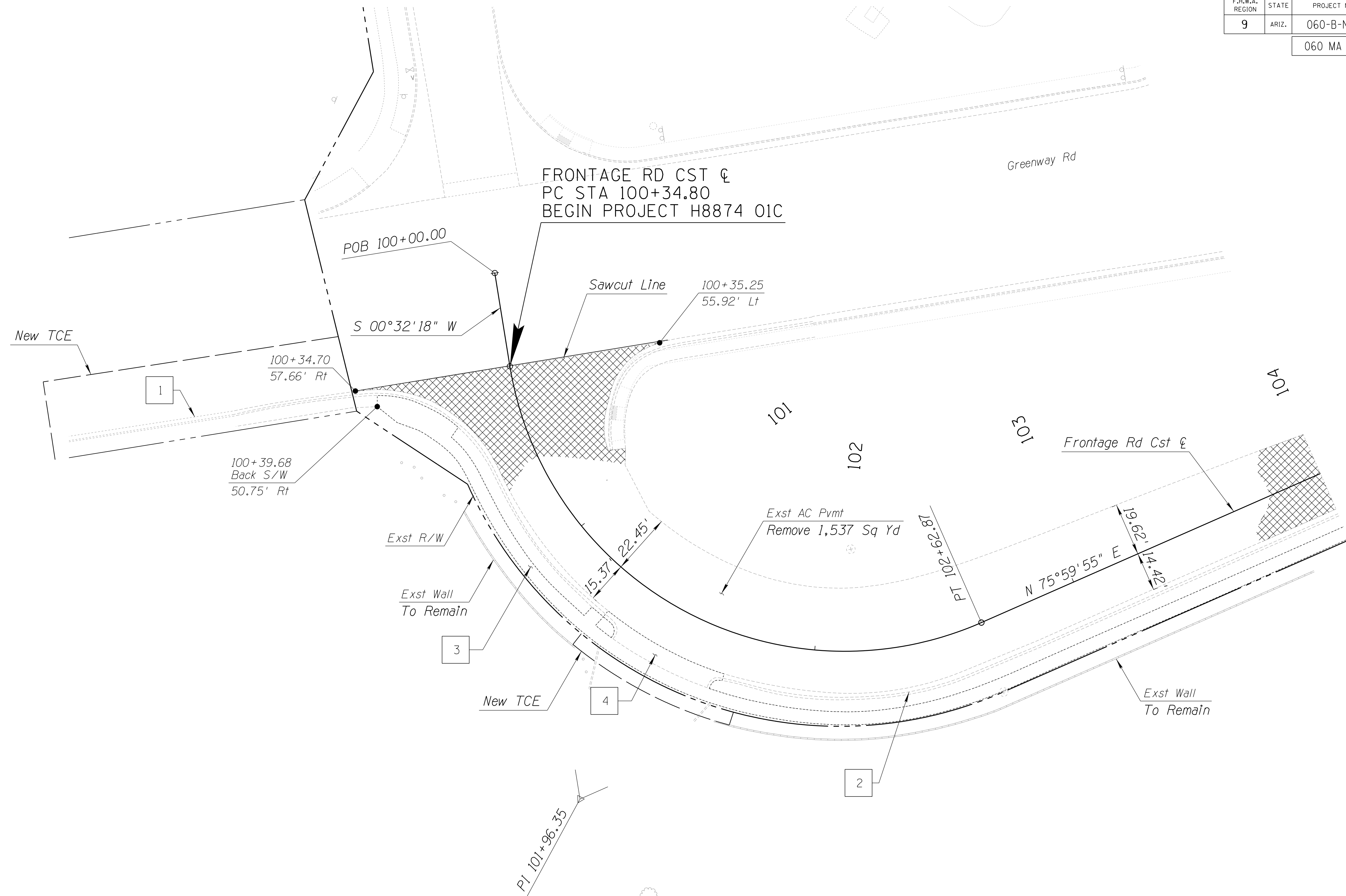
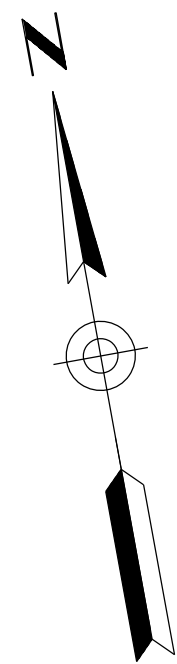
Pt	Ground (N)	Ground (E)	Desc
1004	954776.44	575864.68	BCFL
1036	949495.50	575860.59	BCHH

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PROJECT DR. SUITE 102 TEMPE, AZ 85281			GEOMETRIC CONTROL PLAN STA. 120+00 TO END PROJECT	
ROUTE	LOCATION			
US 60	GRAND AVENUE FRONTAGE ROAD			
TRACS NO. H8874 01C				DWG NO. C-01.03

SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS DATE SURVEY NO. FINISHED PLANS DATE SURVEY NO. FINISHED PLANS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	72	232	

060 MA 144



NOTES:

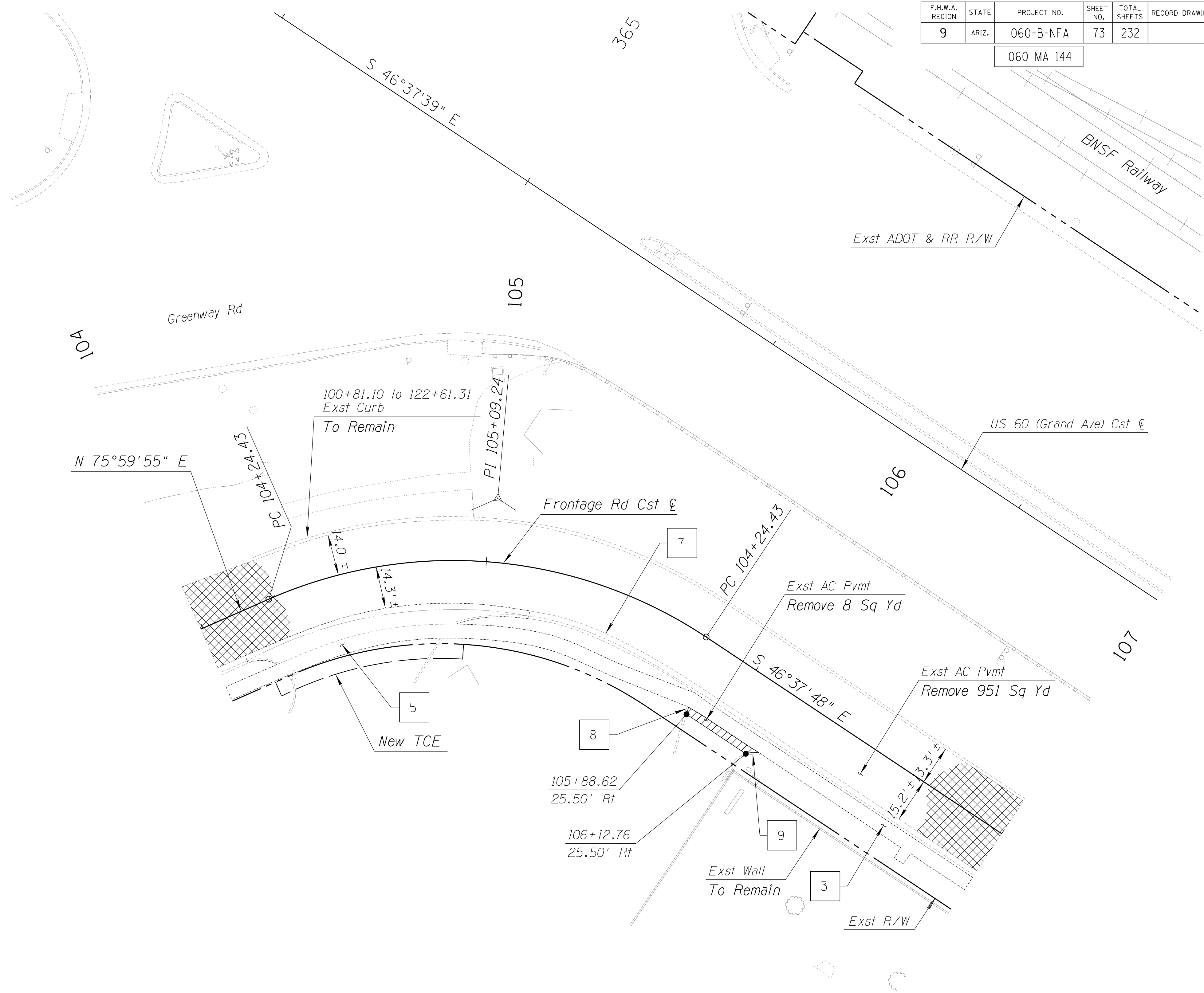
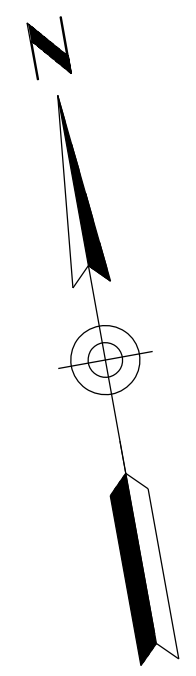
1. Stations and offsets reference Frontage Rd Cst ϕ , unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			REMOVAL SHEET BEGIN PROJECT TO STA. 104+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-02.01
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	73	232	

060 MA 144



NOTES:

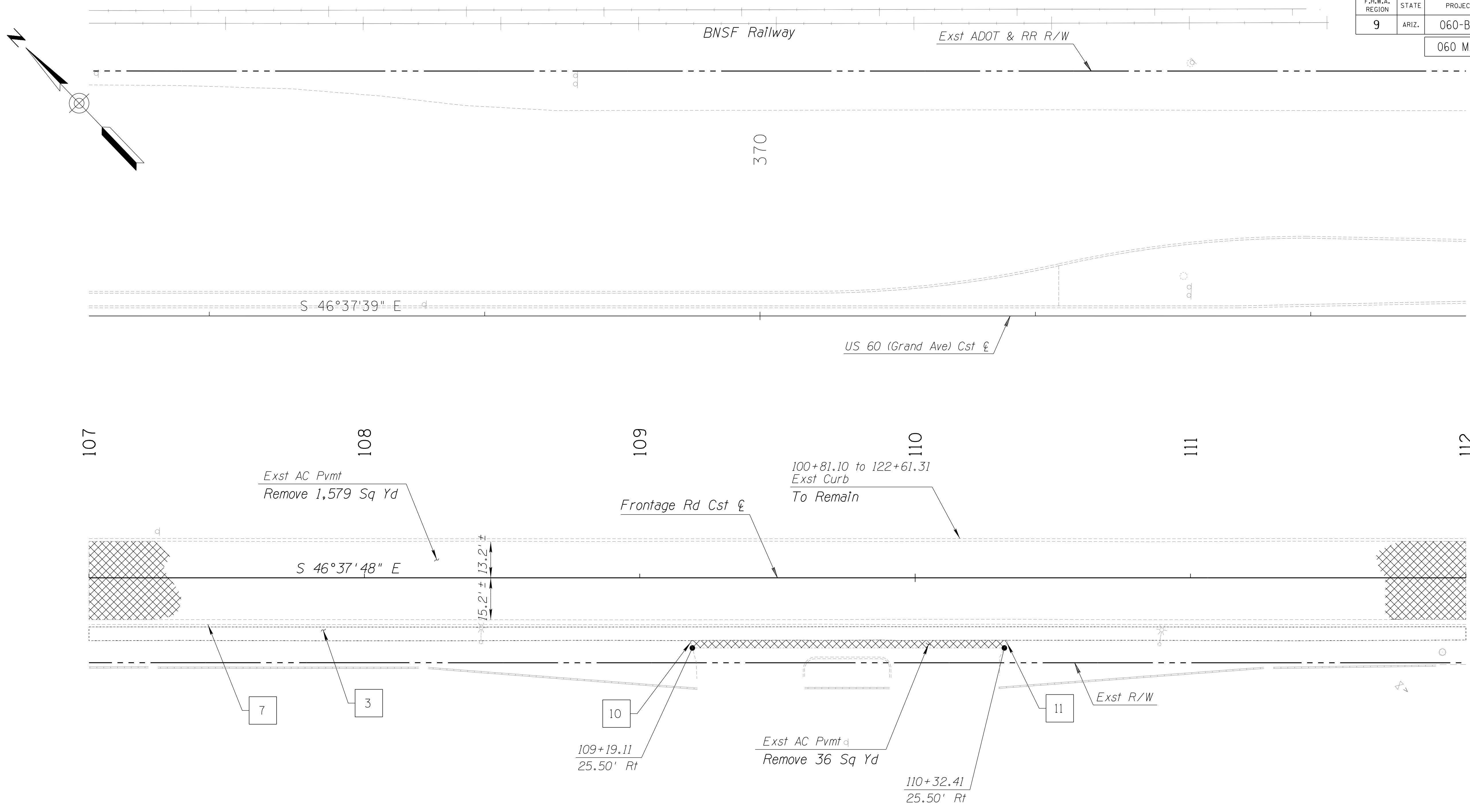
1. Stations and offsets reference Frontage Rd Cst E, unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			REMOVAL SHEET STA. 104+00 TO STA. 107+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-02.02
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. REVISIONS DATE LOCATION

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	74	232	

060 MA 144



NOTES:

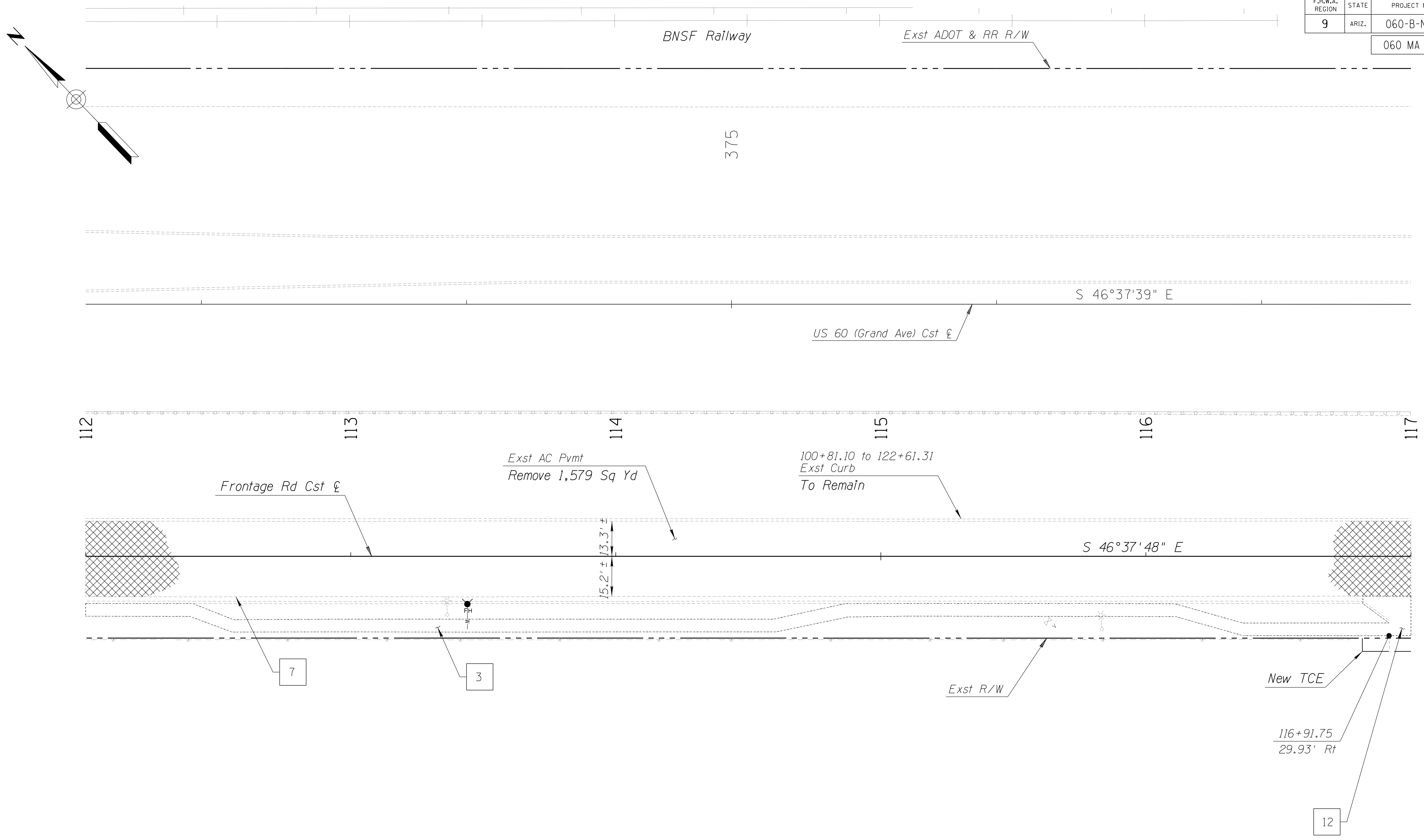
1. Stations and offsets reference Frontage Rd Cst &, unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			REMOVAL SHEET STA. 107+00 TO STA. 112+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.03
TRACS NO. H8874 01C				OF

SURVEY NO. DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	75	232	

060 MA 144



NOTES:

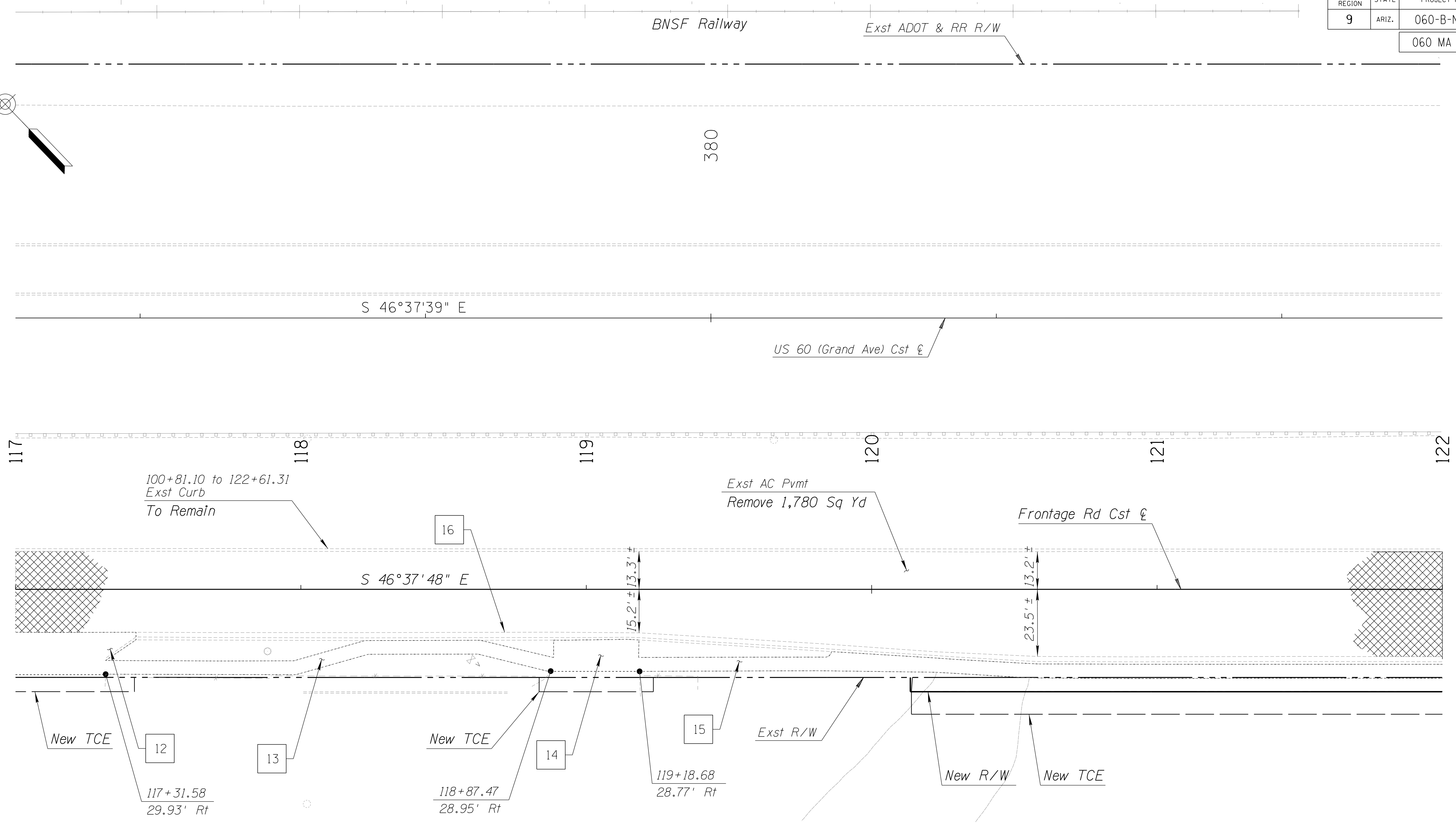
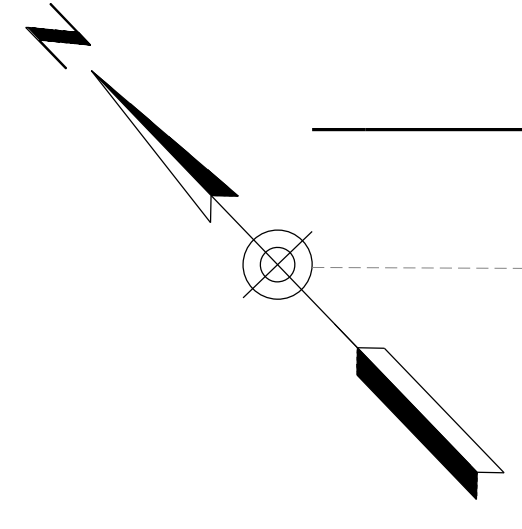
1. Stations and offsets reference Frontage Rd Cst ξ , unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			REMOVAL SHEET STA. 112+00 TO STA. 117+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-02.04
TRACS NO. H8874 01C				OF

SURVEY NO. DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	76	232	

060 MA 144



NOTES:

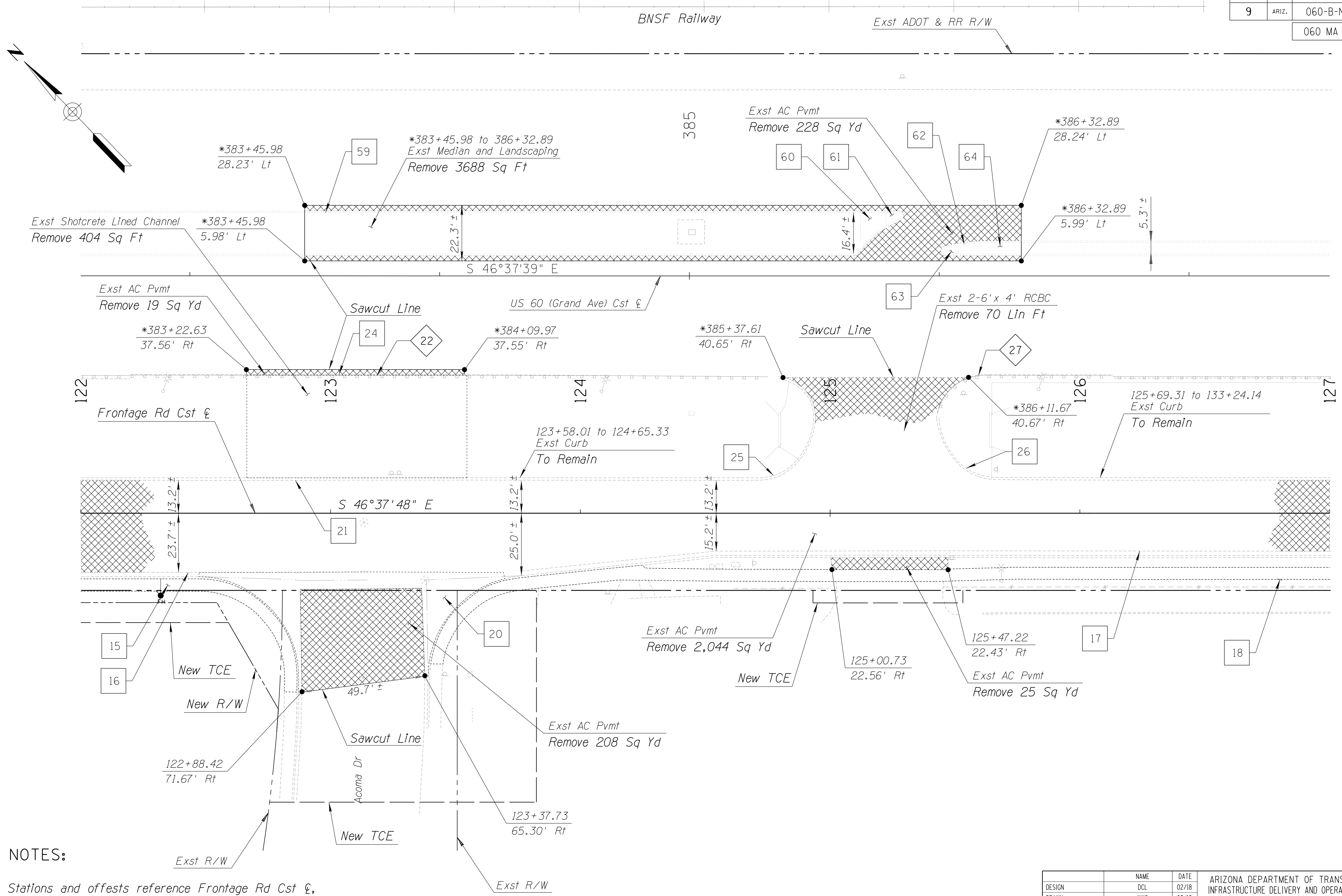
1. Stations and offsets reference Frontage Rd Cst ϕ , unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			REMOVAL SHEET STA. 117+00 TO STA. 122+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.05
TRACS NO. H8874 01C				OF

SURVEY NO. REVISIONS FINISHED PLANS LOCATION DATE SURVEY NO. REVISIONS FINISHED PLANS LOCATION DATE SURVEY NO. REVISIONS FINISHED PLANS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	77	232	

060 MA 144



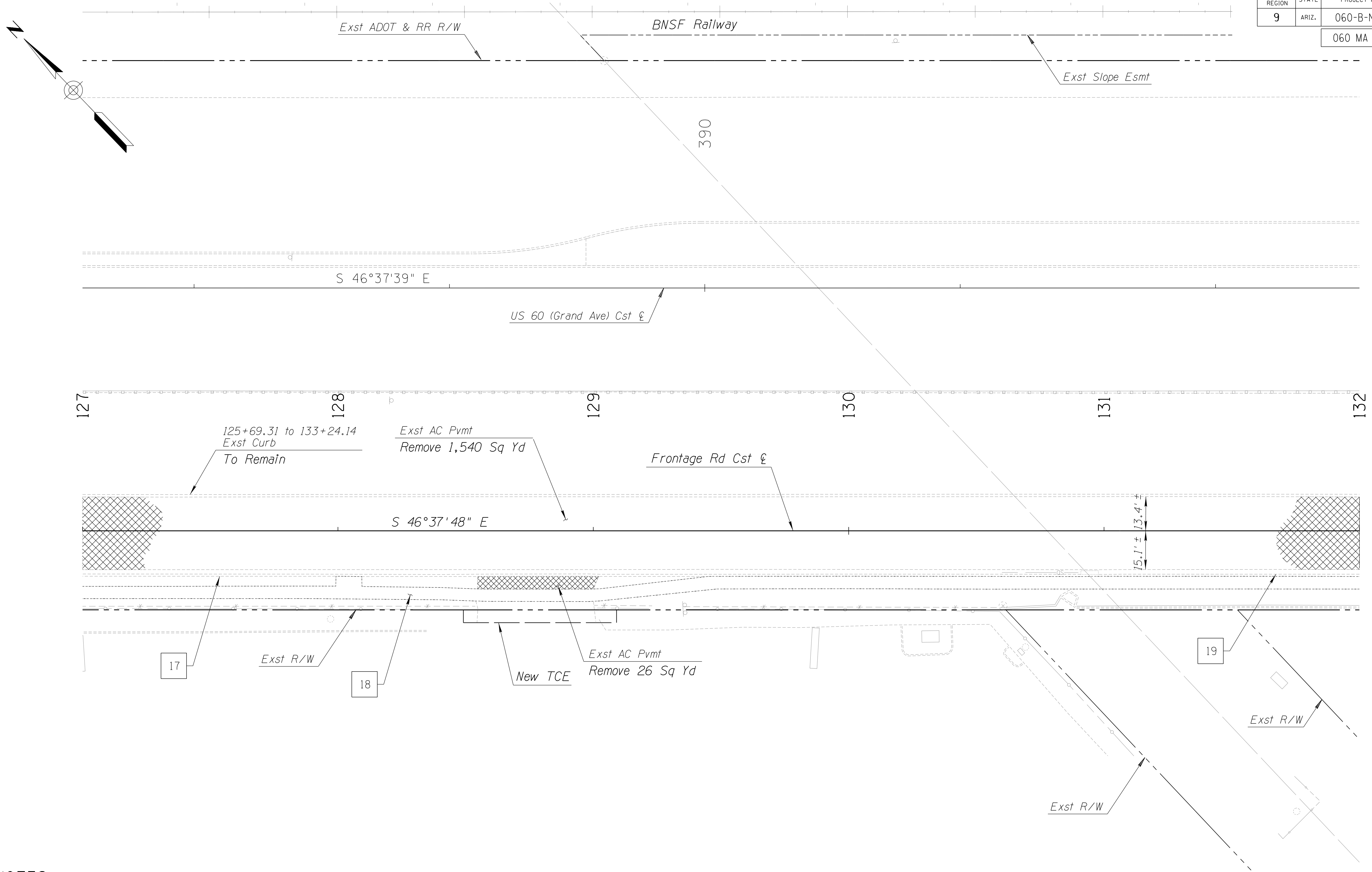
NOTES:

1. Stations and offests reference Frontage Rd Cst ϕ , unless noted otherwise.
2. Stations and offests are to sawcut line, unless noted otherwise.
3. Stations and offests marked by * reference US 60 (Grande Ave) Cst ϕ .

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			REMOVAL SHEET STA. 122+00 TO STA. 127+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.06
TRACS NO. H8874 01C				OF


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	78	232	

060 MA 144



NOTES:

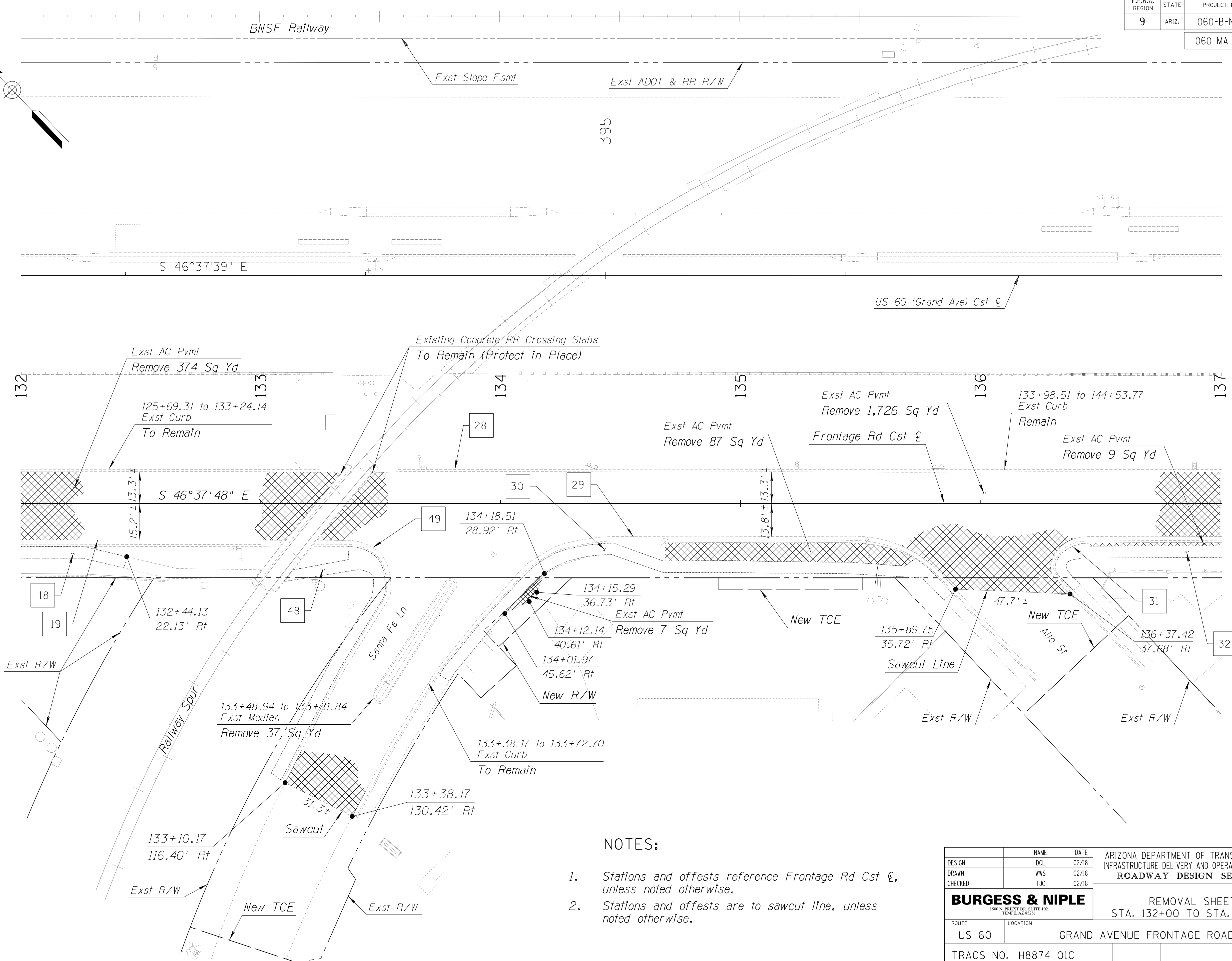
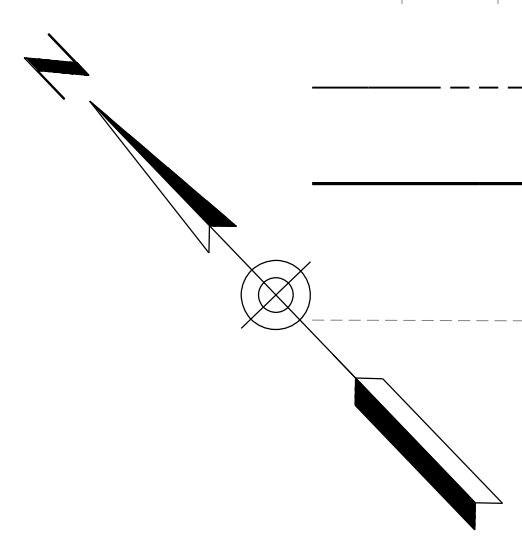
1. Stations and offsets reference Frontage Rd Cst ξ , unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			REMOVAL SHEET STA. 127+00 TO STA. 132+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.07
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	79	232	

060 MA 144



NOTES:

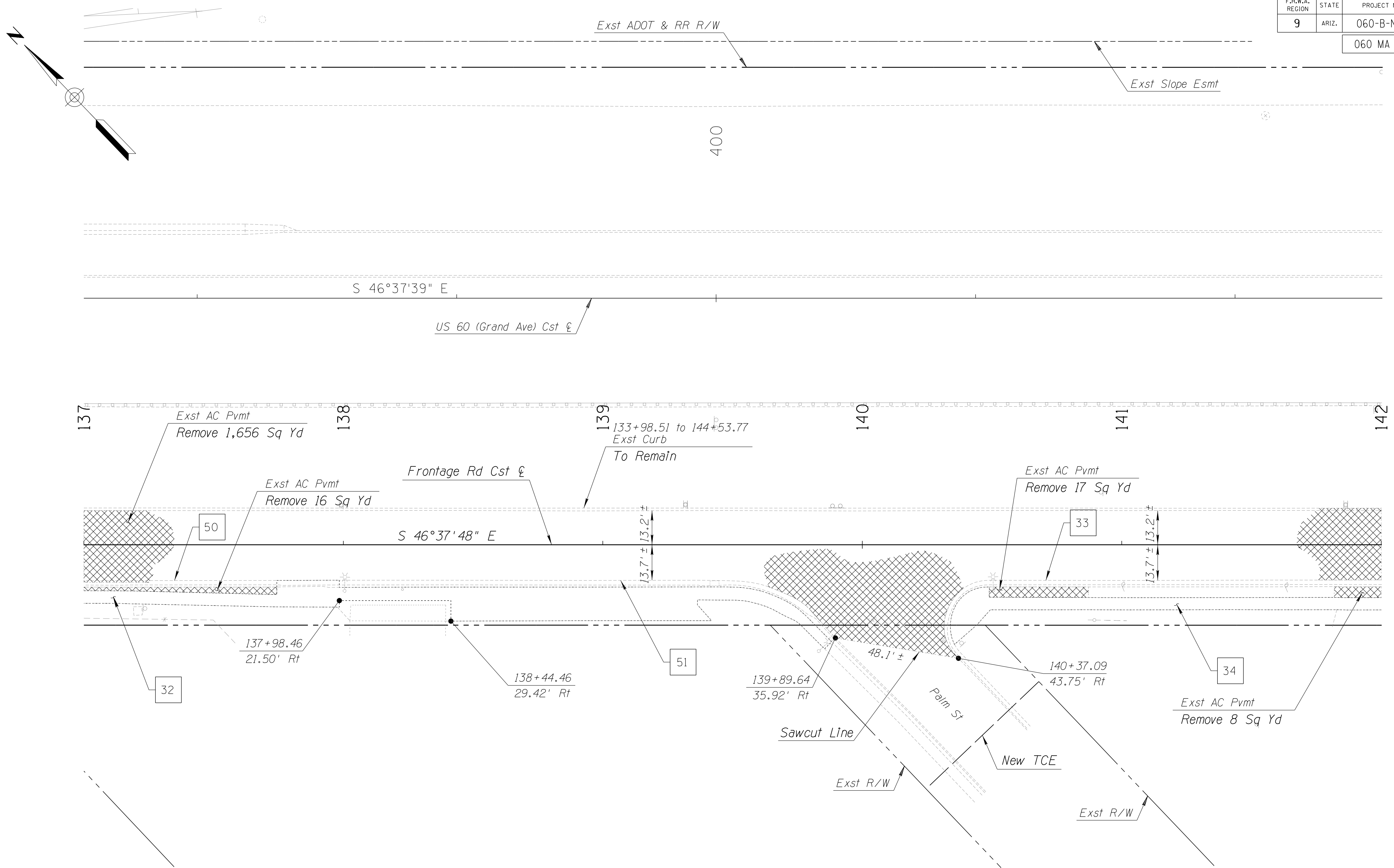
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2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			REMOVAL SHEET STA. 132+00 TO STA. 137+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.08
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	80	232	

060 MA 144



NOTES:

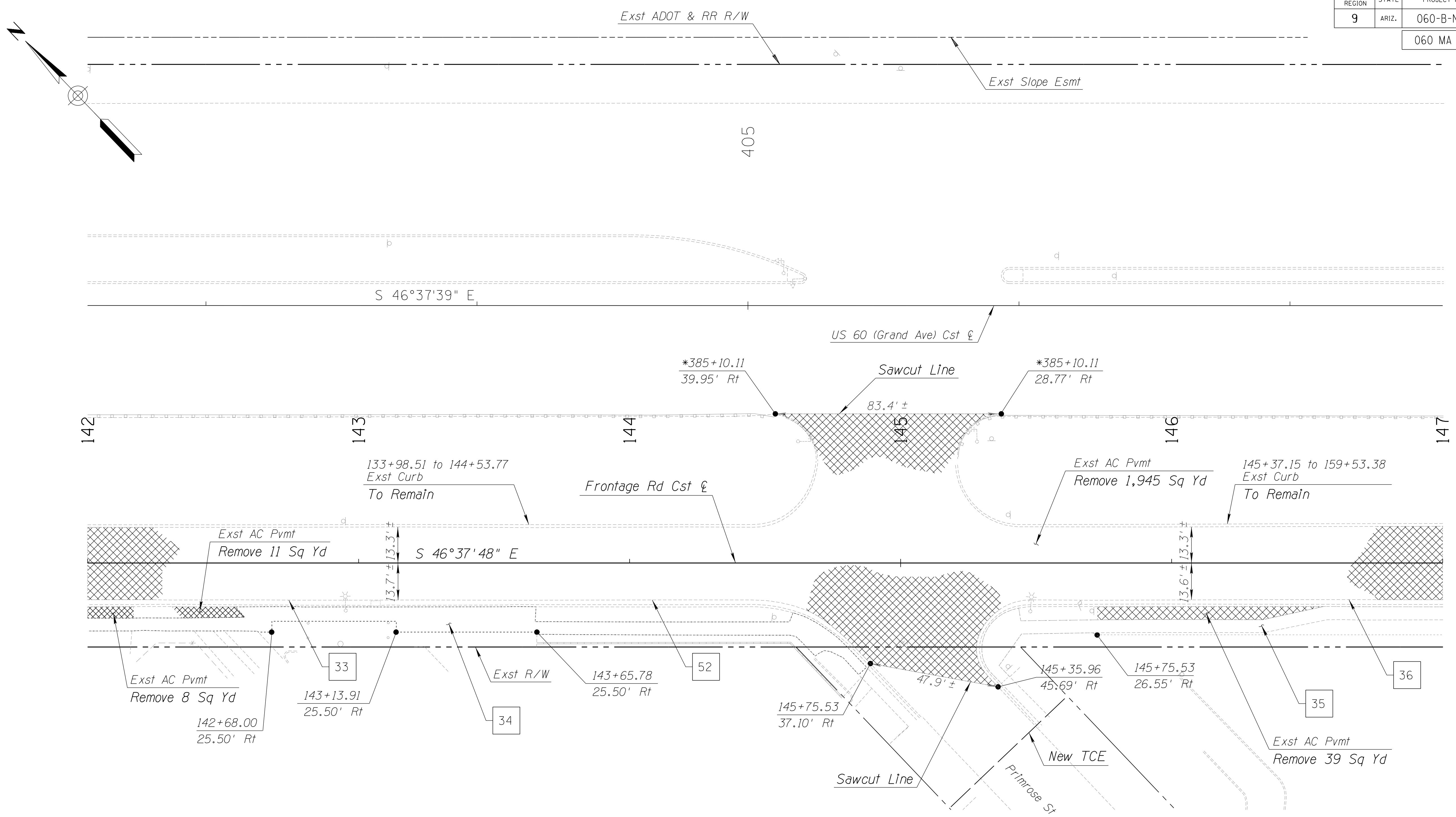
1. Stations and offsets reference Frontage Rd Cst ℄, unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			REMOVAL SHEET STA. 137+00 TO STA. 142+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.09
TRACS NO. H8874 01C				OF

SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	81	232	

060 MA 144



NOTES:

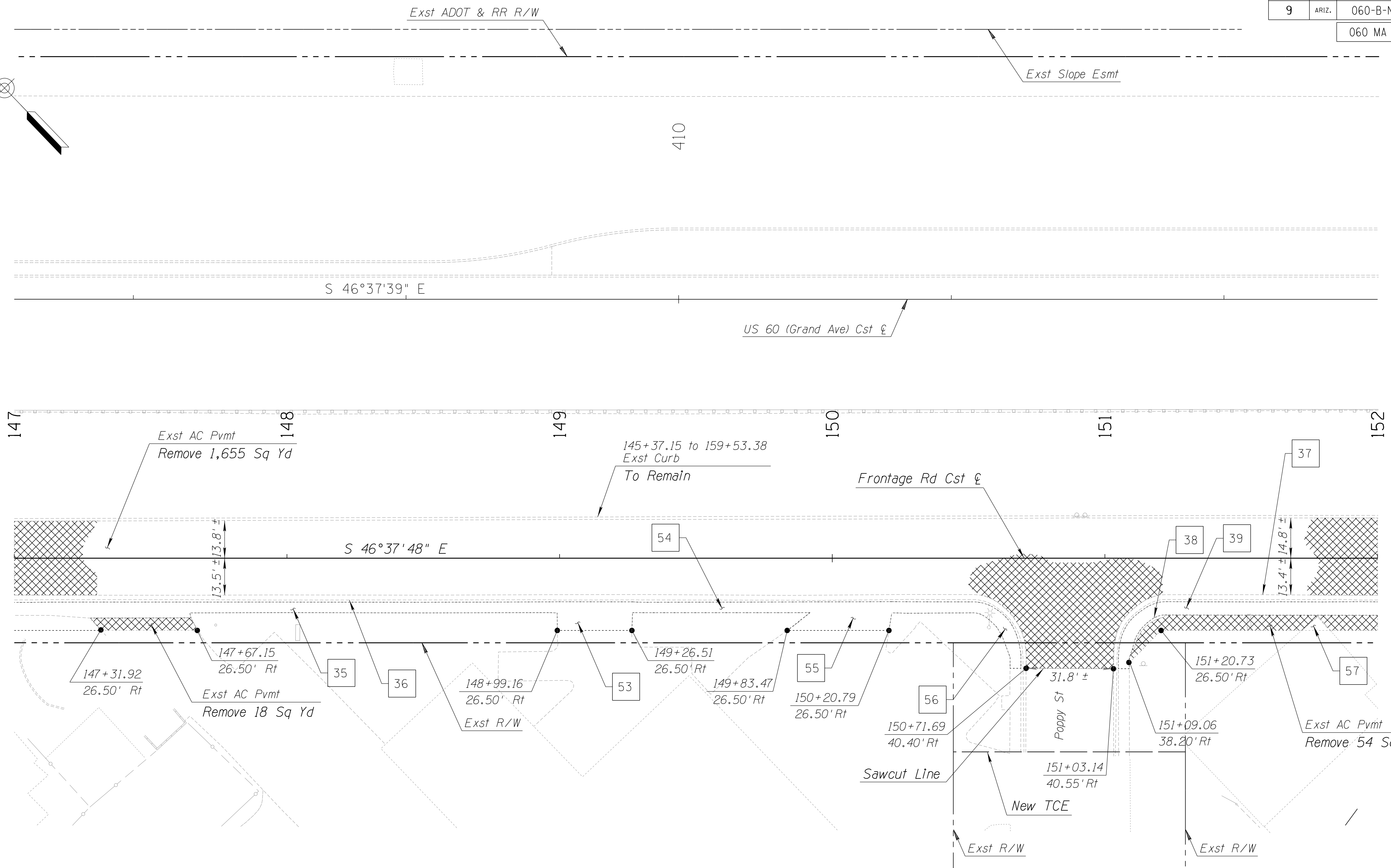
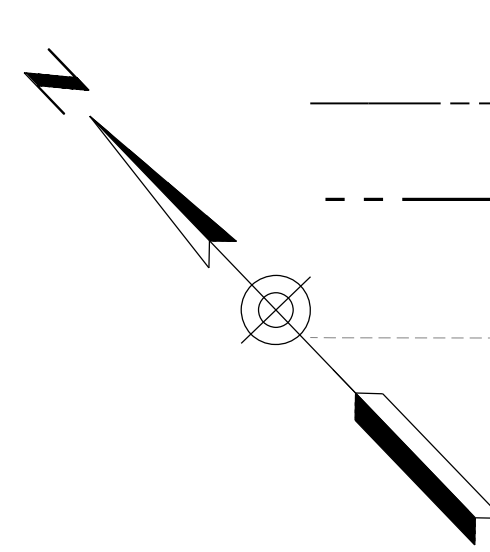
1. Stations and offsets reference Frontage Rd Cst ϕ , unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.
3. Stations and offsets marked by * reference US 60 (Grande Ave) Cst ϕ .

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			REMOVAL SHEET STA. 142+00 TO STA. 147+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.10
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. REVISIONS DATE LOCATION

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	82	232	

060 MA 144



NOTES:

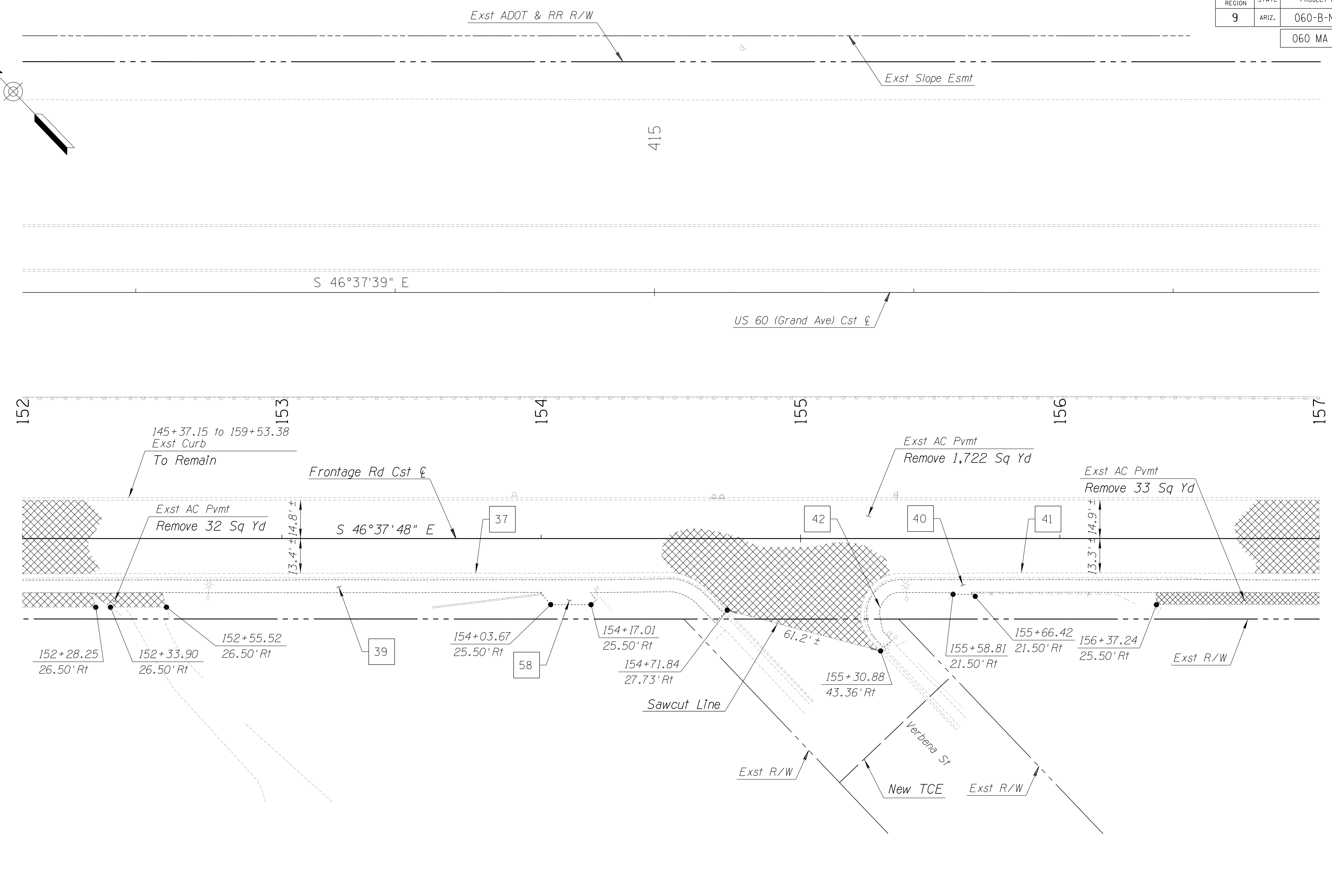
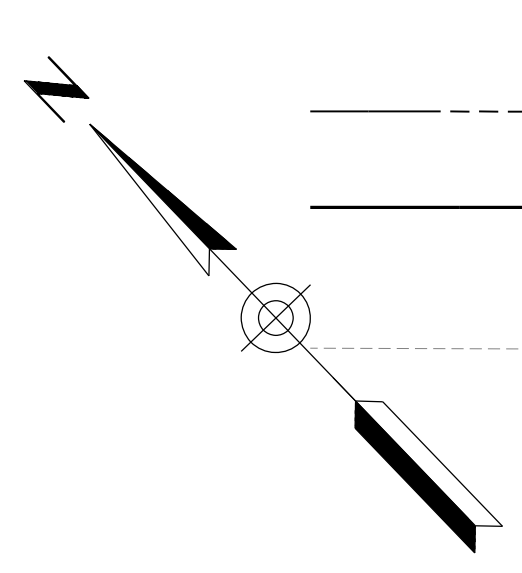
1. Stations and offsets reference Frontage Rd Cst ℓ , unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			REMOVAL SHEET STA. 147+00 TO STA. 152+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.11
TRACS NO.	H8874 01C			OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	83	232	

060 MA 144



NOTES:

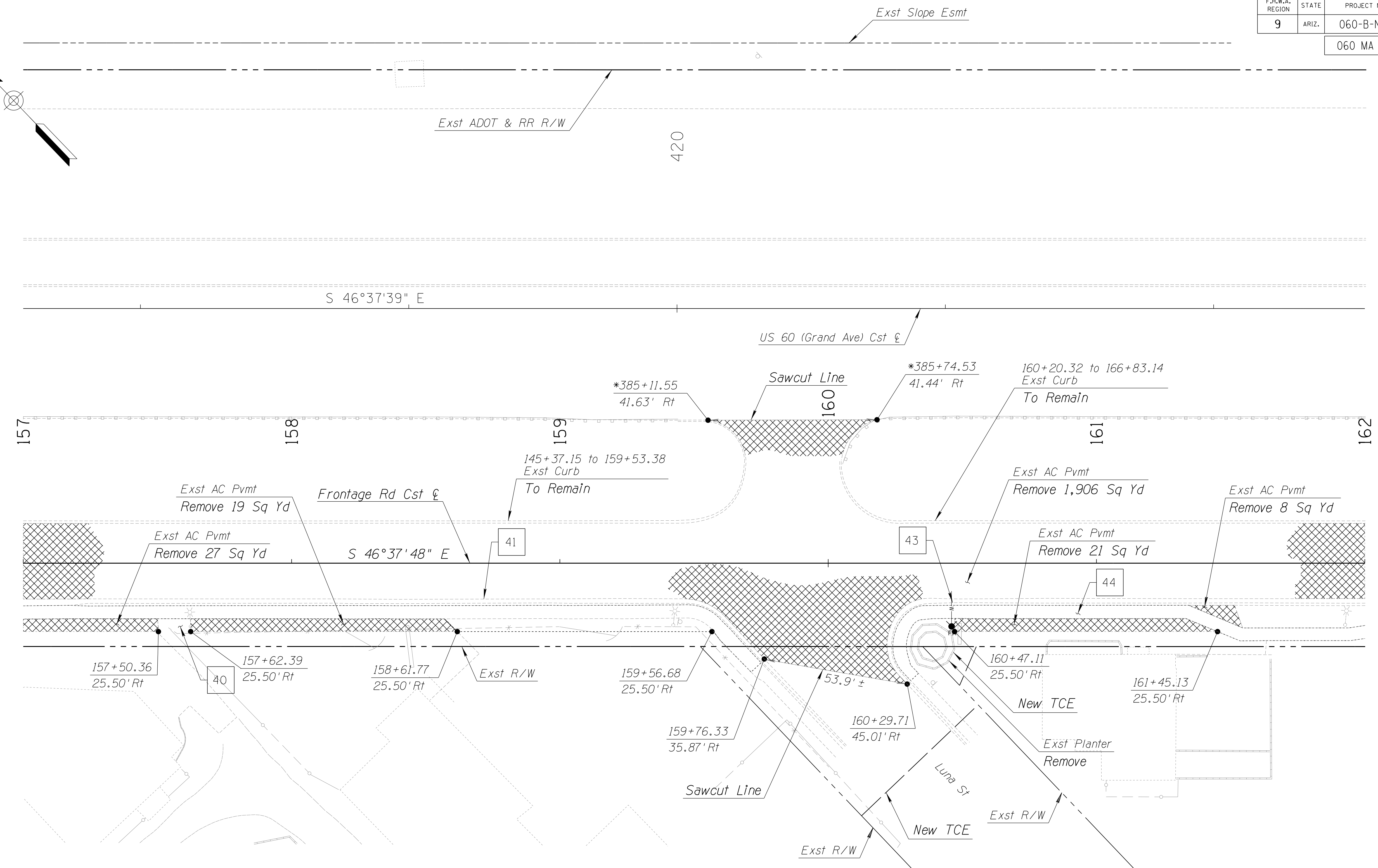
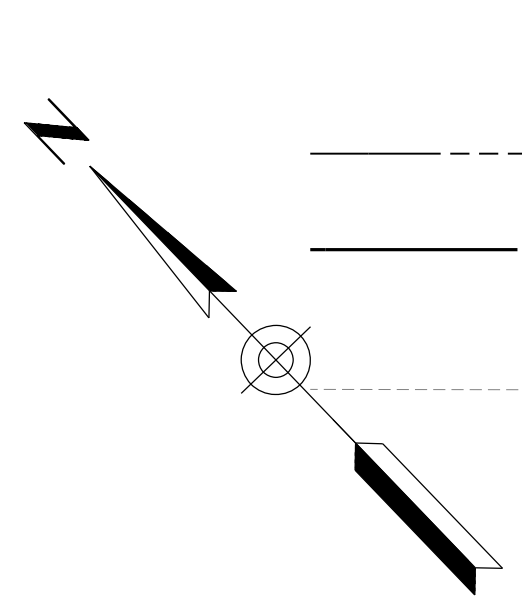
1. Stations and offsets reference Frontage Rd Cst &, unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			REMOVAL SHEET STA. 152+00 TO STA. 157+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.12
TRACS NO. H8874 01C				OF

SURVEY NO. LOCATION FINISHED PLANS REVISIONS DATE SURVEY NO. LOCATION FINISHED PLANS REVISIONS DATE SURVEY NO. LOCATION FINISHED PLANS REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	84	232	

060 MA 144



NOTES:

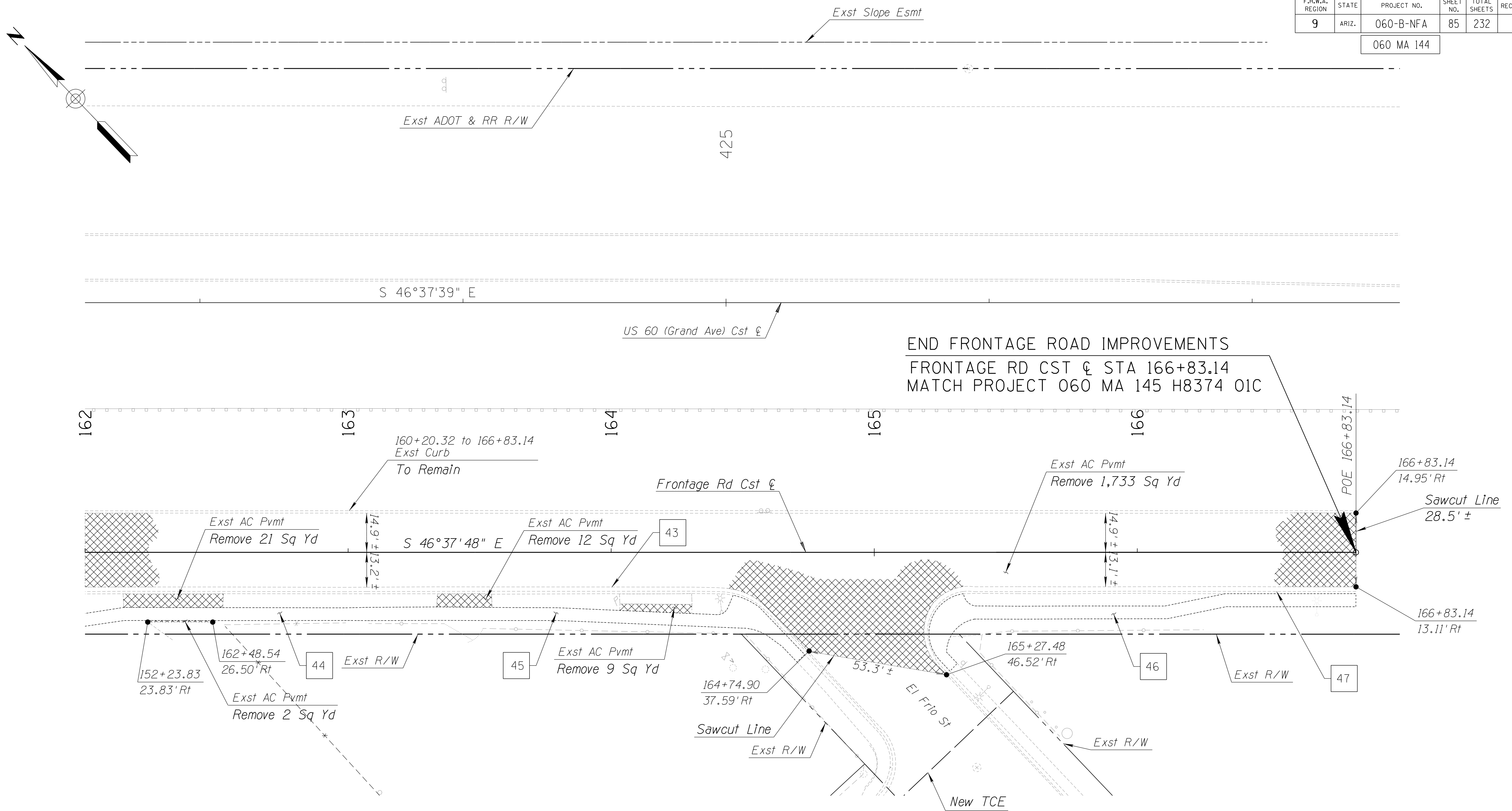
1. Stations and offsets reference Frontage Rd C&G, unless noted otherwise.
2. Stations and offests are to sawcut line, unless noted otherwise.

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	DCL	02/18		
CHECKED	WWS	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			REMOVAL SHEET STA. 157+00 TO STA. 162+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-02.13
TRACS NO. H8874 01C				OF

SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	85	232	

060 MA 144



END FRONTAGE ROAD IMPROVEMENTS
FRONTAGE RD CST STA 166+83.14
MATCH PROJECT 060 MA 145 H8374 01C

NOTES:

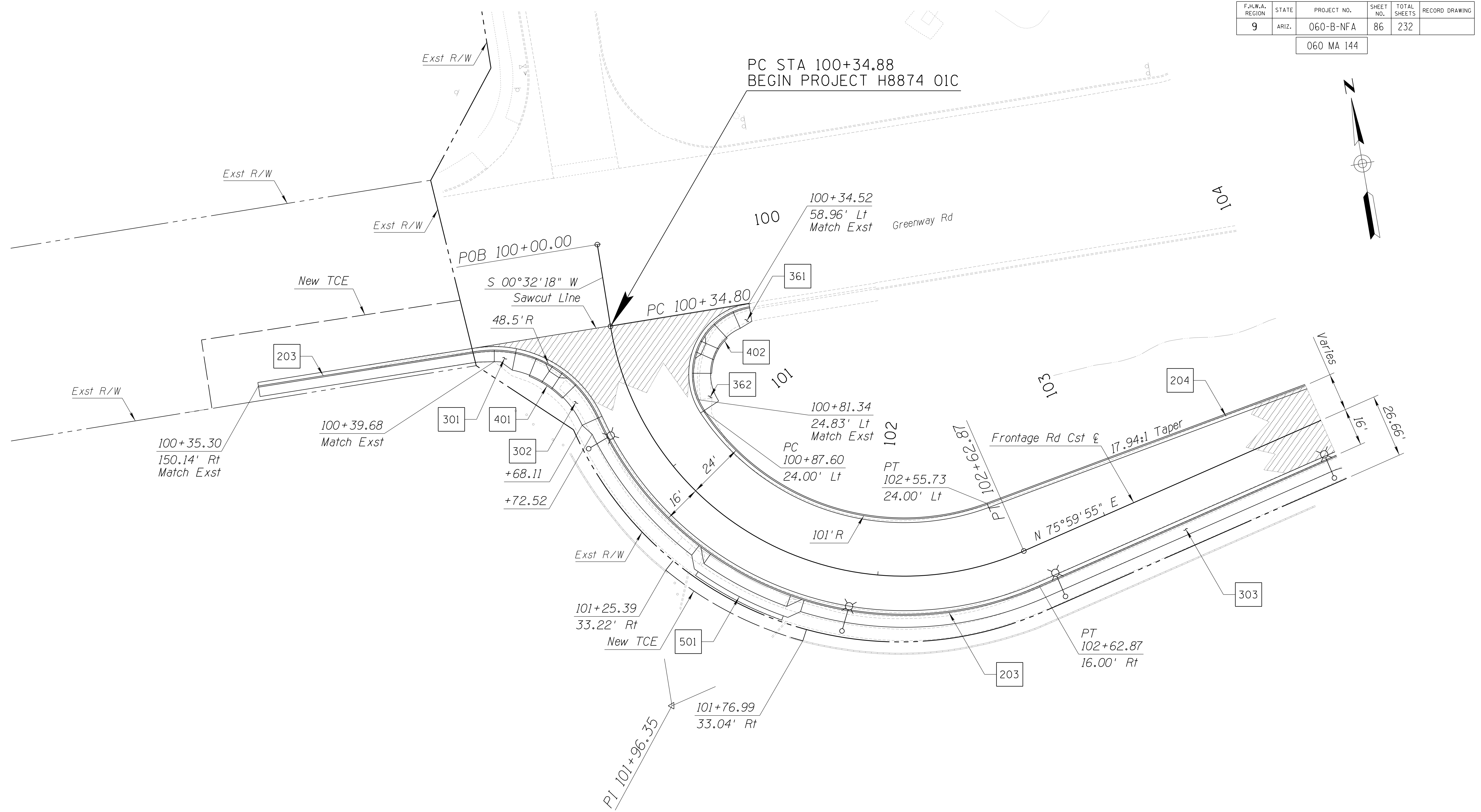
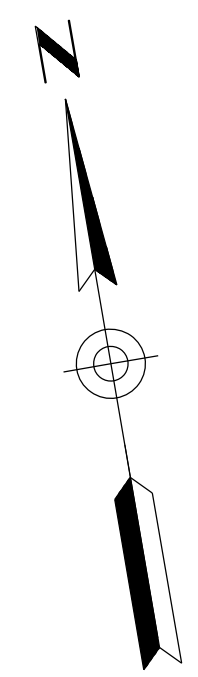
1. Stations and offsets reference Frontage Rd Cst ϕ , unless noted otherwise.
2. Stations and offsets are to sawcut line, unless noted otherwise.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			REMOVAL SHEET STA. 162+00 TO STA. 167+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-02.14
TRACS NO. H8874 01C				OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	86	232	

060 MA 144



NOTES:

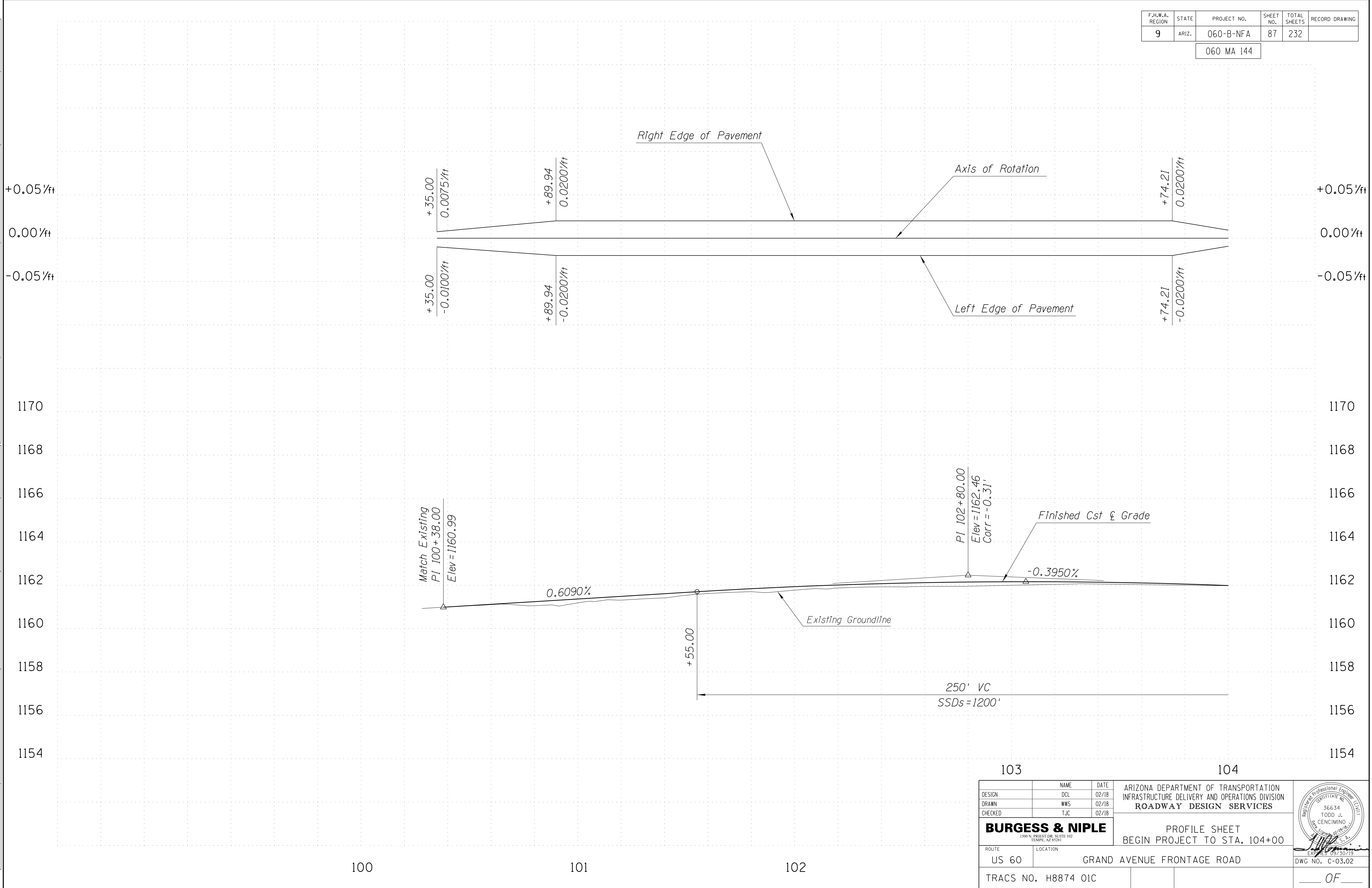
1. See Dwgs T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwgs T-05.03 to T-05.16 for Lighting Plans.
3. See Dwgs R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwgs R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET BEGIN PROJECT TO STA. 104+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.01
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	87	232	

060 MA 144

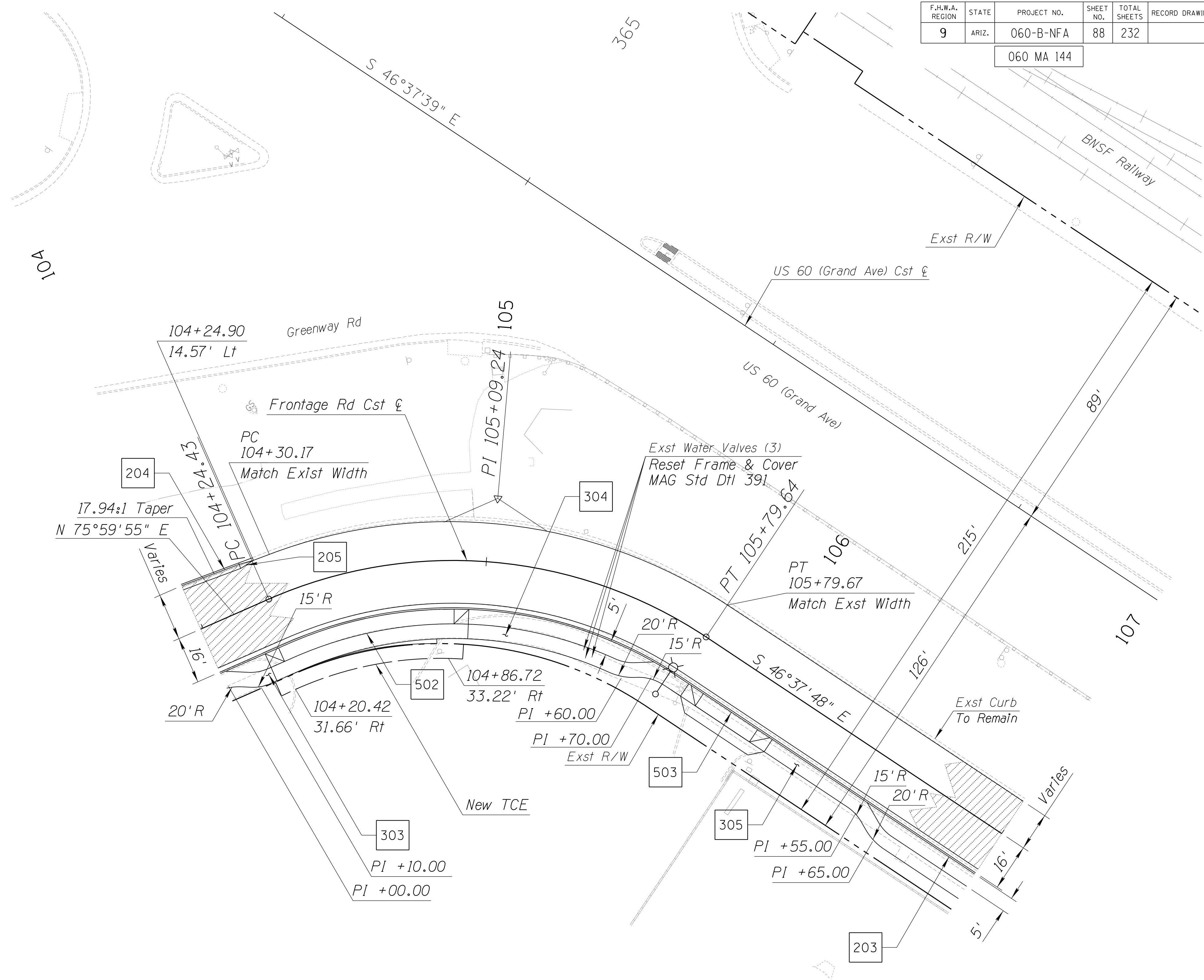
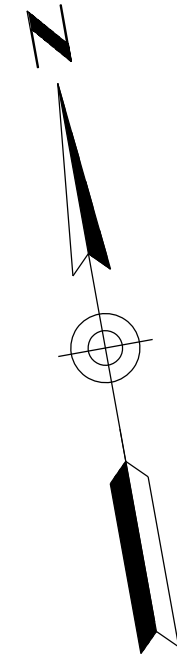


SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. DATE FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. DATE

DESIGN		DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN		WWS	02/18		
CHECKED		TJC	02/18		
BURGESS & NIPLE				PROFILE SHEET BEGIN PROJECT TO STA. 104+00	
ROUTE		LOCATION		DWG NO. C-03.02	
US 60		GRAND AVENUE FRONTAGE ROAD			
TRACS NO. H8874 01C				OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	88	232	

060 MA 144



NOTES:

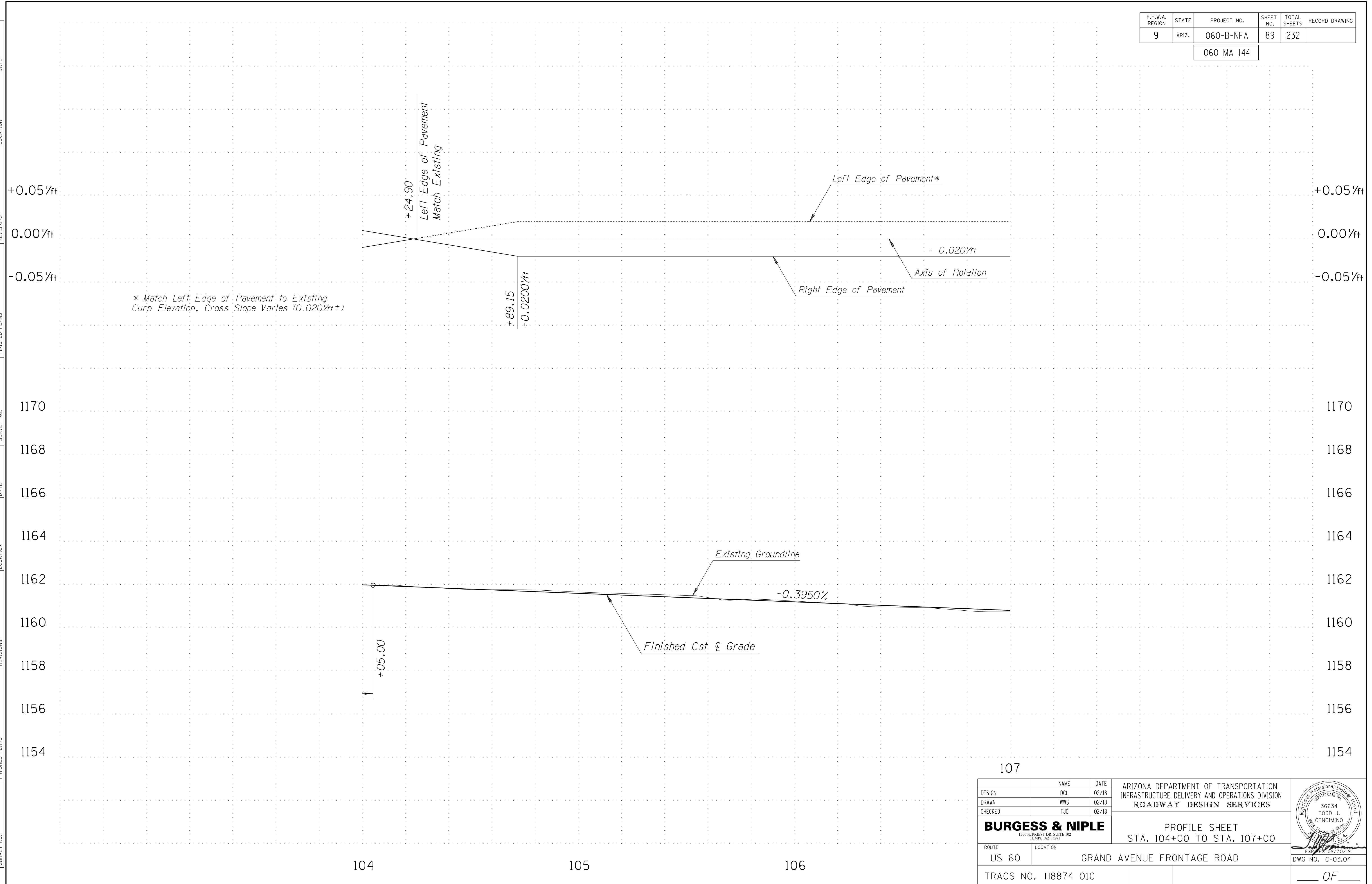
1. See Dwgs T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwgs T-05.03 to T-05.16 for Lighting Plans.
3. See Dwgs R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwgs R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET STA. 104+00 TO STA. 107+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		EXPIRES 09/30/19
TRACS NO. H8874 01C				DWG NO. C-03.03
				OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	89	232	

060 MA 144



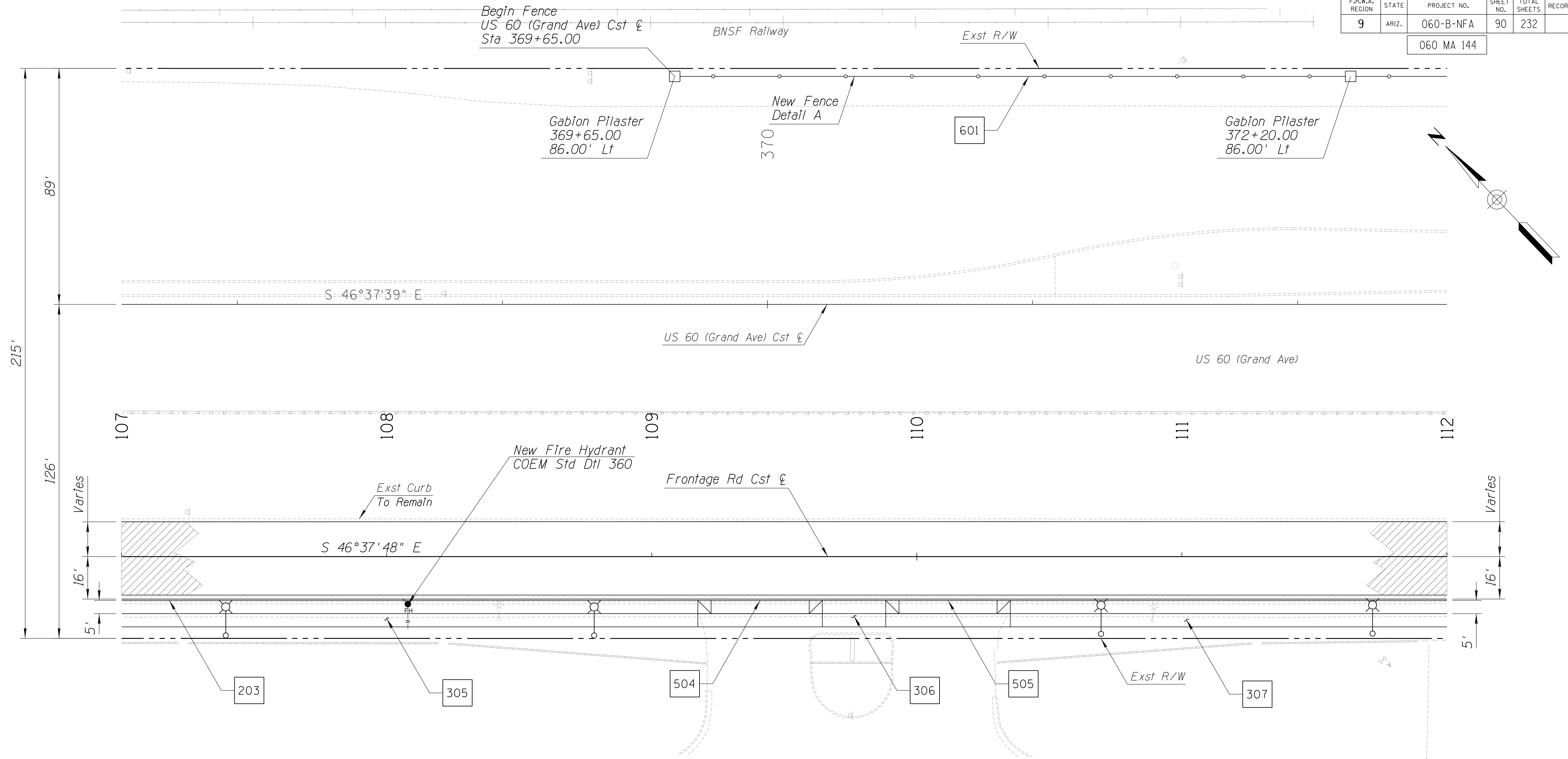
REVISIONS- LOCATION- DATE- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PROFILE SHEET STA. 104+00 TO STA. 107+00	DWG NO. C-03.04
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	TRACS NO. H8874 01C
				OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE SURVEY NO. FINISHED PLANS REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	90	232	

060 MA 144



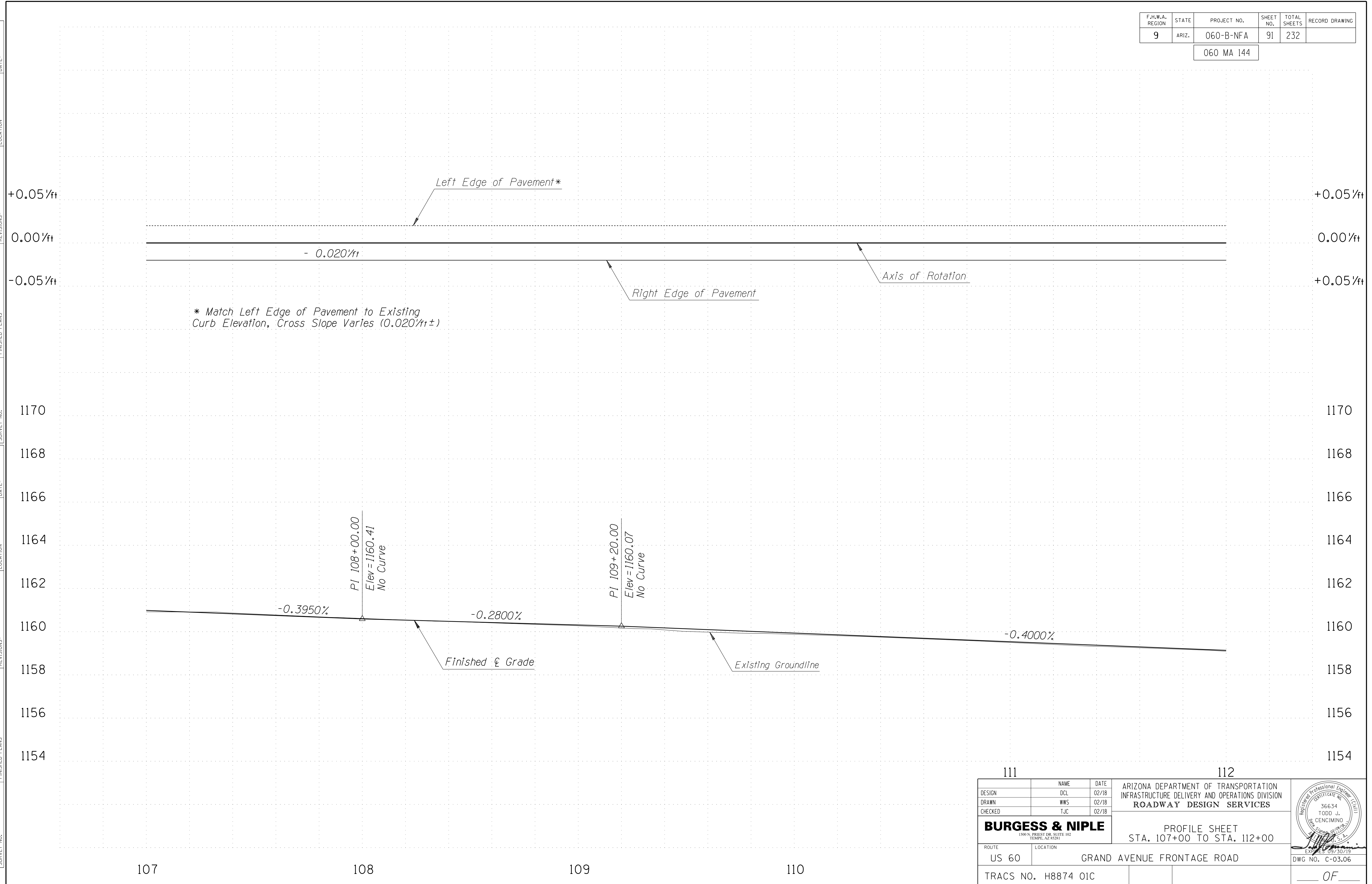
NOTES:

1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PLAN SHEET STA. 107+00 TO STA. 112+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.05
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	91	232	

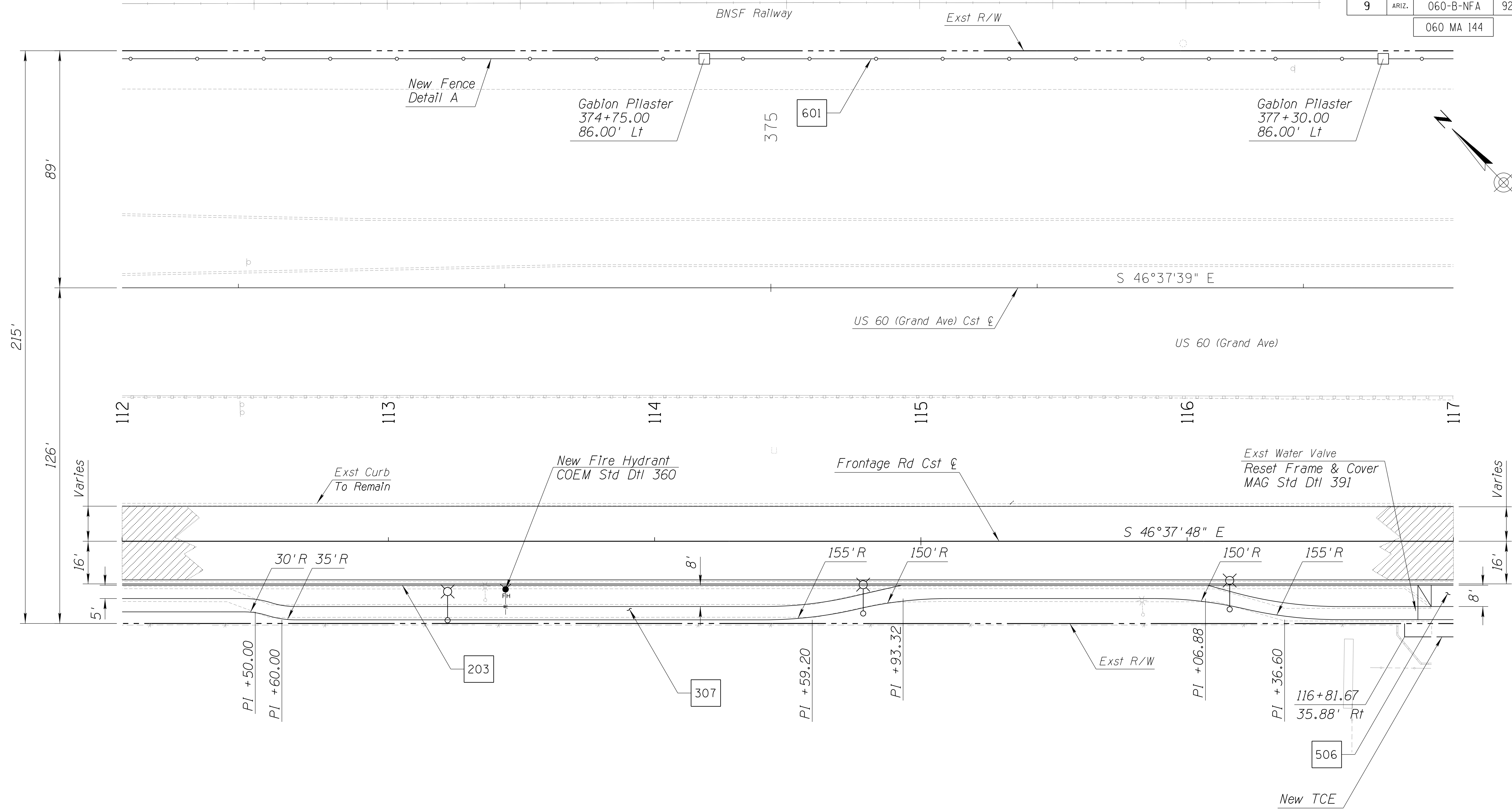
060 MA 144



DESIGN		DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN		WWS	02/18		
CHECKED		TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>				PROFILE SHEET STA. 107+00 TO STA. 112+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD			DWG NO. C-03.06
TRACS NO. H8874 01C				OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	92	232	

060 MA 144



NOTES:

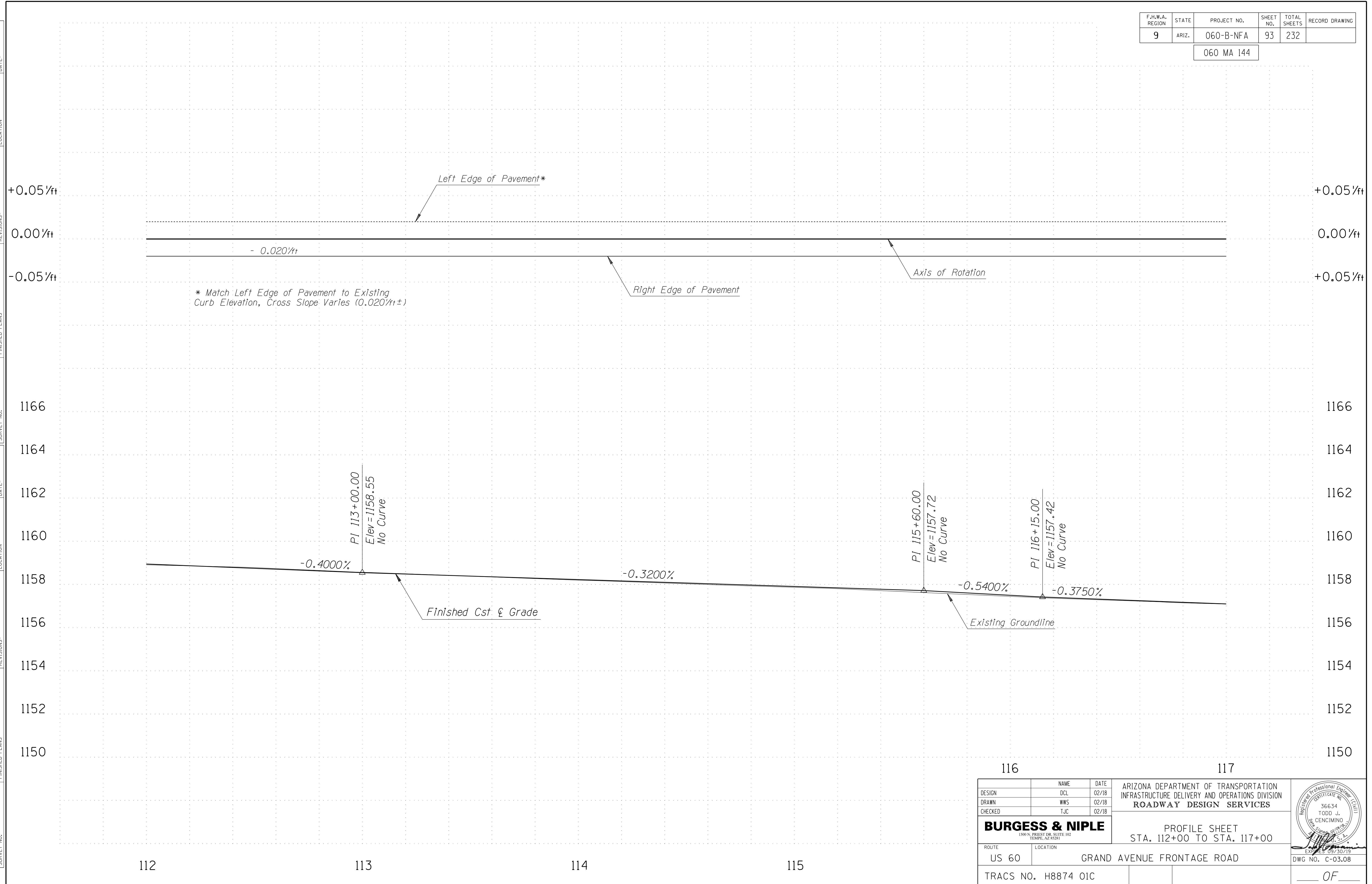
1. See Dwgs T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwgs T-05.03 to T-05.16 for Lighting Plans.
3. See Dwgs R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwgs R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET STA. 112+00 TO STA. 117+00	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.07
TRACS NO. H8874 01C				OF


SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	93	232	

060 MA 144

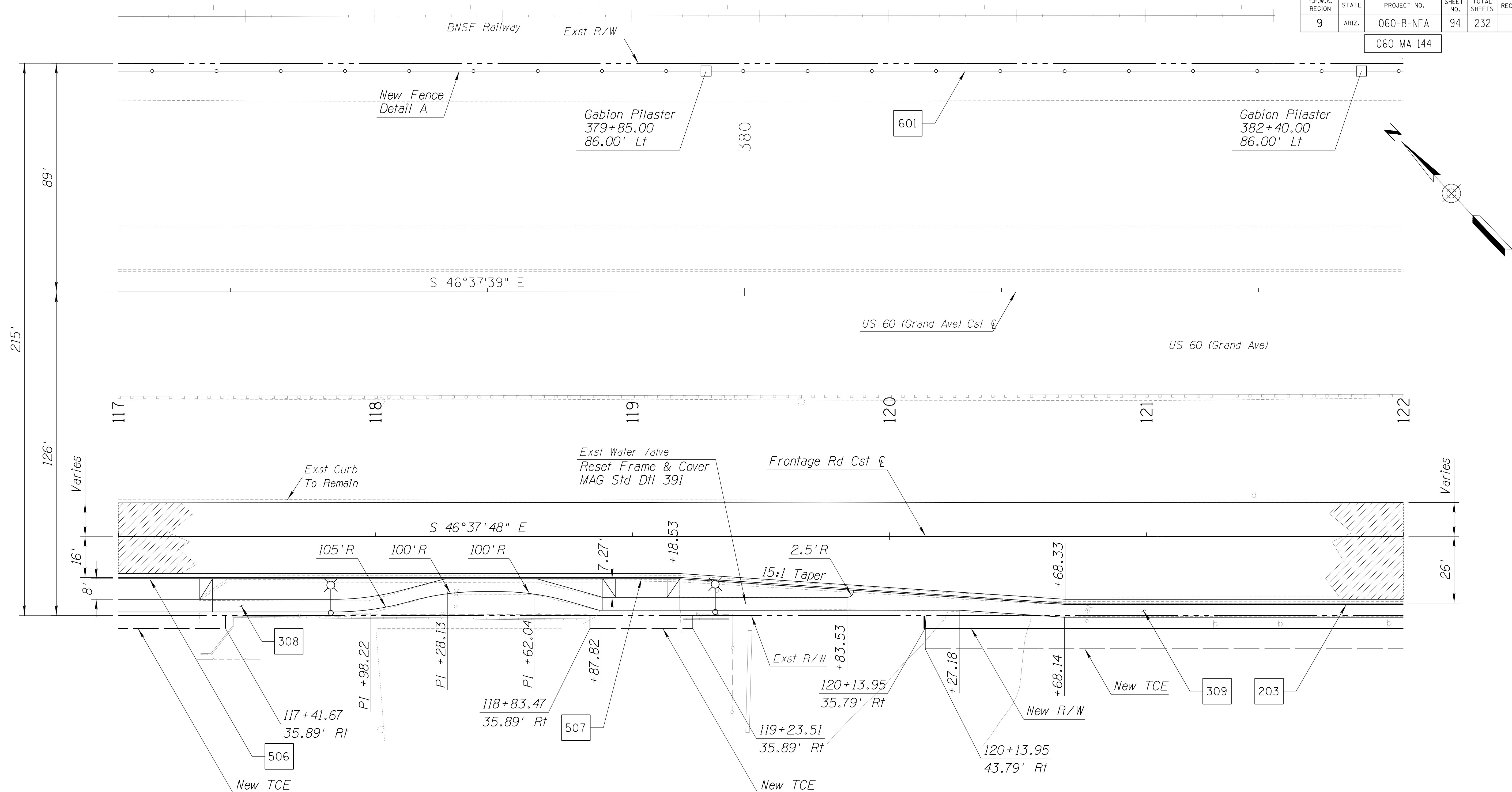


SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. DATE REVISIONS LOCATION DATE

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	WWS	02/18	
CHECKED	TJC	02/18	
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PROFILE SHEET STA. 112+00 TO STA. 117+00 
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
TRACS NO. H8874 01C			DWG NO. C-03.08

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	94	232	

060 MA 144



NOTES:

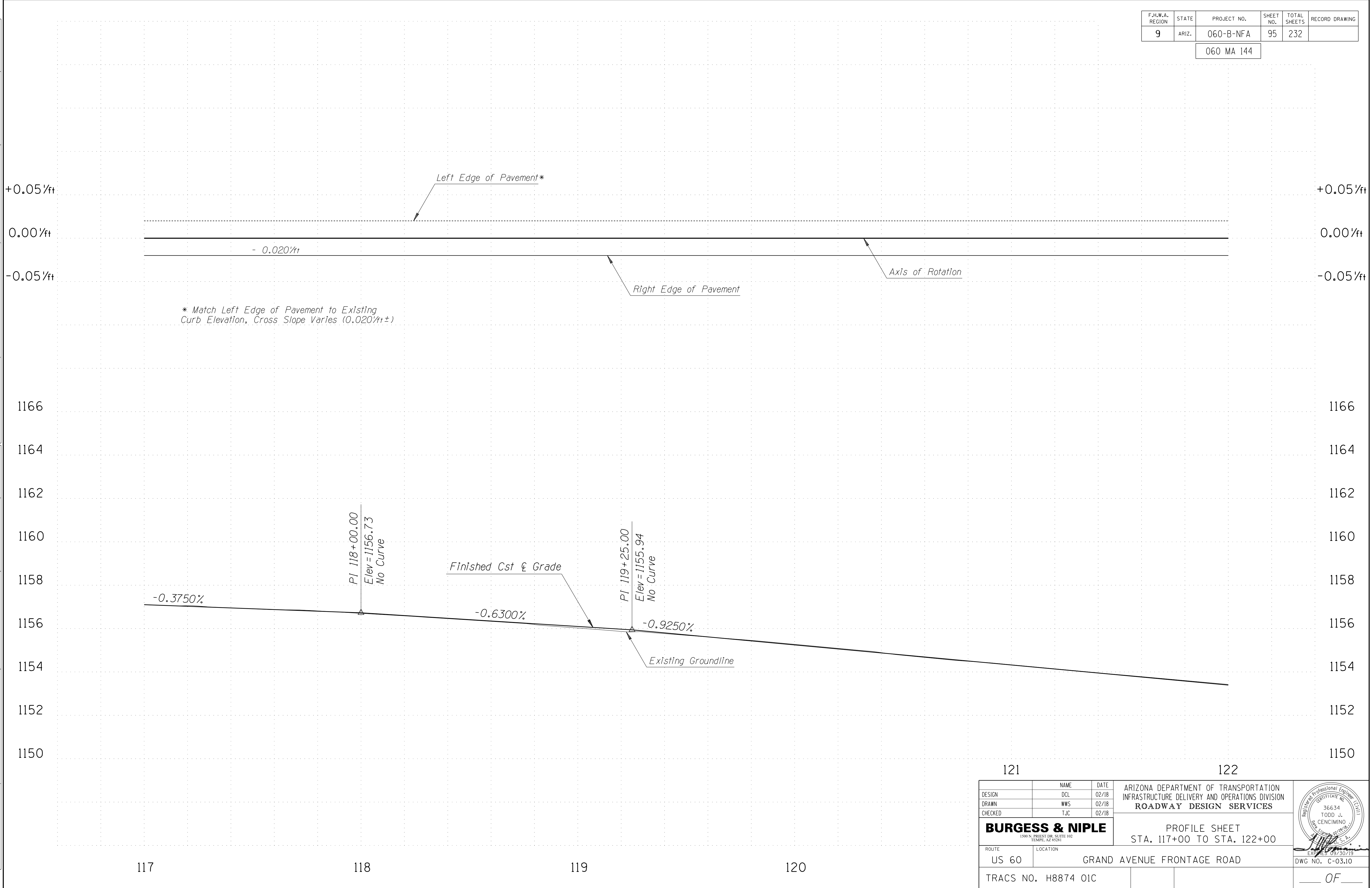
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET STA. 117+00 TO STA. 122+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.09
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE SURVEY NO. FINISHED PLANS REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	95	232	

060 MA 144



* Match Left Edge of Pavement to Existing Curb Elevation, Cross Slope Varies (0.020%/ft±)

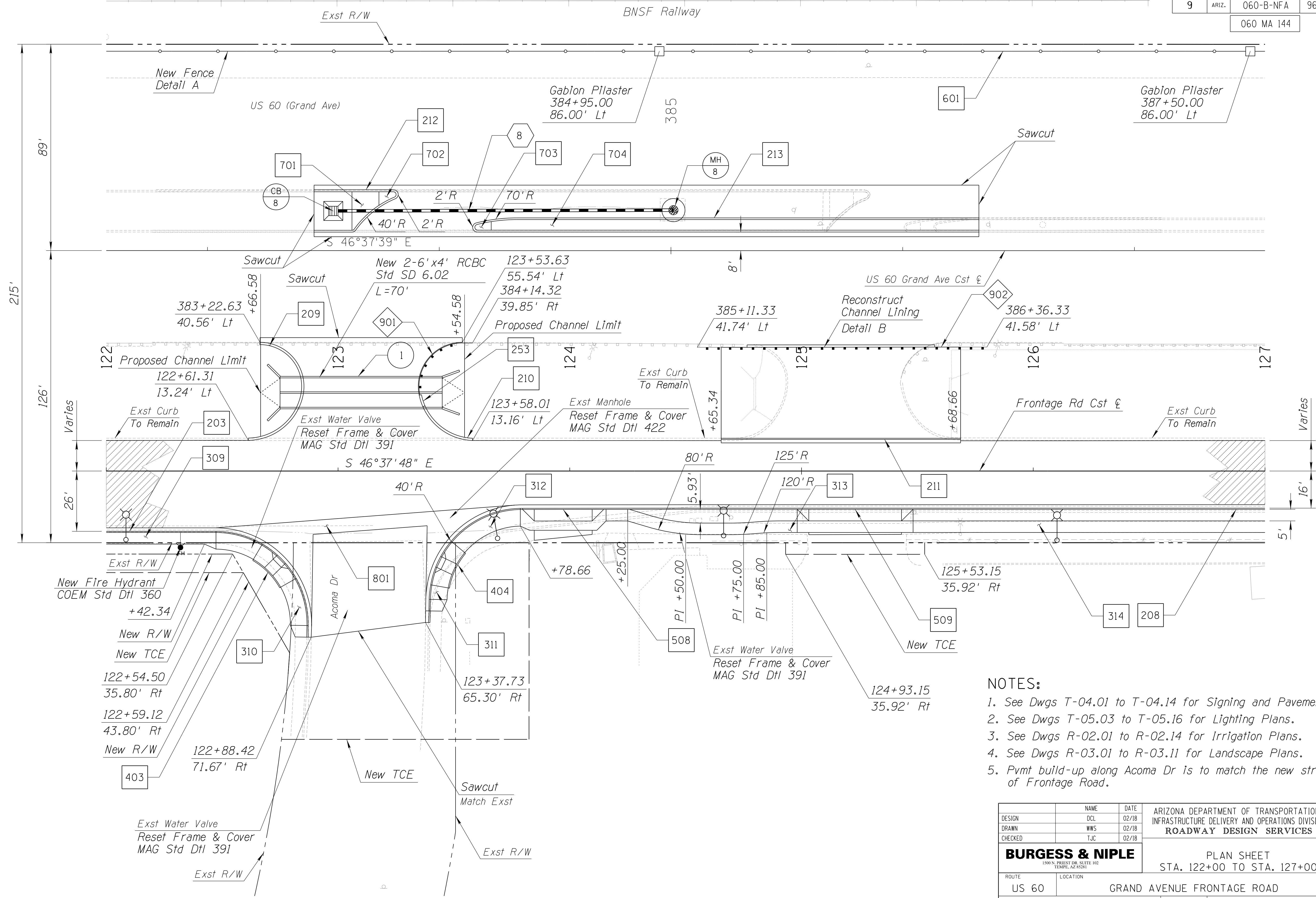
SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. DATE FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS SURVEY NO. DATE

121 122

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PROFILE SHEET STA. 117+00 TO STA. 122+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C			DWG NO. C-03.10	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	96	232	

060 MA 144

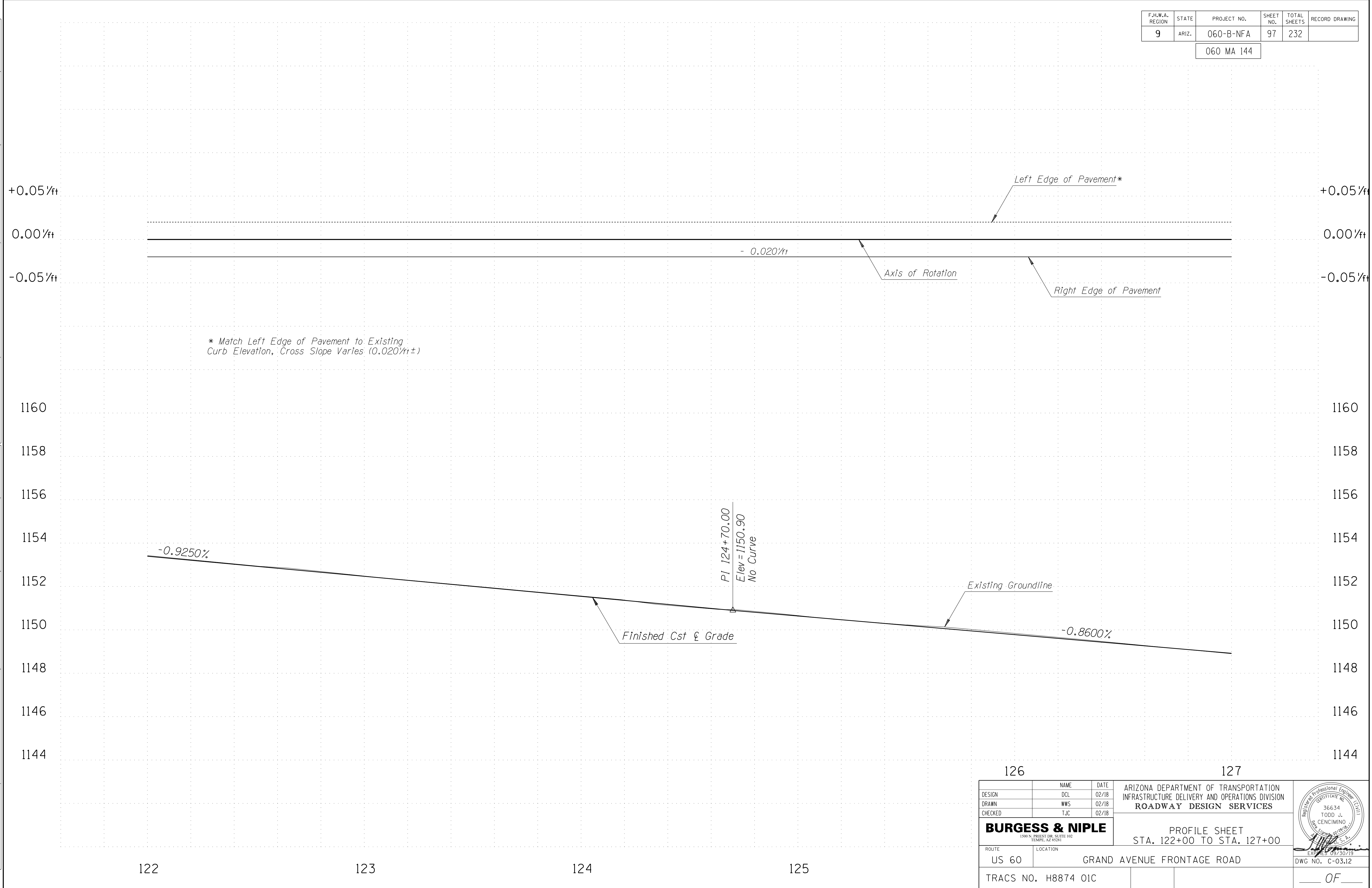


- NOTES:**
1. See Dwgs T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
 2. See Dwgs T-05.03 to T-05.16 for Lighting Plans.
 3. See Dwgs R-02.01 to R-02.14 for Irrigation Plans.
 4. See Dwgs R-03.01 to R-03.11 for Landscape Plans.
 5. Pvmt build-up along Acoma Dr is to match the new structural section of Frontage Road.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET STA. 122+00 TO STA. 127+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-03.11
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	97	232	

060 MA 144



* Match Left Edge of Pavement to Existing Curb Elevation, Cross Slope Varies (0.020/ft±)

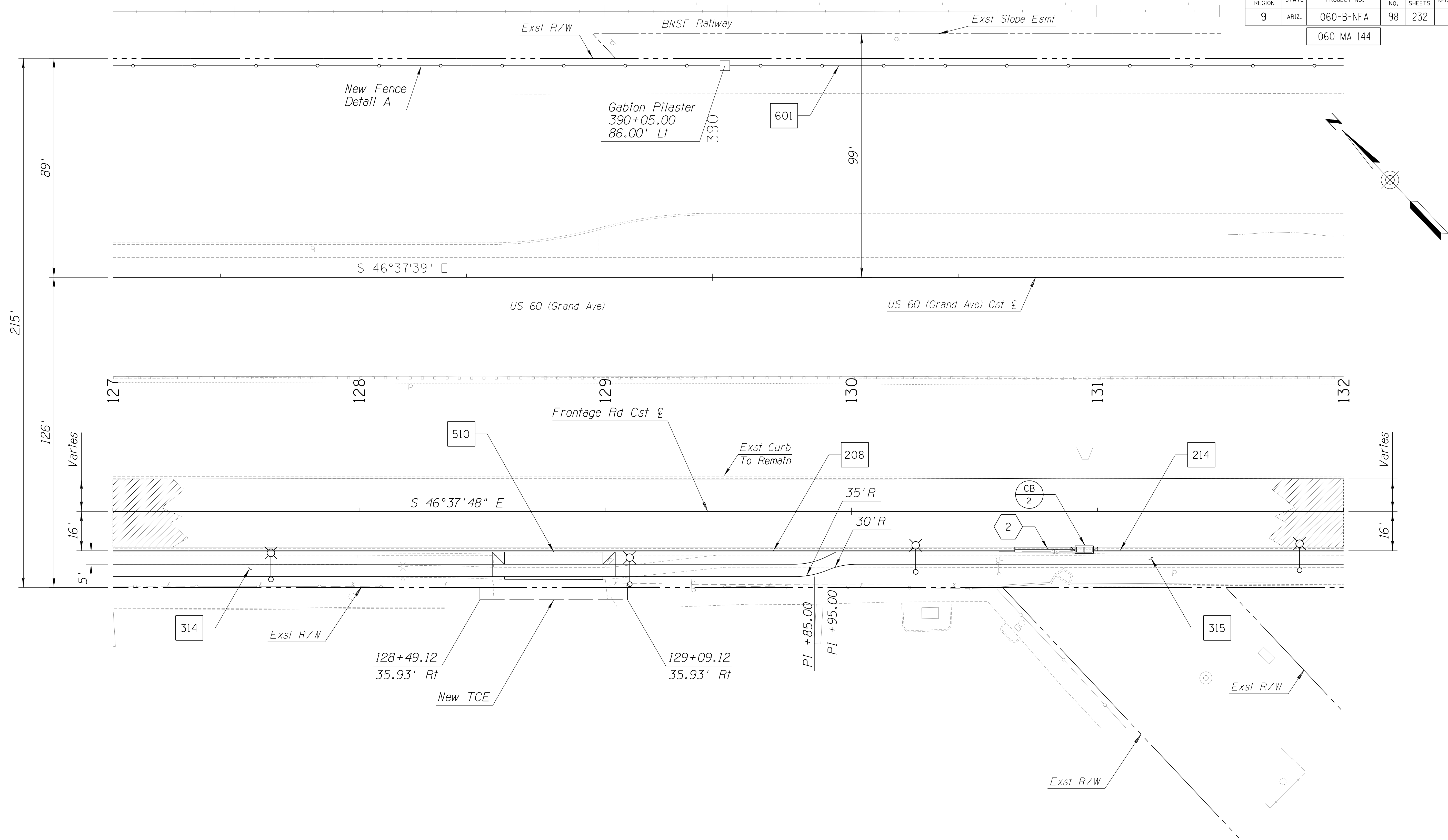
126 127

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PROFILE SHEET STA. 122+00 TO STA. 127+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.12
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS DATE SURVEY NO. FINISHED PLANS REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	98	232	

060 MA 144



NOTES:

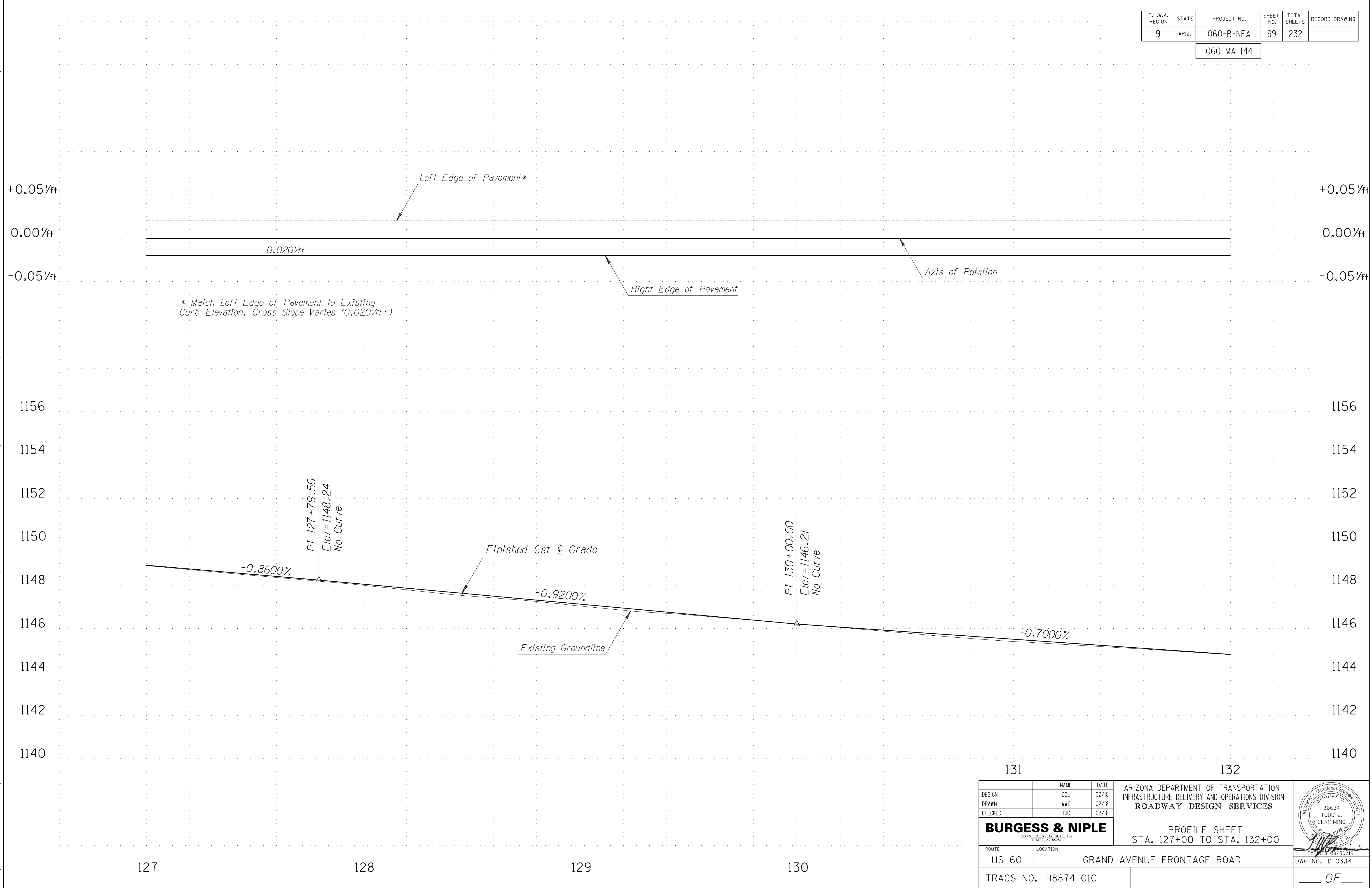
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET STA. 127+00 TO STA. 132+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-03.13
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	99	232	

060 MA 144



SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

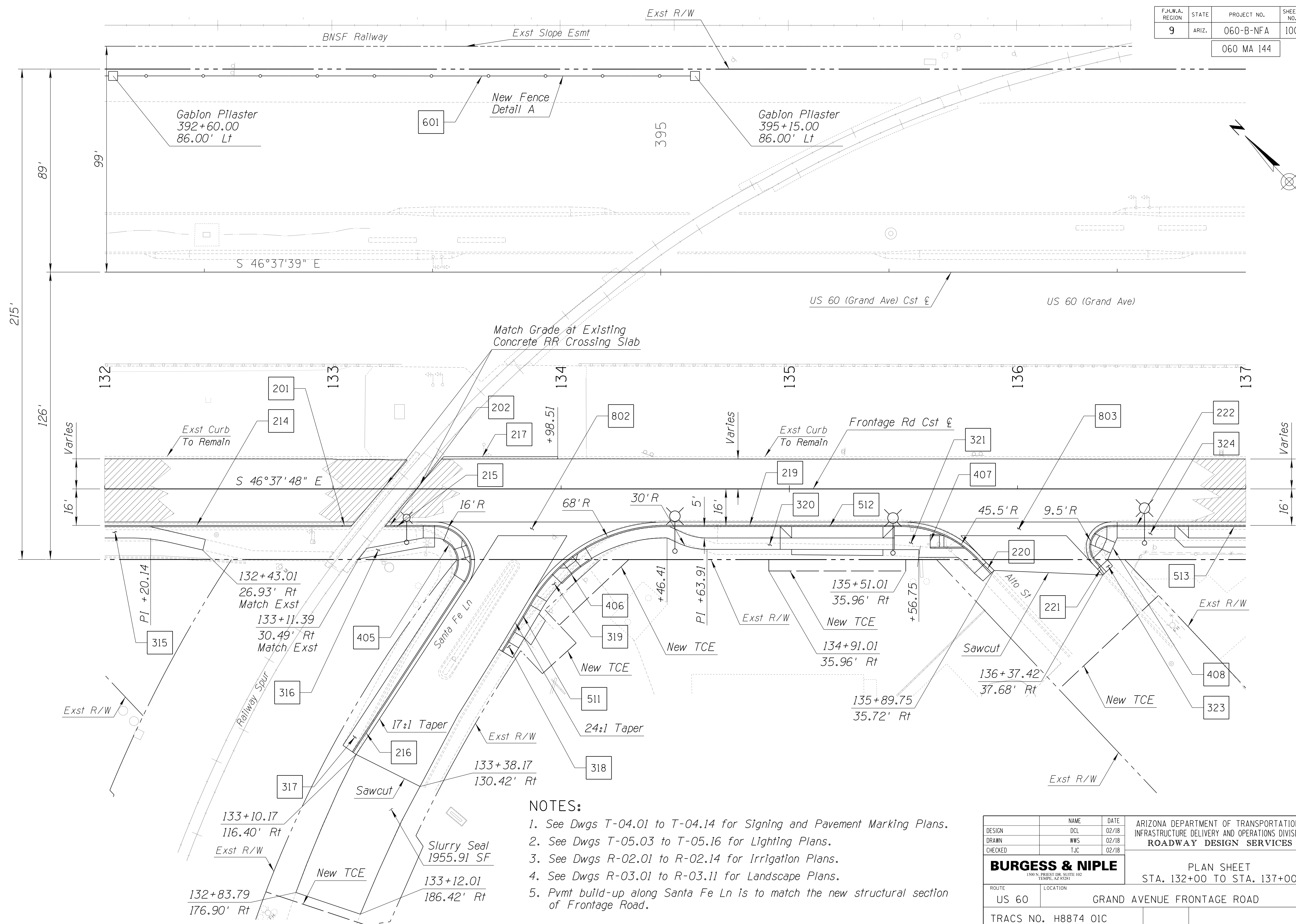
131		132	
DESIGN	DCL	DATE	02/18
DRAWN	WWS	DATE	02/18
CHECKED	TJC	DATE	02/18
BURGESS & NIPLE		ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281		PROFILE SHEET STA. 127+00 TO STA. 132+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
TRACS NO. H8874 01C		DWG NO. C-03.14 OF	



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	100	232	

060 MA 144

SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS

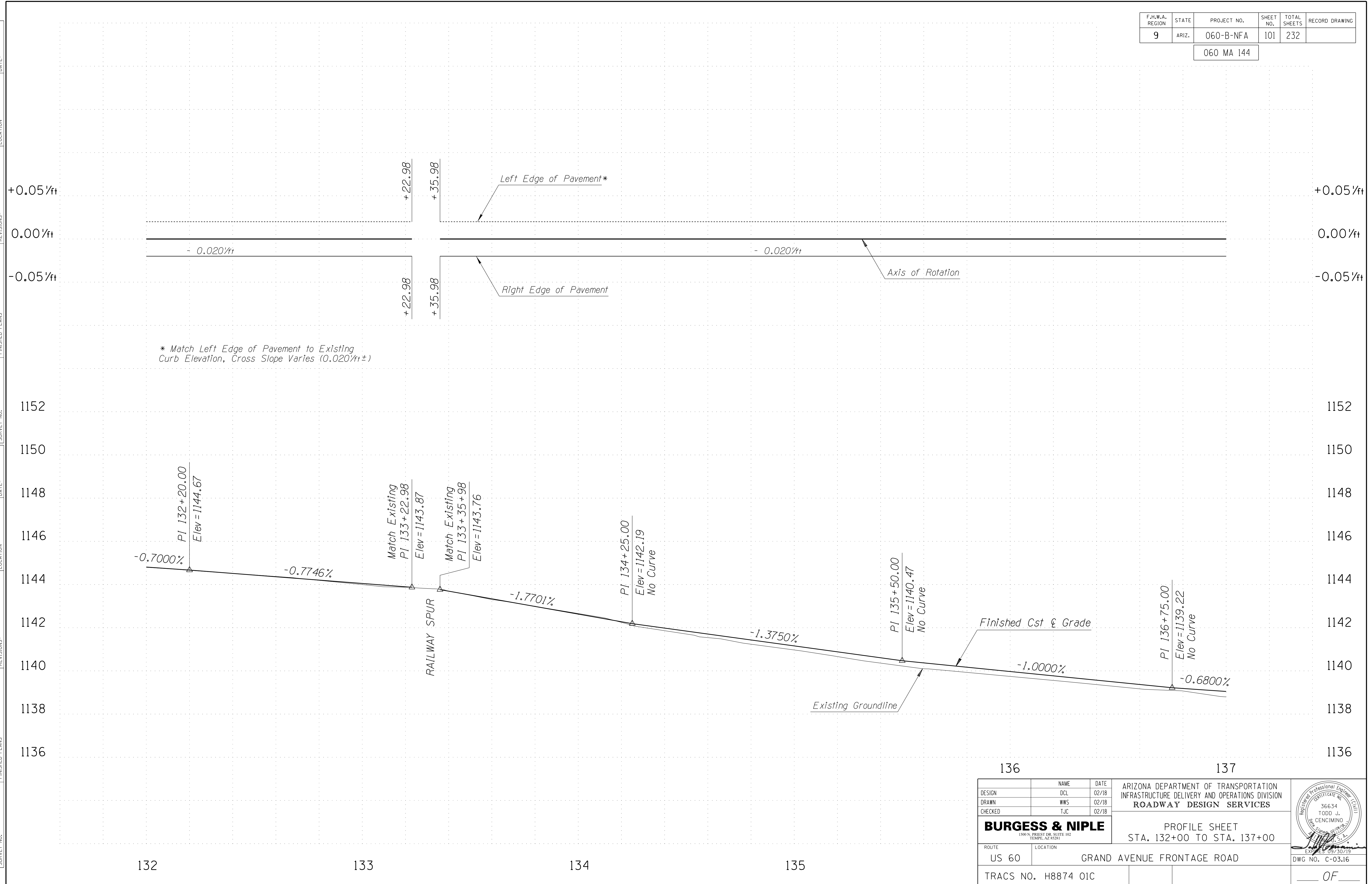


- NOTES:**
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
 2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
 3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
 4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.
 5. Pvm't build-up along Santa Fe Ln is to match the new structural section of Frontage Road.

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PLAN SHEET STA. 132+00 TO STA. 137+00	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60		TRACS NO. H8874 01C		
				DWG NO. C-03.15 OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	101	232	

060 MA 144



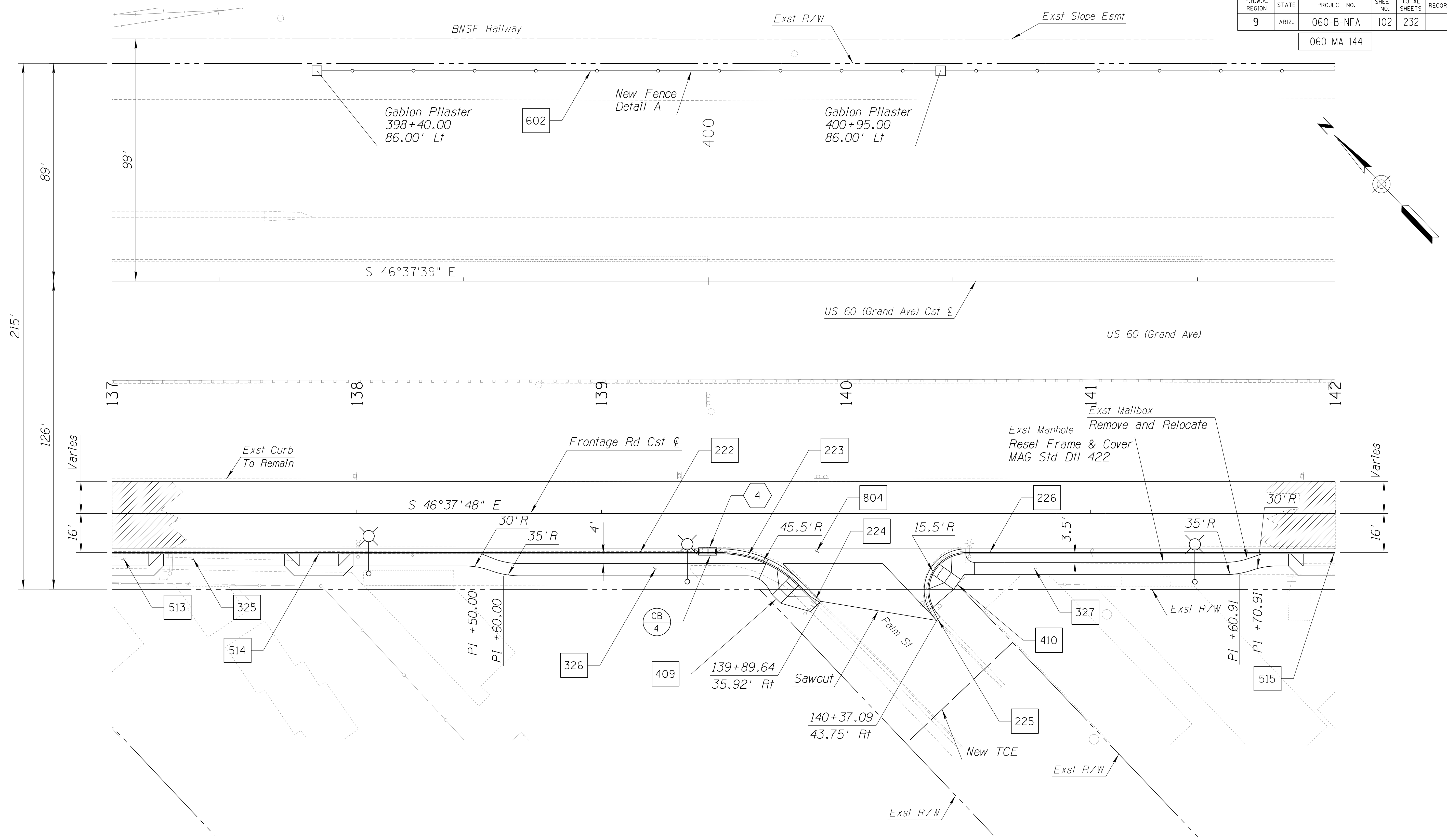
* Match Left Edge of Pavement to Existing Curb Elevation, Cross Slope Varies (0.020'/ft ±)

DESIGN		DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN		WWS	02/18		
CHECKED		TJC	02/18		
BURGESS & NIPLE		PROFILE SHEET STA. 132+00 TO STA. 137+00			
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD			DWG NO. C-03.16
TRACS NO. H8874 01C					OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	102	232	

060 MA 144



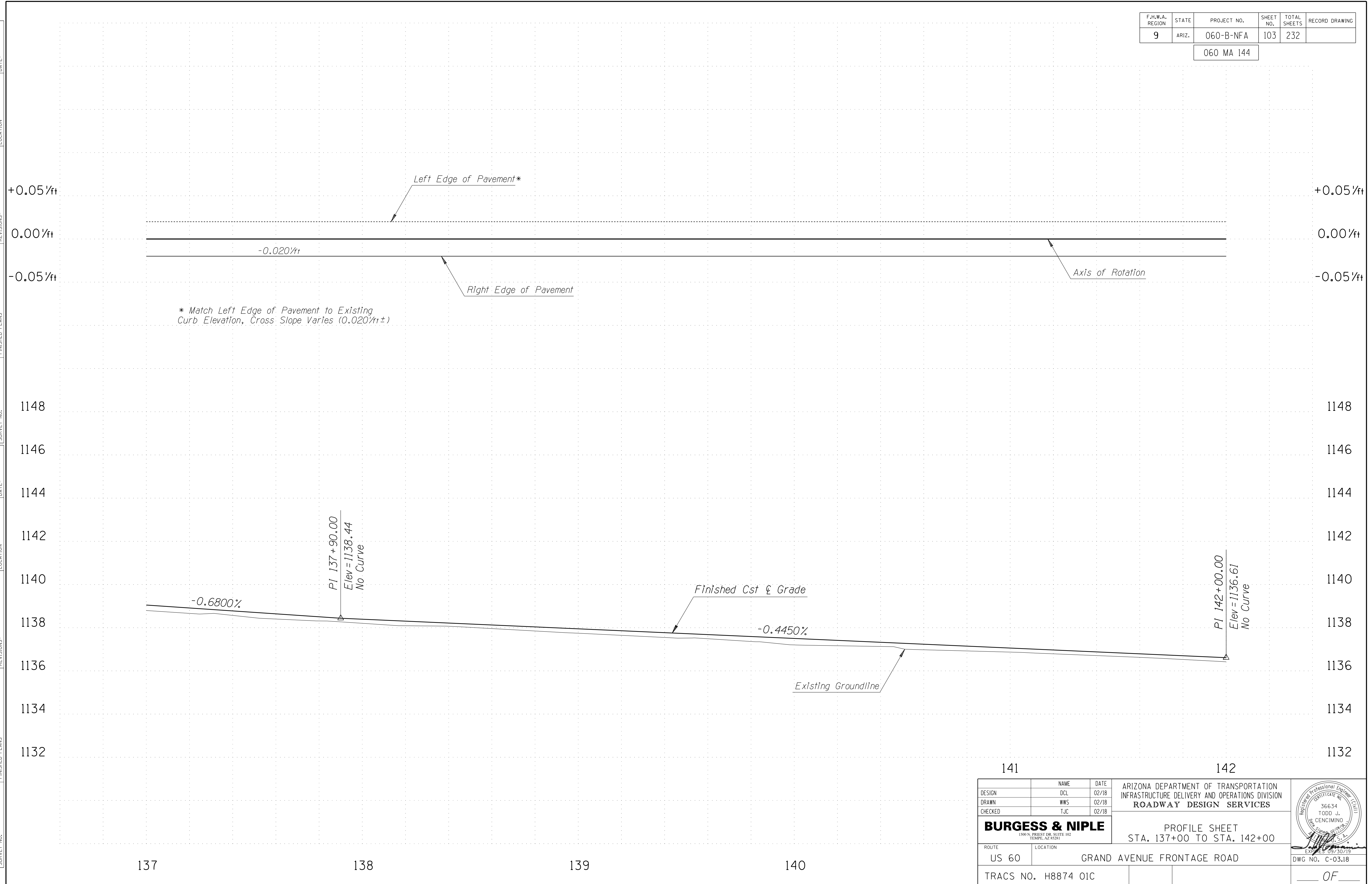
NOTES:

1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PLAN SHEET STA. 137+00 TO STA. 142+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-03.17
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	103	232	

060 MA 144

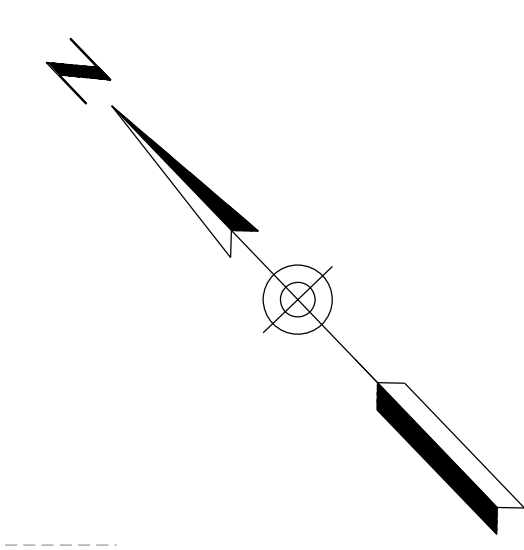
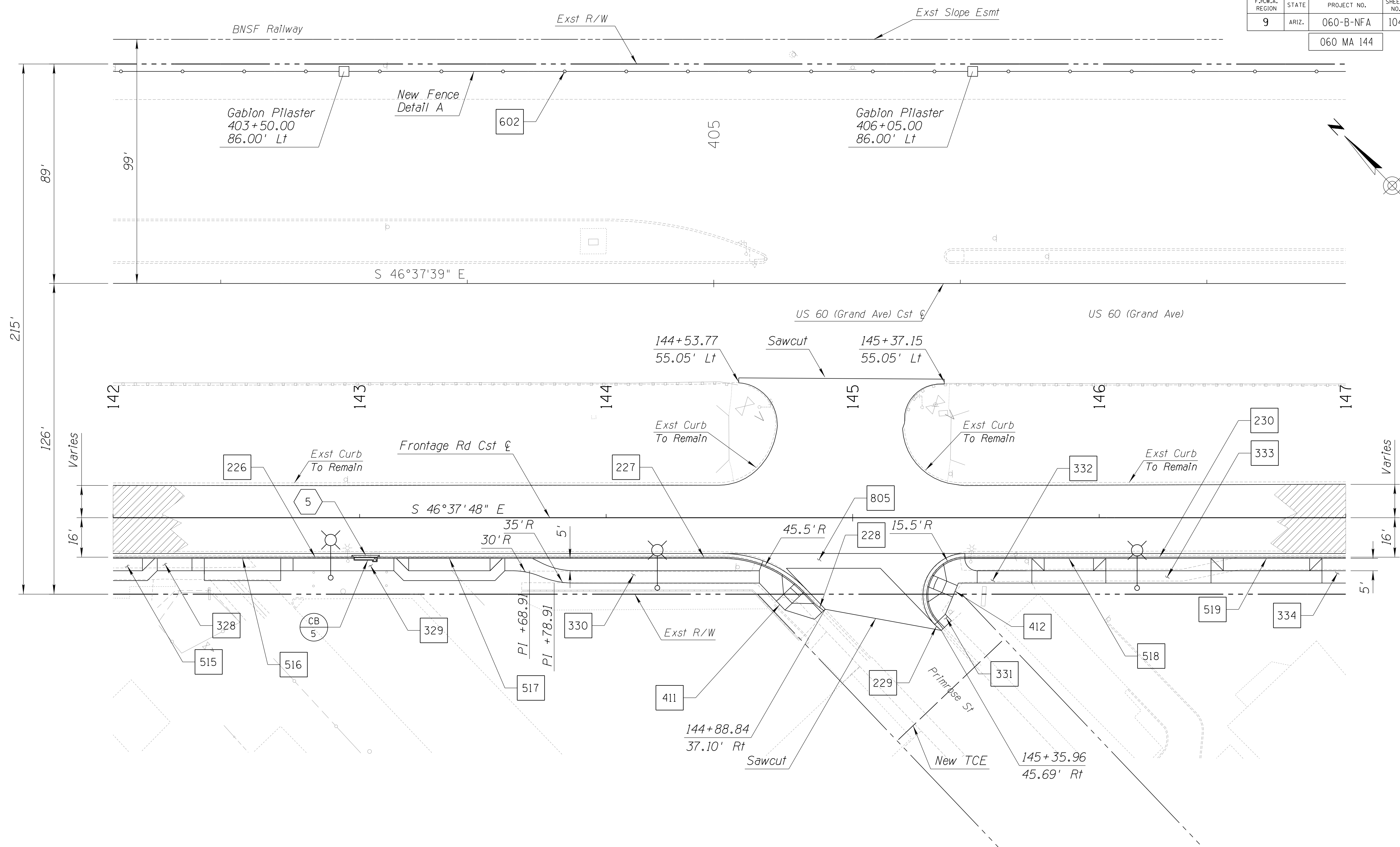


* Match Left Edge of Pavement to Existing Curb Elevation, Cross Slope Varies (0.020/ft ±)

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PROFILE SHEET STA. 137+00 TO STA. 142+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-03.18
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	104	232	

060 MA 144



NOTES:

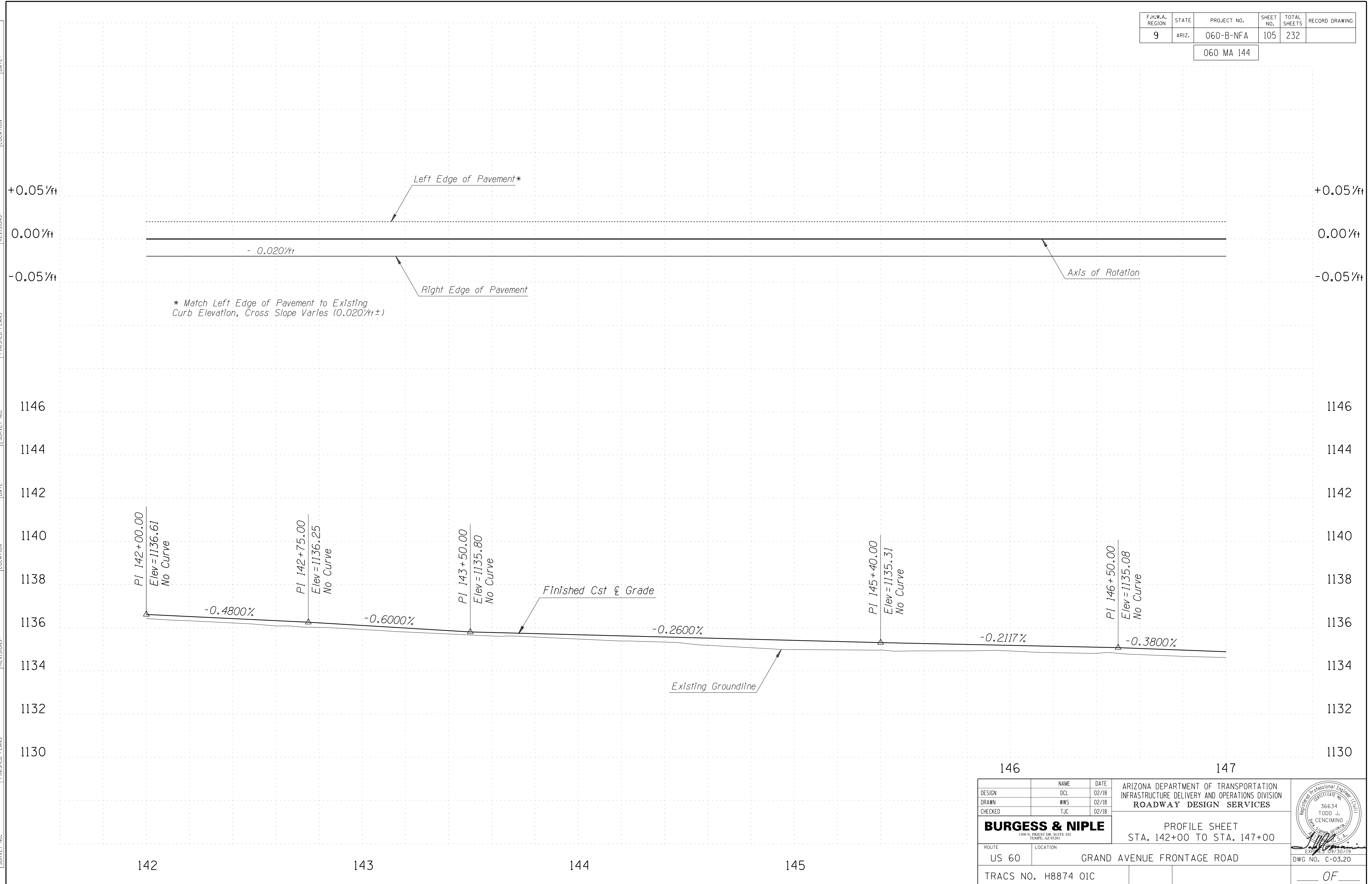
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		PLAN SHEET		STA. 142+00 TO STA. 147+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO.	H8874 01C				DWG NO. C-03.19

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	105	232	

060 MA 144

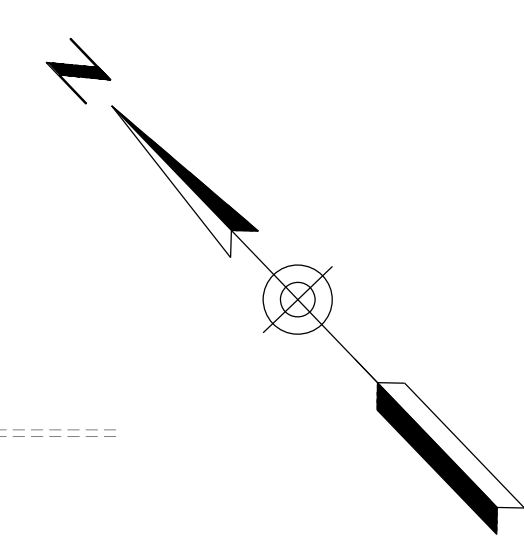
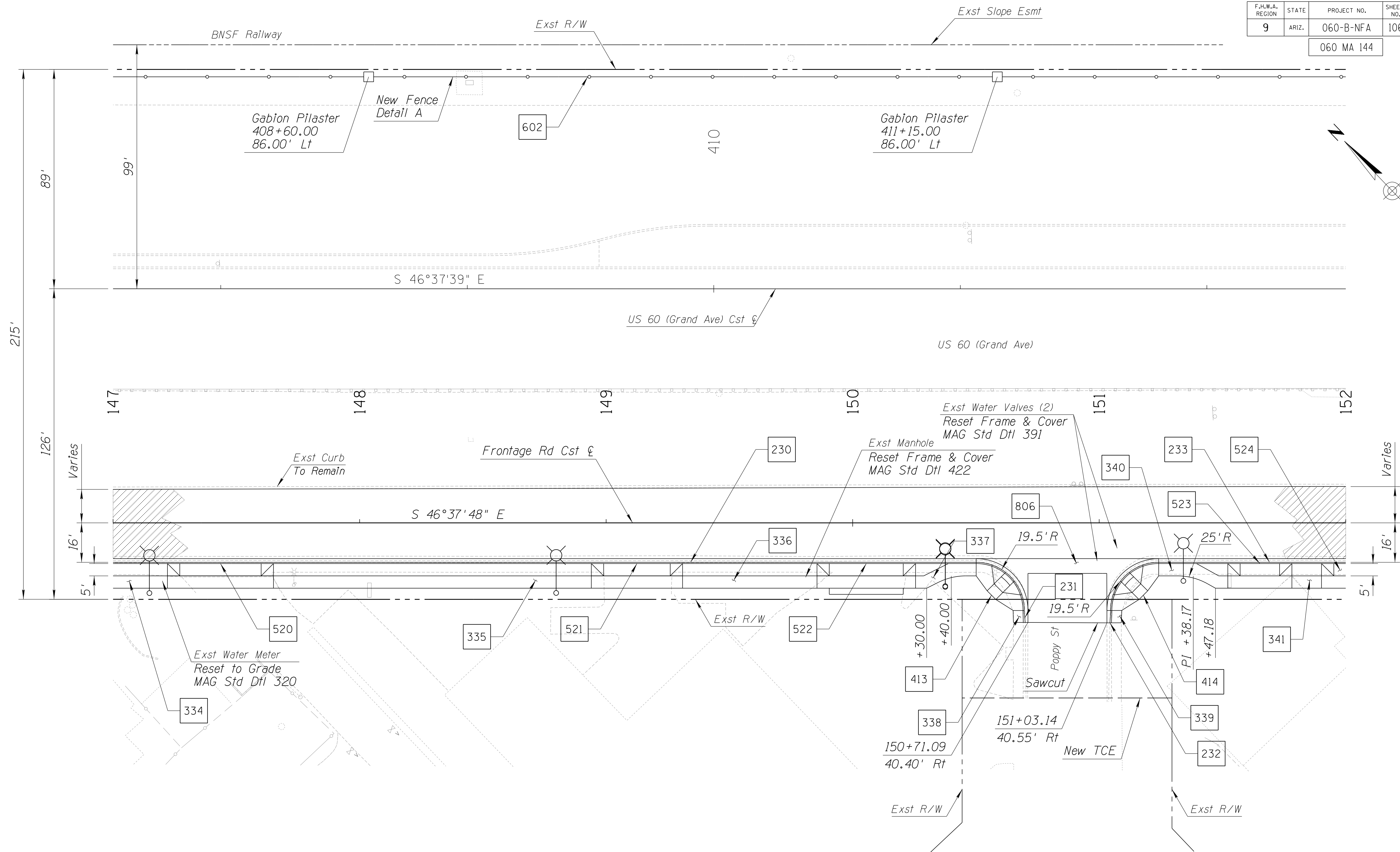


SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PROFILE SHEET STA. 142+00 TO STA. 147+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C			DWG NO. C-03.20	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	106	232	

060 MA 144

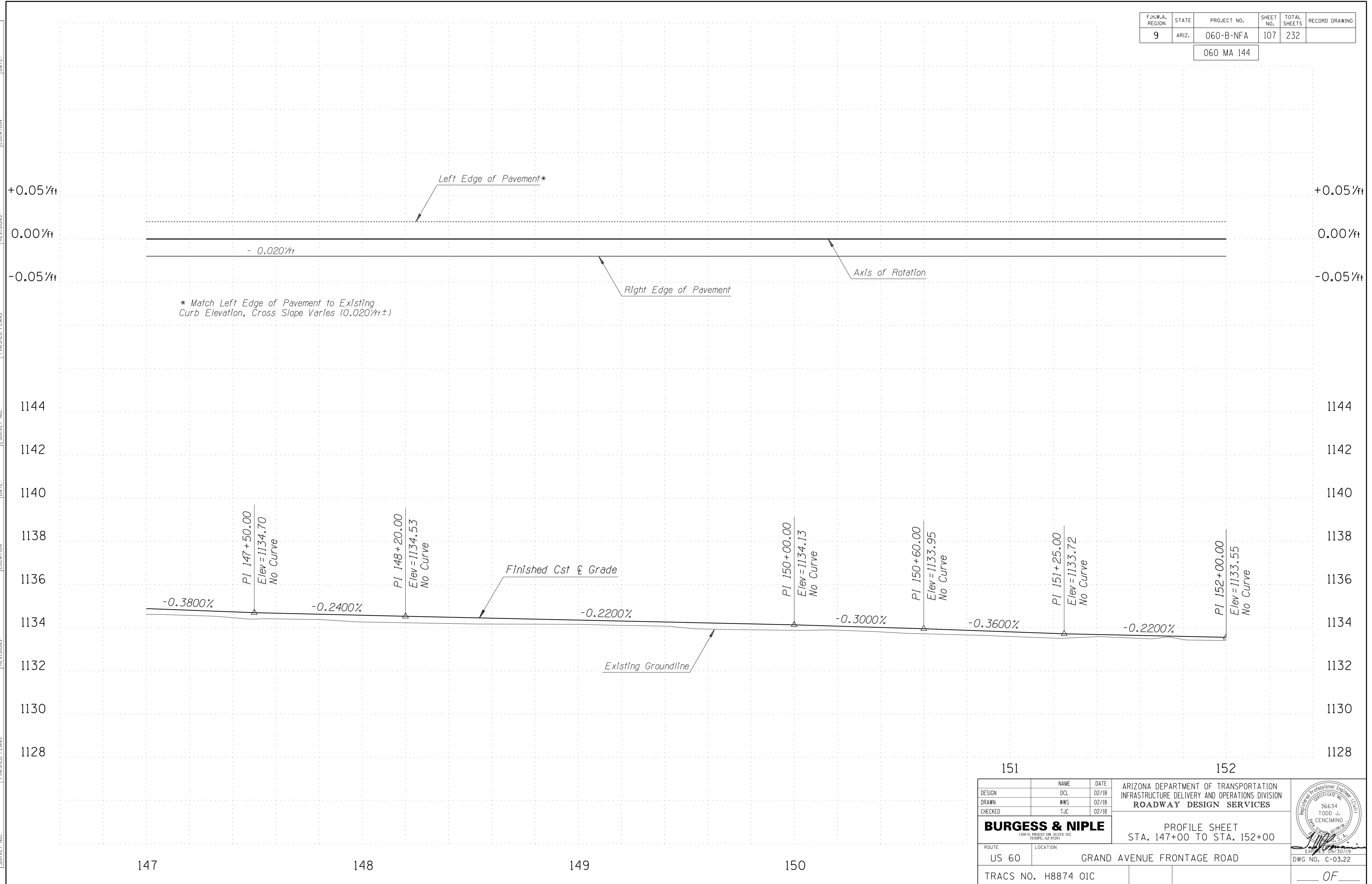


- NOTES:**
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
 2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
 3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
 4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	DCL	02/18		
CHECKED	WWS	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PLAN SHEET STA. 147+00 TO STA. 152+00	<small>REGISTERED PROFESSIONAL ENGINEER STATE OF ARIZONA LICENSE NO. 36634 TODD J. CENCIMINO DATE EXPIRES 09/30/19</small>
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.21
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	107	232	

060 MA 144

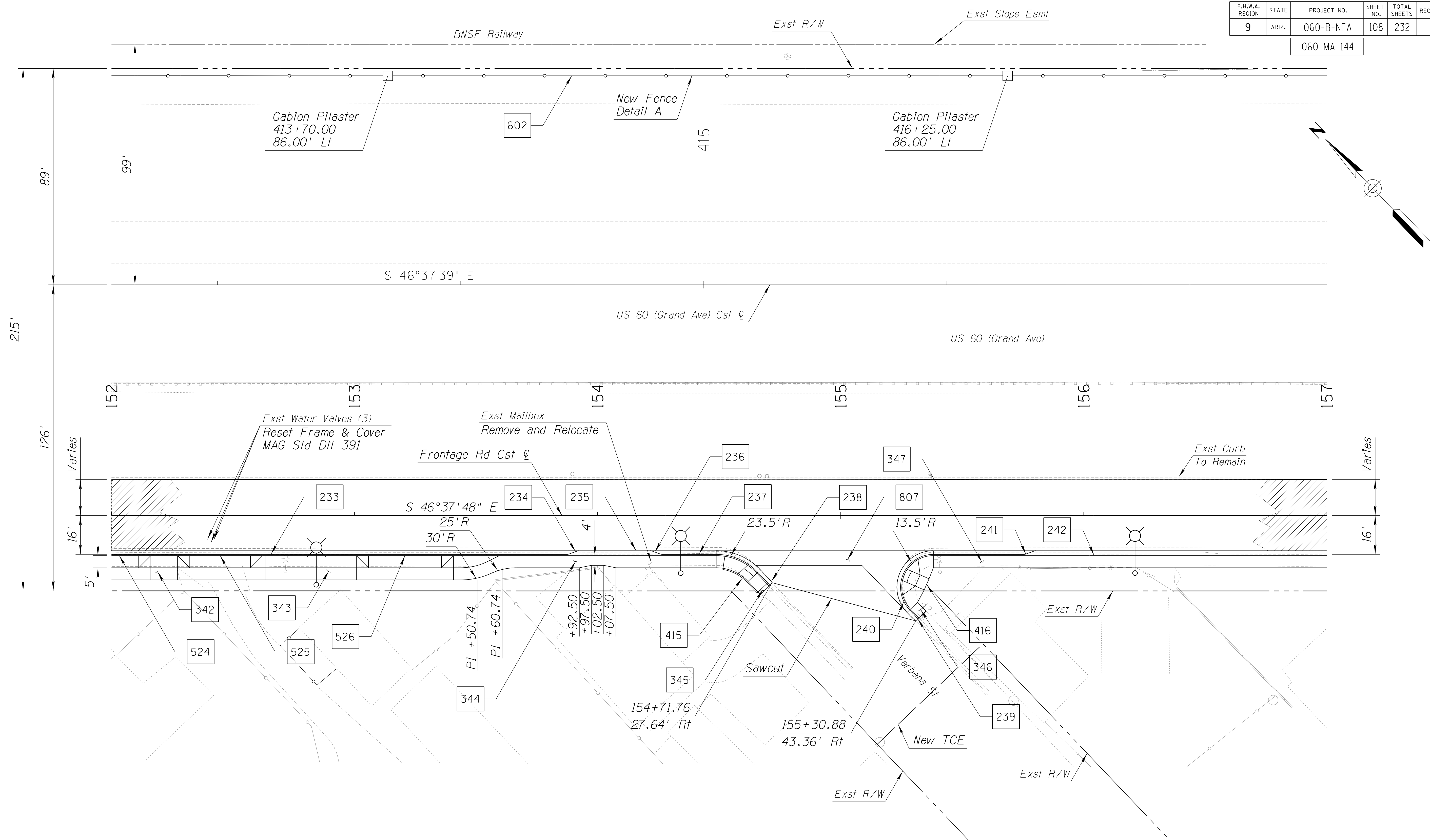


DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PROFILE SHEET STA. 147+00 TO STA. 152+00	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.22
US 60				OF
TRACS NO. H8874 01C				

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	108	232	

060 MA 144

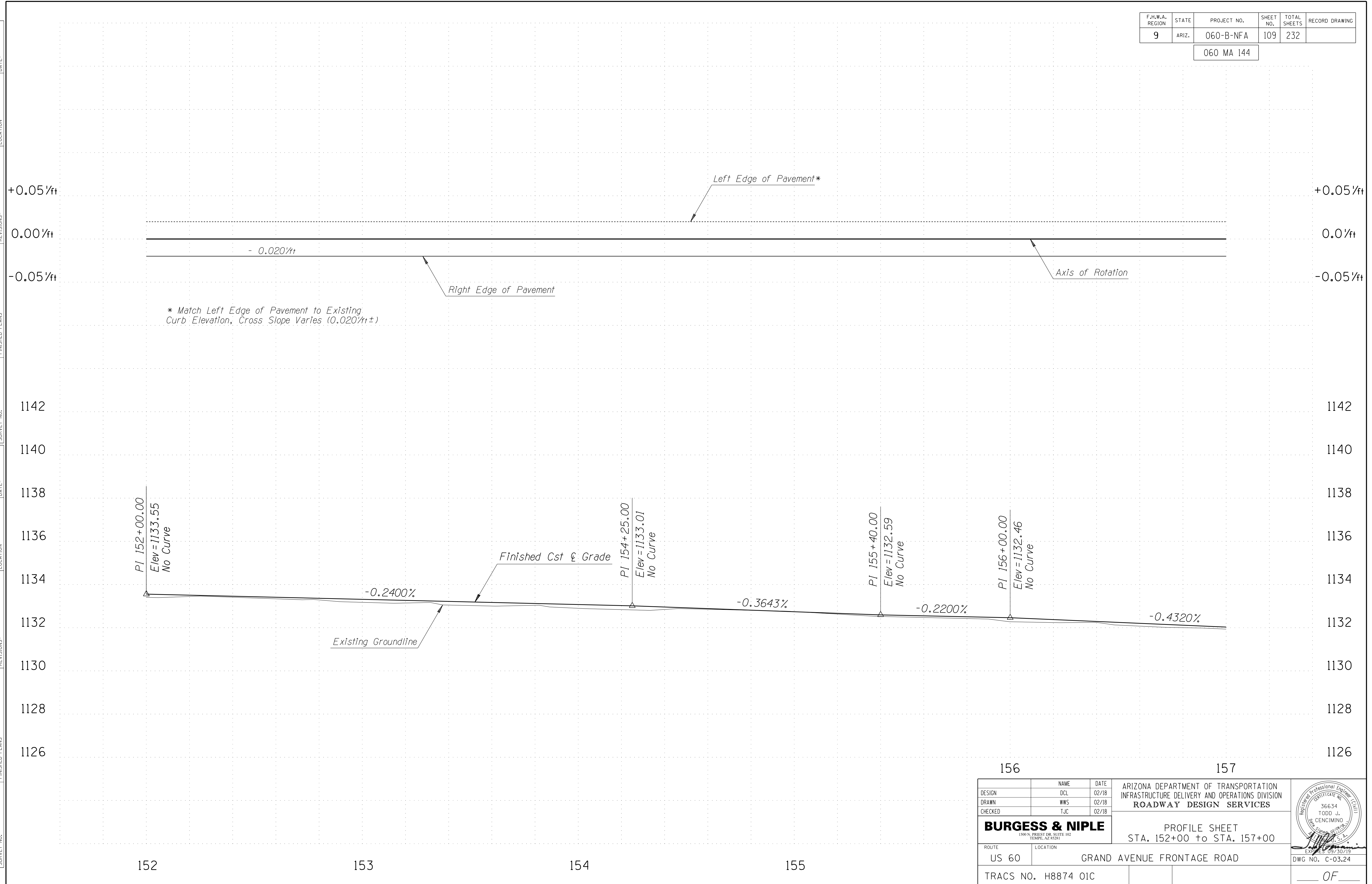


- NOTES:**
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
 2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
 3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
 4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET STA. 152+00 TO STA. 157+00	DWG NO. C-03.23
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	109	232	

060 MA 144

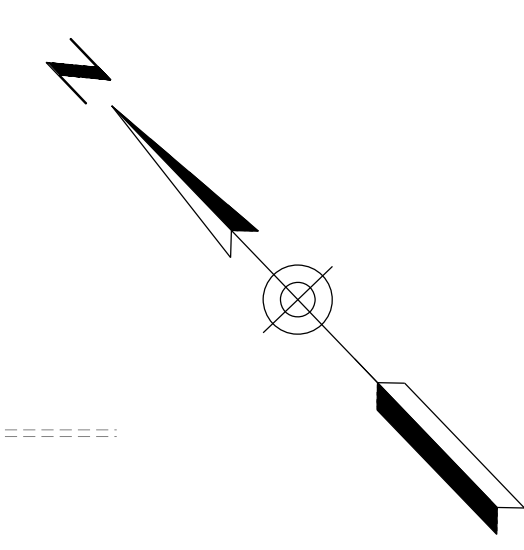
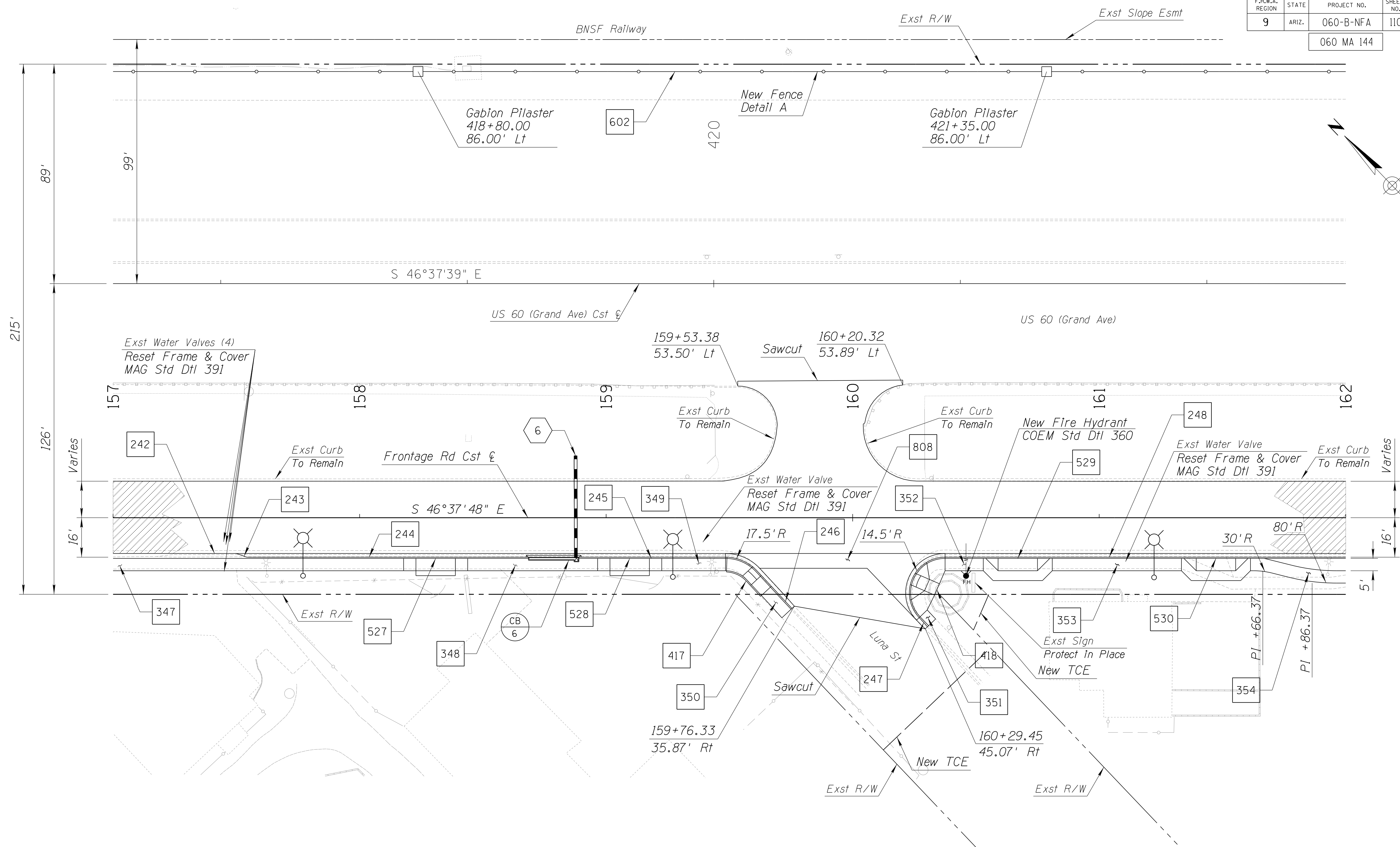


* Match Left Edge of Pavement to Existing Curb Elevation, Cross Slope Varies (0.020'/ft±)

DESIGN		DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN		WWS	02/18		
CHECKED		TJC	02/18		
BURGESS & NIPLE		1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281		PROFILE SHEET STA. 152+00 to STA. 157+00 DWG NO. C-03.24	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		TRACS NO. H8874 01C	
				OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	110	232	

060 MA 144



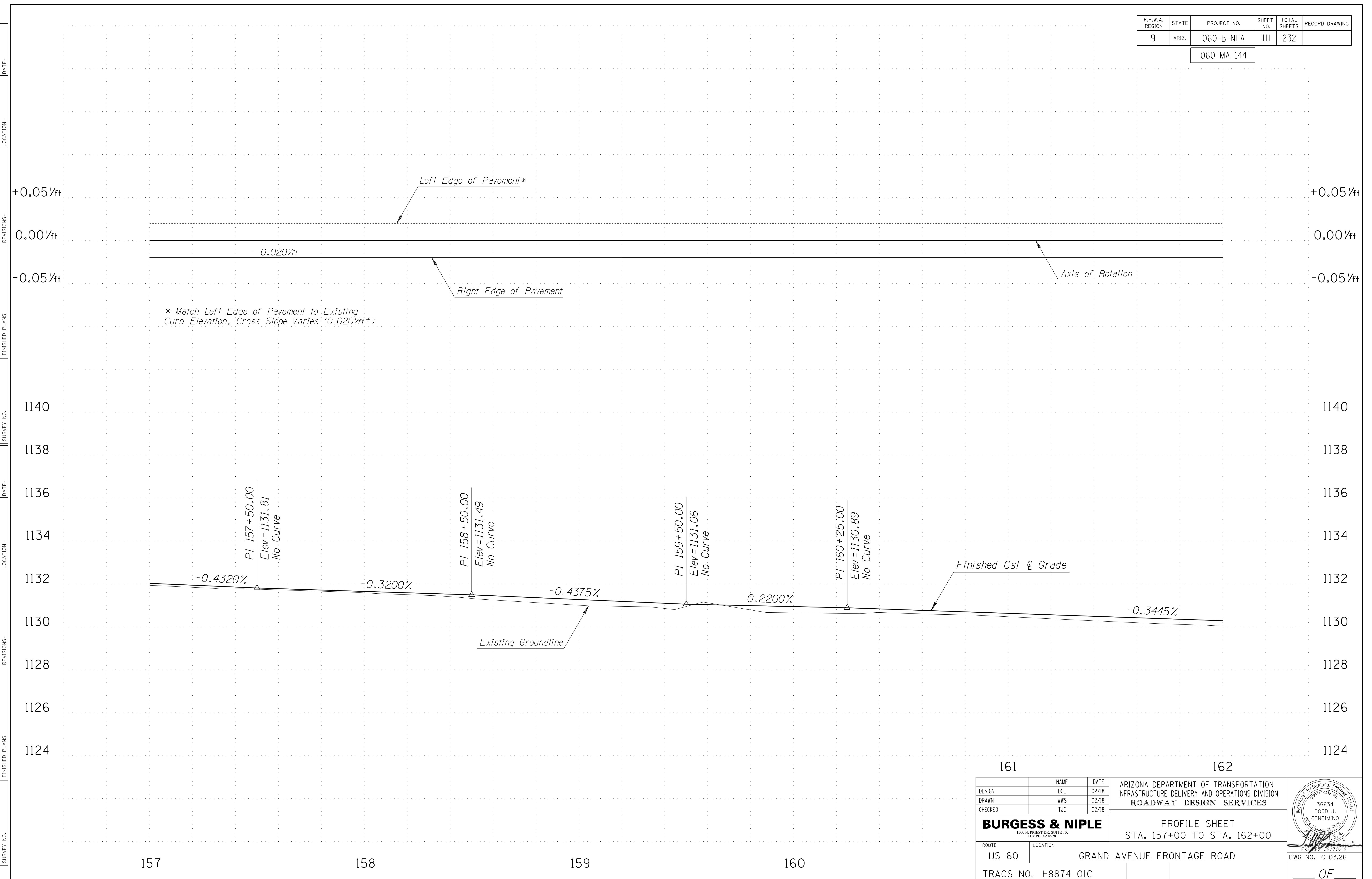
- NOTES:**
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
 2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
 3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
 4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE			PLAN SHEET	
1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			STA. 157+00 TO STA. 162+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-03.25
TRACS NO. H8874 01C				OF

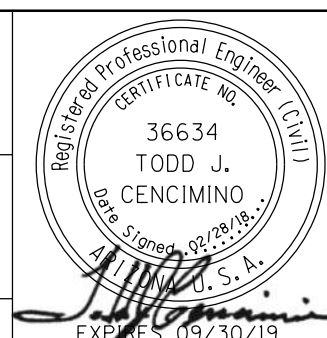
SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. DATE REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	111	232	

060 MA 144

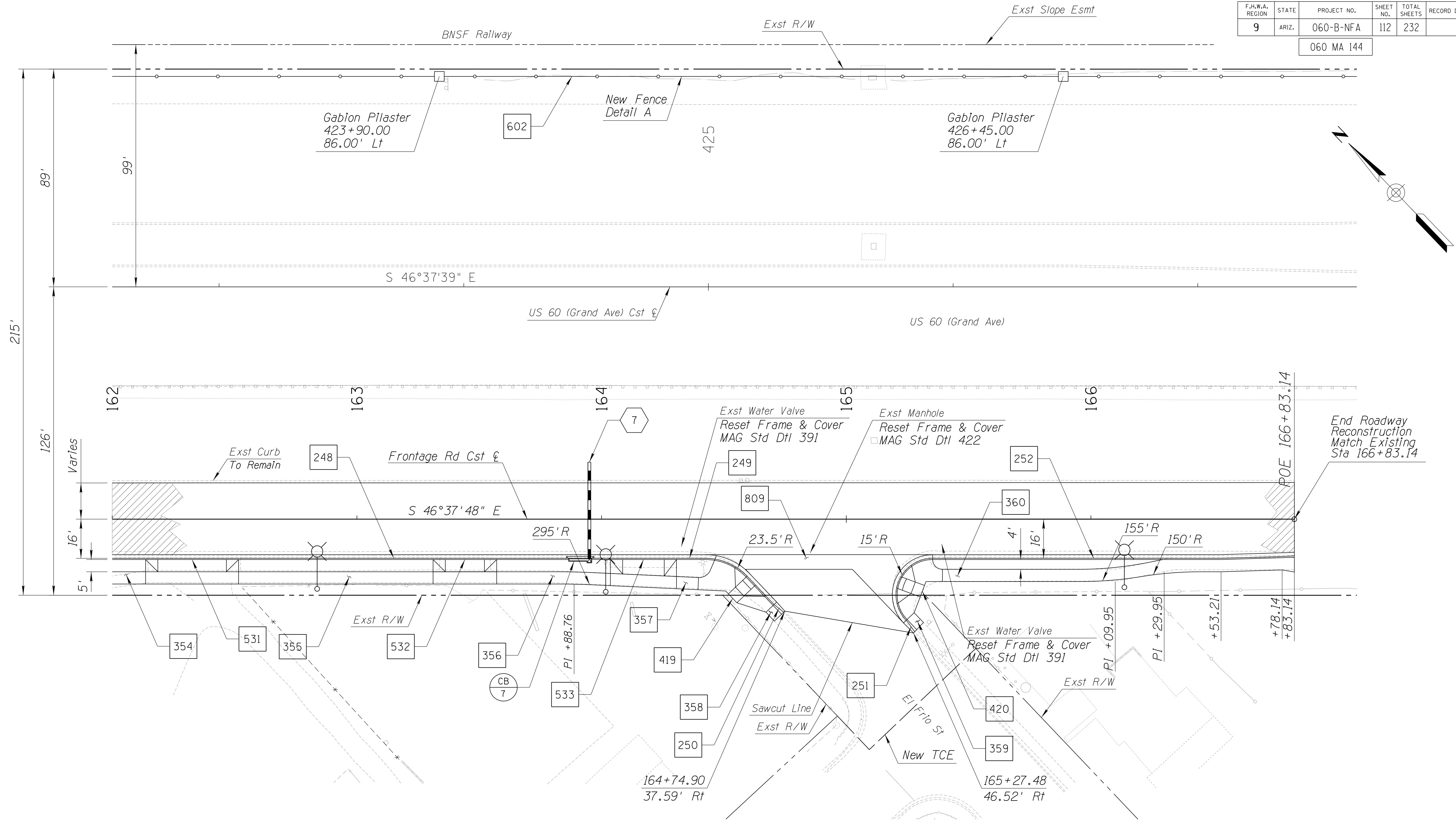


* Match Left Edge of Pavement to Existing Curb Elevation, Cross Slope Varies (0.020/ft±)

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	WWS	02/18	
CHECKED	TJC	02/18	
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PROFILE SHEET STA. 157+00 TO STA. 162+00 
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
TRACS NO. H8874 01C			DWG NO. C-03.26

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	112	232	

060 MA 144



NOTES:

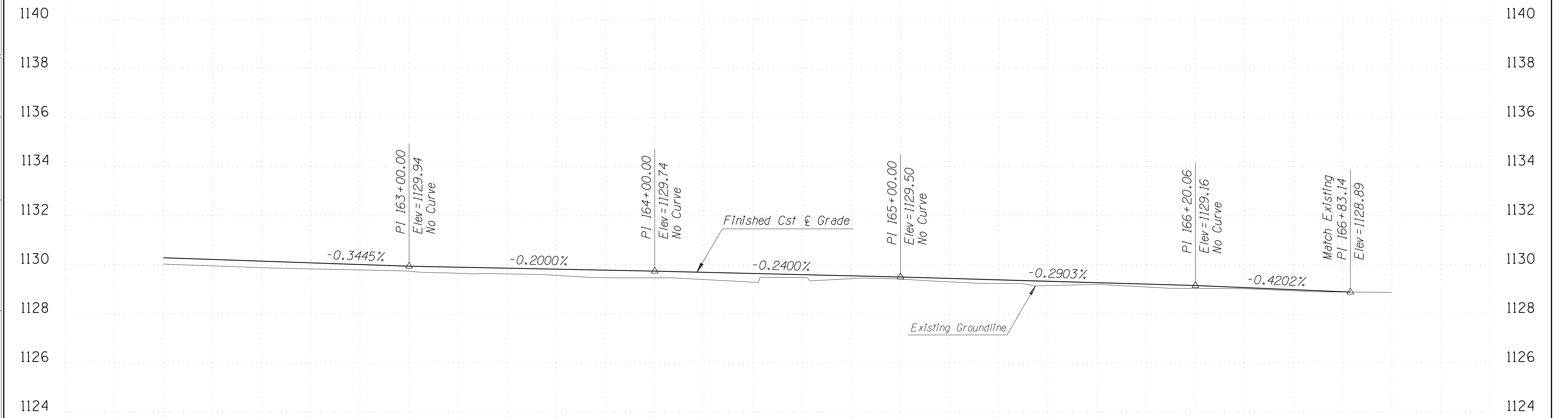
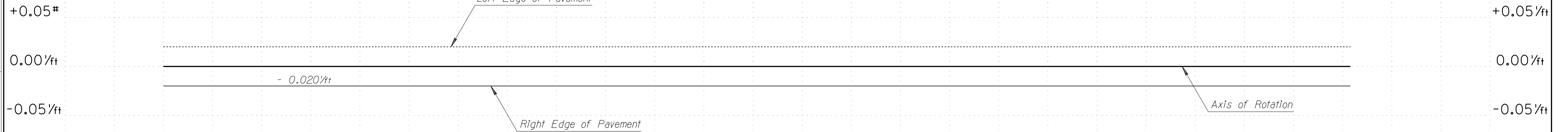
1. See Dwg's T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
2. See Dwg's T-05.03 to T-05.16 for Lighting Plans.
3. See Dwg's R-02.01 to R-02.14 for Irrigation Plans.
4. See Dwg's R-03.01 to R-03.11 for Landscape Plans.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PLAN SHEET STA. 162+00 TO STA. 167+00	DWG NO. C-03.27
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			OF	

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	113	232	

060 MA 144



162

163

164

165

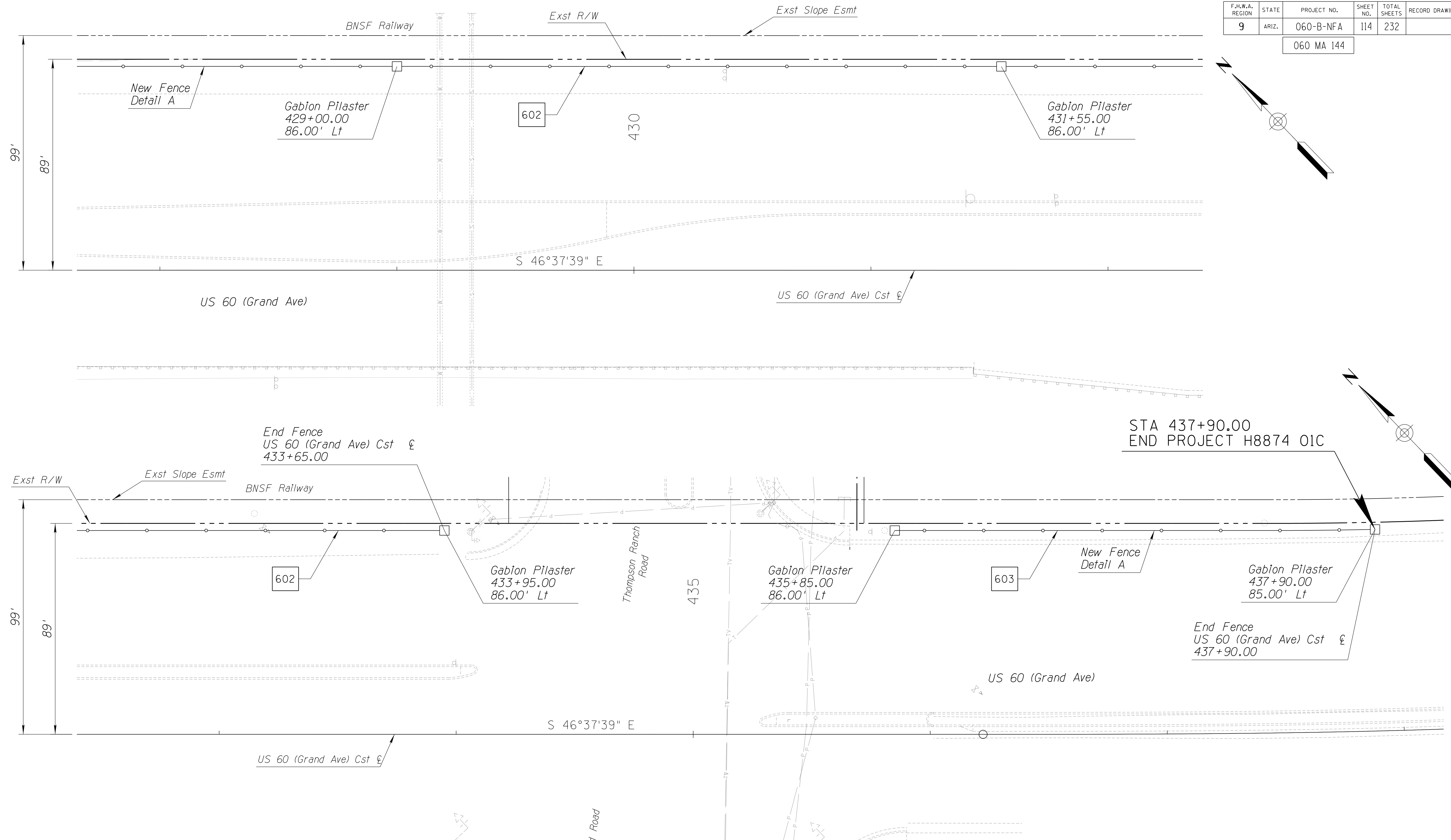
166

167

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PROFILE SHEET STA. 162+00 TO 166+83.14	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-03.28
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	114	232	

060 MA 144



- NOTES:**
1. See Dwgs T-04.01 to T-04.14 for Signing and Pavement Marking Plans.
 2. See Dwgs T-05.03 to T-05.16 for Lighting Plans.
 3. See Dwgs R-02.01 to R-02.14 for Irrigation Plans.
 4. See Dwgs R-03.01 to R-03.11 for Landscape Plans.

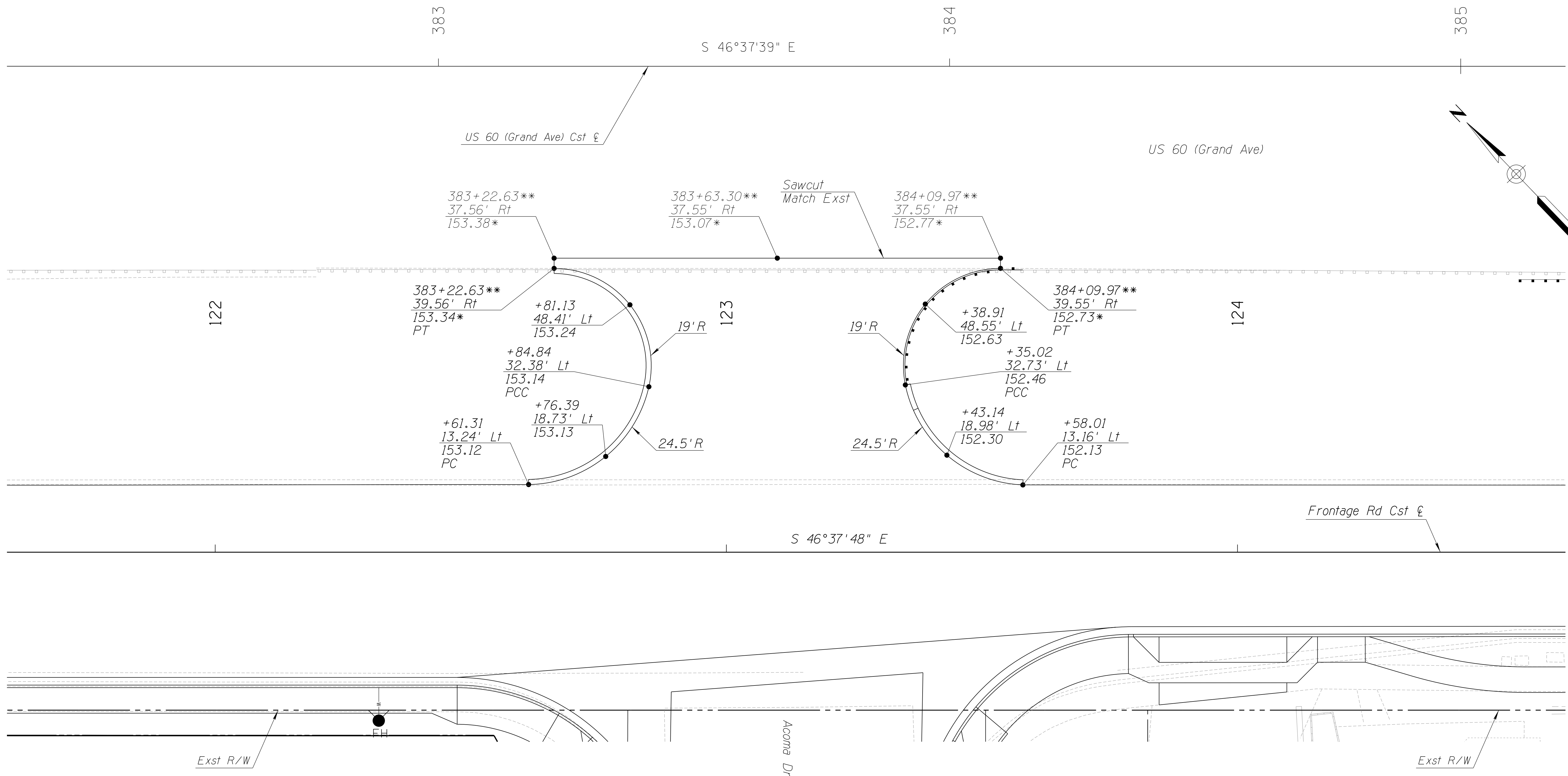
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DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PLAN SHEET STA. 167+00 TO END OF PROJECT	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-03.29
TRACS NO. H8874 01C				OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	115	232	

060 MA 144

REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- DATE- REVISIONS- FINISHED PLANS- SURVEY NO. DATE-



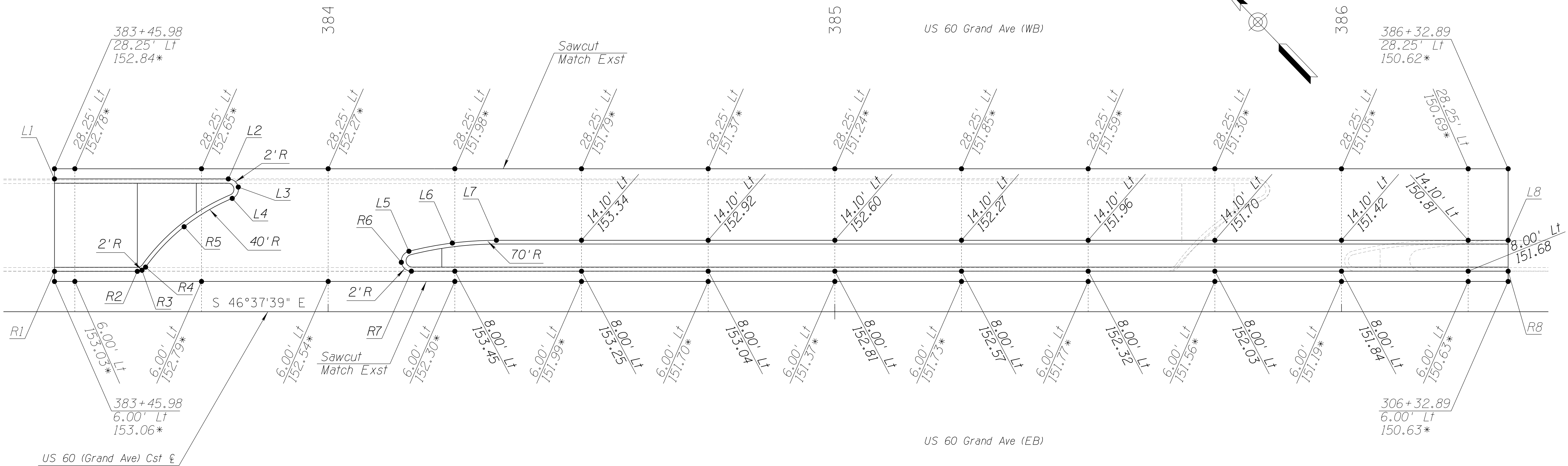
*Match Existing
 **Denotes US 60 (Grand Ave) Cst &

- NOTES:**
1. Stations and offsets reference the Frontage Rd Cst &, unless noted otherwise.
 2. Base Elevation is 1000'.
 3. Elevations are shown at EP.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			STAKING DIAGRAM FRONTAGE RD/ACOMA DR	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			DWG NO. C-04.01	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	116	232	

060 MA 144



STAKING TABLE

Point	Station	Offset	Elevation	Point	Station	Offset	Elevation
L1	383+45.98	26.25' Lt	154.03*	R1	383+45.98	8.00' Lt	154.11*
L2	383+80.30	26.25' Lt	153.71	R2	383+62.34	8.00' Lt	153.97
L3	383+82.26	24.62' Lt	153.72	R3	383+63.25	8.20' Lt	195.95
L4	383+81.07	22.39' Lt	153.73	R4	383+63.96	8.81' Lt	153.92
L5	384+15.94	11.94' Lt	153.52	R5	383+71.57	16.79' Lt	153.83
L6	384+24.50	13.56' Lt	153.46	R6	384+14.44	9.76' Lt	153.53
L7	384+33.20	14.10' Lt	153.40	R7	384+16.43	8.00' Lt	153.52
L8	386+32.89	14.10' Lt	150.61*	R8	386+32.89	8.00' Lt	151.63*

NOTES:

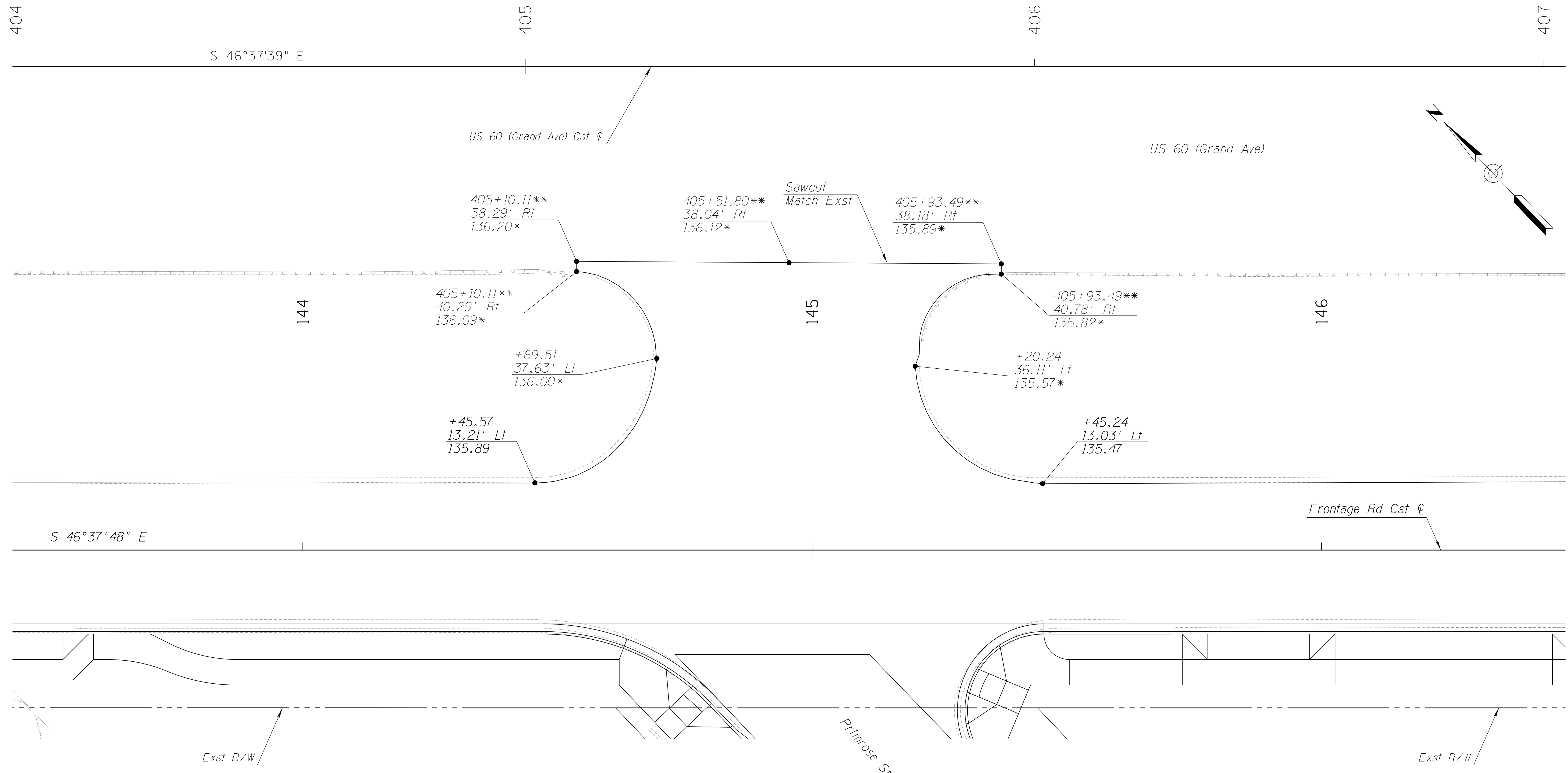
1. Stations and offsets reference US 60 (Grand Ave) Cst & unless otherwise noted.
2. Elevations are shown at even 25' increments, unless otherwise noted.
2. Base Elevation is 1000'.
3. Elevations are shown at EP.
4. Radii measurements are to control point shown in C-05.10.

*Match Existing

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			STAKING DIAGRAM US 60 TURN LANE	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. C-04.02
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	117	232	

060 MA 144



*Match Existing
 **Denotes US 60 (Grand Ave) Cst ξ

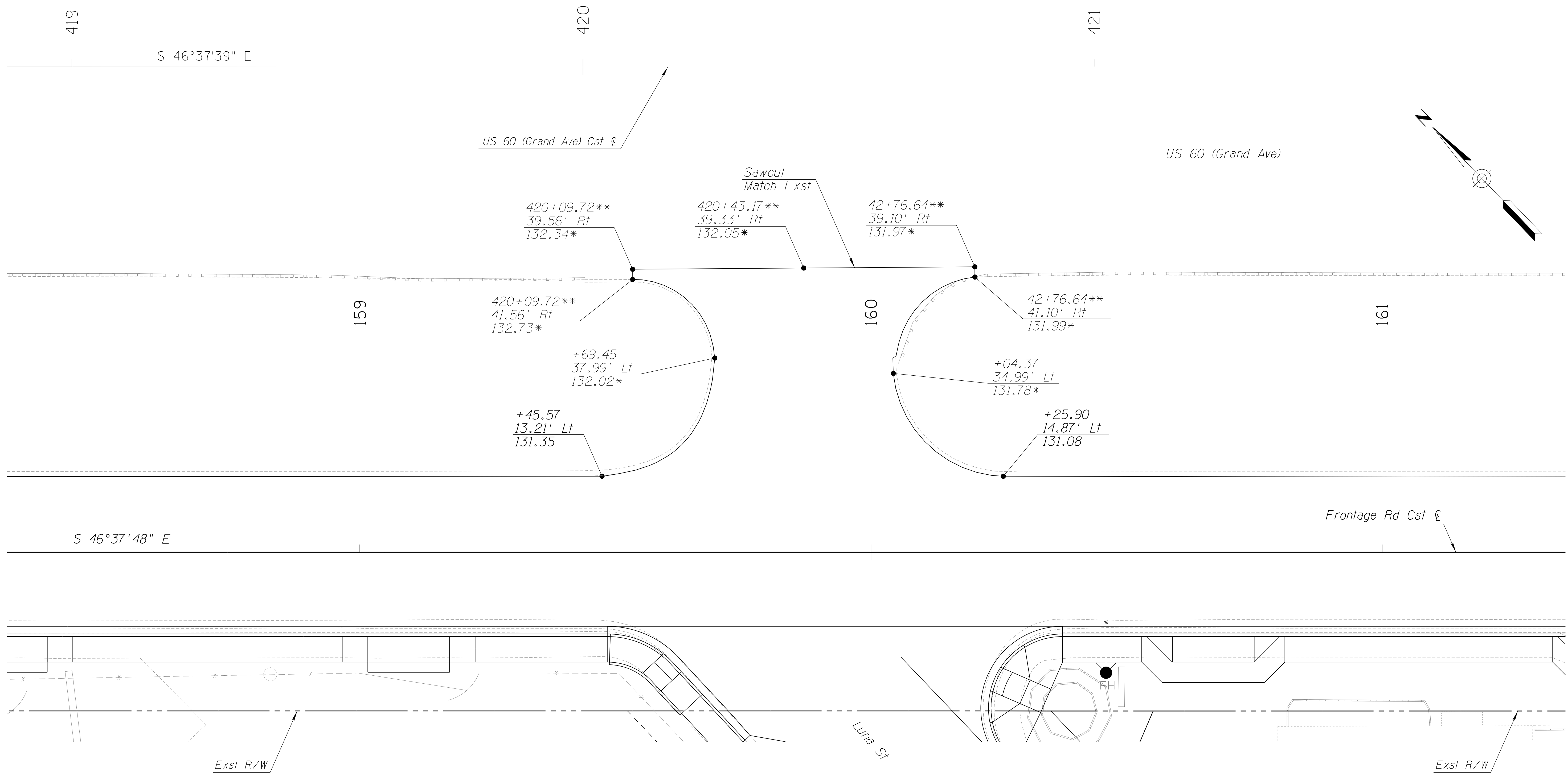
- NOTES:**
1. Stations and offsets reference the Frontage Rd Cst ξ , unless noted otherwise.
 2. Base Elevation is 1000'.
 3. Elevations are shown at EP.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			STAKING DIAGRAM FRONTAGE RD/PRIMROSE ST	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60				
TRACS NO.	H8874 01C	DWG NO. C-04.03		
				OF

SURVEY NO. FINISHED PLANS DATE REVISIONS FINISHED PLANS DATE SURVEY NO. REVISIONS FINISHED PLANS DATE LOCATION LOCATION DATE DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	118	232	

060 MA 144



*Match Existing
 **Denotes US 60 (Grand Ave) Cst &

NOTES:

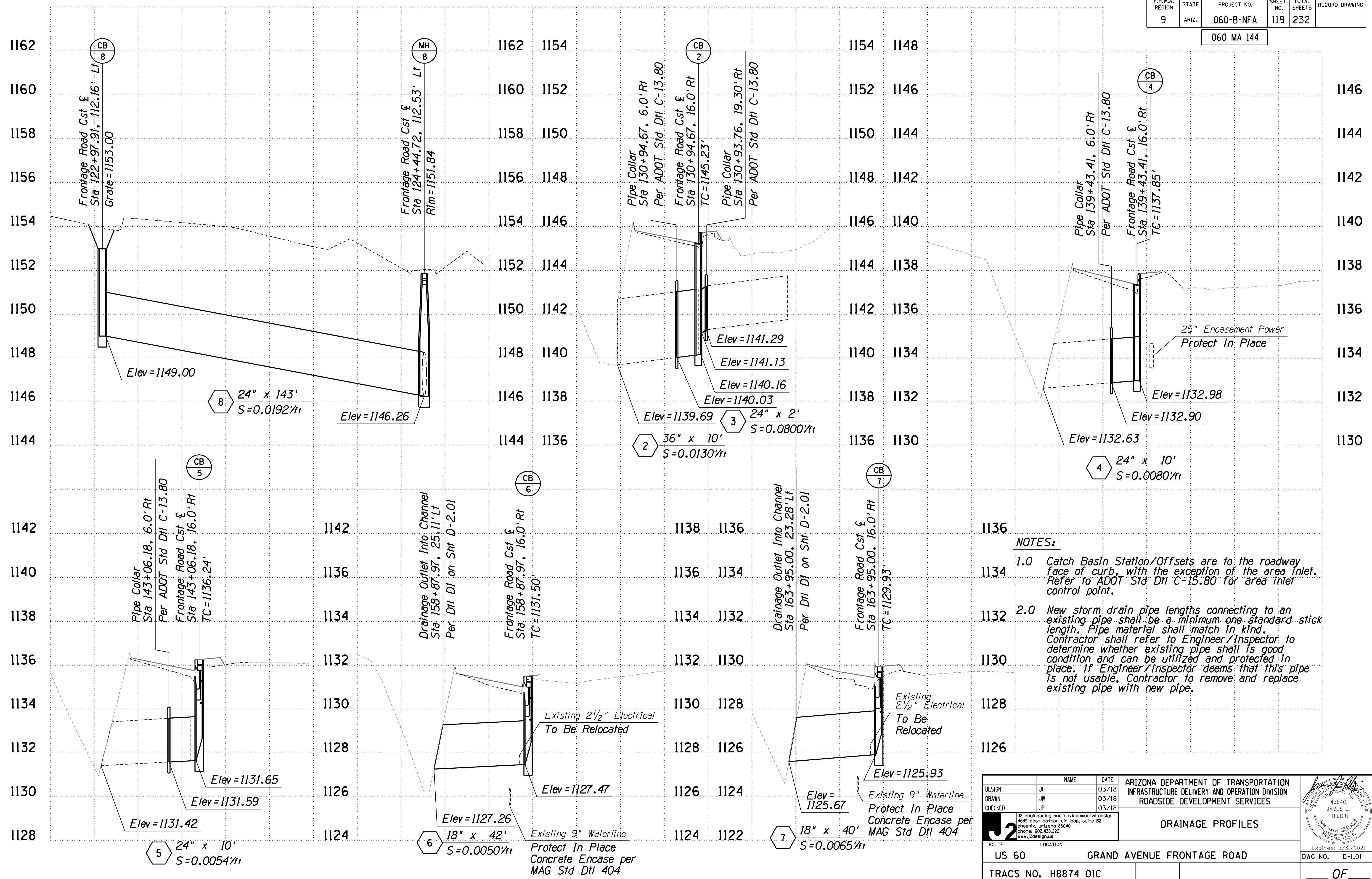
1. Stations and offsets reference the Frontage Rd Cst &, unless noted otherwise.
2. Base Elevation is 1000'.
3. Elevations are shown at EP.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			STAKING DIAGRAM FRONTAGE RD/LUNA ST	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. C-04.04
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	119	232	

060 MA 144

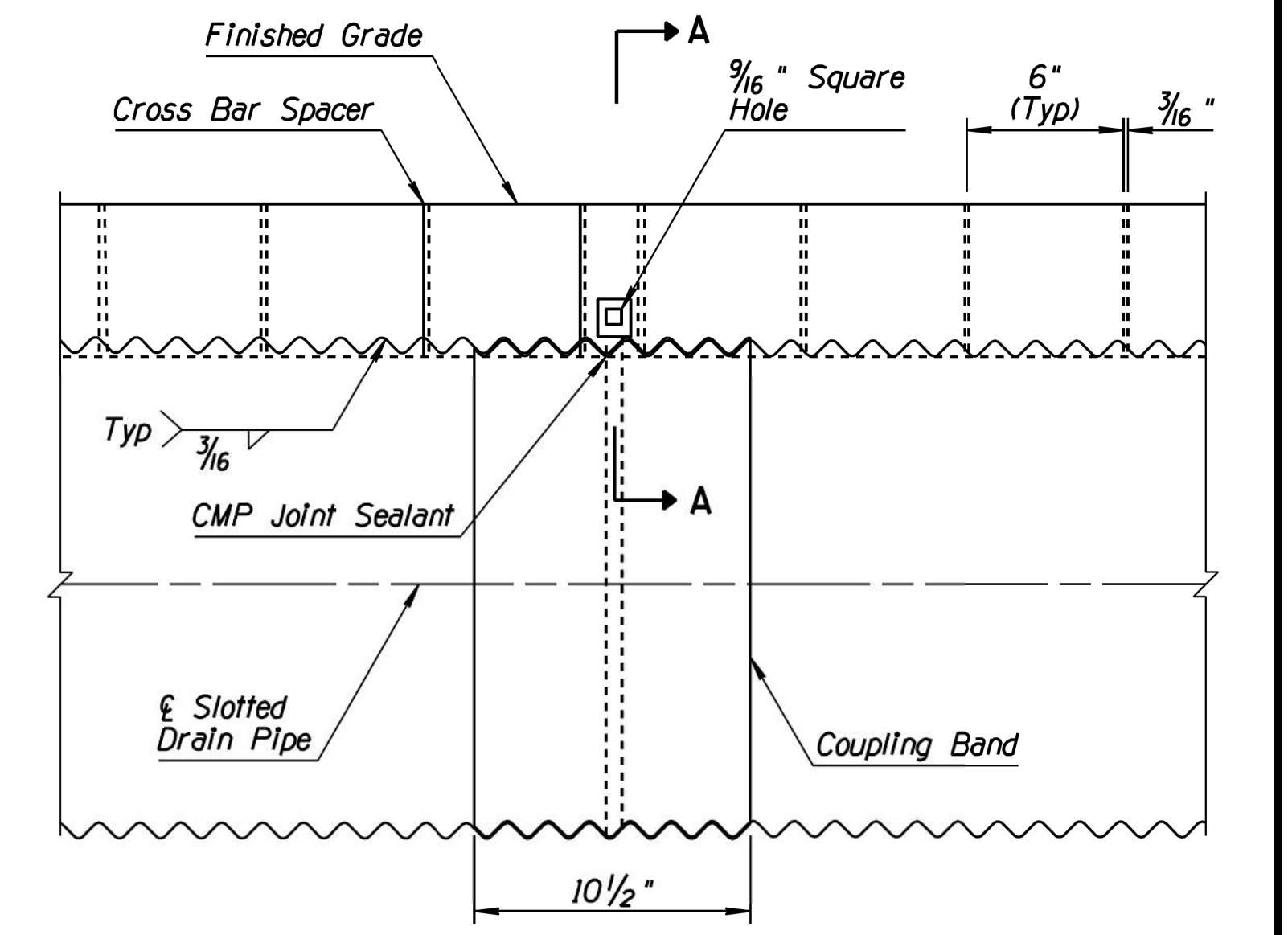
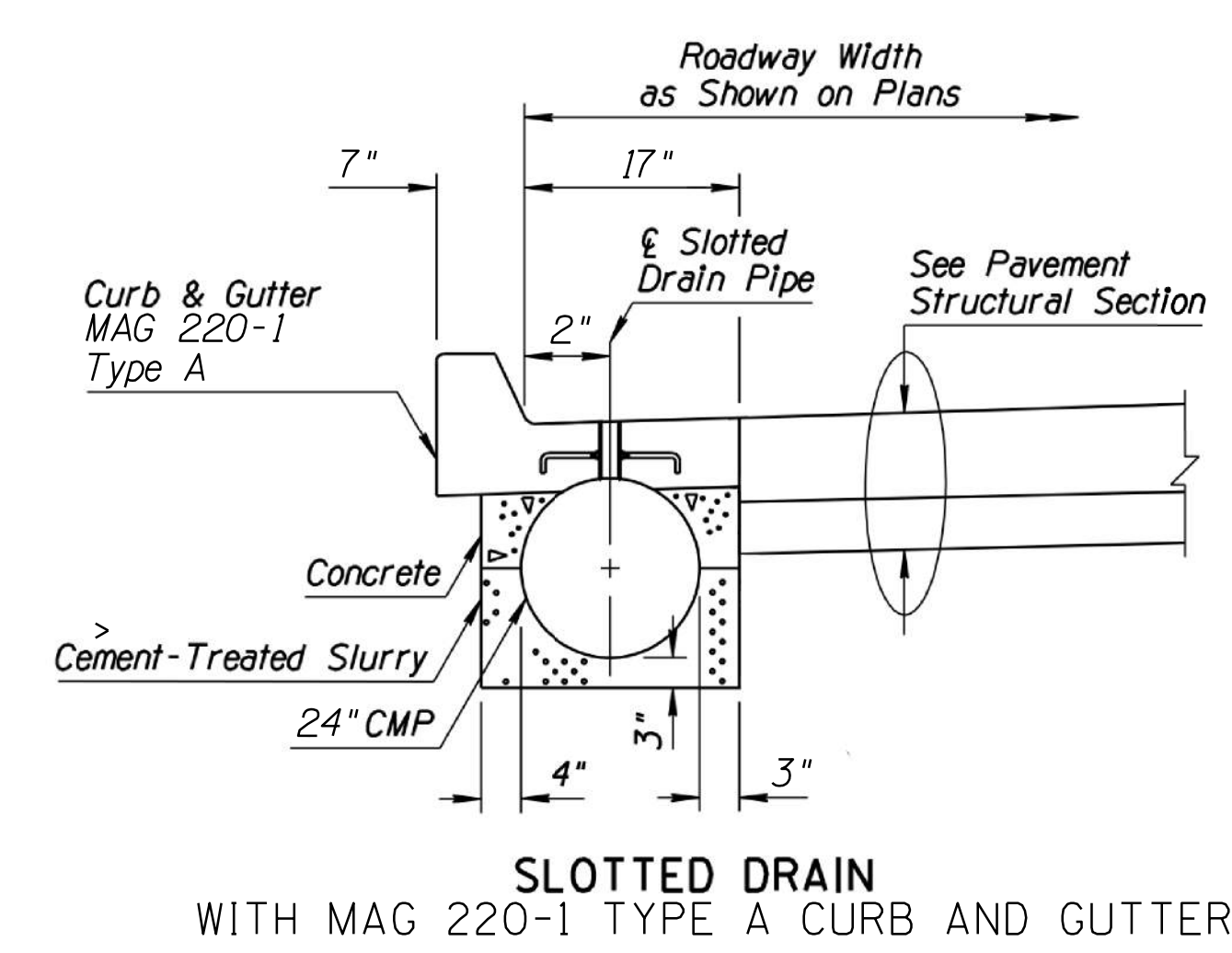
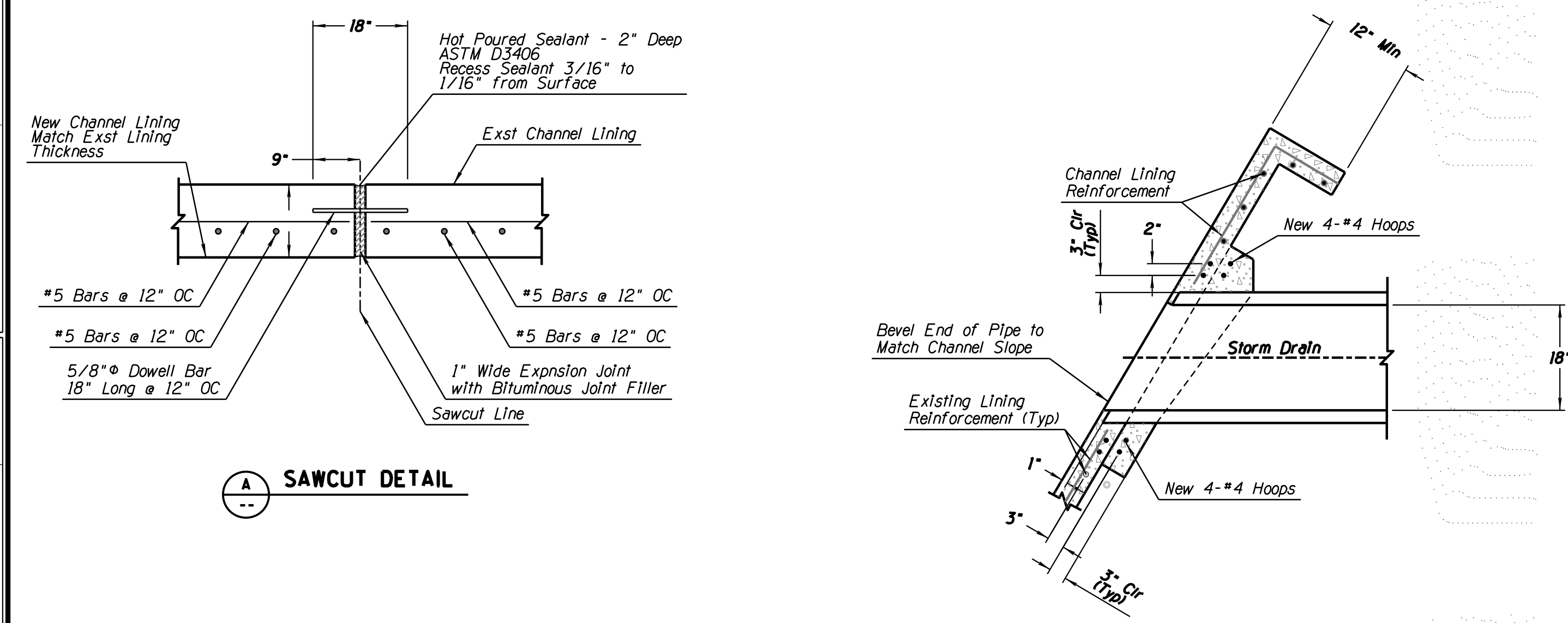
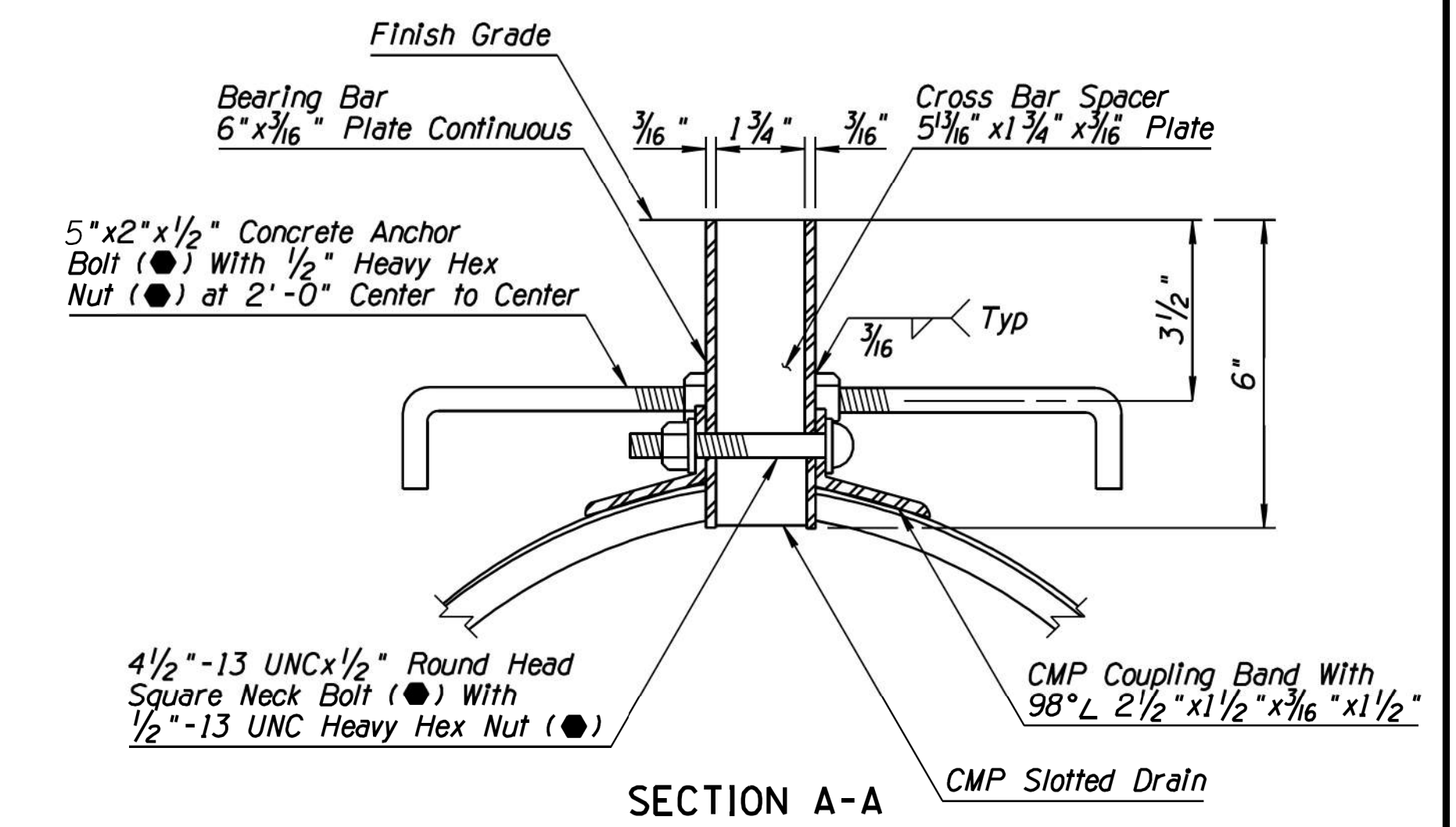
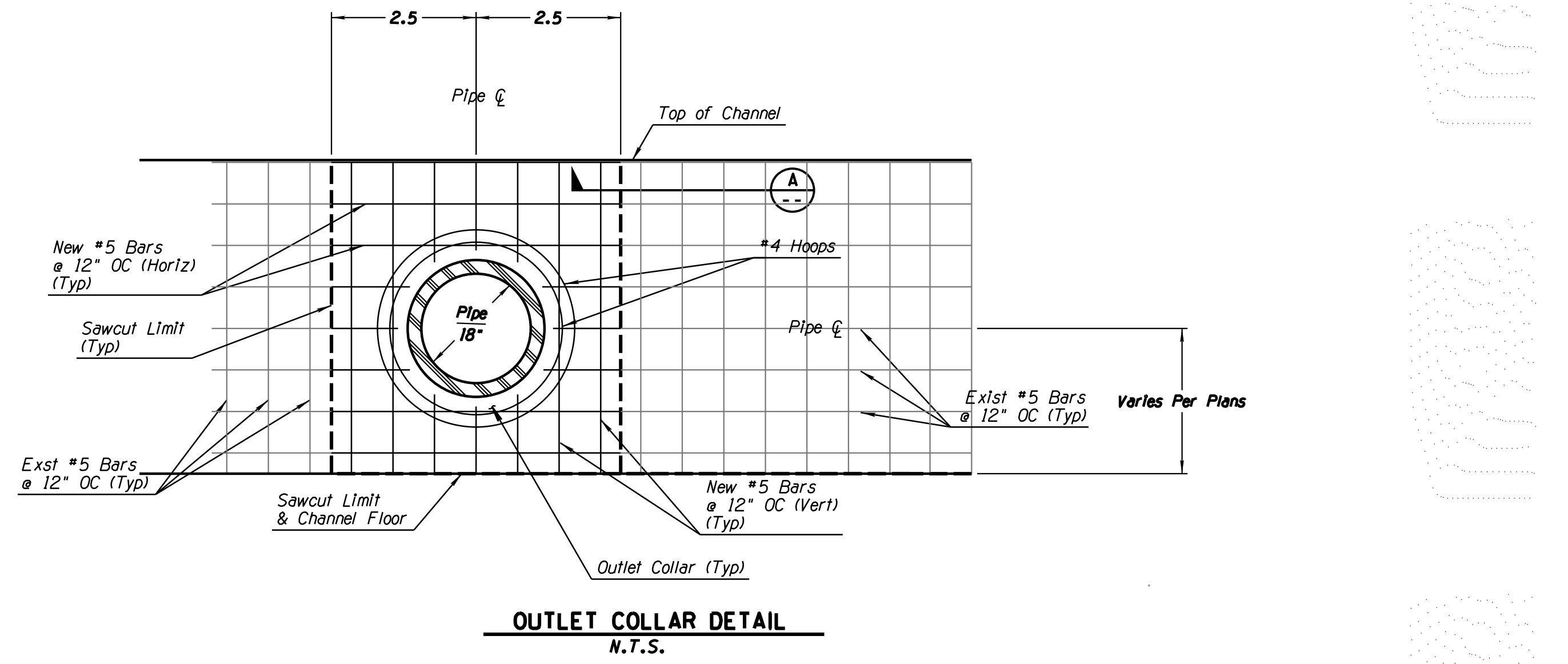


- NOTES:**
- 1.0 Catch Basin Station/Offsets are to the roadway face of curb, with the exception of the area inlet. Refer to ADOT Std Dtl C-15.80 for area inlet control point.
 - 2.0 New storm drain pipe lengths connecting to an existing pipe shall be a minimum one standard stick length. Pipe material shall match in kind. Contractor shall refer to Engineer/Inspector to determine whether existing pipe shall be good condition and can be utilized and protected in place. If Engineer/Inspector deems that this pipe is not usable, Contractor to remove and replace existing pipe with new pipe.

DESIGN	JP	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	JW	DATE	03/18	
CHECKED	JP	DATE	03/18	
				DRAINAGE PROFILES 43840 JAMES J. PHILBIN Exp. 02/20/18 ARIZONA, U.S.A.
ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD				
TRACS NO. H8874 01C				DWG NO. D-1.01 OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	120	232	

060 MA 144



- CONSTRUCTION NOTES:**
1. Concrete channel lining shall be finished match in kind.
 2. Concrete shall be Class "S" f'c=3000 psi.
 3. Reinforcing steel shall conform to ASTM A615, Grade 60.
 4. Construction Joints may be in the side slope if placed a minimum of one (1) foot above the bottom slab.
 5. All Rebar Shall Have 3" min Clear Cover.

DETAIL D1

MODIFIED ADOT STD DWG C-13.80
PIPE OUTLET TO EXIST CHANNEL

DETAIL D2

MODIFIED ADOT STD DWG C-13.60
SLOTTED DRAIN DETAILS

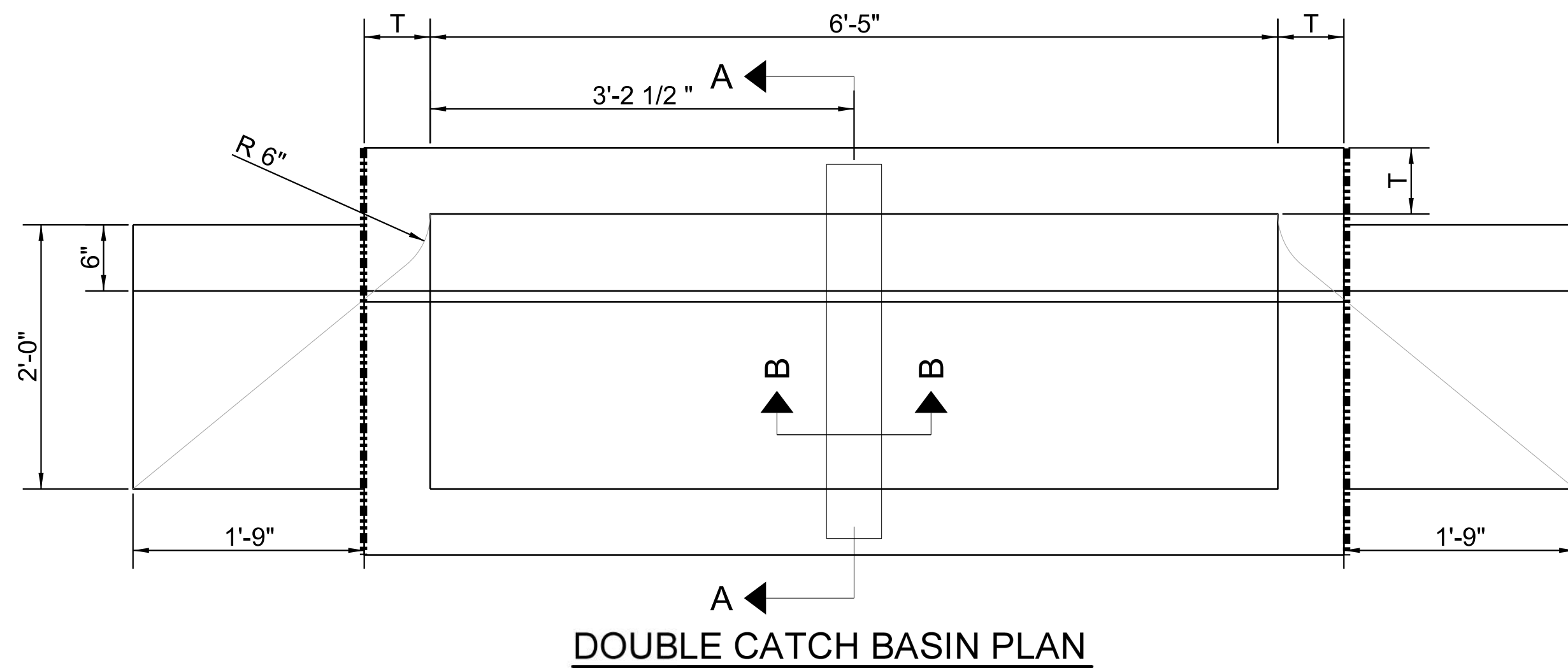
- Notes:**
1. See Std C-13.60 For Additional Details And Notes Note Shown Here.
 2. Refer To Plans For Slotted Drain Length And Size.
 3. Slotted Drain To Be Installed Up Slope Of Catch Basin.

DESIGN	JP	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	JW	DATE	03/18	
CHECKED	JP	DATE	03/18	
				DRAINAGE DETAILS 43840 JAMES J. PHILBIN Exp. 03/31/2021 ARIZONA, U.S.A.
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C				DWG NO. D-2.01

DATE: _____ LOCATION: _____ REVISIONS: _____ FINISHED PLANS: _____ SURVEY NO.: _____ DATE: _____ LOCATION: _____ REVISIONS: _____ FINISHED PLANS: _____ SURVEY NO.: _____

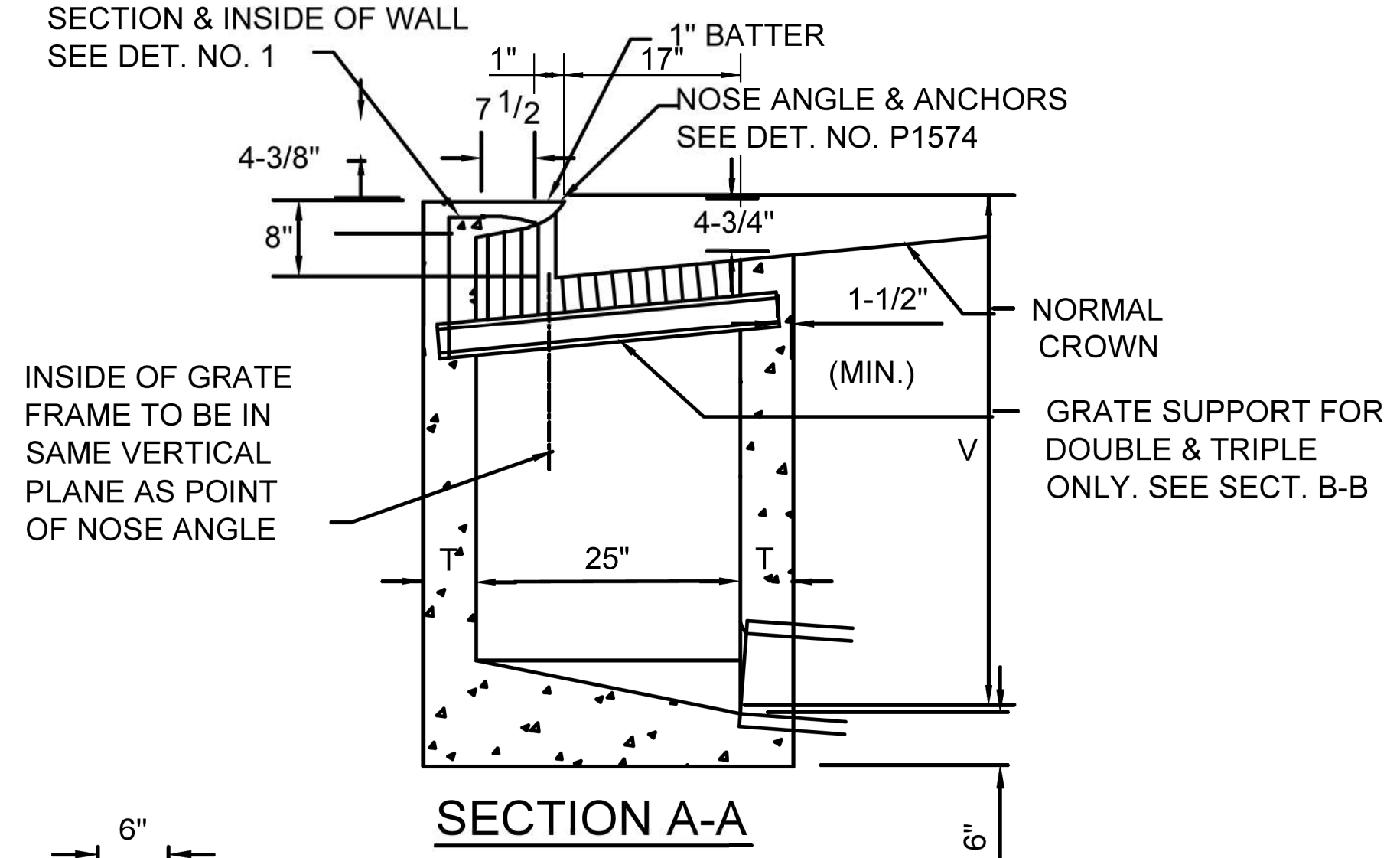
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	121	232	

060 MA 144

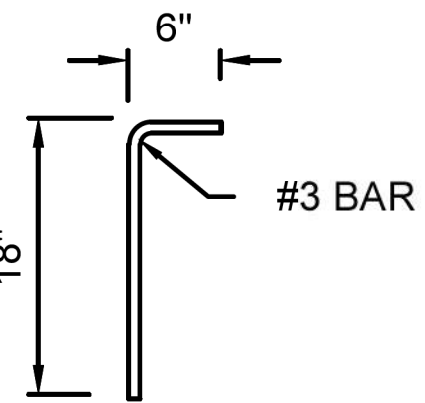


DOUBLE CATCH BASIN PLAN

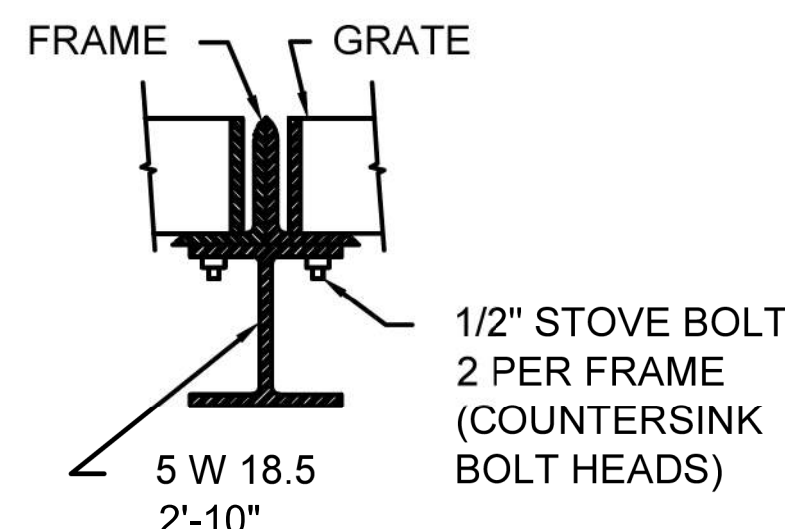
#3 BARS @ 6" O.C., 1-1/2" CLEAR TO TOP OF NOSE SECTION & INSIDE OF WALL SEE DET. NO. 1



SECTION A-A



DETAIL 1



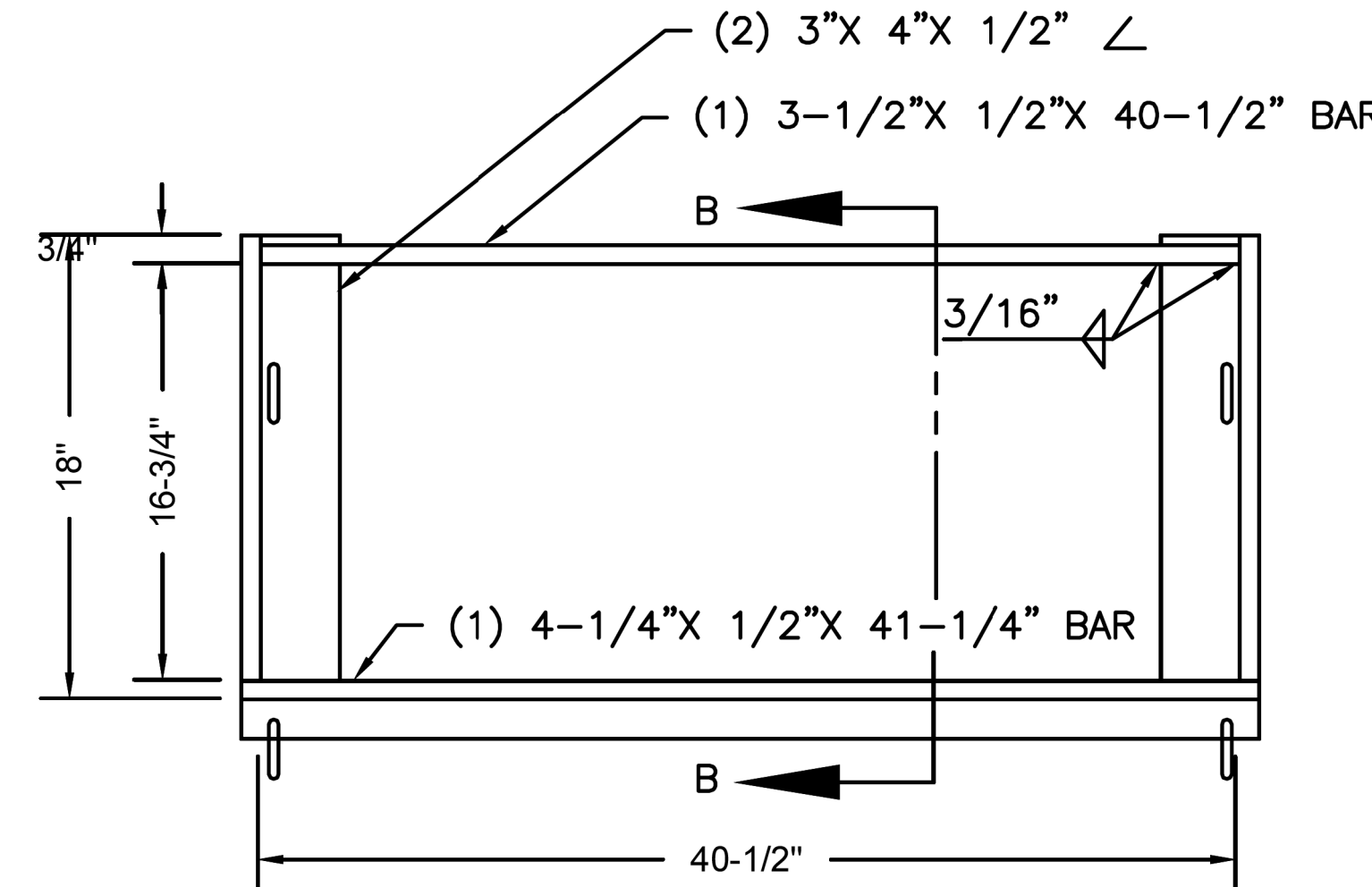
SECTION B-B

CATCH BASIN WALL THICKNESS

T=6" IF V = 4' OR LESS
T=8" IF V = 4' TO 8'
IF V EXCEEDS 8' SPECIAL DESIGN IS REQUIRED
V=4'-0" UNLESS OTHERWISE NOTED.

CATCH BASIN NOTES:

1. ALL CONCRETE SHALL BE CLASS 'A'
2. CONNECTOR PIPES MAY BE PLACED IN ANY WALL AS PER PLAN
3. FLOOR OF BASIN SHALL BE TROWELLED TO A HARD, SMOOTH SURFACE AND SHALL SLOPE FROM ALL DIRECTIONS TO OUTLET
4. CONSTRUCTION DRAINS SHALL BE INSTALLED WHEN NOTED. (SEE DETAIL P1575)
5. CONNECTOR PIPE SHALL BE TRIMMED TO THE FINAL SHAPE AND LENGTH BEFORE CONCRETE IS POURED.
6. THE FRAME SHALL BE DET. P1564, TYPE 2 AND THE GRATE SHALL BE DET. P1565, TYPE 2.
7. EXPANSION JOINT (TYP)
8. INSTALL ONE CITY FURNISHED POLLUTION AWARENESS MARKER (PAM) AT EACH CATCH BASIN, AS DIRECTED BY ENGINEER.



SECTION B-B

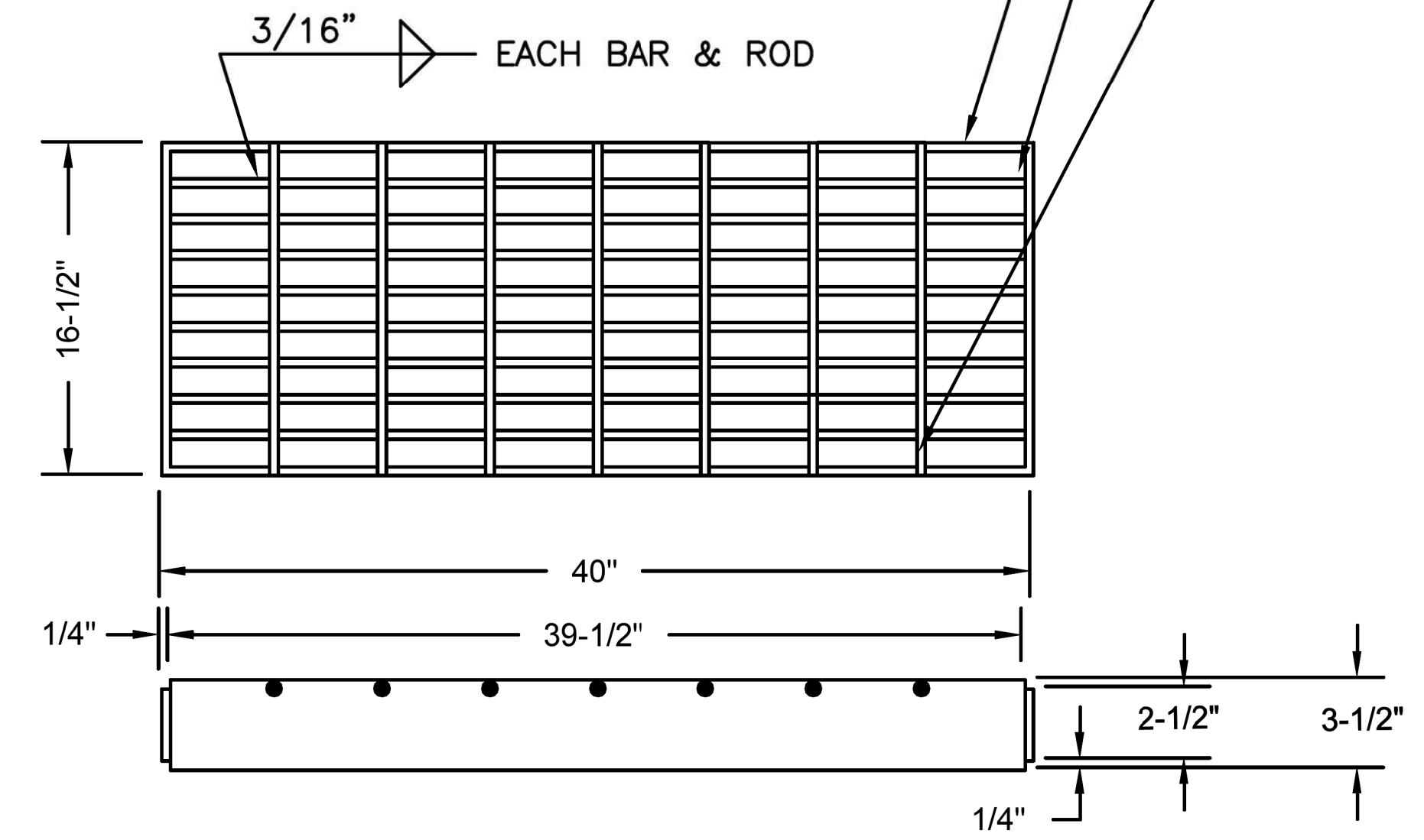
CITY OF PHOENIX STD DWG P1564 TYPE 2

FRAME NOTES:

1. FRAME & FRAME SUPPORT SHALL BE FABRICATED FROM STRUCTURAL STEEL EXCEPT AS NOTED. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH A.S.T.M. A-36
2. WELDING SHALL BE IN ACCORDANCE WITH M.A.G. WELDING SPECIFICATIONS.
3. FRAME AND GRATE SHALL BE TESTED FOR ACCURACY OF FIT AND SHALL BE MARKED IN SETS BEFORE DELIVERY.
4. THE COMPLETED ASSEMBLY SHALL BE GIVEN ONE SHOP COAT OF NO. 1 PAINT AND TWO FIELD COATS OF NO. 10 PAINT AS PER SECTION 790.
5. THE FRAME SHALL BE FABRICATED TO WITHIN ±1/8" OF SPECIFIED DEMENSIONS.

(7) 1/2" DIA. X 16-1/2", TRANSVERSE RODS, 5" ON CENTER FLUSH WITH GRATE SURFACE.

(2) 2-1/2"X 1/4"X 16-1/2" END BARS
(10) 3-1/2"X 1/2"X 39-1/2" BEARING BAR APPROXIMATELY 1-7/8" ON CENTER.



CITY OF PHOENIX STD DWG P1565 TYPE 2

GRATE NOTES:

1. ALL STEEL SHALL BE IN ACCORDANCE WITH A.S.T.M. A-36.
2. WELDING SHALL BE IN ACCORDANCE WITH A.W.S. SPECIFICATIONS.
3. FRAME AND GRATE SHALL BE TESTED FOR ACCURACY OF FIT AND SHALL BE MARKED IN SETS BEFORE DELIVERY.
4. THE COMPLETED ASSEMBLY SHALL BE GIVEN ONE SHOP COAT OF NO. 1 PAINT AND TWO FIELD COATS OF NO. 10 PAINT AS PER SECTION 790.
5. THE GRATE SHALL BE FABRICATED TO WITHIN 1/8" OF SPECIFIED DIMENSIONS
6. TYPE 1 AND TYPE 2 GRATES, INSTALLED IN GRATE FRAMES PER STANDARD DETAIL P1564, ARE BICYCLE FRIENDLY AND MAY BE USED WITHIN BICYCLE FACILITIES WITH BEARING BARS ORIENTED PARALLEL TO THE DIRECTION OF TRAVEL.
7. TPYE 1 AND TYPE 2 GRATES ARE NOT PEDESTRIAN FRIENDLY AND SHALL NOT BE USED IN PEDESTRIAN TRAVELED WAYS.

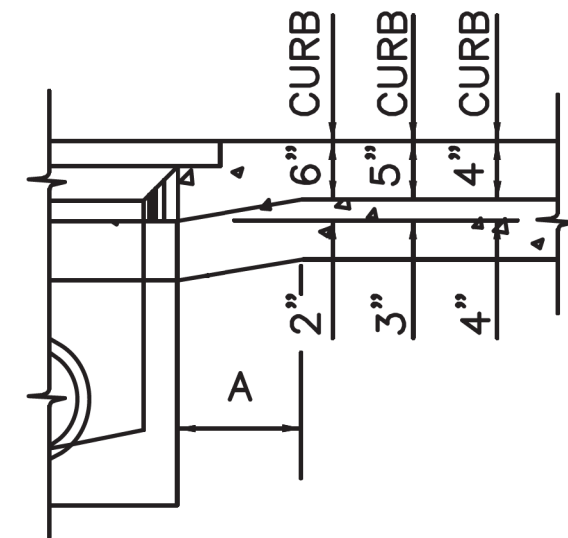
DETAIL D3
MODIFIED CITY OF PHOENIX STD DWG P1572

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
JP		03/18	
JW		03/18	
JP		03/18	
			DRAINAGE DETAILS 43840 JAMES J. PHILBIN Arizona, U.S.A. Expires: 3/31/2021 DWG NO. D-2.02
ROUTE	LOCATION		
US 60	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 OIC			

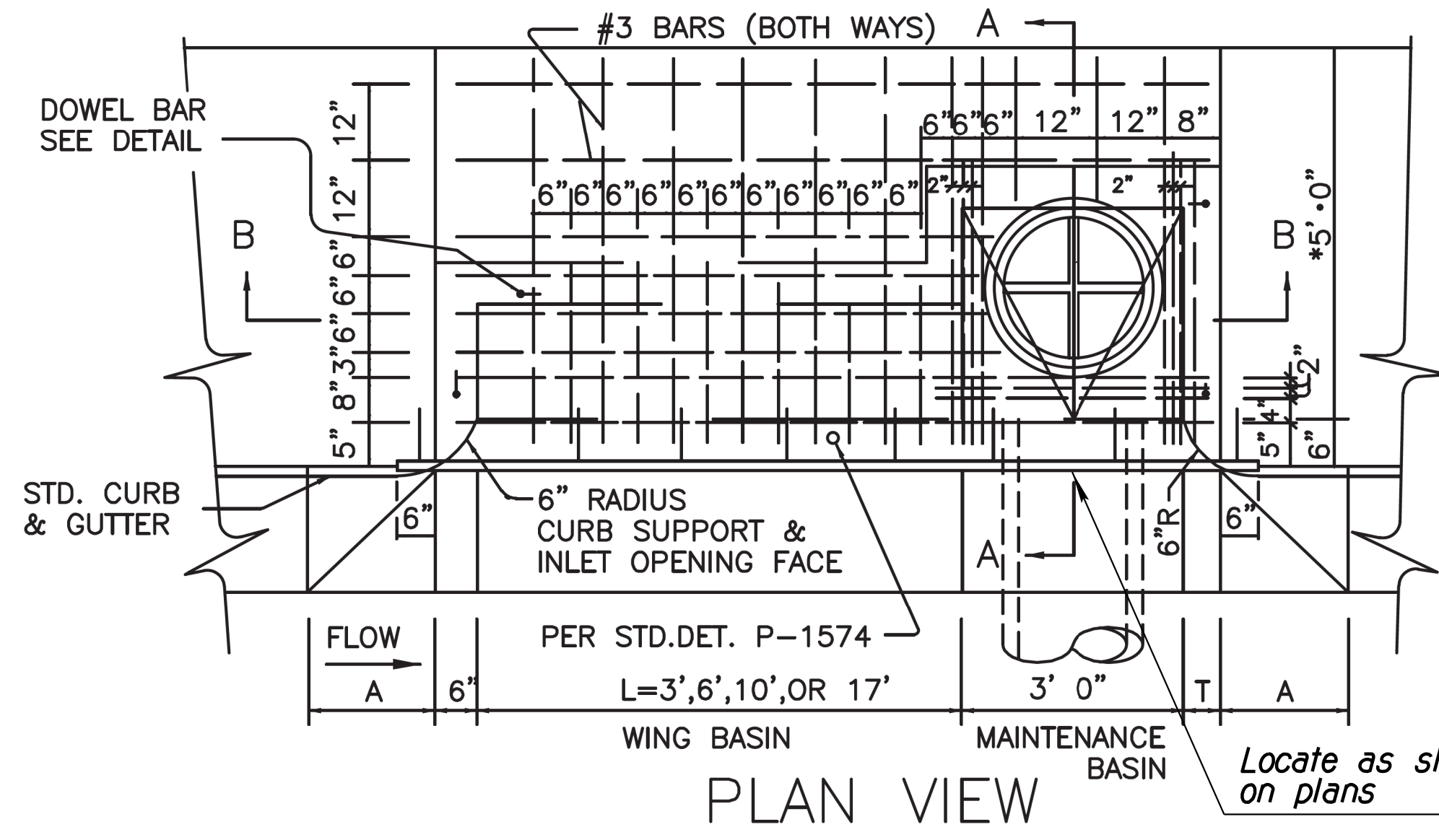
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	122	232	

060 MA 144

GUTTER TRANSITION	
CURB HEIGHT	DIM 'A'
4"	3'-3"
5"	2'-6"
6"	1'-9"



DEPRESSED GUTTER

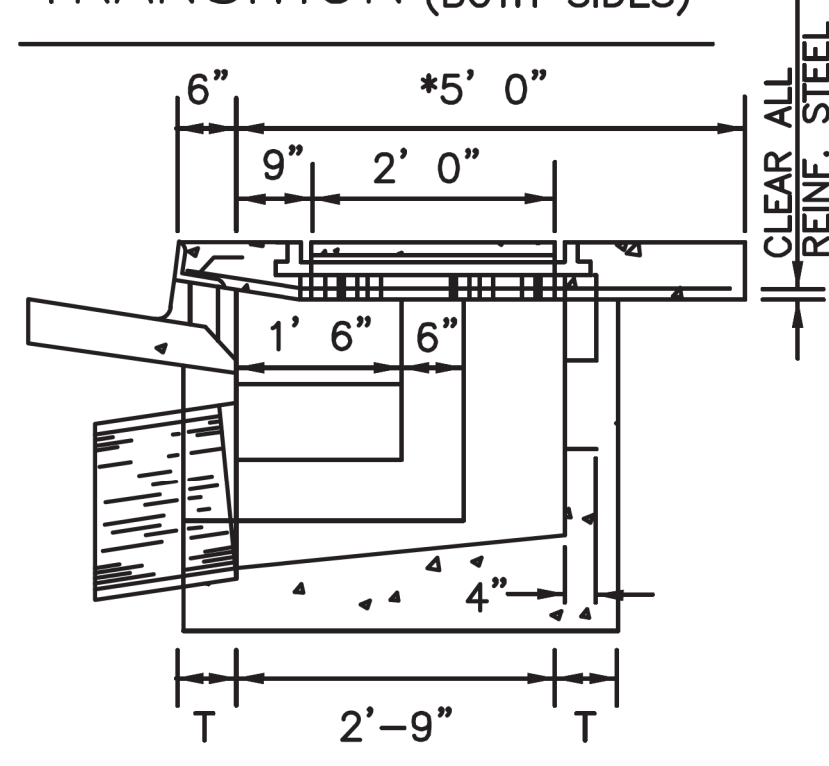


PLAN VIEW

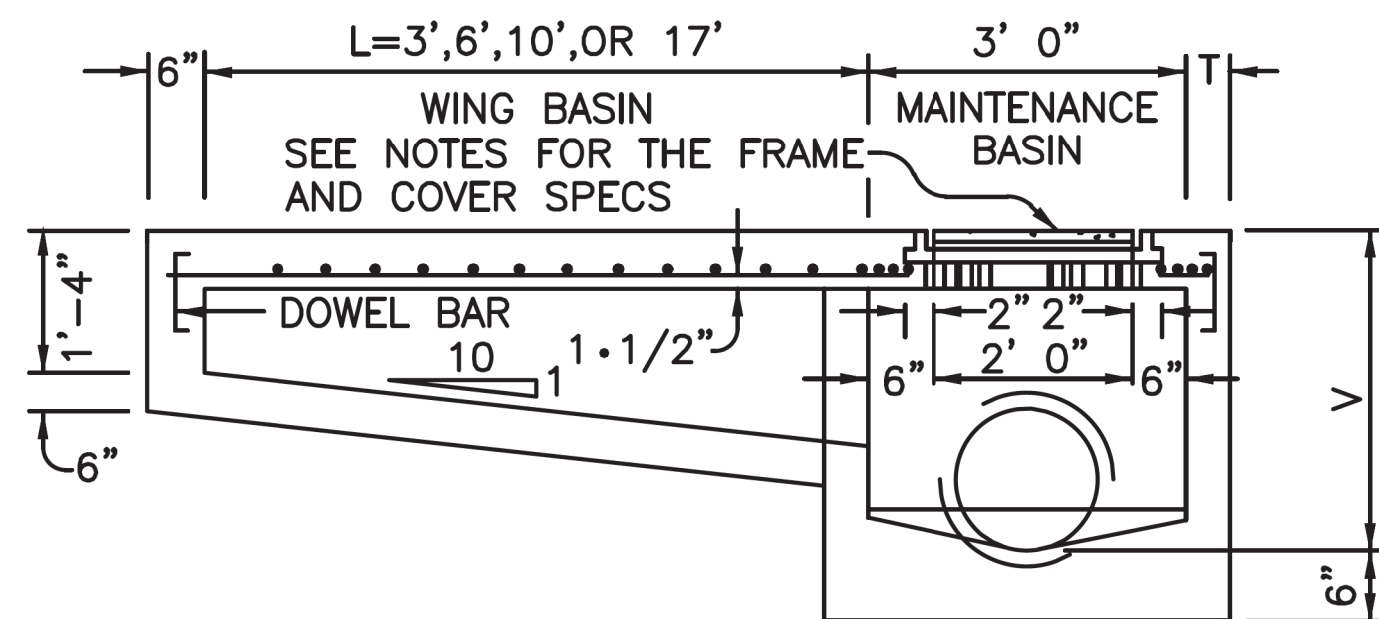
NOTES

1. TYPES ARE DESIGNATED AS FOLLOWS:
'M'.. NO WING, 'M-1'.. ONE WING,
'M-2'.. TWO WINGS.
2. ALL CONCRETE SHALL BE CLASS 'A'.
3. ALL REINFORCING STEEL SHALL BE DEFORMED BARS AND SHALL CONFORM TO A.S.T.M. SPECIFICATION 615.
4. CONNECTOR PIPES SHALL BE PLACED IN THE APPROPRIATE WALL OF THE MAINTENANCE BASIN.
5. FLOOR OF BASIN SHALL BE TROWELLED TO A HARD, SMOOTH SURFACE AND SHALL SLOPE FROM ALL DIRECTIONS TO OUTLET.
6. CONSTRUCTION DRAINS SHALL BE INSTALLED IN WHEN NOTED. (SEE DET. P-1575.)
7. LOCATE WING BASIN ON UPSTREAM SIDE OF MAINTENANCE BASIN FOR TYPE M-1. WING BASINS FOR TYPE M-2 SHALL BE BOTH SIDES OF MAINTENANCE BASIN.
8. ACCESS FRAME AND COVER PER DET. P-1561
9. INSTALL ONE CITY FURNISHED POLLUTION AWARENESS MARKER (PAM) AT EACH CATCH BASIN, AS DIRECTED BY THE ENGINEER.

TRANSITION (BOTH SIDES)



SECTION A - A



SECTION B - B

DOWEL BAR DETAIL

CATCH BASIN WALL THICKNESS	
T = 6"	IF V = 4' OR LESS
T = 8"	IF V = 4' TO 8'
(IF V EXCEEDS 8', SPECIAL DESIGN IS REQUIRED.)	
L = 0'	UNLESS SPECIFIED ON THE PLANS
V = 4'-0"	MIN. UNLESS OTHERWISE NOTED
*4'-0" IN LOCATIONS WHERE 4' SIDEWALK IS REQ'D.	

DETAIL NO. P1569-1 **City of Phoenix** STANDARD DETAIL

CATCH BASIN TYPE "M"

APPROVED: *[Signature]* 12/10/2012 DATE
CITY ENGINEER

DETAIL NO. P1569-1

DETAIL D4

CITY OF PHOENIX STD DWG P1569-1

Note:
The detail shown hereon are the product of the City of Phoenix (COP) who is solely responsible for the their design, content and any specifications or other information referenced therein. Exceptions to the COP details have been noted to address specific requirements of this project

DESIGN	JP	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	JW	DATE	03/18	
CHECKED	JP	DATE	03/18	
ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD				
TRACS NO. H8874 01C				Expires: 3/31/2021 DWG NO. D-2.03 OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	123	232	

060 MA 144

TRAFFIC CONTROL NOTES:


1. Traffic control plans are to be prepared in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition, the Arizona Supplement to the MUTCD, and ADOT Traffic Control Design Guidelines (TCDG), 2010.
2. The traffic control plans represent a suggested method for traffic control during construction. The Contractor may prepare another traffic control plan in accordance with Section 701 of the Standard Specifications and the Special Provisions. All traffic control plans are subject to approval of the Engineer before the beginning of the construction. No measurement or direct payment will be made for developing the traffic control plans. The cost shall be considered as included in the price of the contract items.
3. Adjustments to the details of these traffic control plans and requirements may be necessary due to construction activities. All adjustments shall be approved by the Engineer. If the Contractor elects to deviate from the traffic control plans, the Contractor shall develop a traffic control plan in accordance with the requirements of the specifications. No measurement or direct payment will be made for developing the plan. The cost shall be considered as included in the price of contract items.
4. All existing signs in conflict with the construction signs shall be removed, relocated or covered in place, as directed by the Engineer. The Contractor shall store and reinstall items which have been removed or relocated in a manner approved by the Engineer. The cost being considered as included in the price of contract items.
5. Channelization devices shall be placed 40 feet on center in tapers and 80 feet on tangents, except as otherwise noted in the plans.
6. Speed limit reduction signing is preliminary and is subject for review and change by the Engineer as dictated by field conditions.
7. All construction signs shall have black letters on a fluorescent orange background, except as otherwise noted. The retro-reflectivity sheeting on all construction signs shall meet the minimum criteria established in Section 1007 of the Special Provisions and in Section 380 of the ADOT Traffic Guidelines and Processes.
8. Signs shall be mounted on embedded posts, spring stands, rigid stands, or as directed by the Engineer. For signs installed on embedded posts, sign mounting height is a minimum of 7 feet as measured from the bottom edge of the sign to the near edge of pavement or 2 feet behind guardrail or concrete barrier. Signs on spring and rigid stands shall be mounted at manufacturers recommended height.
9. The Contractor shall preserve all roadway signs, sign supports, object markers, and milepost markers that are not to be removed. The Contractor shall replace any signs, sign supports, and markers damaged as a result of the construction at the Contractor's expense.
10. Flags shall be mounted on top of all construction signs except the "END ROAD WORK THANK YOU" sign. Type "A" flashing warning lights shall be required on all nighttime construction signs except the "END ROAD WORK THANK YOU" sign.
11. The Contractor shall use Type II barricades or vertical panels in taper and tangent areas for channelization during nighttime activities. A Type "C" steady-burning yellow light shall be mounted on every barricade during nighttime activities for delineating the edge of traveled way.
12. The Contractor shall clean the roadway surface to the satisfaction of the Engineer by sweeping and air-jet blowing, immediately prior to the placement of all temporary pavement markings. The roadway surface shall be dry.
13. Construction signs shall not be displayed to traffic more than 24 hours prior to the actual start of construction. These signs may be installed sooner but they must be covered or turned away from traffic. The cost of covering or turning them shall be considered part of the sign installation cost. No further compensation will be made. These signs shall be removed within 24 hours after the completion of construction activities.
14. Provide changeable message signs as specified in the plans and specifications with a message that is appropriate for each activity as approved by the Engineer. Cycle time and duration of the message on the changeable message sign shall be that the entire message can be read twice at the operating speed from no farther than 650 feet. The Contractor shall utilize the changeable message boards to pre-warn traffic of any full closures.
15. When traffic control devices are not in use, they shall be moved at least 30 feet from the roadway. All traffic control signs not in use shall be covered or turned away from traffic. The signs and devices shall be grouped in designated area(s) in a timely manner.
16. Off-duty uniformed police officers and their vehicles shall be included as part of the Contractor's traffic control when the Engineer decides they should be present as indicated in these traffic control plans.
17. The Contractor shall utilize a flashing arrow panel in the sequential chevron mode for each closure of the through lane. The Contractor shall not utilize a flashing arrow panel in connection with any shifting taper.
18. The Contractor shall position changeable message signs in advance of each road closure or as directed by the Engineer.
19. An adequate number of Type "III" barricades shall be placed across each roadway to be closed. A 48 inch by 30 inch "ROAD CLOSED" sign shall be attached to one of the Type "III" barricades closing the roadway. A Type "A" flashing warning light shall be mounted on the end of each Type "III" barricade during nighttime activities.
20. When stripe obliteration is necessary it shall be accomplished by approved methods, as indicated in the Standard Specifications. Painting over stripes, removal of pavement, and overlaying pavement do not constitute stripe obliteration. The Contractor shall remove the existing pavement markers in connection with the stripe obliteration activities.
21. All drawings are schematic only and not to scale.
22. Existing signs not indicated on the plan sheets, that do not need to be removed or relocated, shall remain. If construction activities require the removal of signs, the signs shall be reinstalled as near as possible to the existing location, as directed by the Engineer. The removal/reinstallation of signs for any construction activity shall be included in the cost of that activity. No further compensation will be made.
23. Temporary concrete barrier shall be placed per ADOT TCDG.
24. The Contractor is responsible for maintaining traffic control for the railroad through all construction phases.
25. The nearest edge or corner of a sign shall be approximately 12 feet from the nearest edge of pavement for all signs mounted on embedded posts.
26. Where no closure is necessary but where there is construction alongside a roadway under construction, the Contractor shall place a 48x48 inch "ROAD WORK AHEAD" and "SHOULDER WORK AHEAD" sign as directed by the Engineer to alert the public to the construction activities.
27. The Contractor may substitute Type I barricades for Type II barricades as long as the reflective area on the top panel of each Type I barricades is equivalent or greater than the reflective area of the Type II barricade.
28. For temporary concrete barrier markers, see ADOT Standard Drawing M-32 barrier markers. Markers shall be installed at 20 feet spacing. The installed price for the markers shall be considered part of the barrier cost.
29. The Contractor shall provide flagger and uniformed police officers (DPS) as directed by the Engineer during installation and removal of temporary concrete barrier.
30. Temporary pavement markings shall be removed by the approved methods when no longer required.
31. All existing pavement markings in conflict with the traffic control plans shall be removed by approved methods, as indicated in the Special Provisions.
32. The Contractor shall provide "Business Access" signs during construction for all affected business owners within the project construction limits.
33. The Contractor is responsible to maintain business and residential access at all times.
34. The Contractor shall provide a uniform police officer with a marked car for all detours, as directed by the Engineer.

References:

- MUTCD -- Temporary Traffic Control - Part 6 of The Manual on Uniform Traffic Control Devices (2009 Edition).
- TCDG -- ADOT Traffic Control Design Guidelines 2010.

Note:

Sign codes called out shall be superceded with latest ADOT Manual of Approved Signs.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			TRAFFIC CONTROL GENERAL NOTES	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-01.01
TRACS NO. H8874 01C				OF

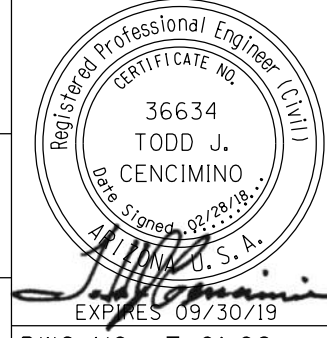
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	124	232	

060 MA 144

TRAFFIC CONTROL QUANTITIES

BID ITEM NO.	ELEMENT OF WORK	UNIT	PHASE 1A	PHASE 1B	PHASE 1C	PHASE 2A	PHASE 2B	PHASE 3	TOTAL QTYS.
	ESTIMATED DURATION	DAYS	300	300	120	60	45	30	
7015010	Temporary Concrete Barrier (Installation and Removal)	L.Ft.			7455	1294	1091	354	10,194
7015020	Temporary Impact Attenuators (Installation and Removal)	Each			2		2		4
7015051	Obliterate Pavement Marking (Arrow, Symbol or Legend)	Each			2				2
7015091	Specialty Signs	Sq.Ft.		225					225
7016020	Temporary Concrete Barrier (In Use)	L.Ft. - Day			894,600	106,080	49,095	10,620	1,060,395
7016021	Temporary Impact Attenuators (In-Use)	Each - Day			240	60	90		390
7016030	Barricade (Type II, Vert. Panel, Tubular Marker)	Each - Day			43,920	22,560		420	66,900
7016031	Barricade (Type III, High Level Flag Trees)	Each - Day			14,760	180			14,940
7016032	Portable Sign Stands (Rigid)	Each - Day	6900	2100					9000
7016033	Portable Sign Stands (Spring Type)	Each - Day			12,600	8520	405	90	21,615
7016035	Warning Lights (Type A)	Each - Day	5400	8700	15,840	8580	315	60	38,895
7016039	Embedded Sign Post	Each - Day			6900				6900
7016051	Temporary Sign (Less Than 10 S.F.)	Each - Day		19,800	12,720	7260	135		39,915
7016052	Temporary Sign (10 S.F. or More)	Each - Day	6900	1200	3240	1320	270	90	13,020
7016067	Changeable Message Board (Contractor Furnished)	Each - Day	1800						1800

NOTE:
Estimated duration are in calendar days.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			TRAFFIC CONTROL QUANTITIES	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-01.02
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE SURVEY NO. FINISHED PLANS REVISIONS DATE

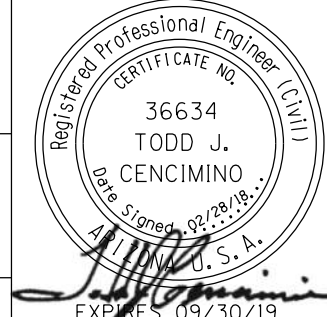
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	125	232	

060 MA 144

MAINTENANCE AND PROTECTIN OF TRAFFIC

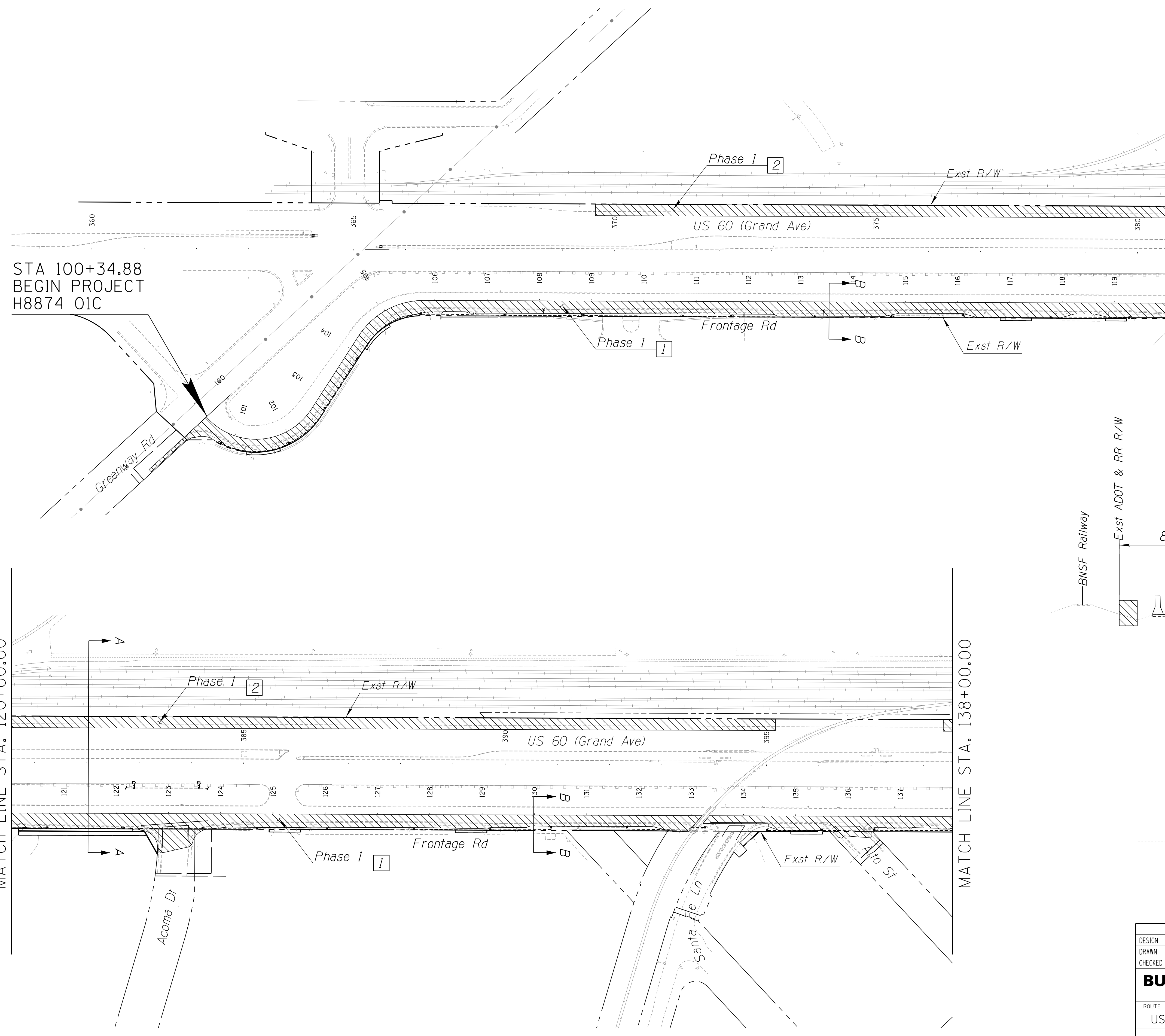
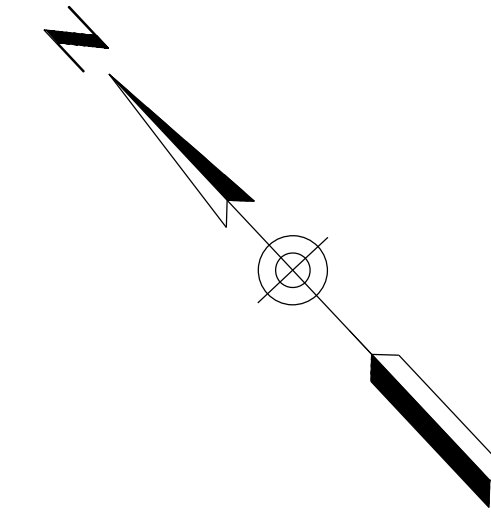
PHASE NO.	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	COMMENTS
1A	Mobilize and Install Advanced Warning Signs.	Maintain all existing travel lanes on Fronrage Road and US 60. Provide advanced warning signs per Detail TC-A.	Advanced warning signs shall be placed on embedded posts for the duration of the project.
1B	Mobilize and Install Frontage Detour Signs.	Maintain all existing travel lanes on Frontage Road and US 60. Provide detour signs per Detail TC-B.	Detour signs shall be placed on embedded posts for the duration of the phase 1 and 2.
1C	Remove and Construct New AC, Curb & Gutter, Sidewalk, and Driveways on West Side of Frontage Road Remove and Construct New Connectors for all access roads to Frontage Road. Install new fence along NB US 60. Remove and construct curb & gutter on EB Greenway Road. Remove and construct Curb & gutter, AC, and connection from Santa Fe Lane to Frontage Road.	Close Southbound Frontage Road. Maintain one SB lane on the east side of Frontage Road. Traffic control conforms to Detail TC-C. Close EB right lane on Greenway Road. Close NB right shoulder of US 60 and install TCB and advanced warning signs. Close left turn lane on Acoma Road. Close Frontage Road to all thru traffic after the Acoma Road Acces point to Alto St. Install TCB and advanced warning signs. Close Santa Fe Lane to all thru traffic and install TCB and advanced warning signs.	Maintain at least one driveway to all buinesses and residences along the Frontage Road or along a side street. Maintain all existing lanes on US 60. Maintain Acoma Road, Lune Street, and Primrose Street access points. Maintain all access at the intersection of Thunderbird and US 60. Maintain all connectors' access to Frontage Road.
2A	Remove and construct new AC on east side of Frontage Road. Remove drainage channel and install new RCBC. Construct new Acoma Road access point. Install final pavement markings.	Close northbound Frontage Road. Maintain one SB lane on the west side of Frontage Road. Traffic control conforms to Detail TC-D. Install TCB along US 60 at Acoma Road access and close right SB lane on US 60. Install TCB Primrose and Luna Street access points. Temporary shoulder between edgeline and TCB is 2 feet and shall not be less than 1 foot.	
2B	Remove and construct new median, AC, Curb & gutter on US 60 at Acoma Road Access point.	Install TCB and advanced warning signs along US 60 per detail TC-E. Close left turn lane for NB traffic on US 60. Close SB and NB left lane and install TCB. Temporary shoulder between edgeline and TCB is 2 feet and shall not be less than 1 foot.	
3	Remove existng Acoma Road access point and rebuild drainage channel.	Install TCB and advanced warning signs along US 60 and Frontage Road. Close right shoulder for SB traffic on US 60. Temporary shoulder between edgeline and TCB is 2 feet and shall not be less than 1 foot.	

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			TRAFFIC CONTROL MAINTENANCE OF TRAFFIC	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. T-01.03
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	126	232	

060 MA 144



STA 100+34.88
BEGIN PROJECT
H8874 01C

MATCH LINE STA. 120+00.00

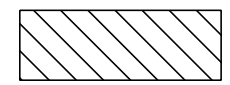
MATCH LINE STA. 120+00.00

MATCH LINE STA. 138+00.00

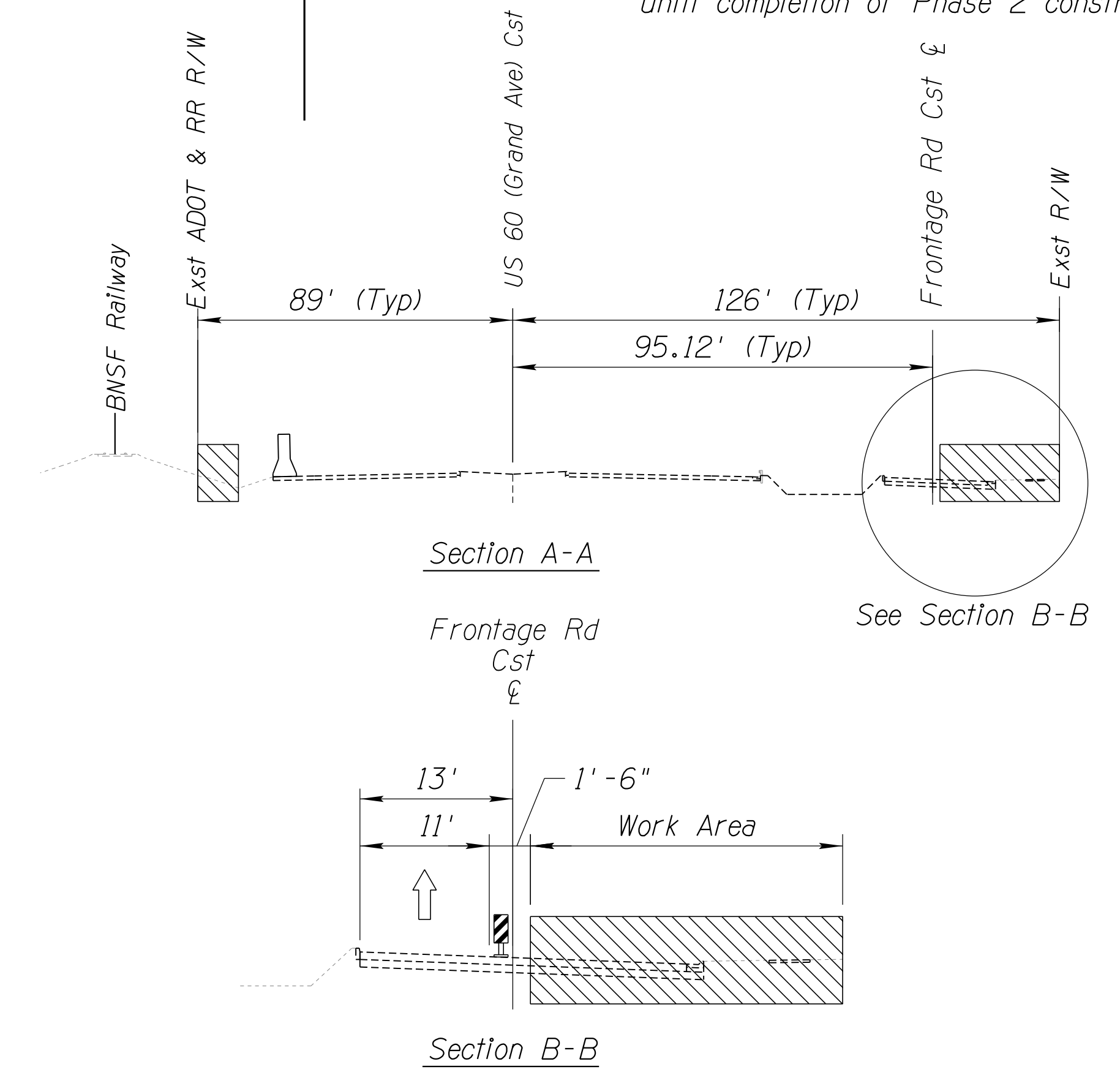
Major Construction Activities

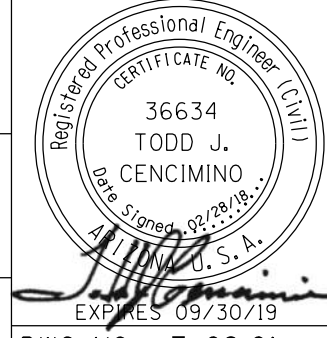
Phase 1:

- 1 Remove and Construct City Side of Frontage Rd, new curb, sidewalk, lighting, drainage structures*
- 2 Construct Fence

 Construct

*Drainage structures should be covered until completion of Phase 2 construction

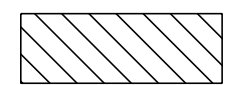


DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			CONSTRUCTION PHASING PHASE 1	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-02.01
TRACS NO. H8874 01C				OF

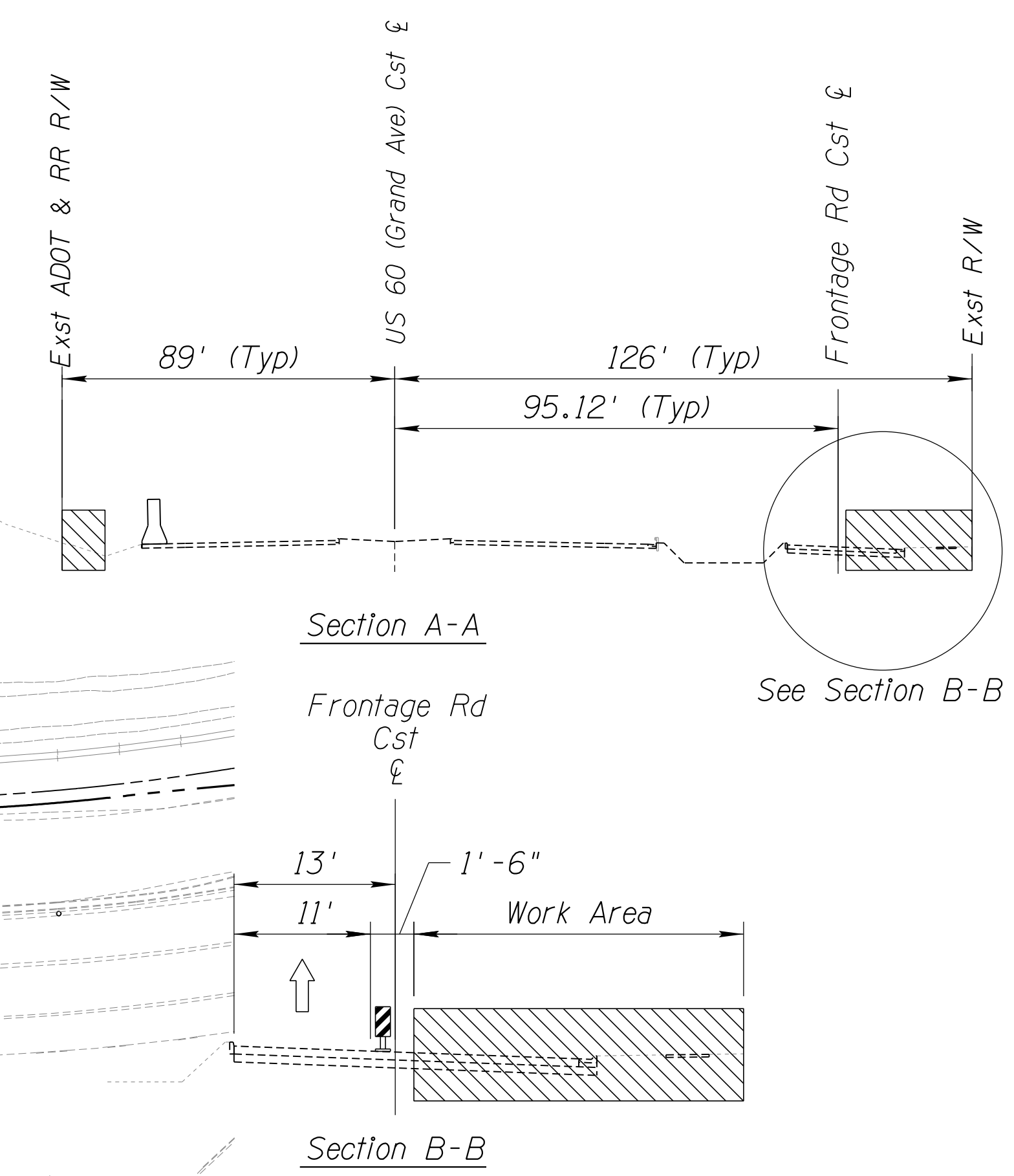
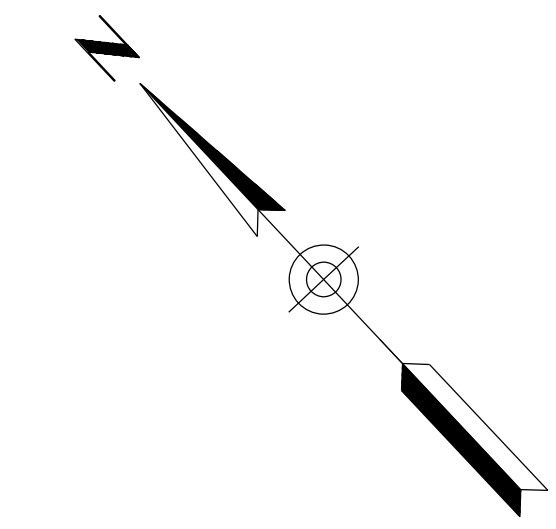
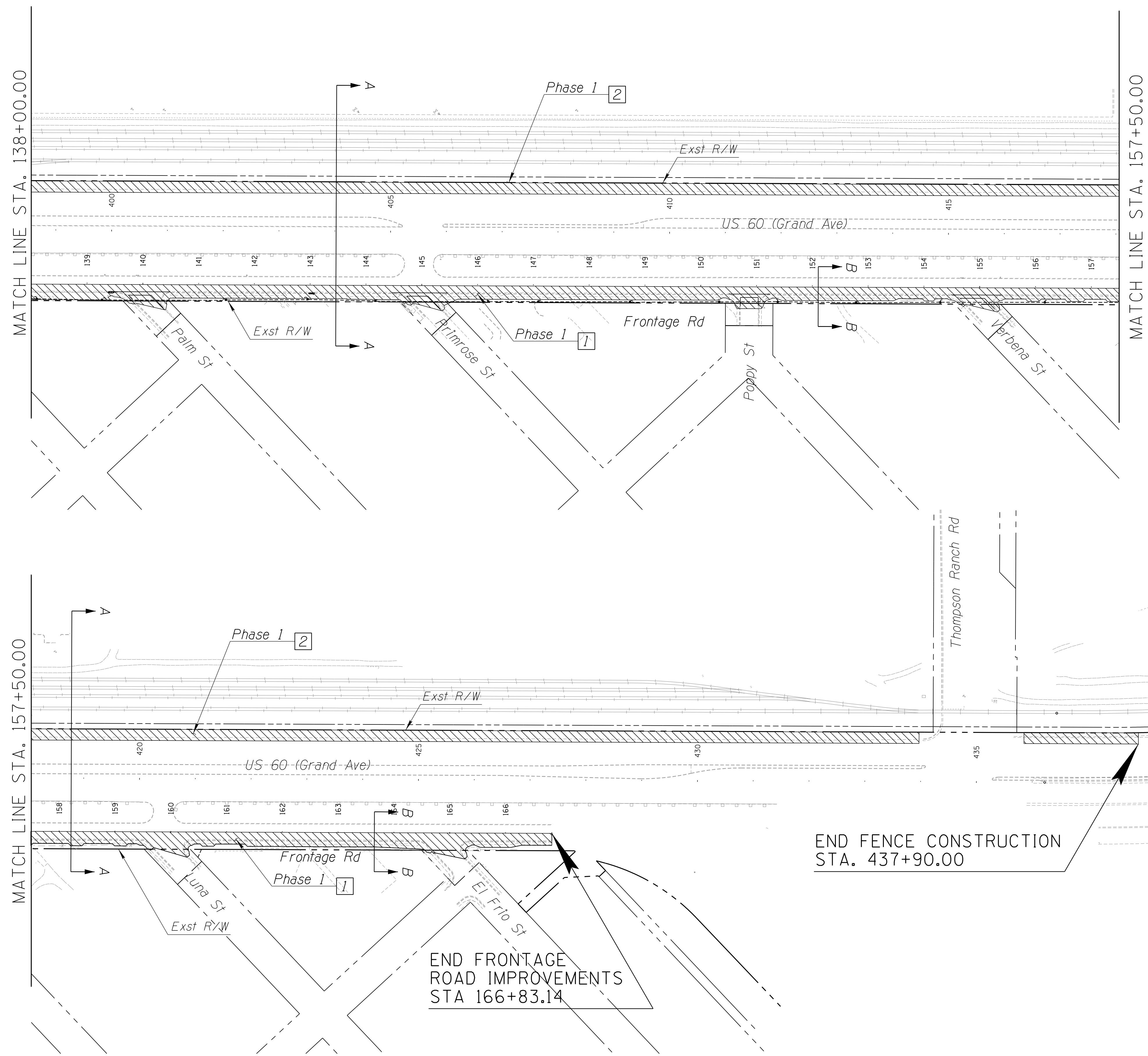
DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO. DATE: LOCATION: REVISIONS: FINISHED PLANS: SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	127	232	

060 MA 144

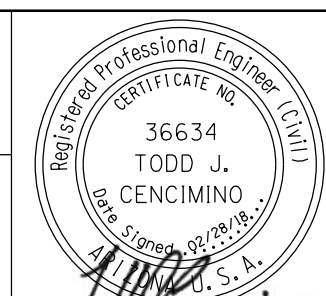
Major Construction Activities	
Phase 1:	
1	Remove and Construct City Side of Frontage Rd, new curb, sidewalk, lighting, drainage structures*
2	Construct Fence
	Construct

*Drainage structures should be covered until completion of Phase 2 construction



END FENCE CONSTRUCTION
STA. 437+90.00

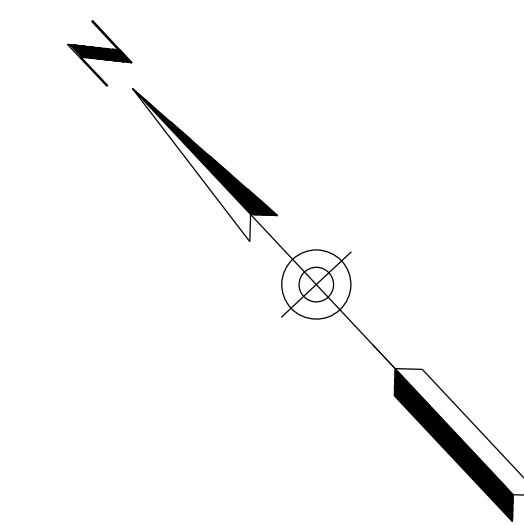
END FRONTAGE
ROAD IMPROVEMENTS
STA 166+83.14

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			CONSTRUCTION PHASING PHASE 1	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-02.02
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	128	232	

060 MA 144

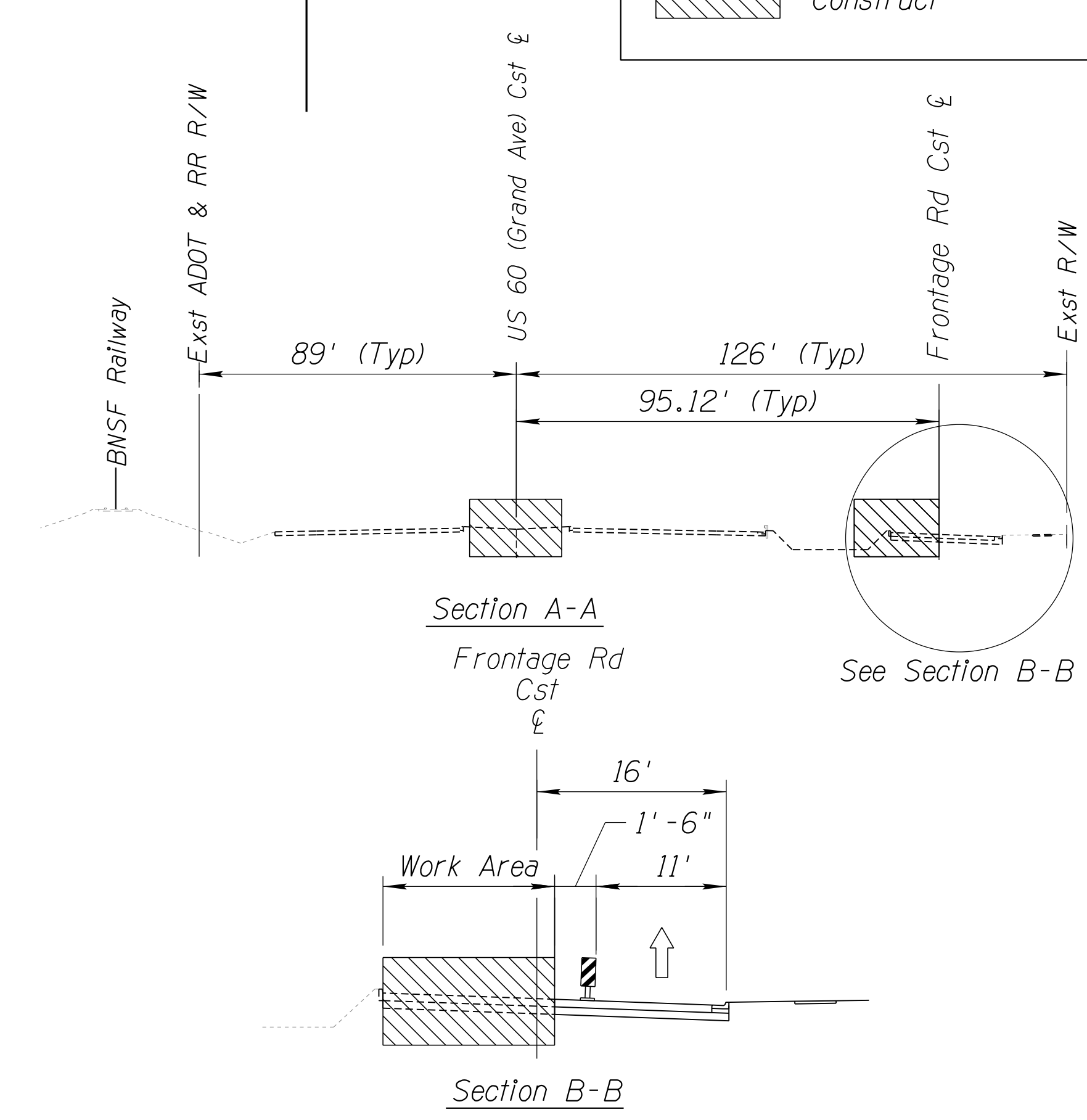
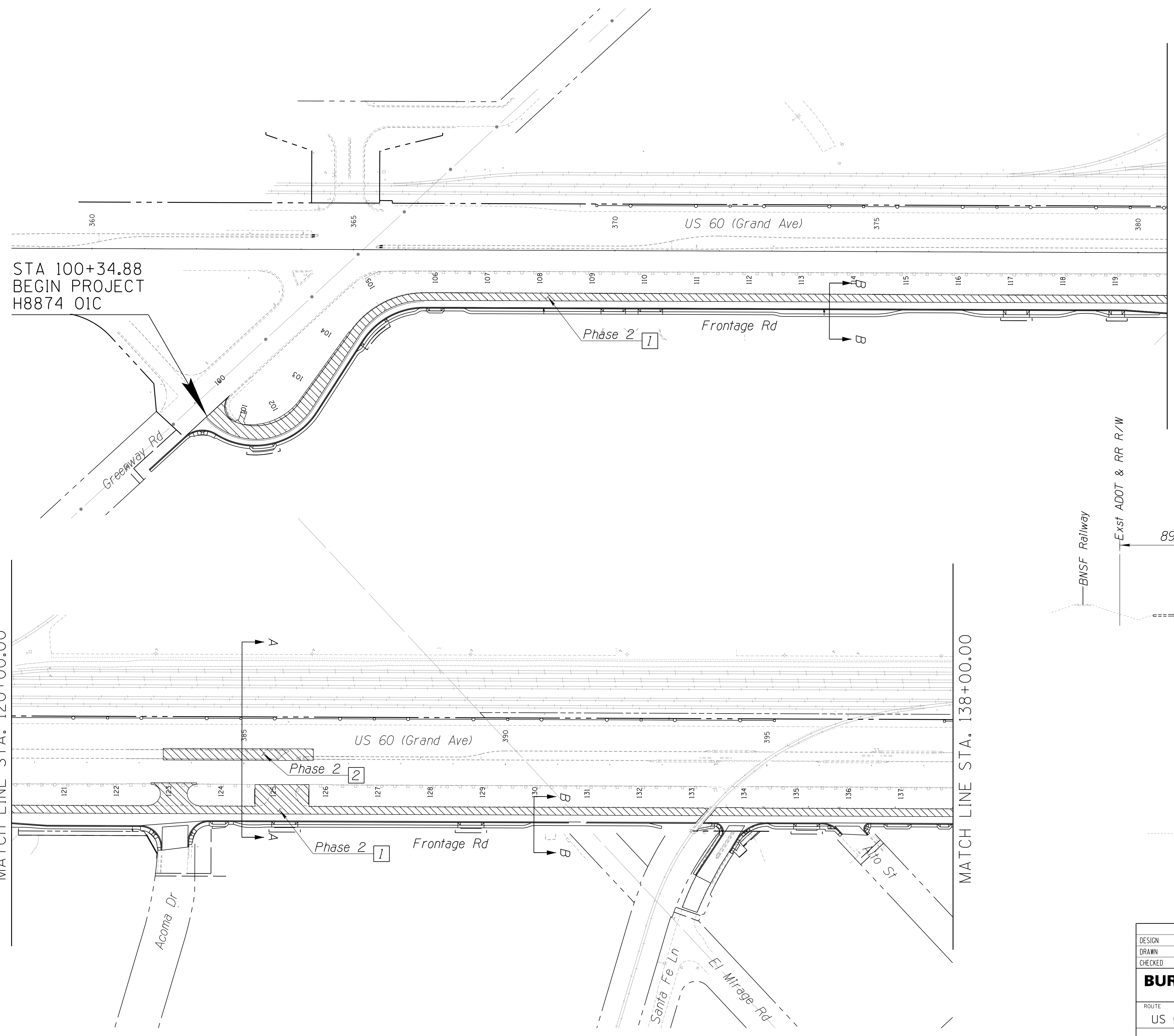


Major Construction Activities

Phase 2:

- 1 Construct US 60 (Grand Ave) side of Frontage Rd, Drainage Improvements
- 2 Construct Turn Bay Extension

Construct

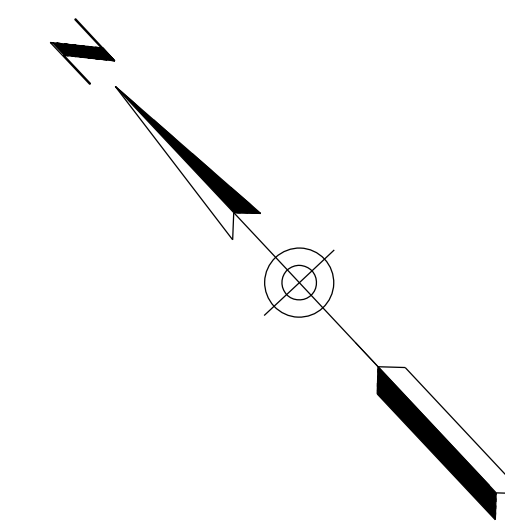


REVISIONS-	LOCATION-	DATE-
FINISHED PLANS-	SURVEY NO.	DATE-
REVISIONS-	LOCATION-	DATE-
FINISHED PLANS-	SURVEY NO.	DATE-

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIST DR. SUITE 102 TEMPE, AZ 85281</small>			CONSTRUCTION PHASING PHASE 2	DWG NO. T-02.03
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	129	232	

060 MA 144

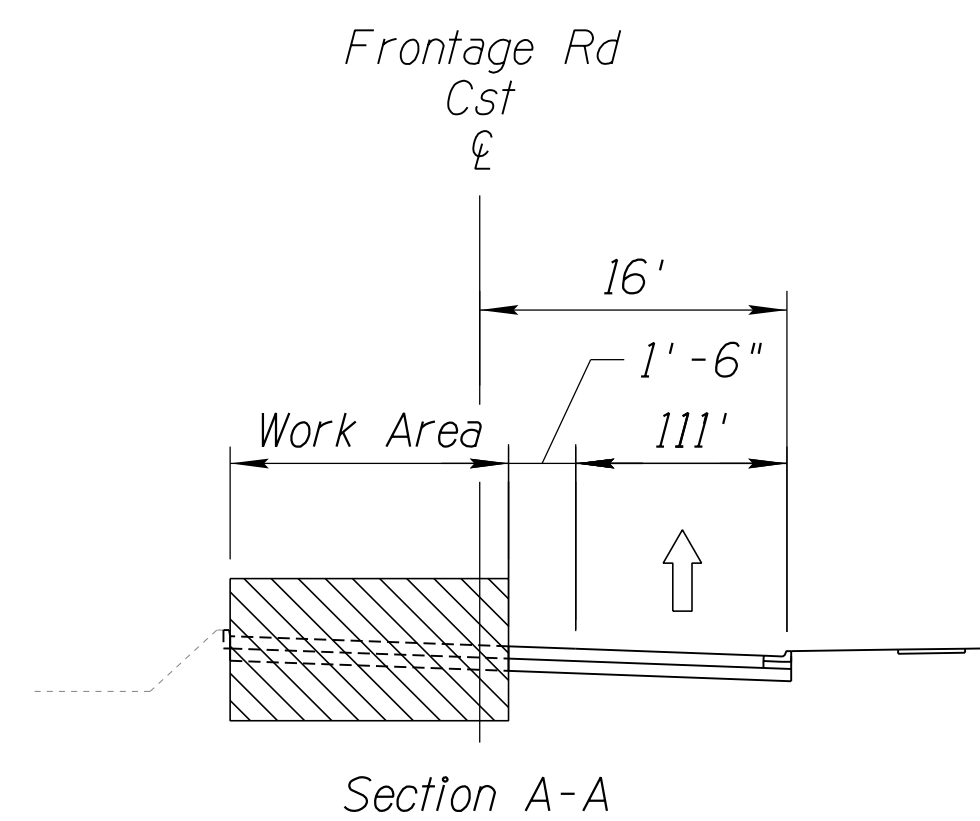
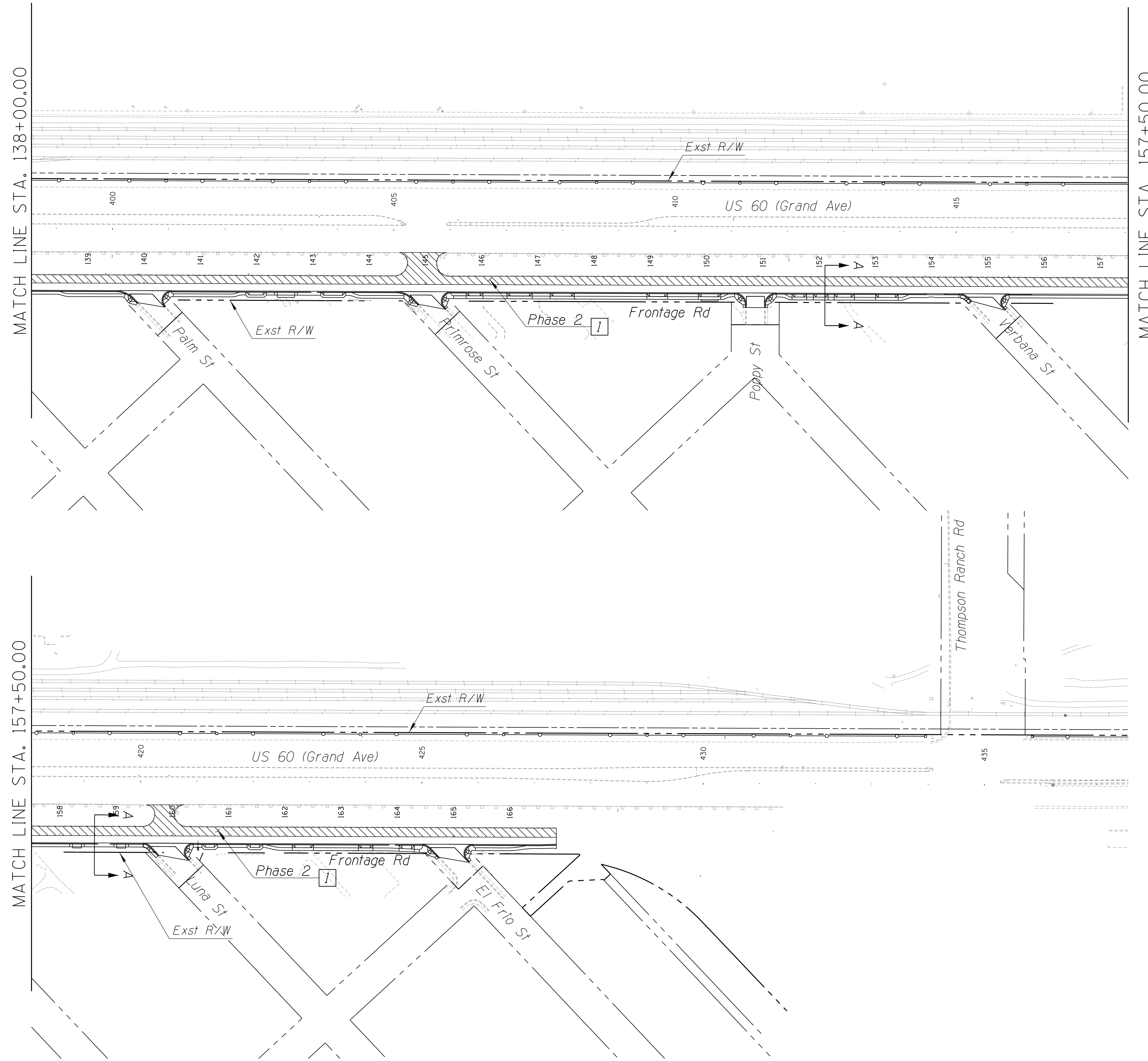


Major Construction Activities

Phase 2:

1 Construct US 60 (Grand Ave) side of Frontage Rd, Drainage Improvements

Construct

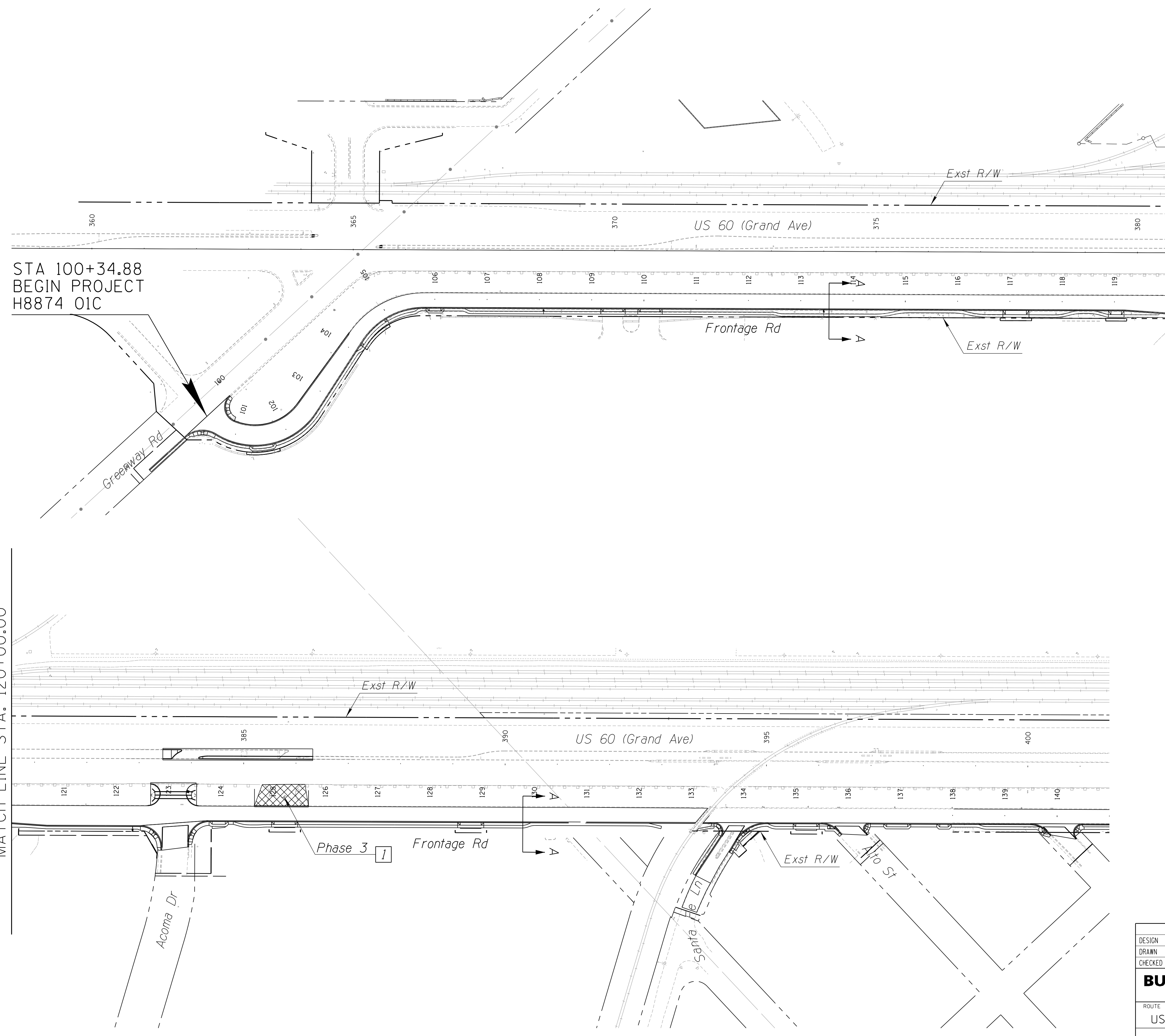
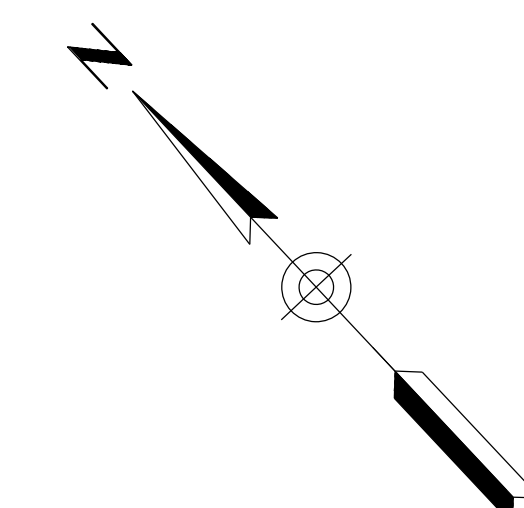


SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE			CONSTRUCTION PHASING PHASE 2	DWG NO. T-02.04
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C			OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	130	232	

060 MA 144



STA 100+34.88
BEGIN PROJECT
H8874 01C

MATCH LINE STA. 120+00.00

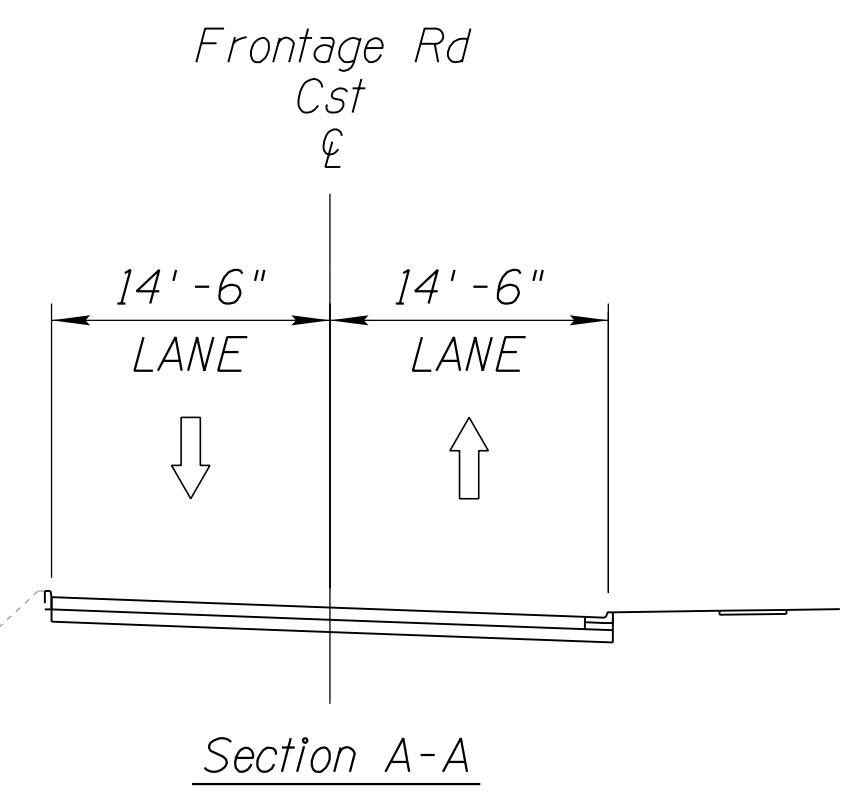
MATCH LINE STA. 120+00.00

Major Construction Activities

Phase 3:

1 Remove US60/Frontage Rd Access Point, Reconstruct Channel

Removal



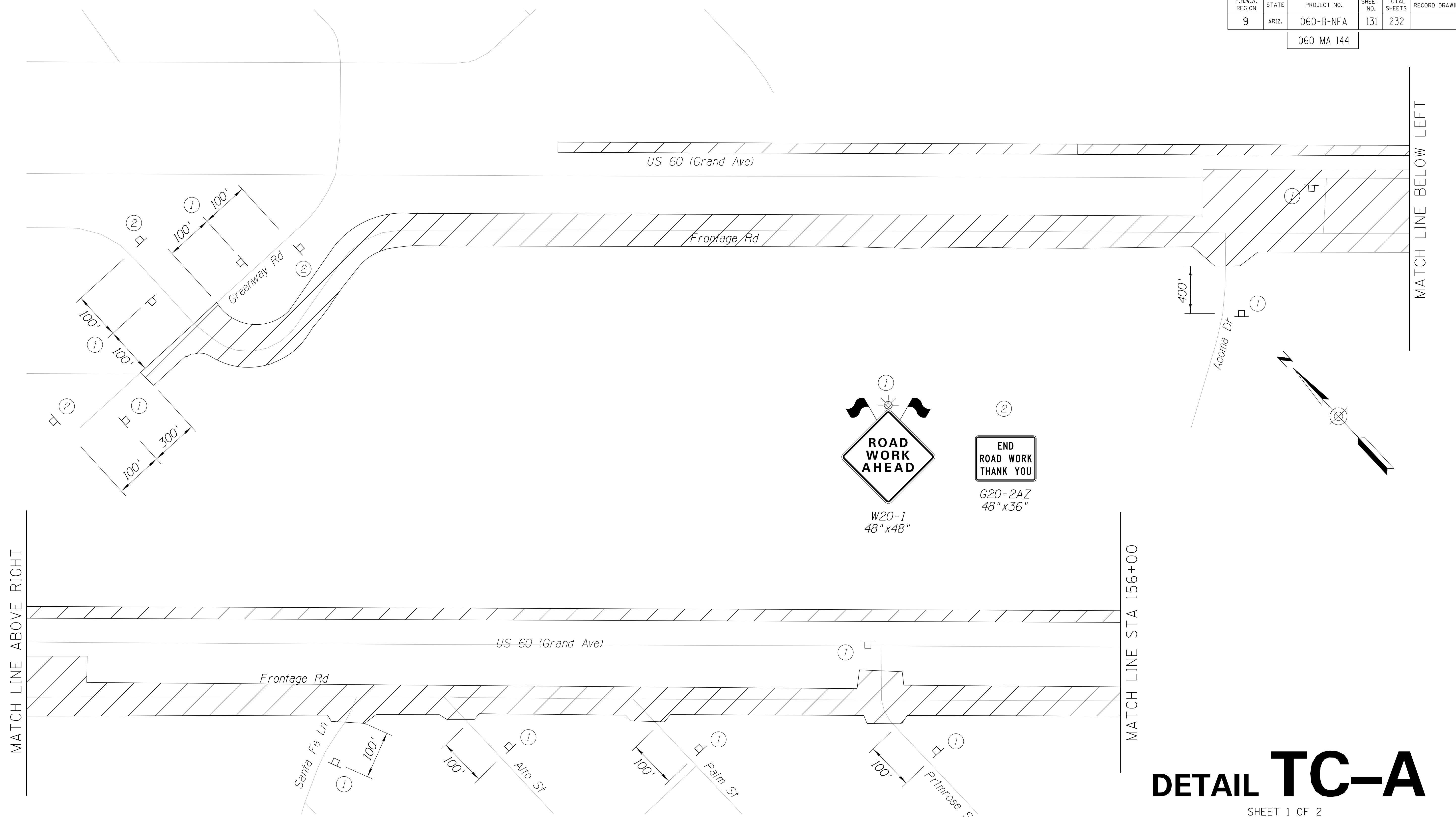
REVISIONS-	LOCATION-	DATE-
FINISHED PLANS-	SURVEY NO.	DATE-
REVISIONS-	LOCATION-	DATE-
FINISHED PLANS-	SURVEY NO.	DATE-

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			CONSTRUCTION PHASING PHASE 3	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-02.05
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	131	232	

060 MA 144

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE



MATCH LINE ABOVE RIGHT

MATCH LINE STA 156+00

MATCH LINE BELOW LEFT

DETAIL TC-A

SHEET 1 OF 2

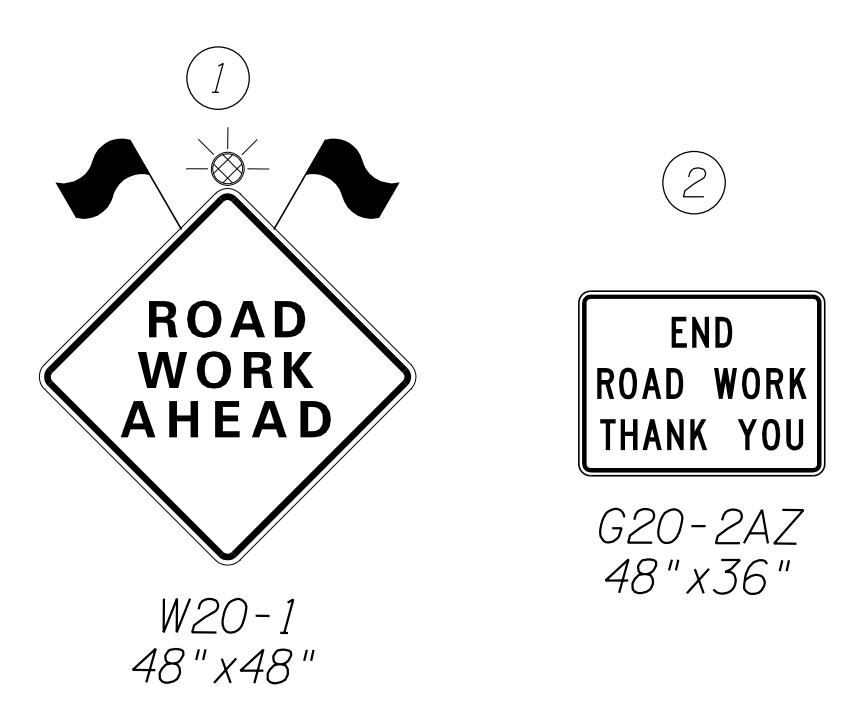
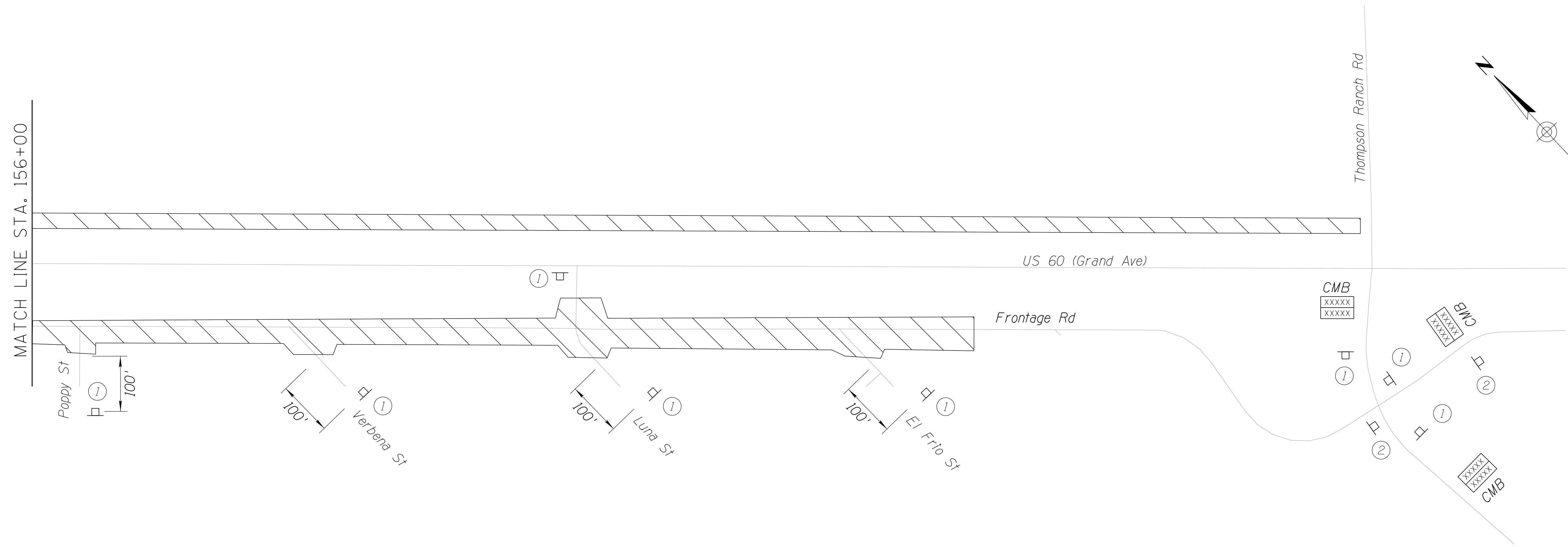
Advance Warning Signs
 The above signs shall be in place for the duration of the project.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 1A ADVANCE WARNING SIGNS TRAFFIC CONTROL DETAIL	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			DWG NO. T-03.01	OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	132	232	

060 MA 144

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE



DETAIL TC-A

SHEET 2 OF 2

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 1A ADVANCE WARNING SIGNS TRAFFIC CONTROL DETAIL	DWG NO. T-03.02
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	133	232	

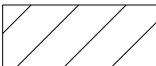
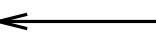
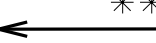
060 MA 144

PC STA 100+32.68
BEGIN PROJECT

During Phase 1 and Phase 2 of construction, the traveled-way width along the Frontage Road will be reduced to a minimum of 11' between the construction barrier and the curb. A single lane of traffic will be maintained through the construction zone at all times.

One-way travel operations will be introduced. The one-way operations will be southeast in direction in order to facilitate right-in right-out access to local streets, businesses, public buildings, and private residences. A detour will be signed directing northwest traffic to Thunderbird Road to Dysart Road to Greenway Road.


Side streets and business driveways shall only be closed during their respective reconstruction. Side streets should maintain at least one lane of traffic at all times. Contractor must alert business owners to driveway closures. Construction for businesses with only one driveway may have to take place on weekends. Business Access signs shall be installed during construction.

-  Work Area
-  Detour Route
-  ** Direction of Local Access Travel along Detour Route

END FRONTAGE ROAD IMPROVEMENTS
FRONTAGE RD CST @ STA 167+83.28
MATCH PROJECT 060 MA 146 H8374 01C

DETAIL TC-B

SHEET 1 OF 3

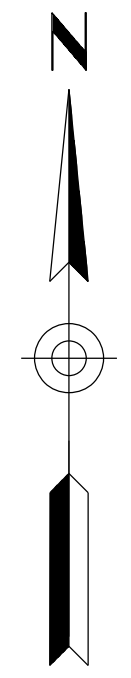
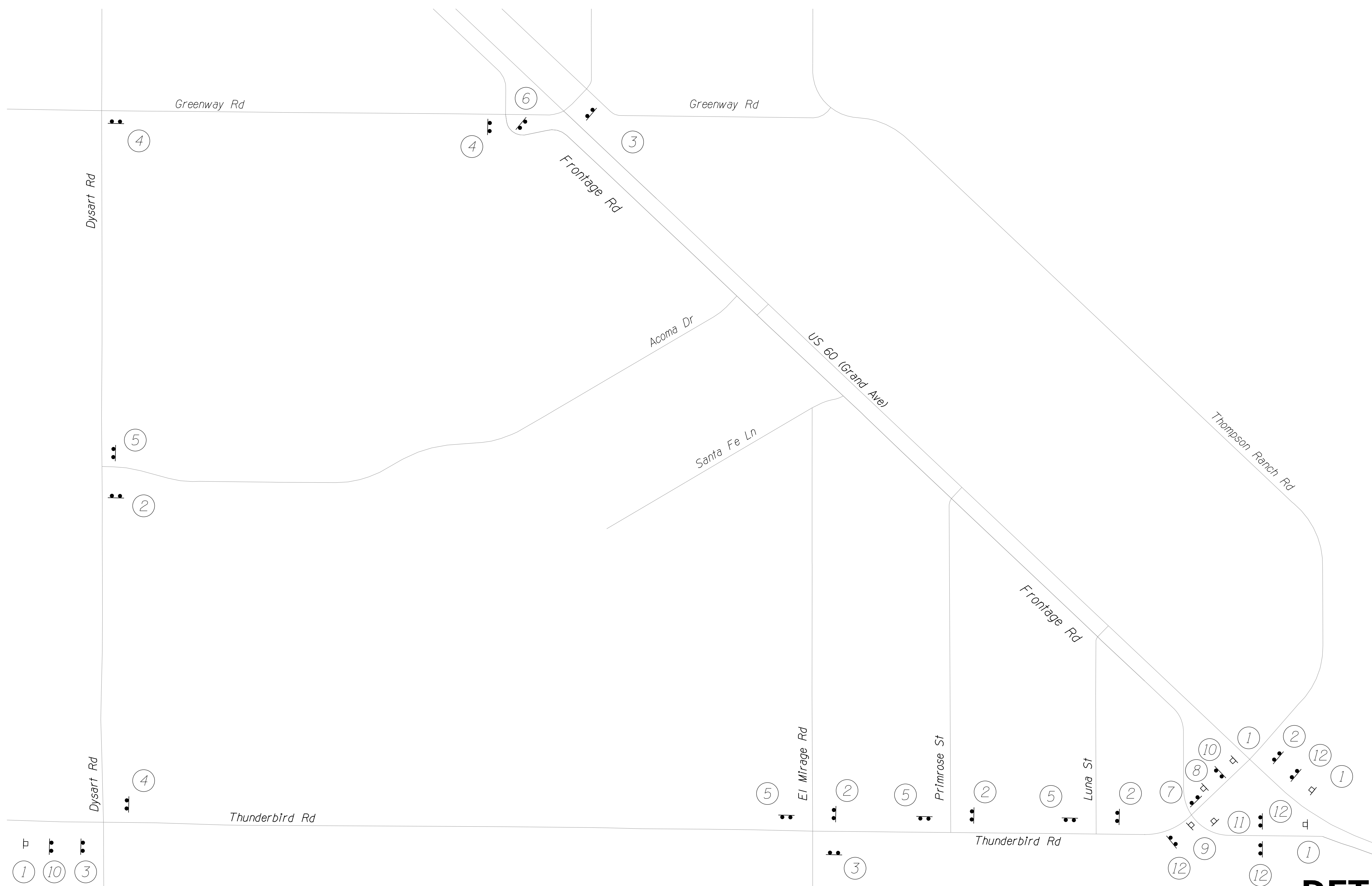
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 1B DETOUR PLAN (SHEET 1 OF 3)	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60		GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			DWG NO. T-03.03	
			OF	

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	134	232	

060 MA 144

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE



DETAIL TC-B

SHEET 2 OF 3

Notes:


1. Contractor shall modify the CMB message to provide notice to any closures a minimum of five days in advance.
2. The Contractor shall coordinate closures with the Engineer a minimum of two weeks prior to full closures.

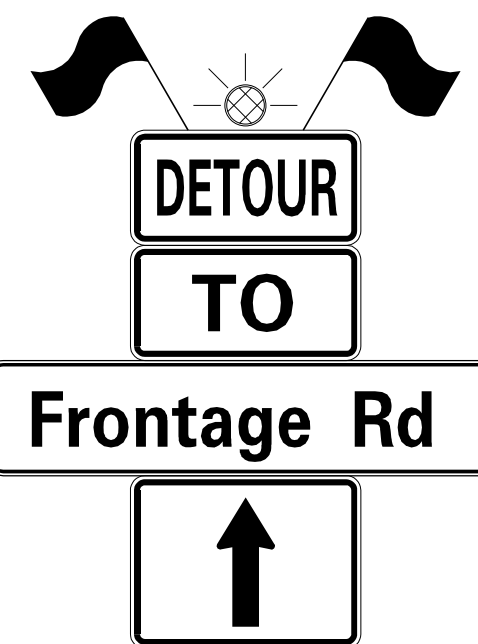
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 1B TRAFFIC CONTROL DETOUR DETAIL (SHEET 2 OF 3)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-03.04
TRACS NO. H8874 01C				OF

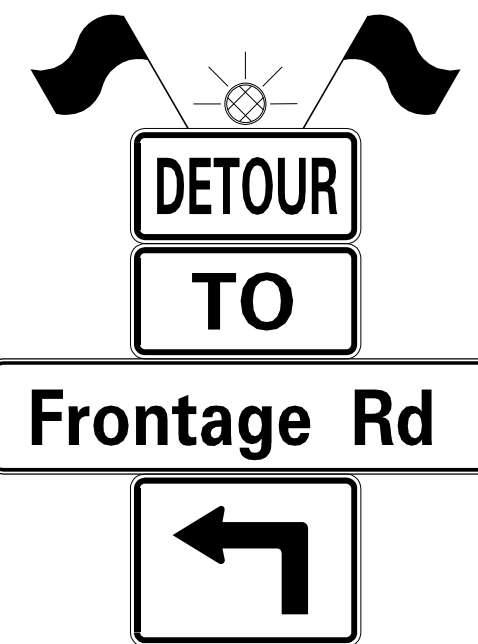
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	135	232	

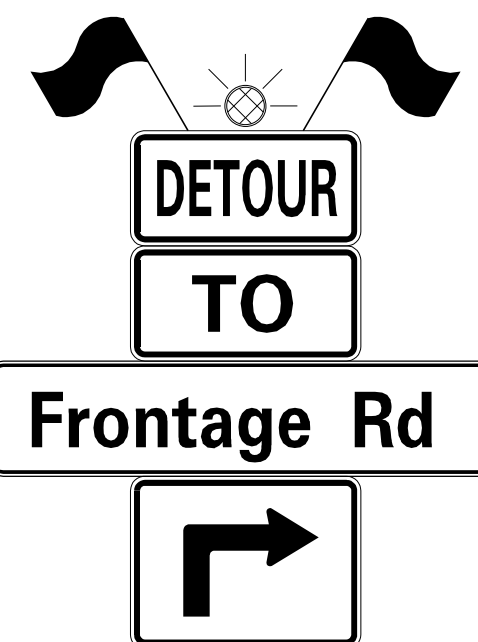
060 MA 144

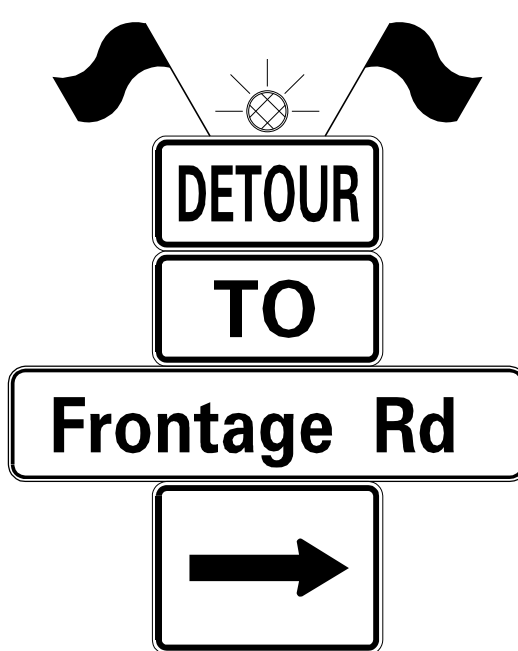
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

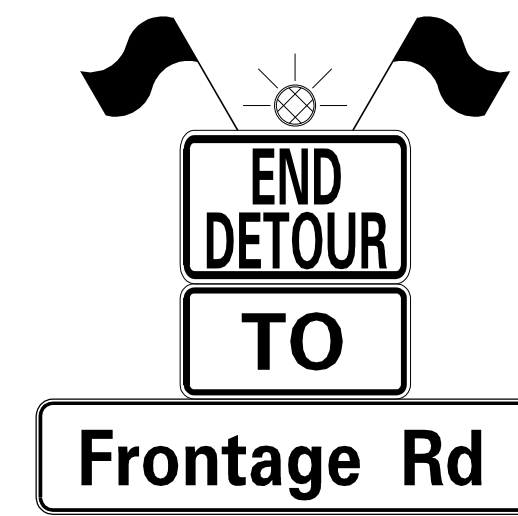
①  *W20-2
48" x 48"*

②  *M4-8
24" x12"
M4-5
24" x12"
D3
54" x12"
M6-3
24" x18"*

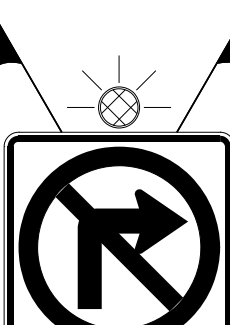
③  *M4-8
24" x12"
M4-5
24" x12"
D3
54" x12"
M5-1L
24" x18"*

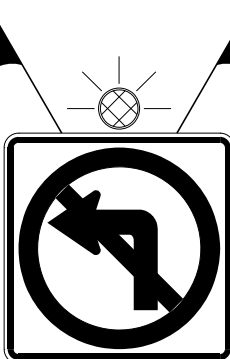
④  *M4-8
24" x12"
M4-5
24" x12"
D3
54" x12"
M5-1R
24" x18"*

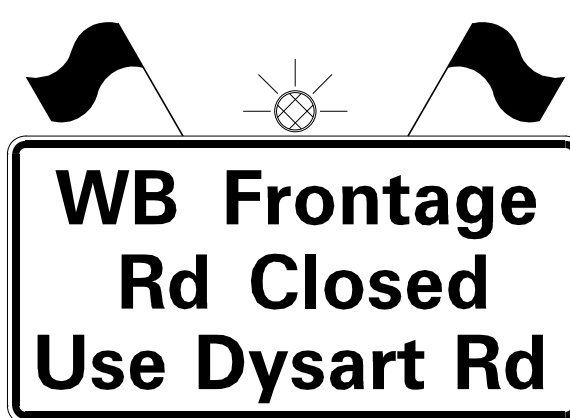
⑤  *M4-8
24" x12"
M4-5
24" x12"
D3
54" x12"
M6-1R
24" x18"*

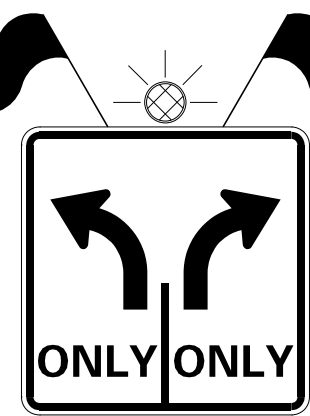
⑥  *M4-8A
24" x18"
M4-5
24" x12"
D3
54" x12"*

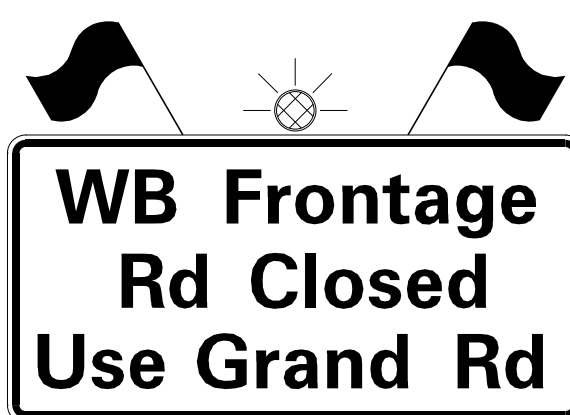
⑦  *R11-2
48" x30"
White/Black
Mounted on
Type II Barricade*

⑧  *R3-2
24" x24"
White/Black/Red*

⑨  *R3-1
24" x24"
White/Black/Red*

⑩  *SPECIAL
60" x36"*

⑪  *R3-8LR
30" x30"*

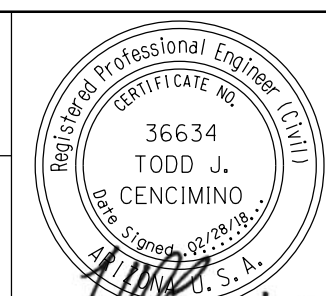
⑫  *SPECIAL
60" x36"*

Suggested CMB Message

F	R	O	N	T	A	G	E
R	D		W	B			
C	L	O	S	E	D		

DETAIL TC-B

SHEET 3 OF 3

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	 36634 TODD J. CENCIMINO State Expires 09/30/19
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 1B TRAFFIC CONTROL DETOUR DETAIL (SHEET 3 OF 3)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-03.05
TRACS NO. H8874 01C				OF

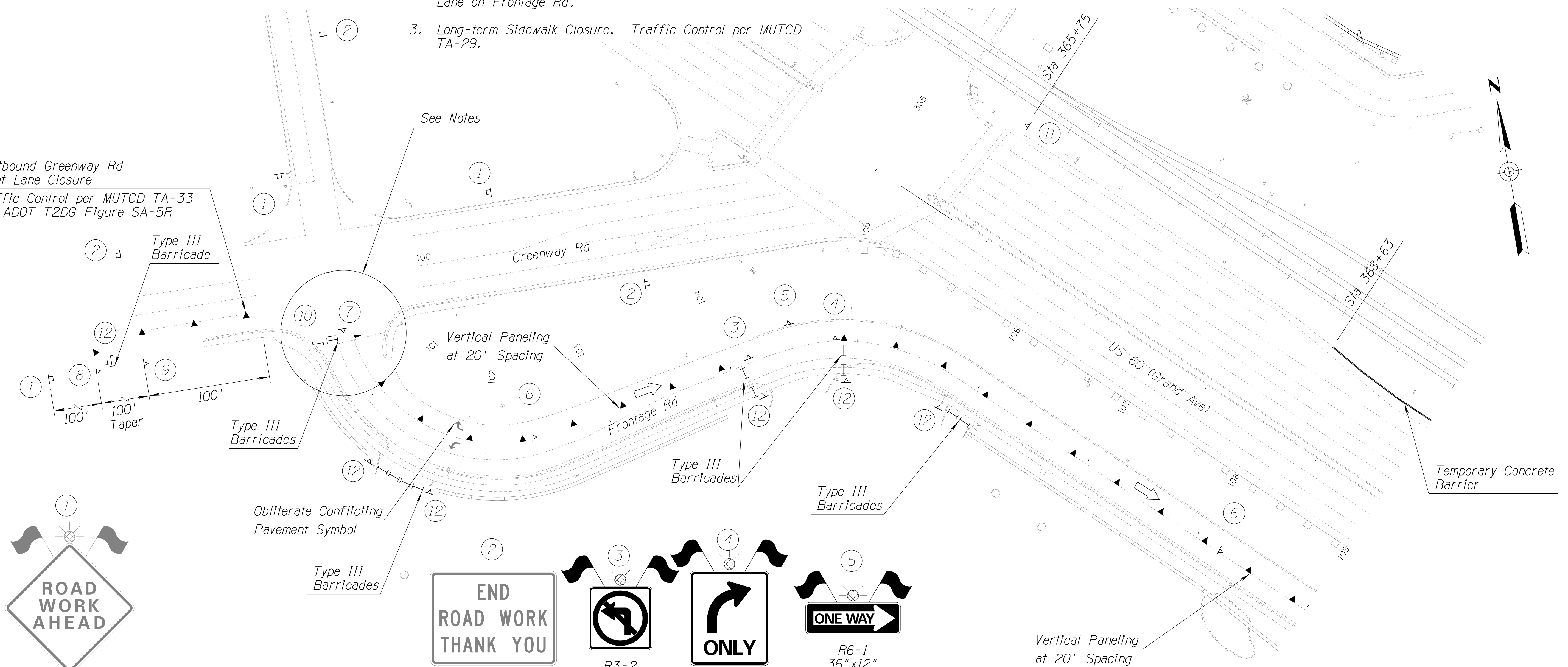
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	136	232	

060 MA 144

Notes:

1. Closure per ADOT Figure SA-2. Close Frontage Rd EB Thru Lane and WB Left TURN Lane.
2. WB Thru Lane shall be utilized as an Exclusive EB Thru Lane on Frontage Rd.
3. Long-term Sidewalk Closure. Traffic Control per MUTCD TA-29.

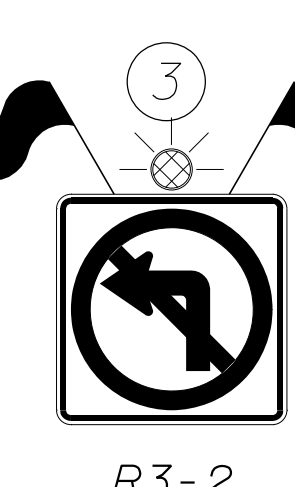
Eastbound Greenway Rd
Right Lane Closure
Traffic Control per MUTCD TA-33
and ADOT T2DG Figure SA-5R



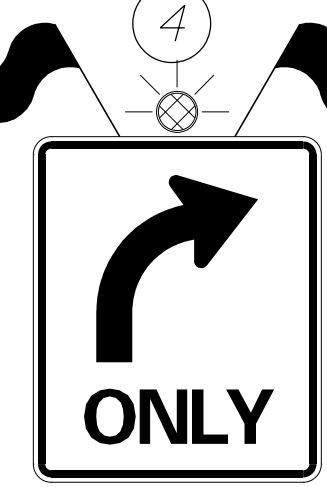
Existing W20-1
To be Maintained



Existing G20-2AZ
To be Maintained



R3-2
24" x 24"



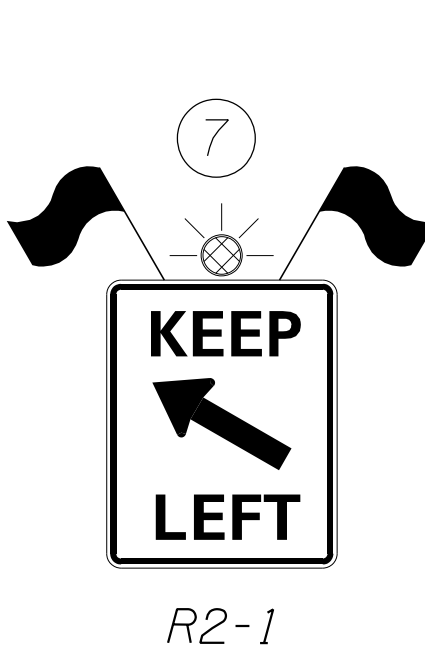
R3-5R
30" x 36"



R6-1
36" x 12"



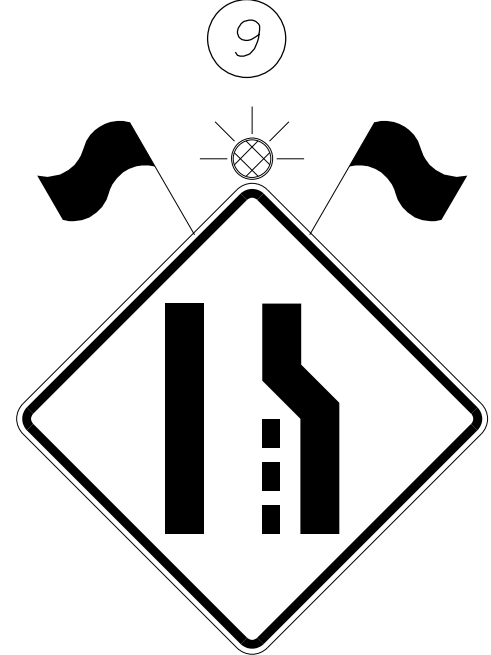
R2-1
36" x 48"



R2-1
24" x 30"



W20-5aR
36" x 36"



W4-2R
48" x 48"



R11-3A
60" x 30"



G20-2AZ
48" x 48"



R9-9
30" x 18"

DETAIL TC-C

SHEET 1 OF 9

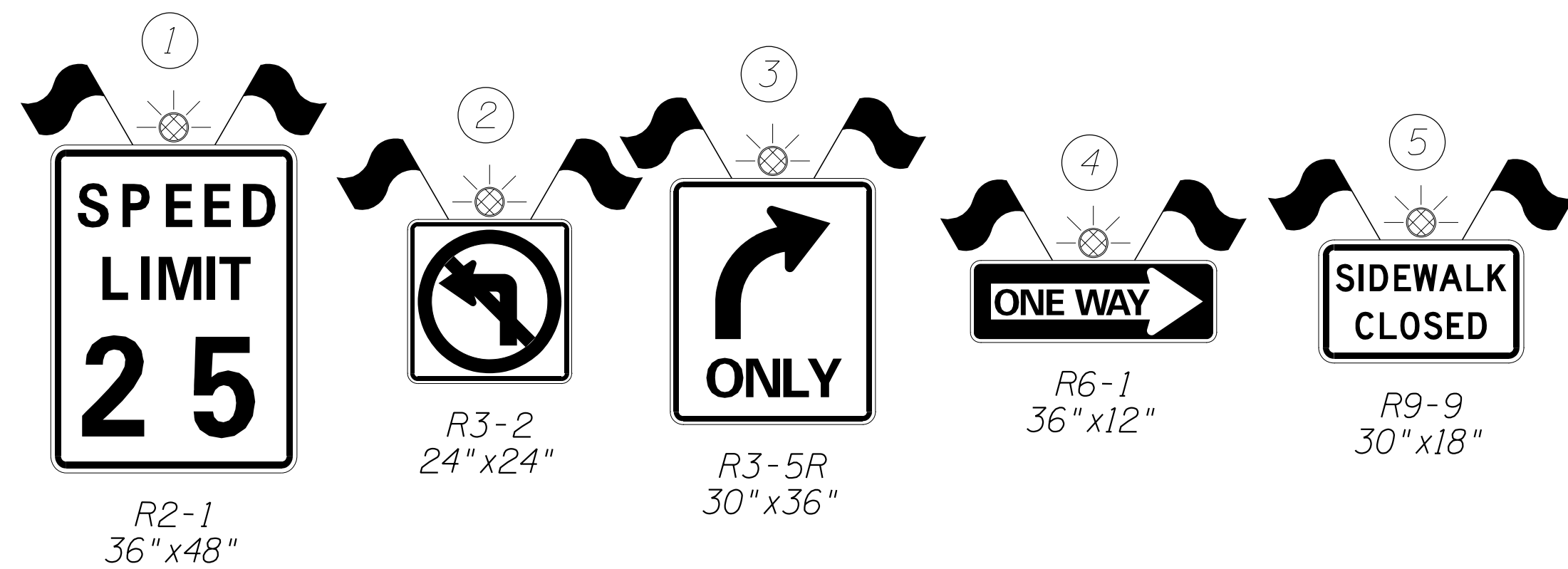
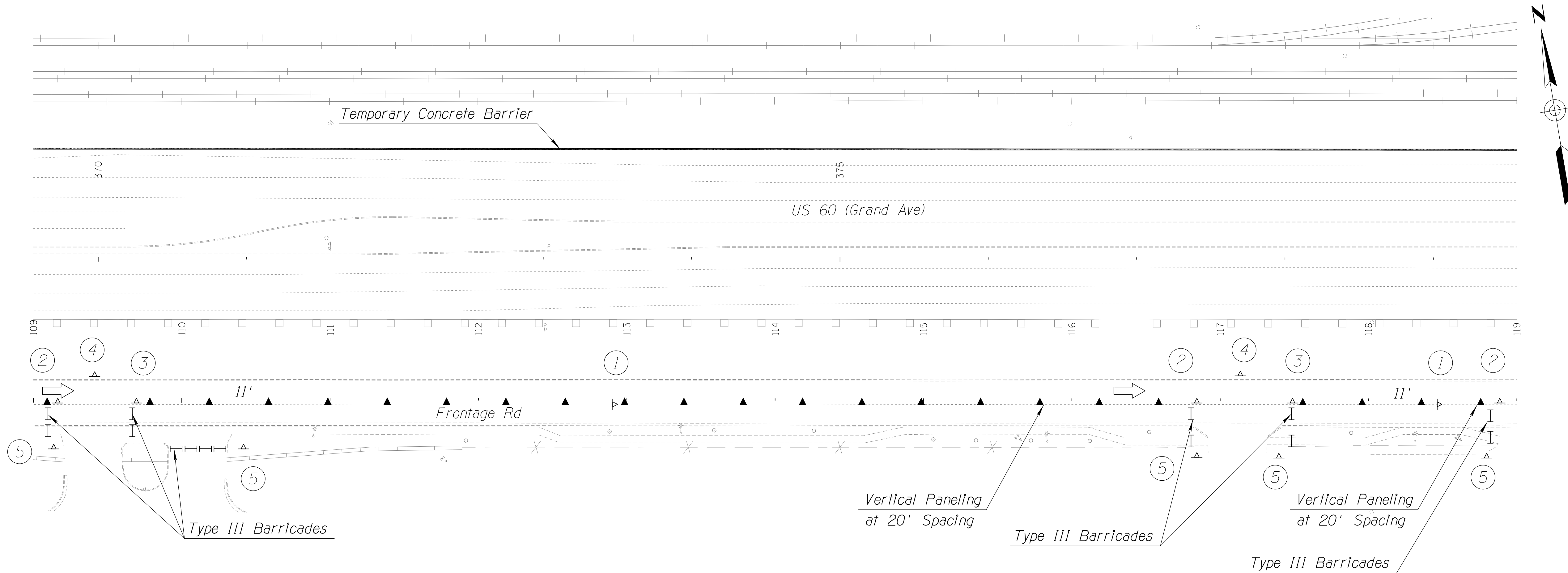
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 1C TRAFFIC CONTROL DETAIL (SHEET 1 OF 9)	DWG NO. T-03.06
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		OF
TRACS NO. H8874 01C				

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	137	232	

060 MA 144

Notes:

1. Long-term Sidewalk Closure. Traffic Control per MUTCD TA-29.



DETAIL TC-C

SHEET 2 OF 9

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 1C TRAFFIC CONTROL DETAIL (SHEET 2 OF 9)	DWG NO. T-03.07
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			OF	

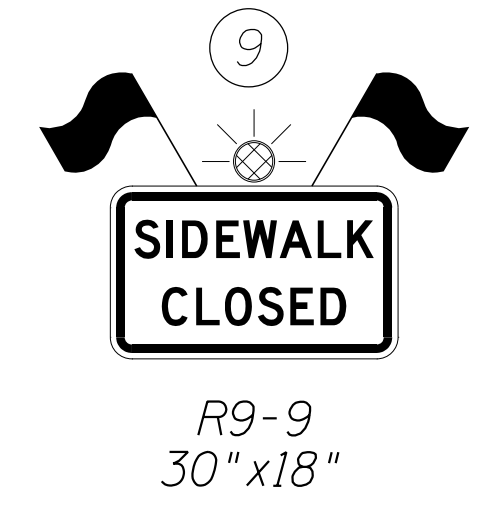
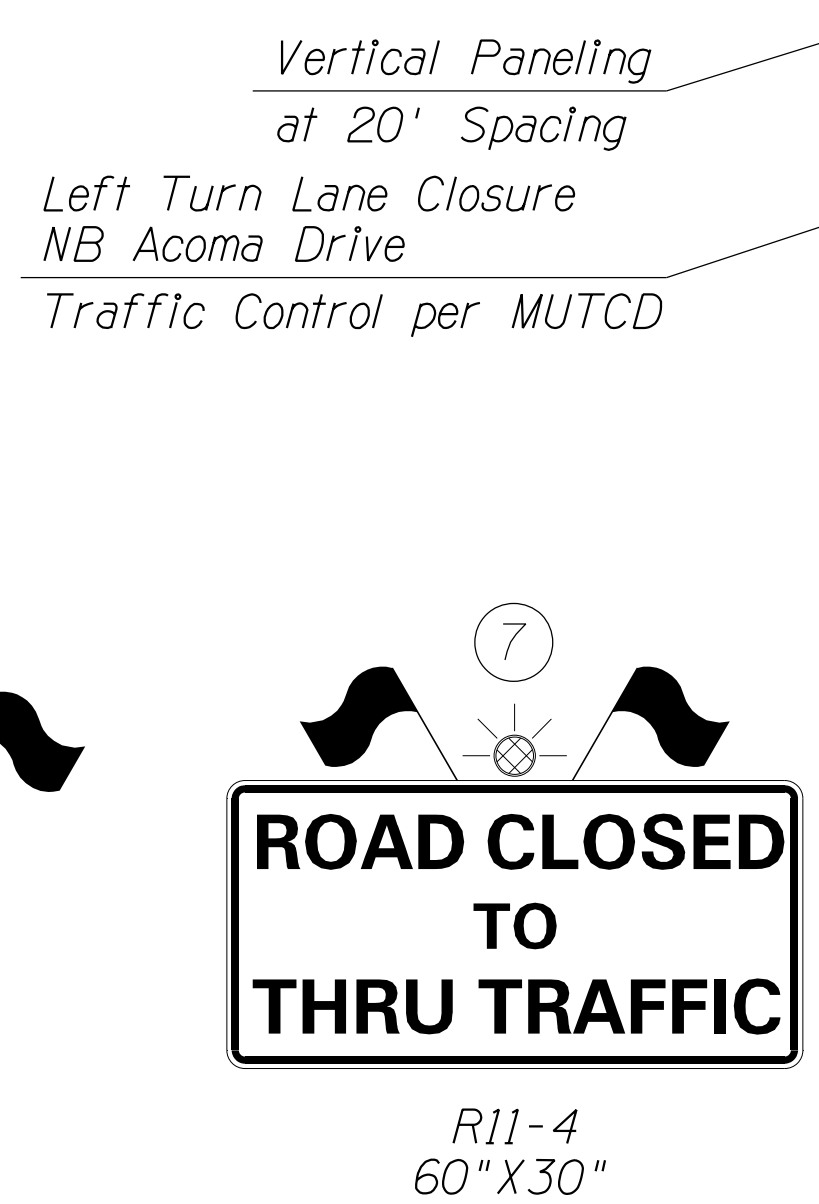
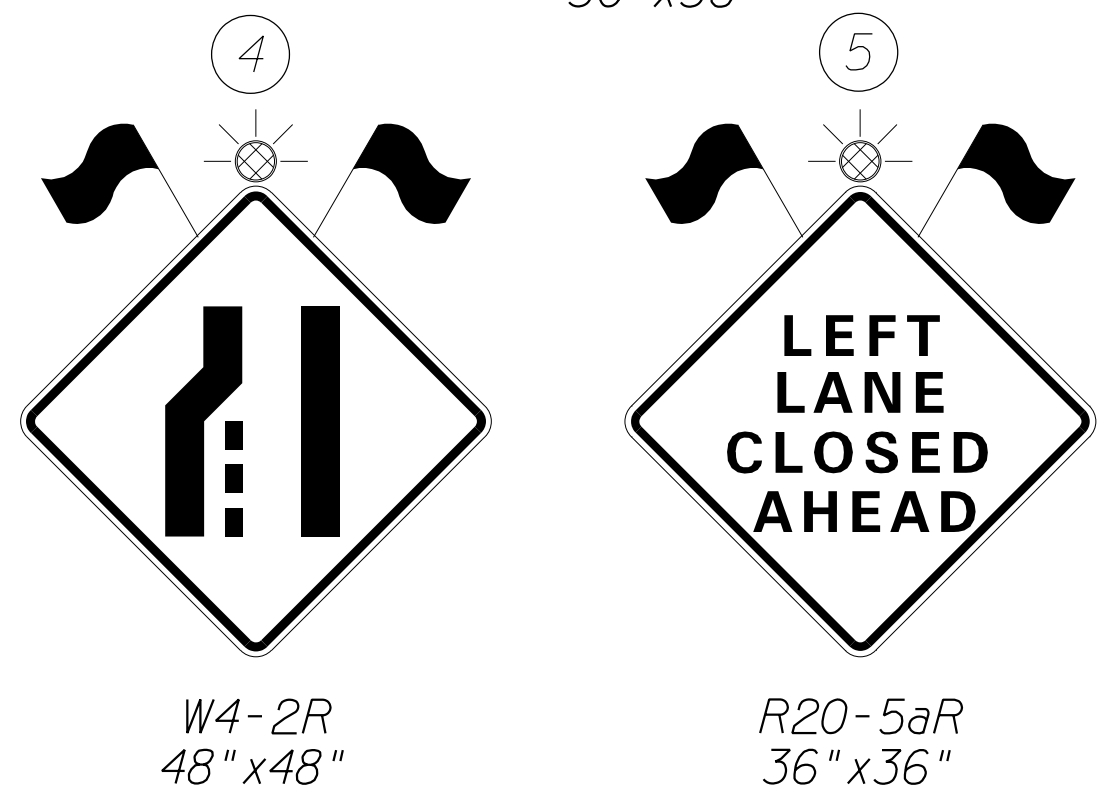
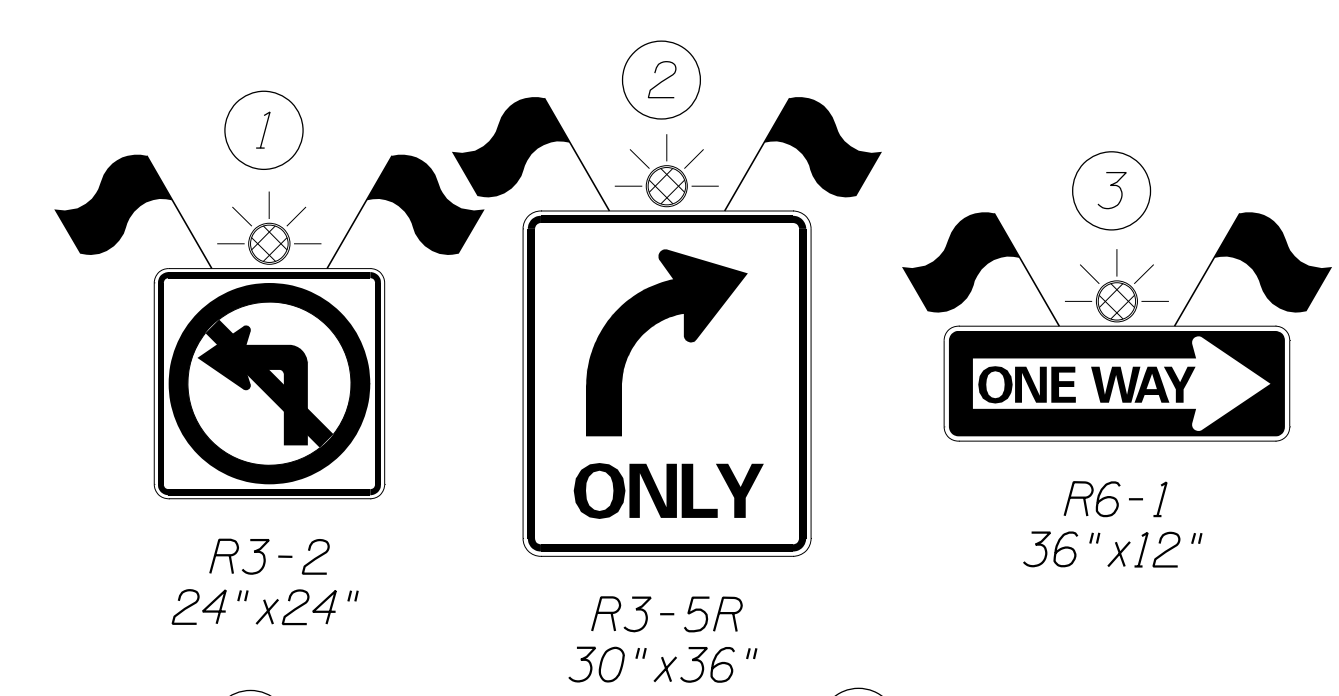
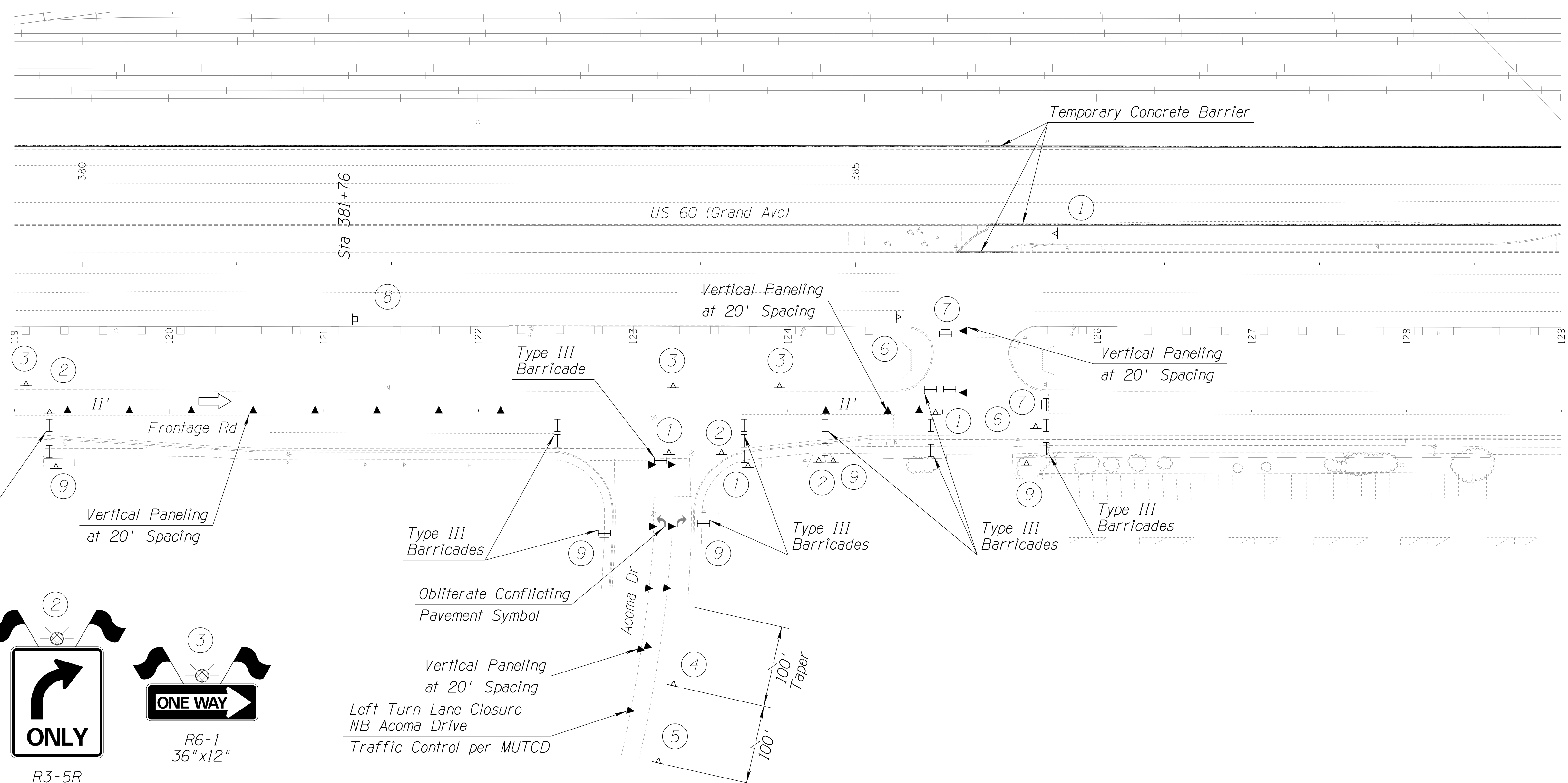
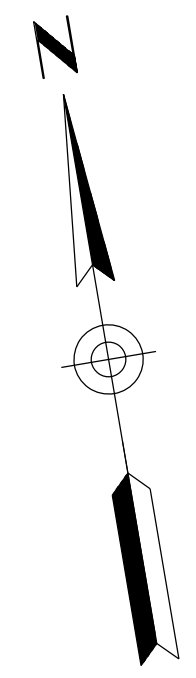
DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	138	232	

060 MA 144

Notes:

1. Long-term Sidewalk Closure. Traffic Control per MUTCD TA-29.



DETAIL TC-C

SHEET 3 OF 9

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	DCL	02/18	BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>	
CHECKED	TJC	02/18		
		02/18		
ROUTE	LOCATION	PHASE 1C TRAFFIC CONTROL DETAIL (SHEET 3 OF 9)		
US 60	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-03.08		
TRACS NO. H8874 01C		OF		

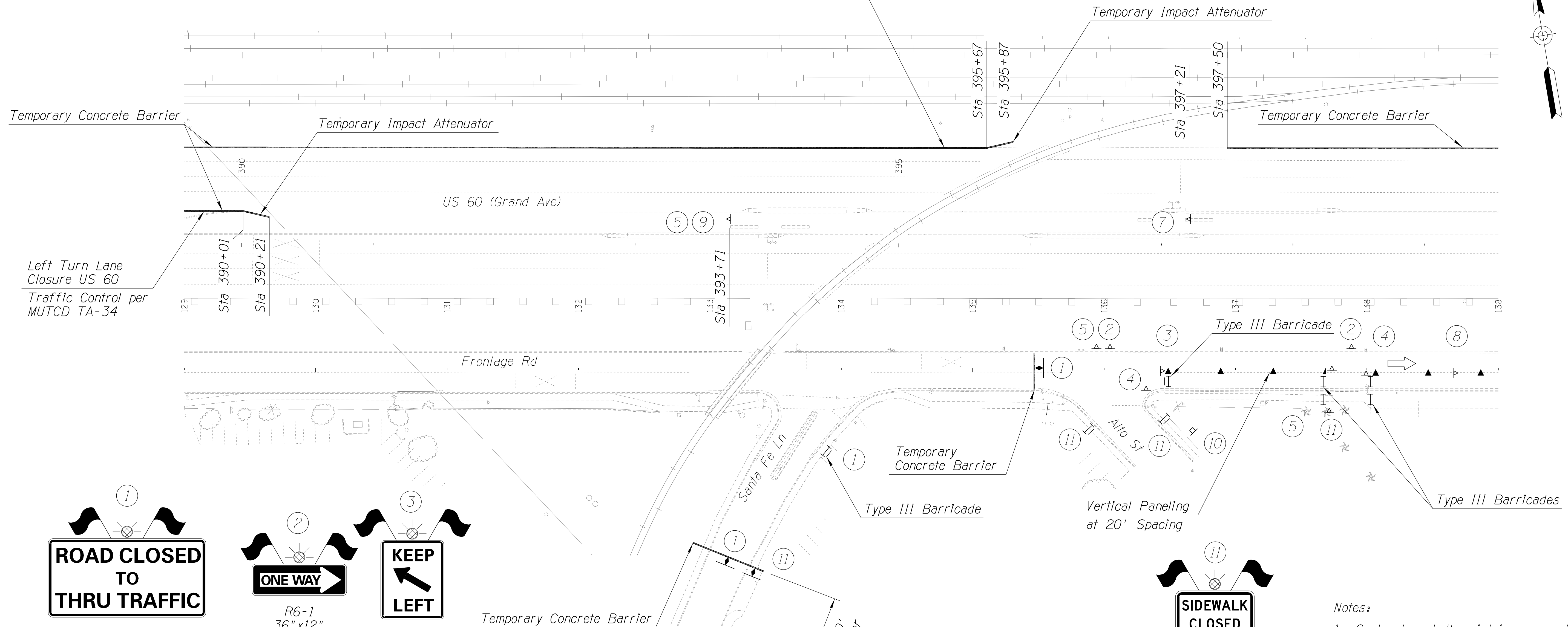
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	139	232	

060 MA 144

Notes:

1. Long-term Sidewalk Closure. Traffic Control per MUTCD TA-29.

Right Shoulder Closed US 60
Traffic Control per MUTCD TA-5



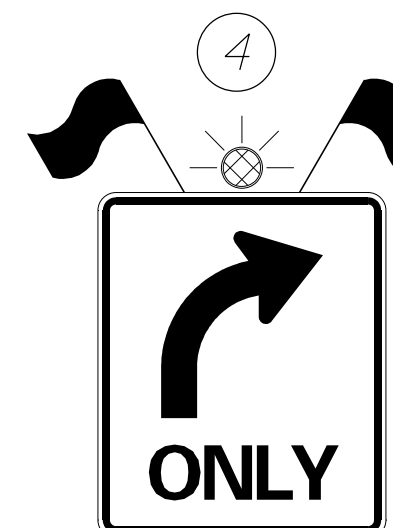
R11-4
60" x 30"



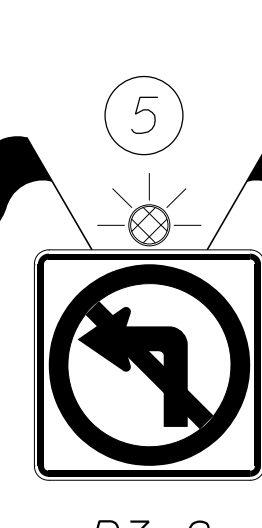
R6-1
36" x 12"



R2-1
24" x 30"



R3-5R
30" x 36"



R3-2
24" x 24"



W20-1
48" x 48"



W20-1
48" x 48"



R2-1
36" x 48"



W20-5aL
36" x 36"



Existing W20-1
To be Maintained



R9-9
30" x 18"

Notes:

1. Contractor shall maintain access to Rio Mirage Cafe during Slurry Seal placement.

DETAIL TC-C

SHEET 4 OF 9

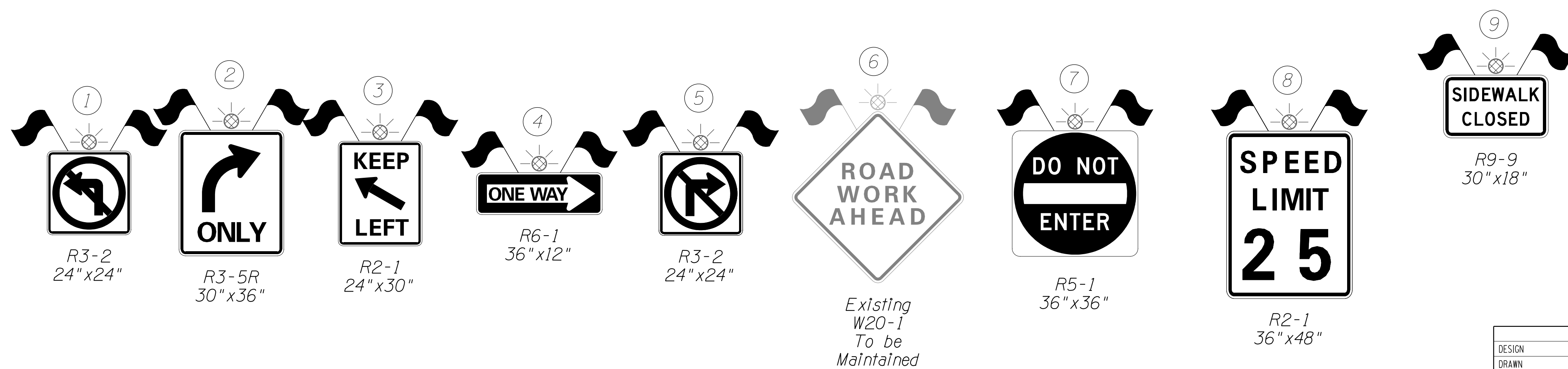
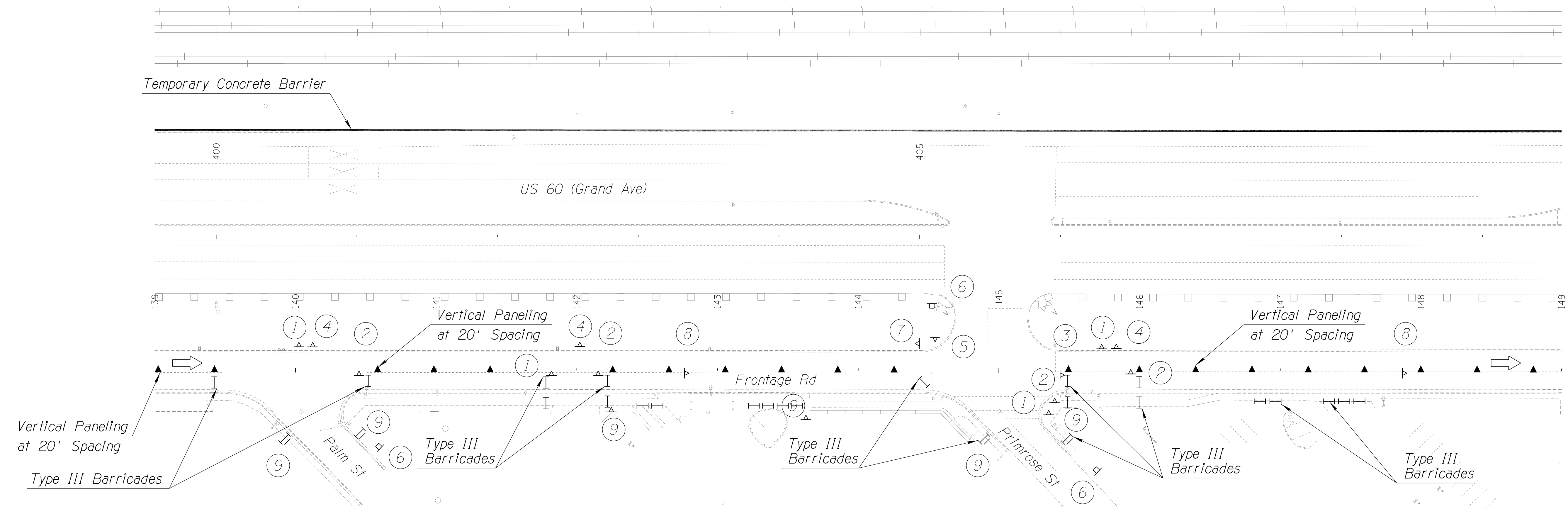
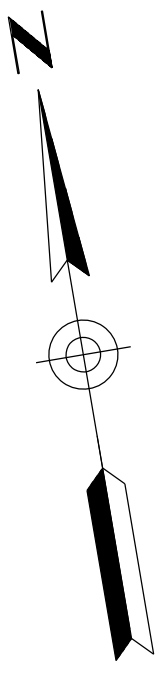
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 1C TRAFFIC CONTROL DETAIL (SHEET 4 OF 9)	DWG NO. T-03.09
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	TRACS NO. H8874 01C

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	140	232	

060 MA 144

Notes:

1. Long-term Sidewalk Closure. Traffic Control per MUTCD TA-29.



DETAIL TC-C

SHEET 5 OF 9

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 1C TRAFFIC CONTROL DETAILS (SHEET 5 OF 9)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-03.10
TRACS NO. H8874 01C				OF

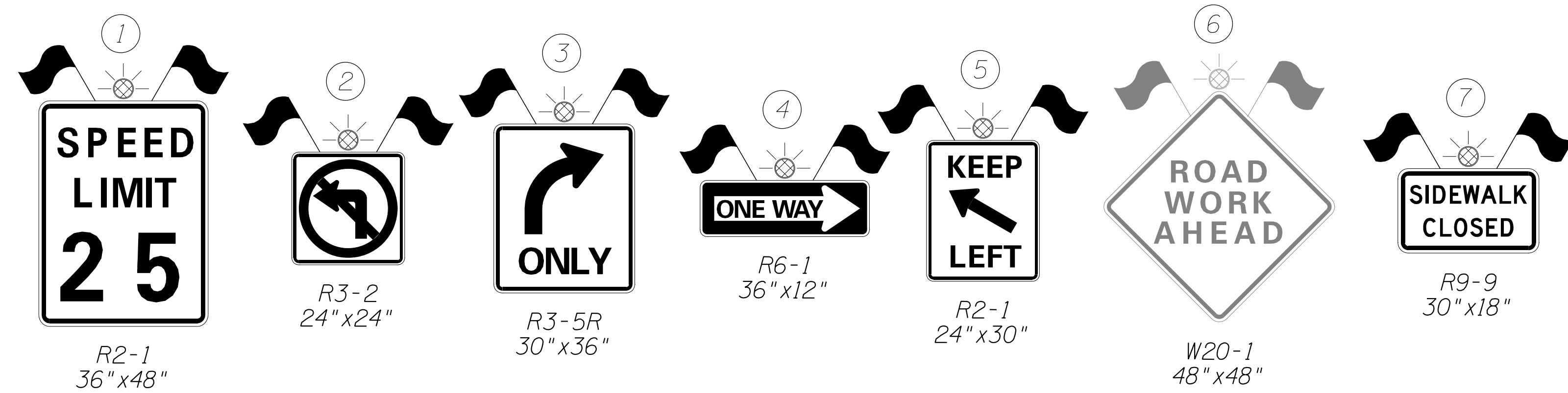
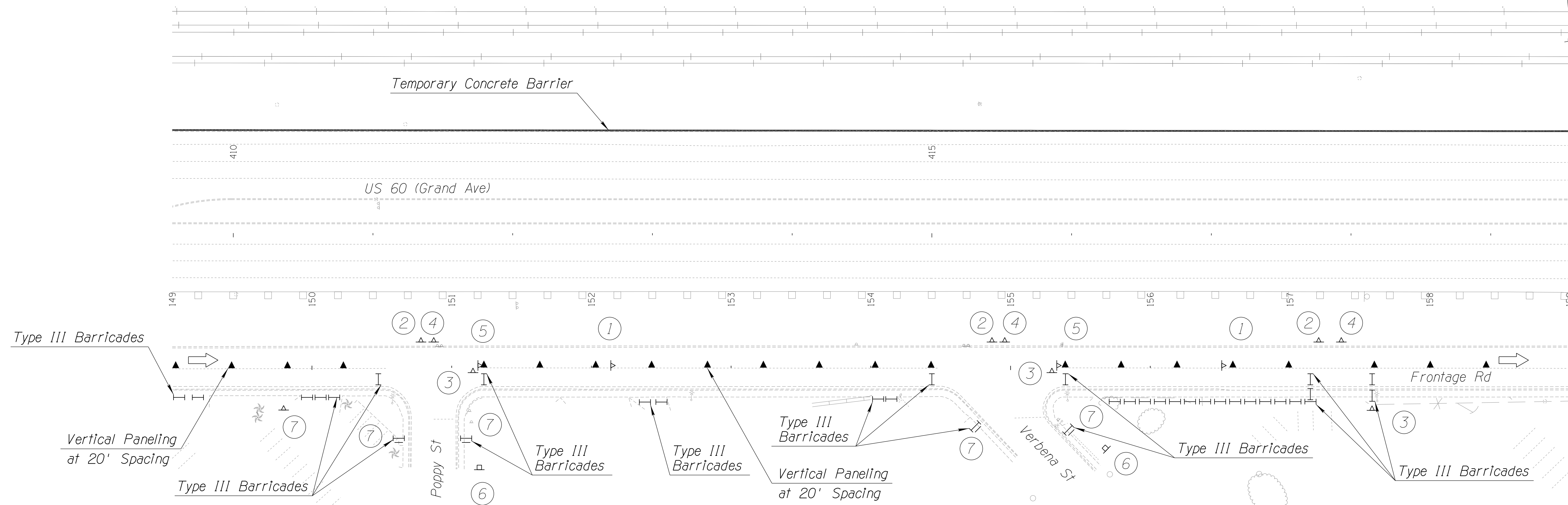
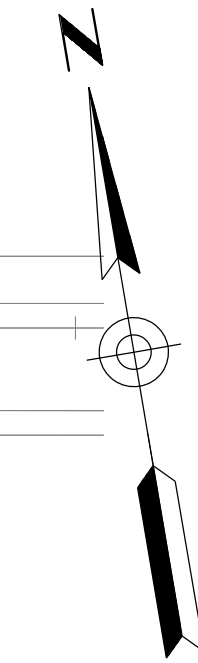
SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	141	232	

060 MA 144

Notes:

1. Long-term Sidewalk Closure. Traffic Control per MUTCD TA-29.



DETAIL TC-C

SHEET 6 OF 9

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 1C TRAFFIC CONTROL DETAILS (SHEET 6 OF 9)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-03.11
TRACS NO. H8874 01C				OF

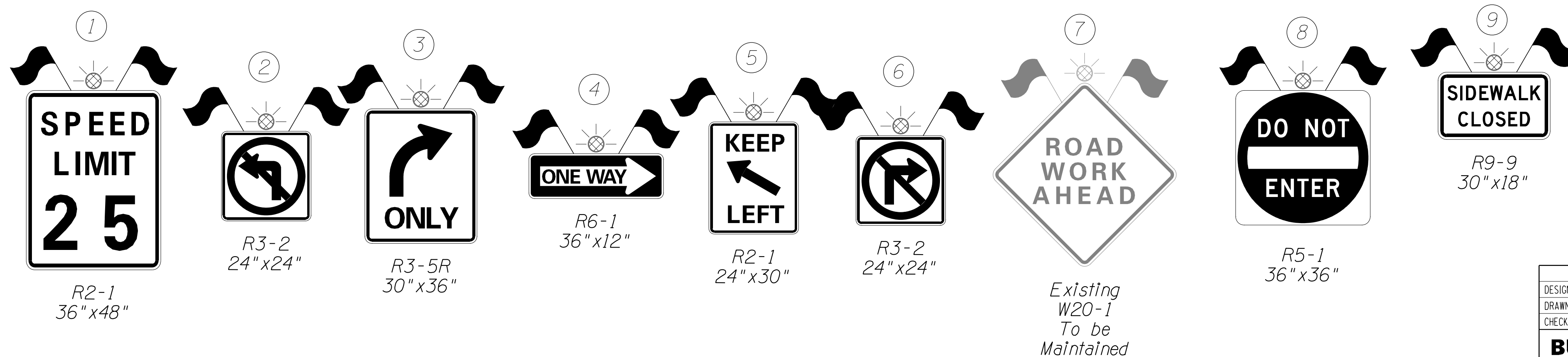
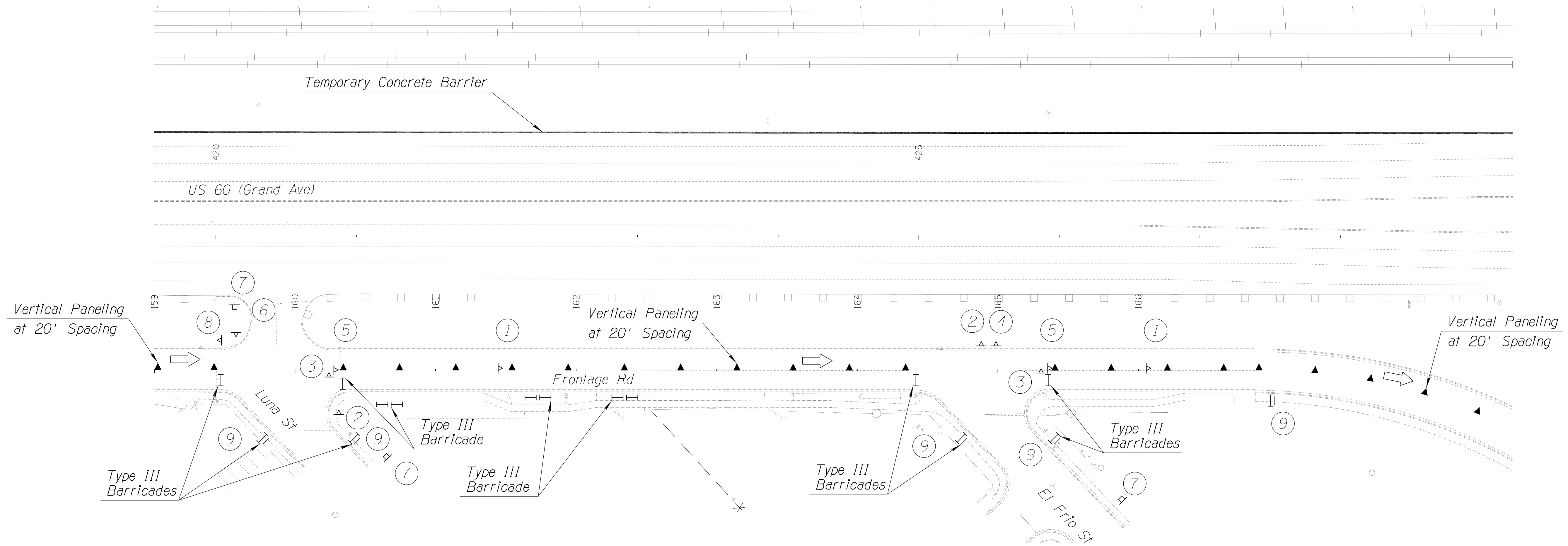
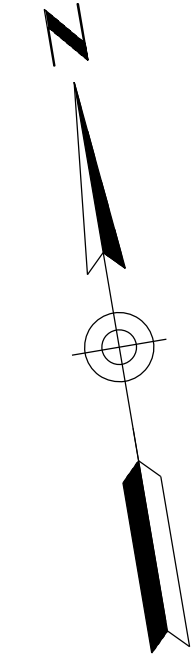
SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE LOCATION FINISHED PLANS REVISIONS DATE LOCATION

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	142	232	

060 MA 144

Notes:

1. Long-term Sidewalk Closure. Traffic Control per MUTCD TA-29.



DETAIL TC-C

SHEET 7 OF 9

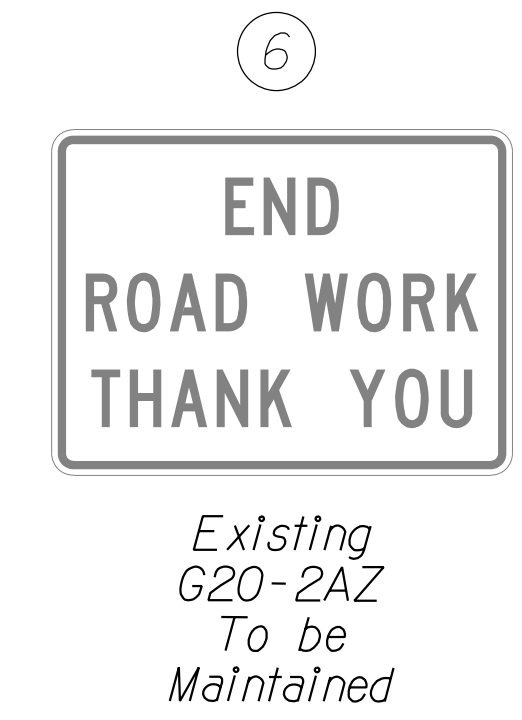
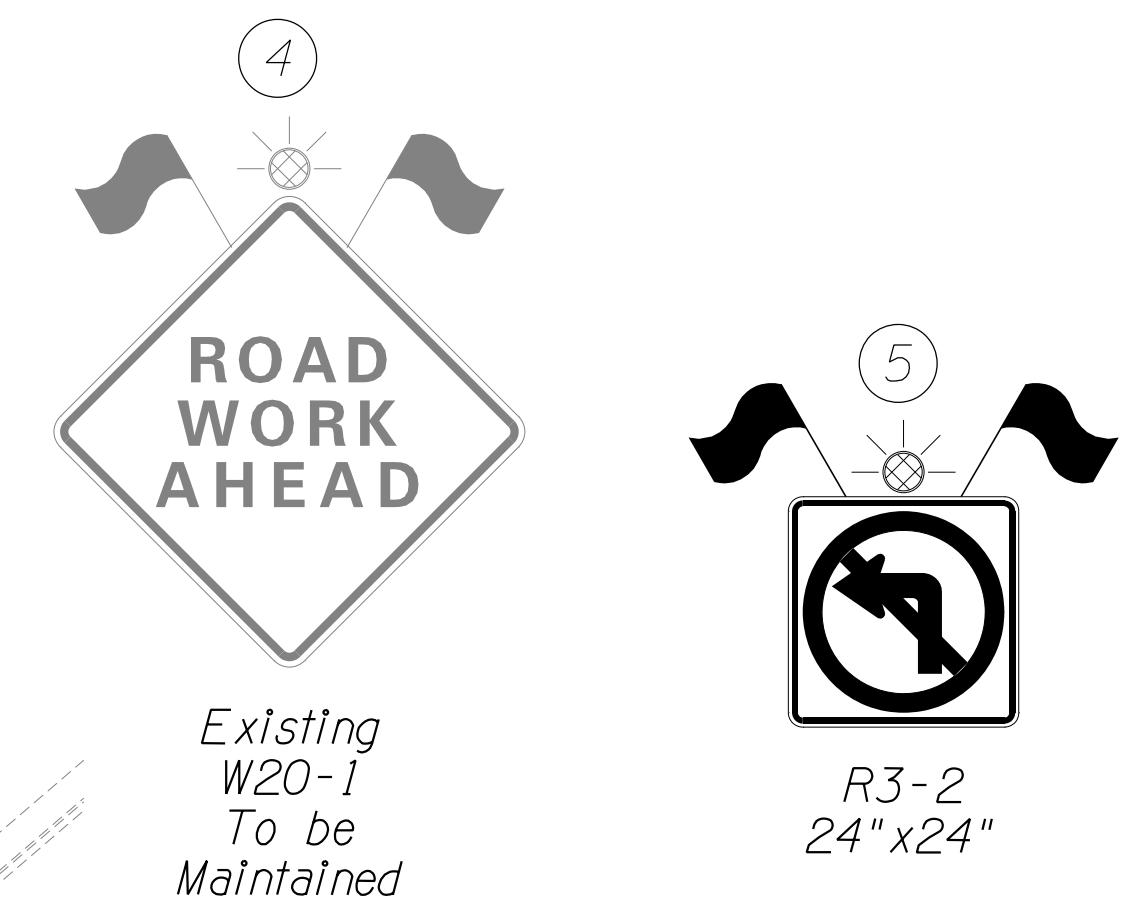
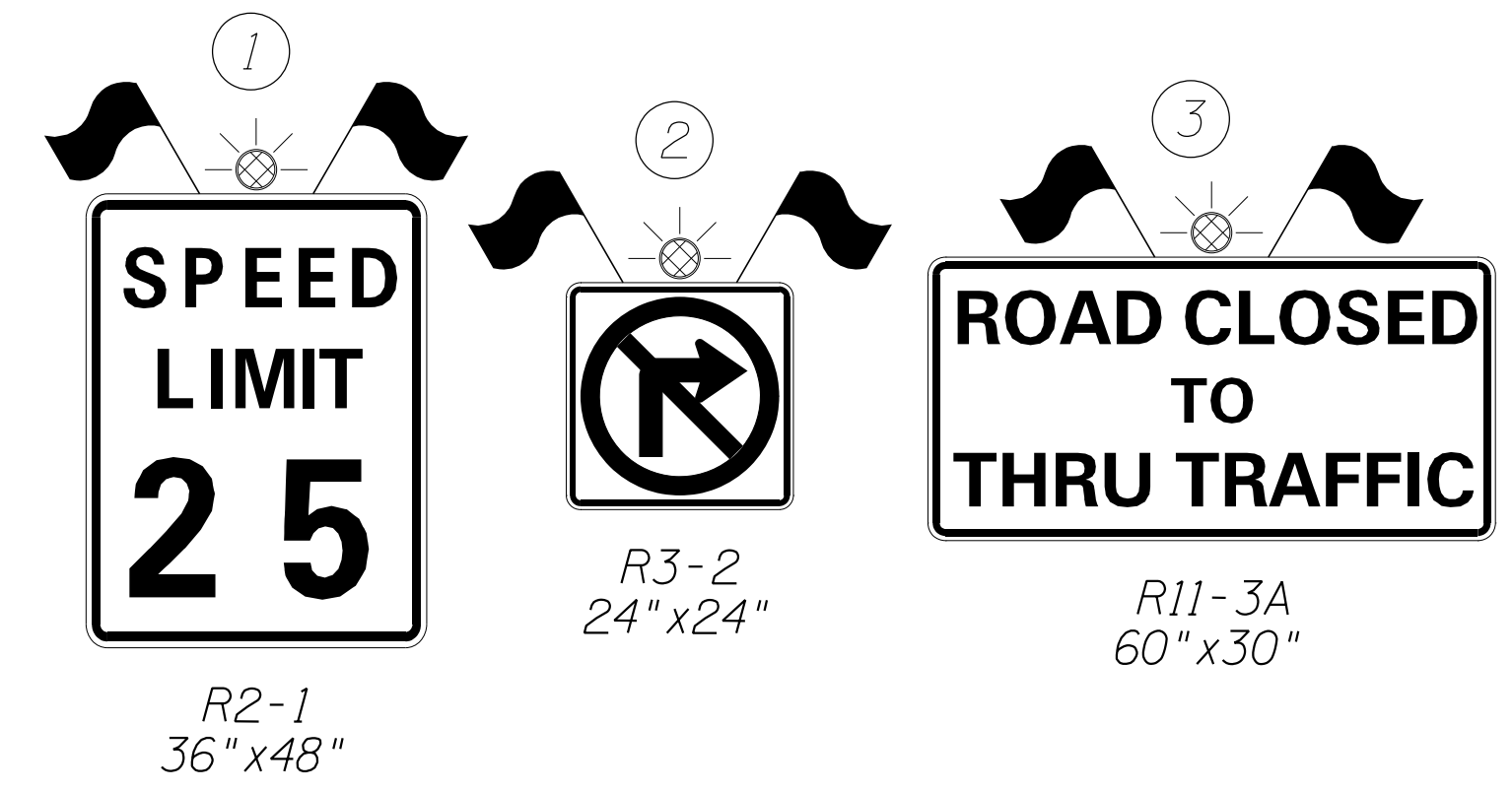
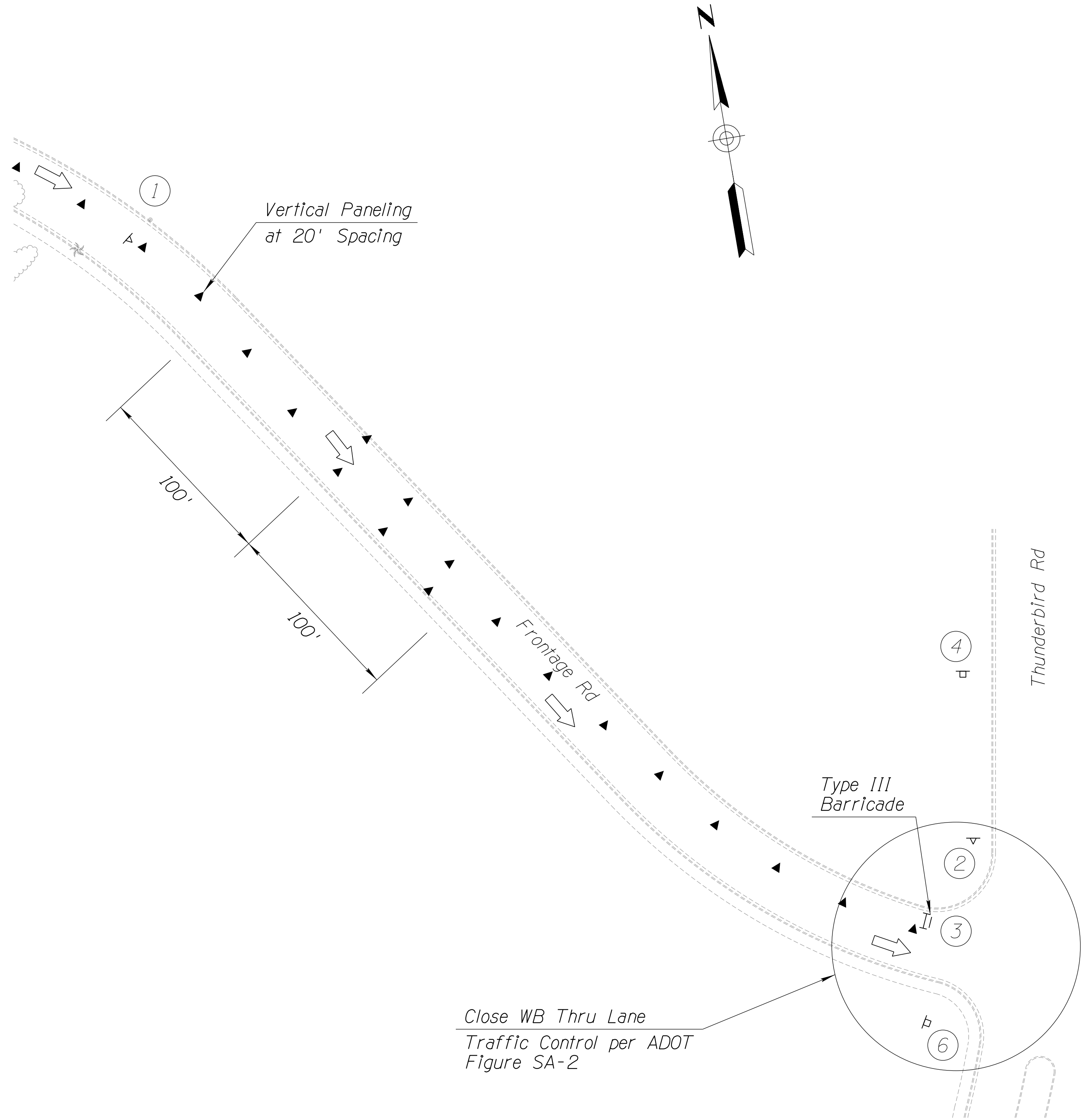
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 1C TRAFFIC CONTROL DETAILS (SHEET 7 OF 9)	DWG NO. T-03.12
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 01C				OF

SURVEY NO. DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	143	232	

060 MA 144

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE



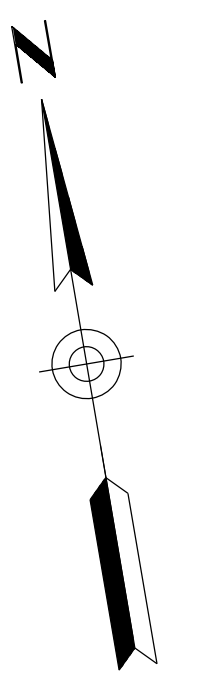
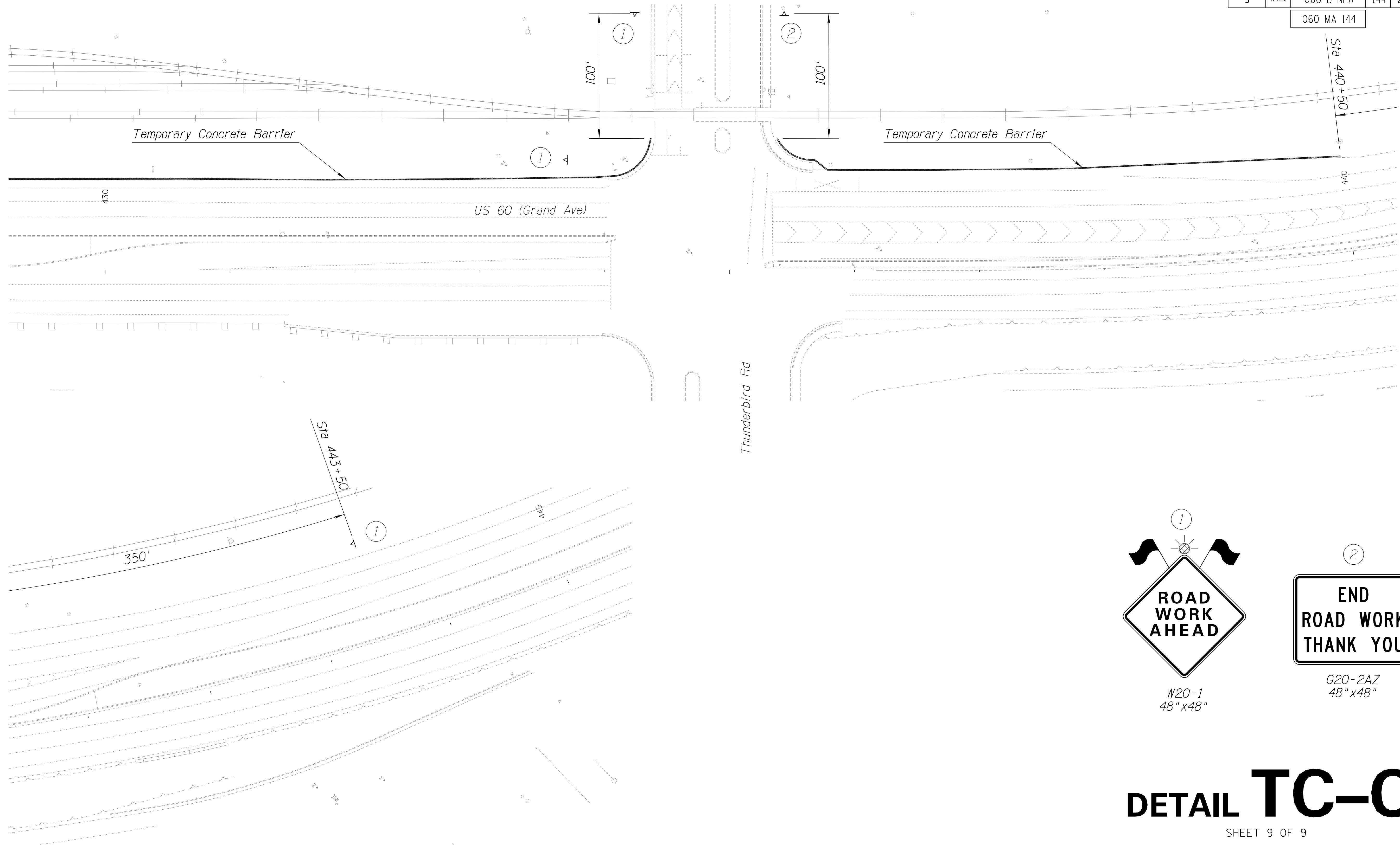
DETAIL TC-C

SHEET 8 OF 9

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 1C TRAFFIC CONTROL DETAILS (SHEET 8 OF 9)	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60				
TRACS NO. H8874 01C				DWG NO. T-03.13
				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	144	232	

060 MA 144



W20-1
48" x 48"



G20-2AZ
48" x 48"

DETAIL TC-C

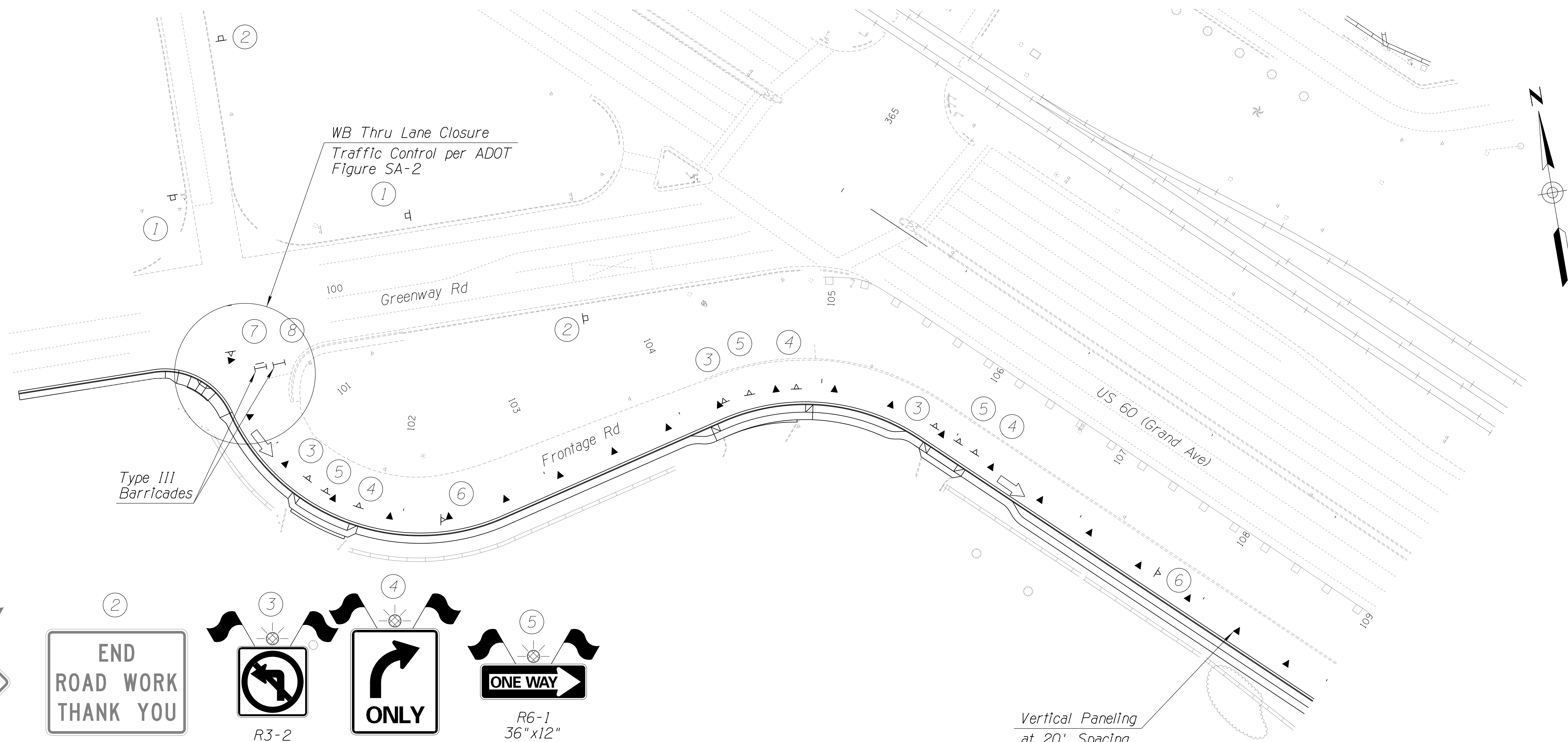
SHEET 9 OF 9


SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 1C TRAFFIC CONTROL DETAILS (SHEET 9 OF 9)	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60				
TRACS NO. H8874 01C				DWG NO. T-03.14
				OF


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	145	232	

060 MA 144

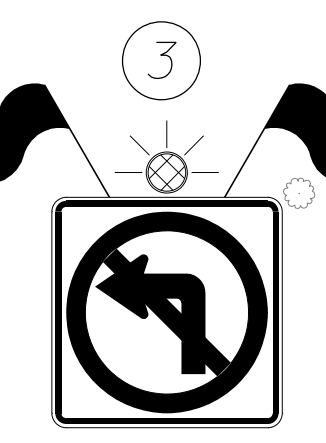




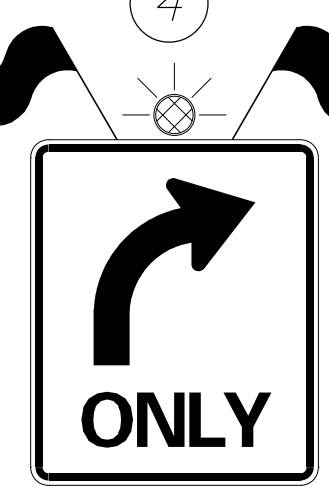
Existing
W20-1
To be
Maintained




Existing
G20-2AZ
To be
Maintained




R3-2
24" x 24"



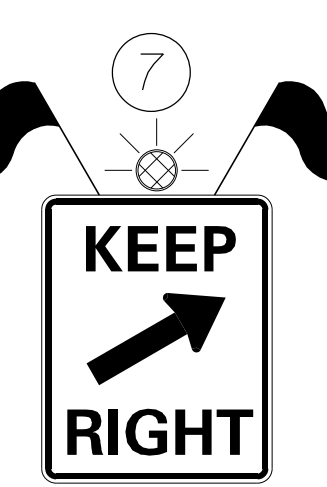
R3-5R
30" x 36"




R6-1
36" x 12"



R2-1
36" x 48"



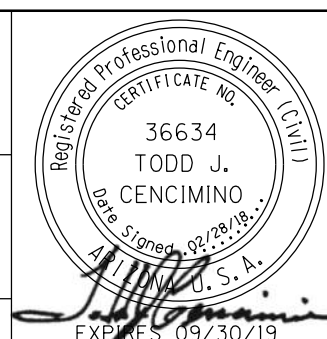
R2-1
24" x 30"



R11-3A
60" x 30"

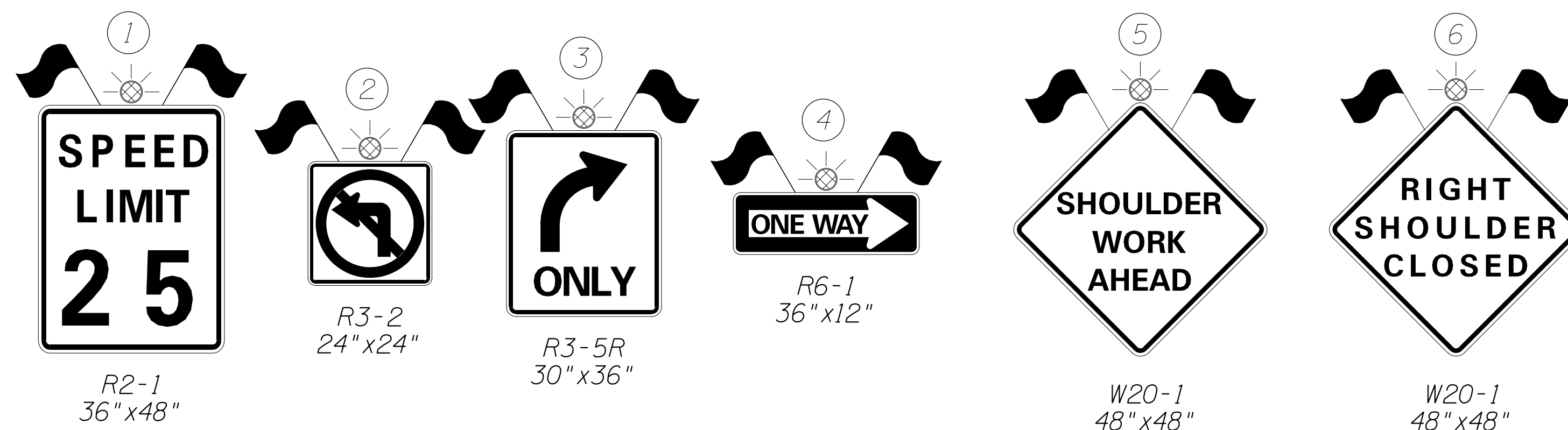
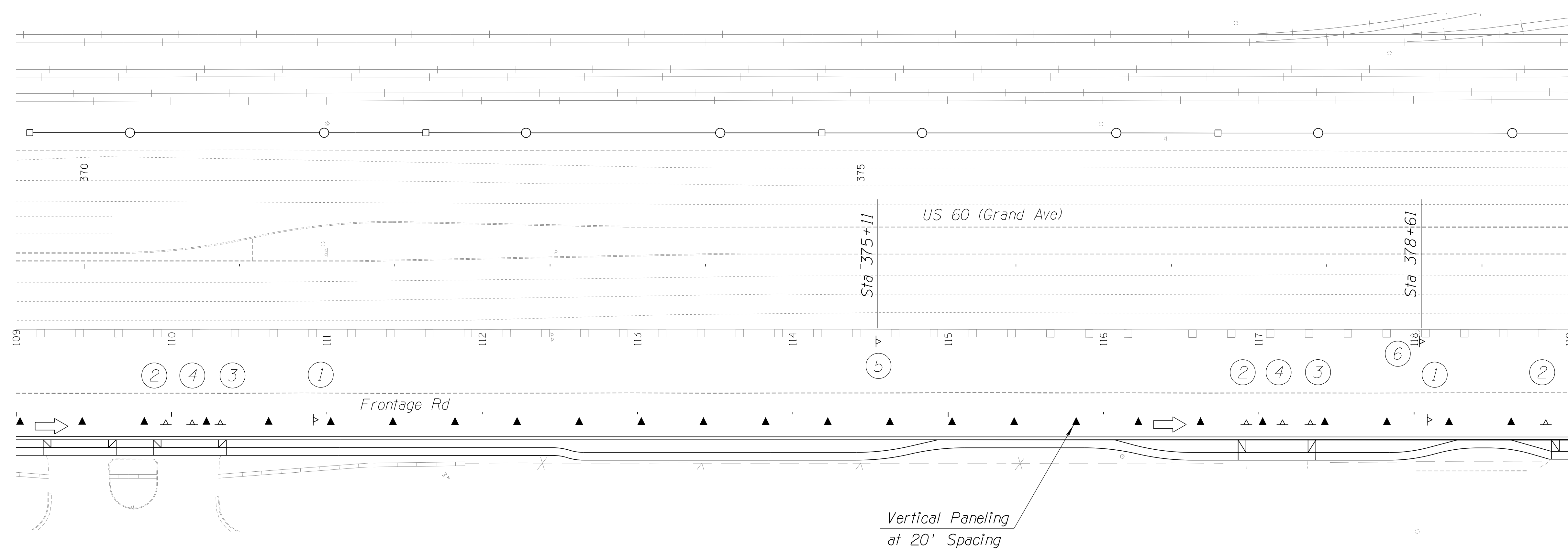
DETAIL TC-D

SHEET 1 OF 8

DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES PHASE 2A TRAFFIC CONTROL DETAIL (SHEET 1 OF 8)	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLÉ		1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO.	H8874 01C				DWG NO. T-03.15

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	146	232	

060 MA 144



DETAIL TC-D

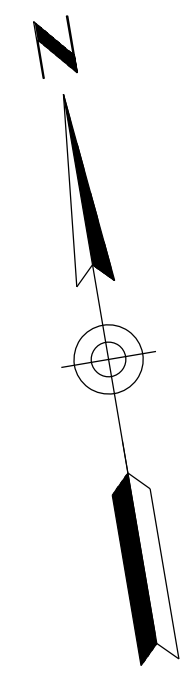
SHEET 2 OF 8

DESIGN	DCL	DATE	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	DATE	02/18		
CHECKED	TJC	DATE	02/18		
BURGESS & NIPLE		1500 N. PRIST DR. SUITE 102 TEMPE, AZ 85281		PHASE 2A TRAFFIC CONTROL DETAIL (SHEET 2 OF 8)	DWG NO. T-03.16
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		TRACS NO. H8874 01C
					OF

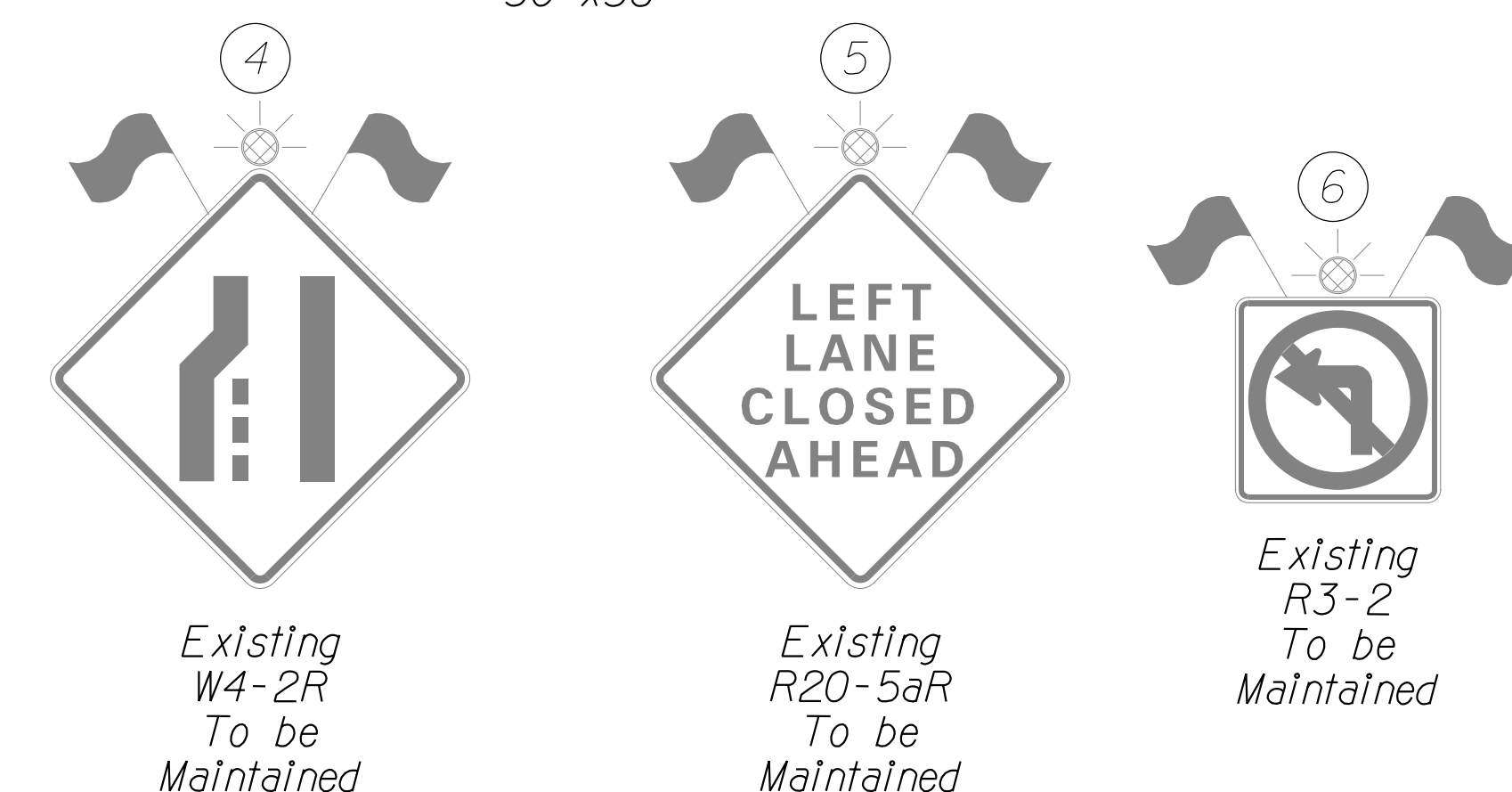
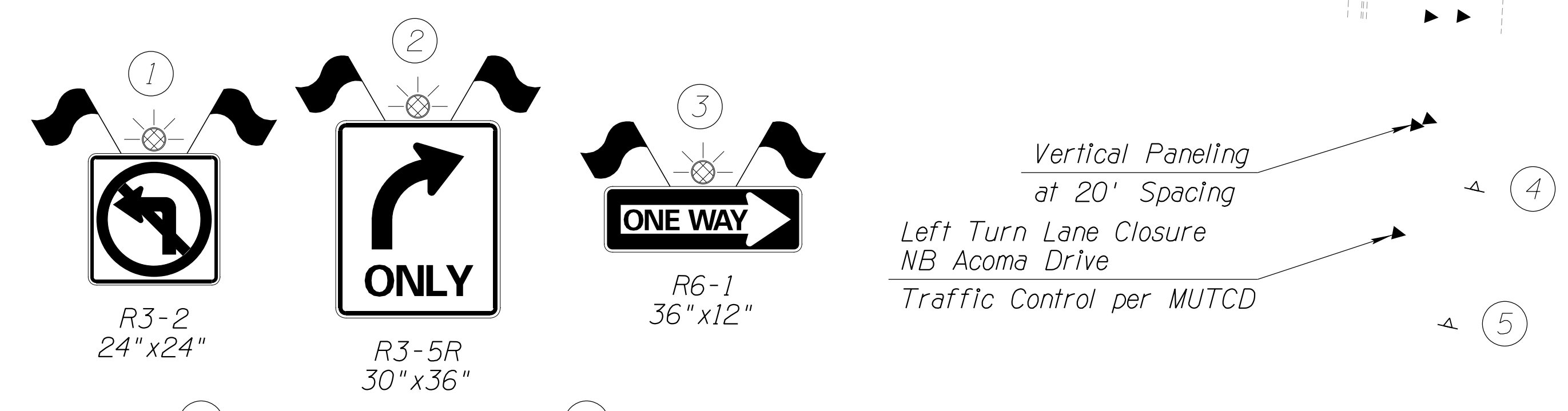
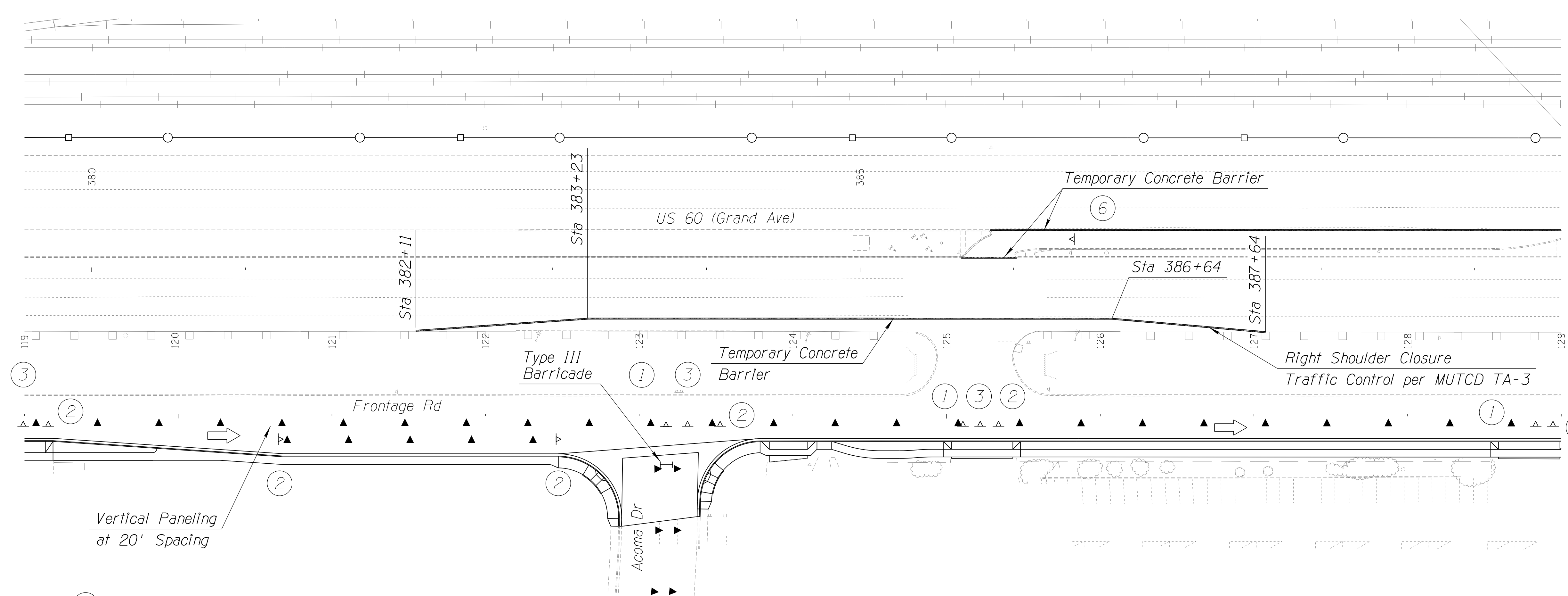
SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	147	232	

060 MA 144



Sta 380+60



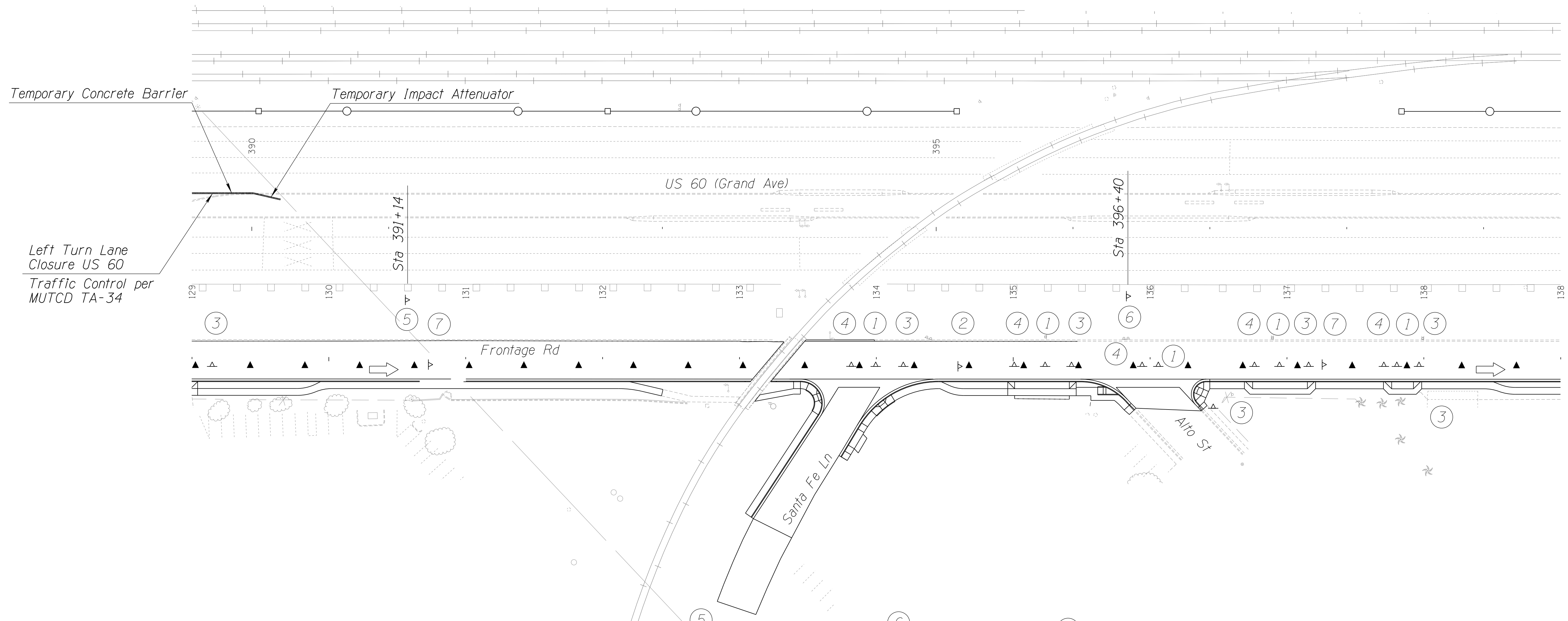
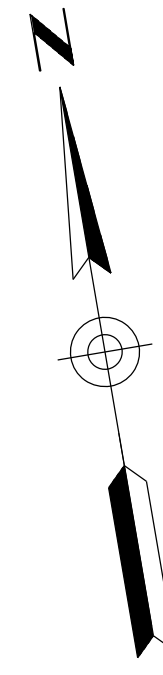
DETAIL TC-D

SHEET 3 OF 8

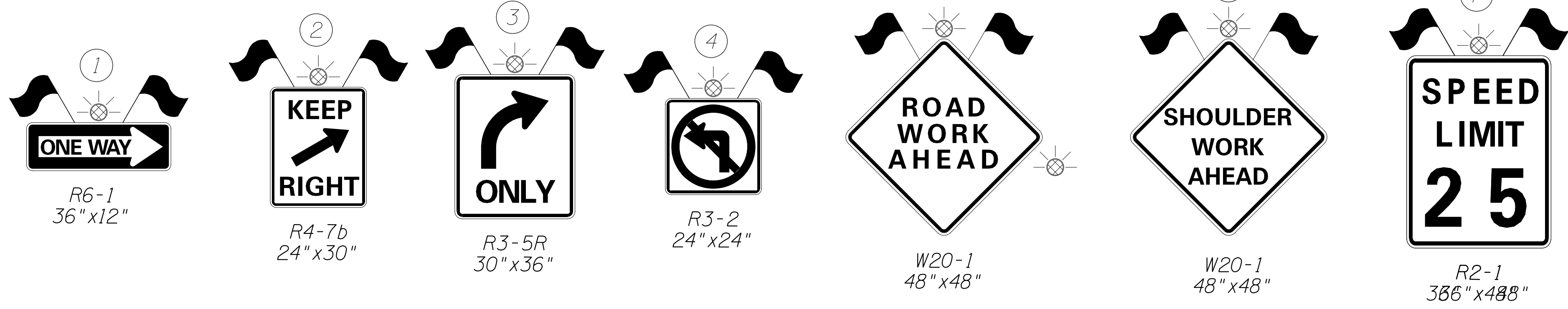
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 2A TRAFFIC CONTROL DETAIL (SHEET 3 OF 8)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. T-03.17

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	148	232	

060 MA 144



Left Turn Lane Closure US 60
Traffic Control per MUTCD TA-34



DETAIL TC-D

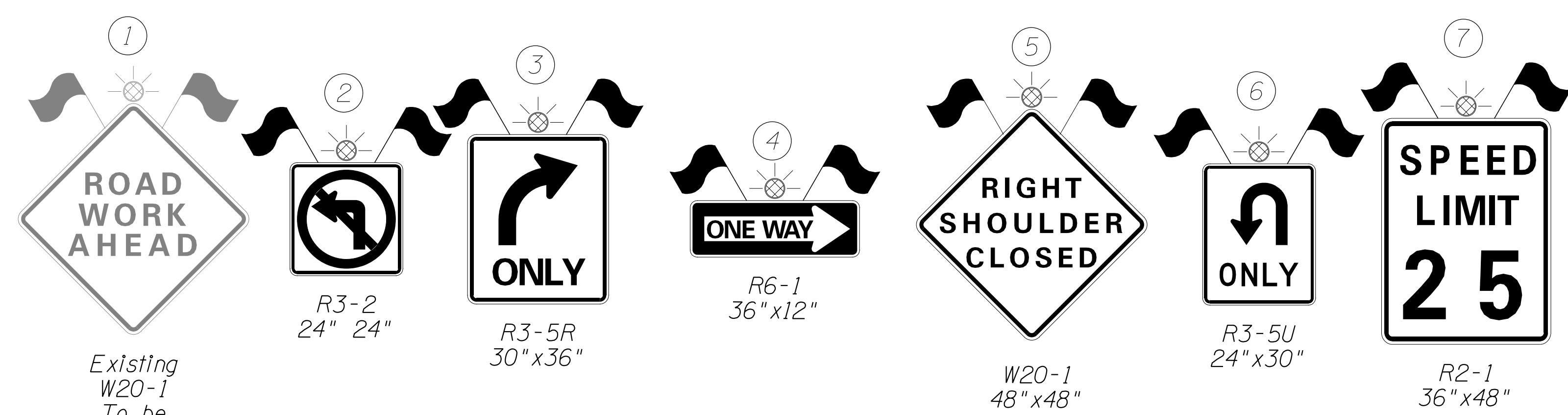
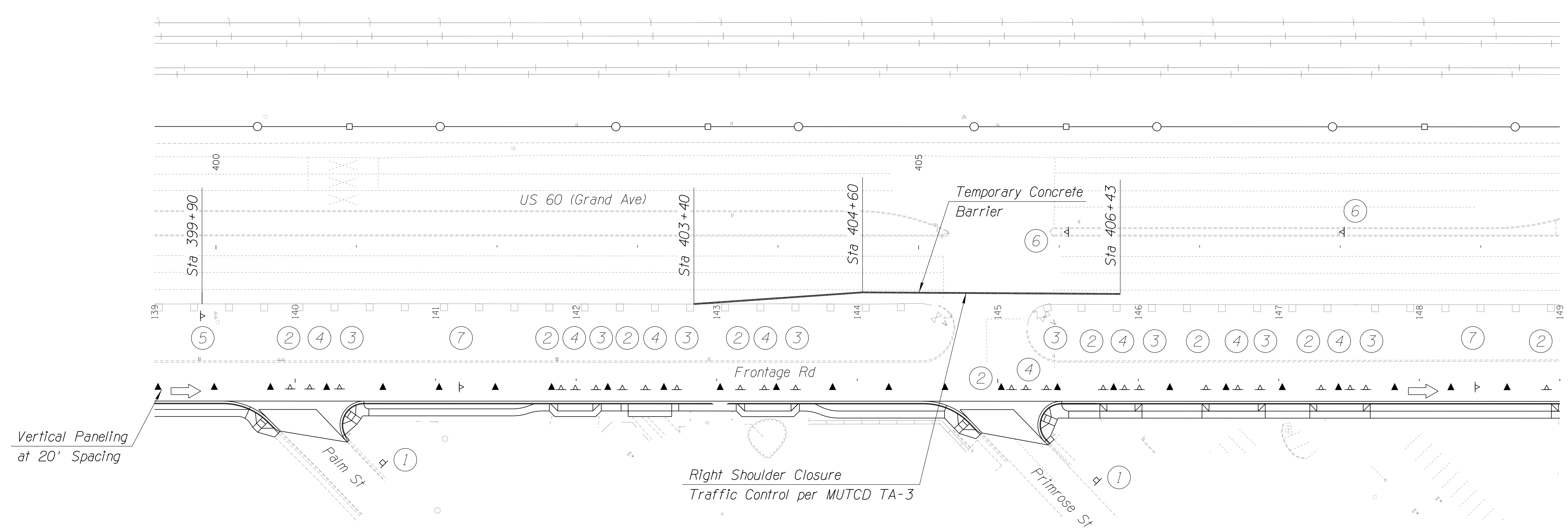
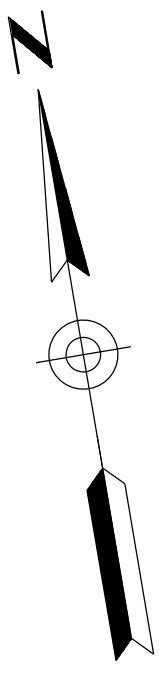
SHEET 4 OF 8

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 2A TRAFFIC CONTROL DETAIL (SHEET 4 OF 8)	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-03.18
TRACS NO. H8874 01C				OF

SURVEY NO. _____ DATE _____
 FINISHED PLANS _____
 REVISIONS _____
 LOCATION _____
 DATE _____
 FINISHED PLANS _____
 SURVEY NO. _____ DATE _____

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	149	232	

060 MA 144



DETAIL TC-D

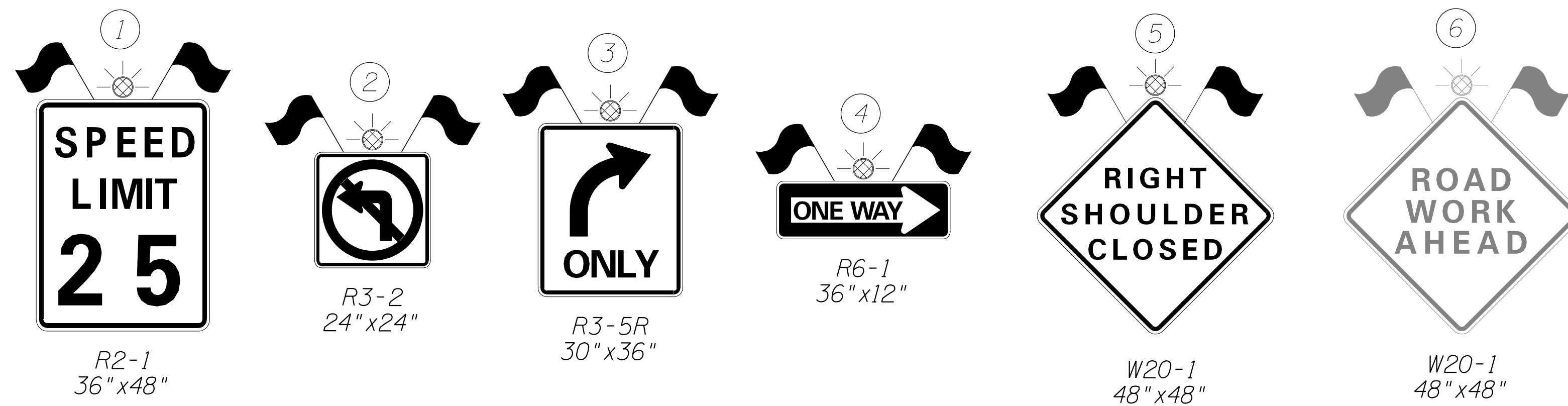
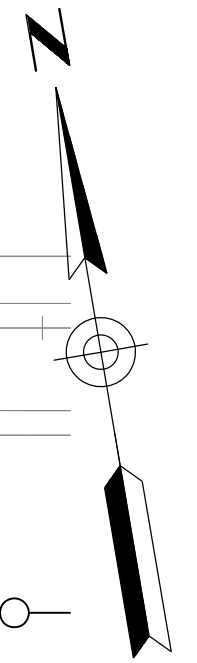
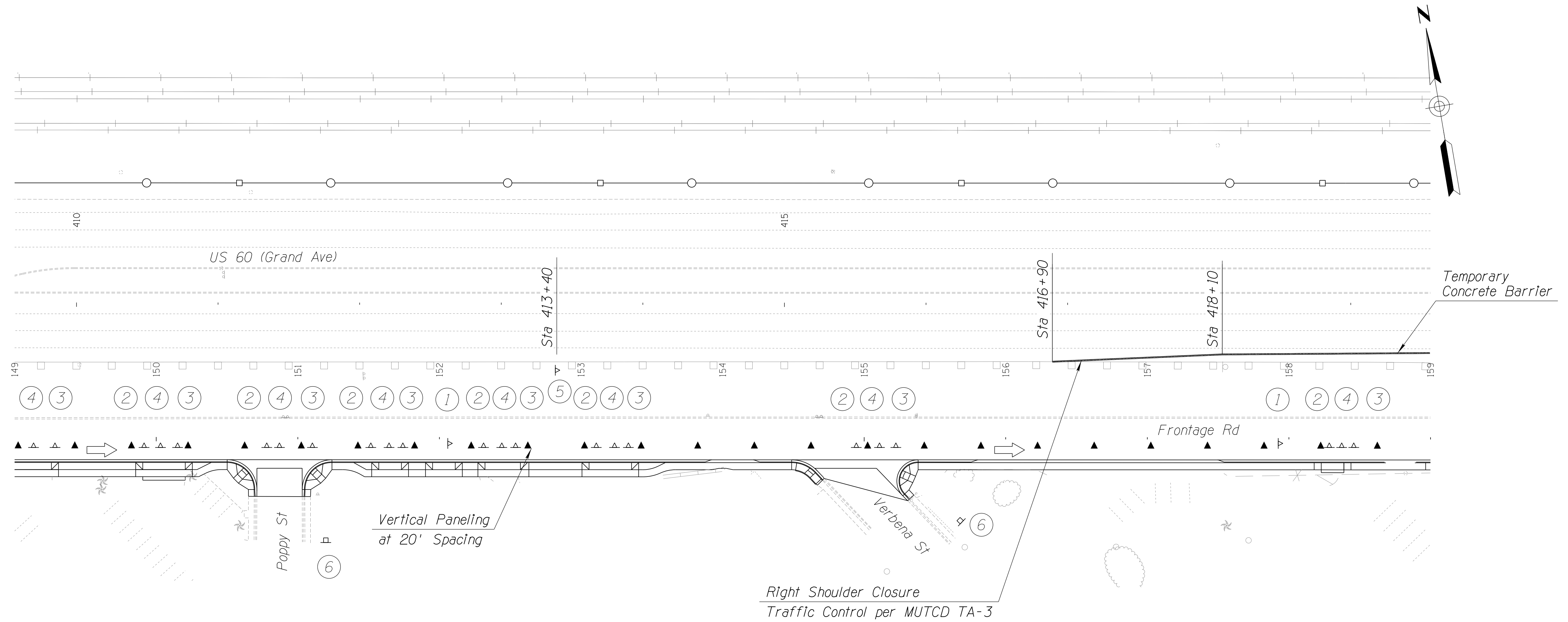
SHEET 5 OF 8

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 2A TRAFFIC CONTROL DETAILS (SHEET 5 OF 8)	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-03.19
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	150	232	

060 MA 144



DETAIL TC-D

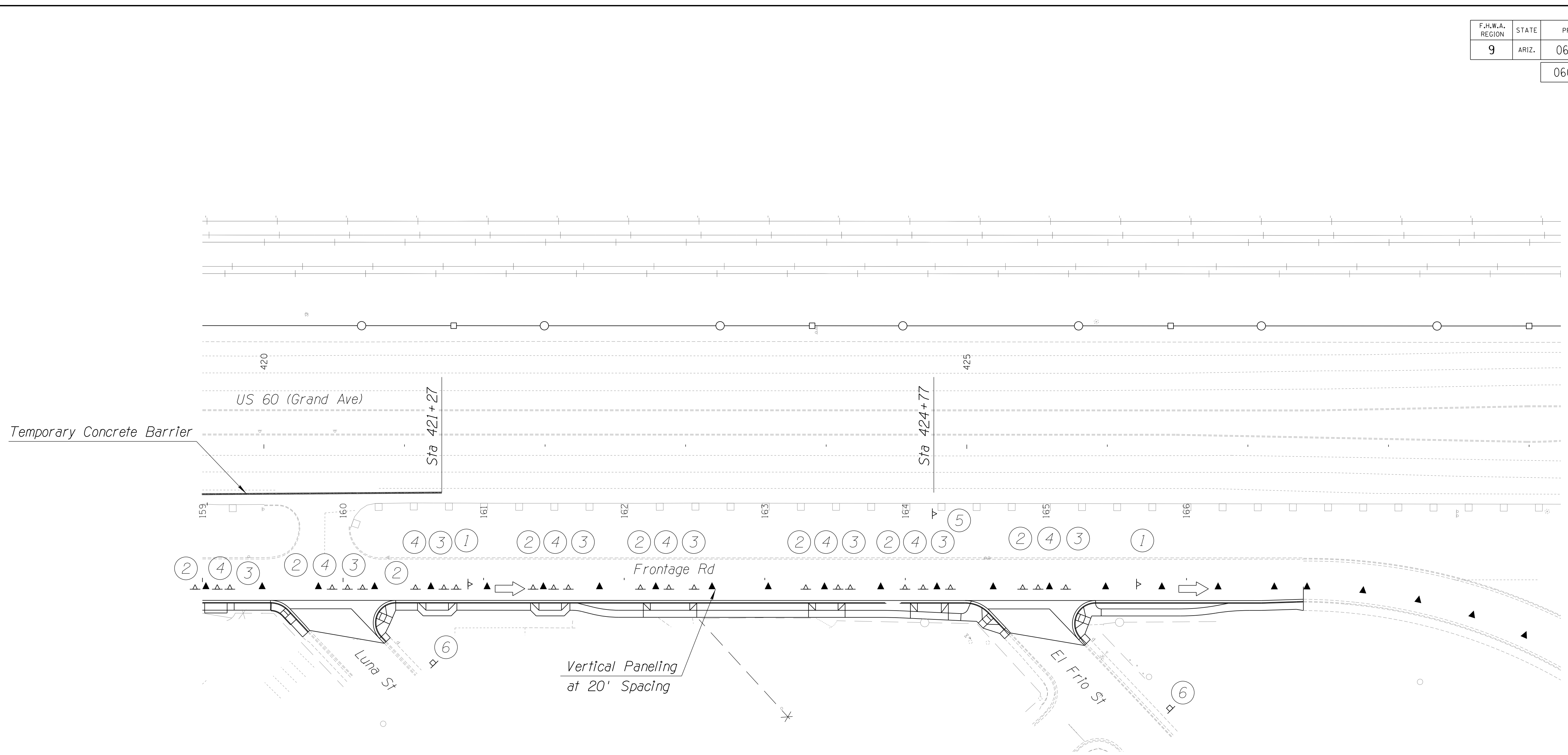
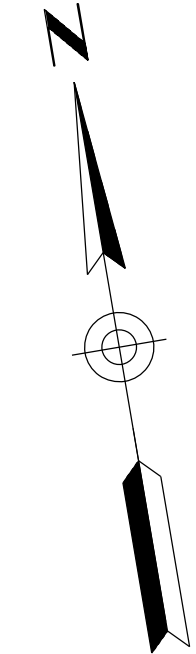
SHEET 6 OF 8

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 2A TRAFFIC CONTROL DETAILS (SHEET 5 OF 9)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. T-03.20

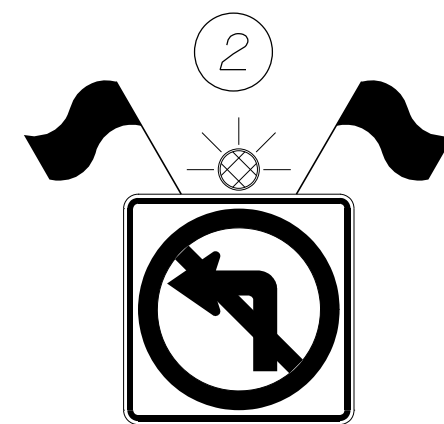
SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	151	232	

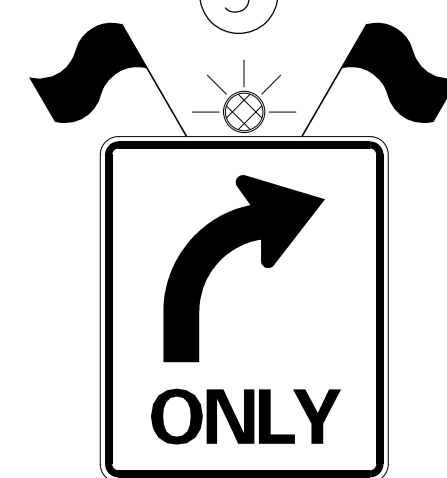
060 MA 144



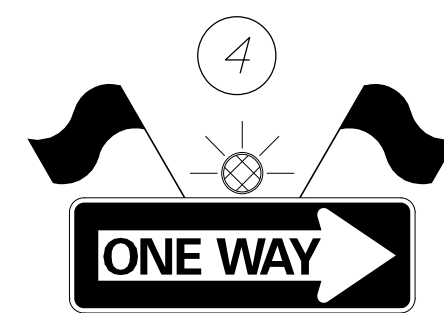
R2-1
36" x 48"



R3-2
24" x 24"



R3-5R
30" x 36"



R6-1
36" x 12"



G20-2AZ
48" x 36"



Existing
W20-1
To be
Maintained

DETAIL TC-D

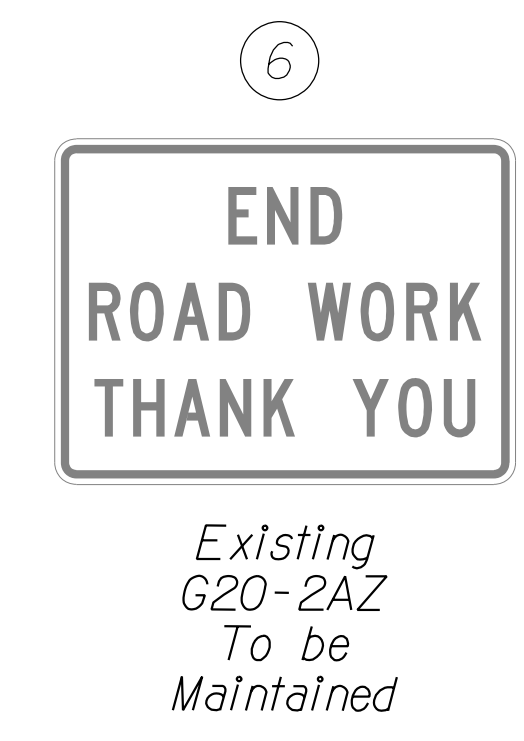
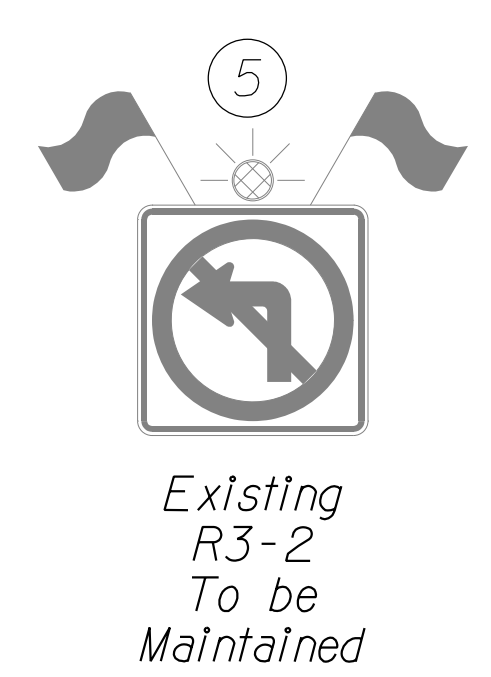
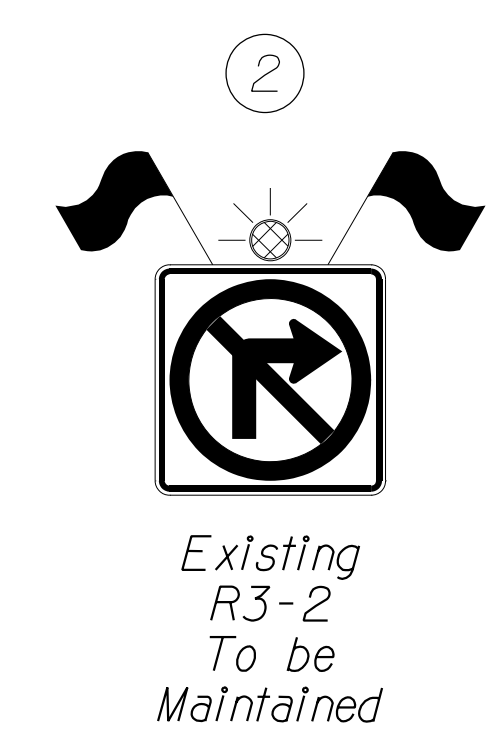
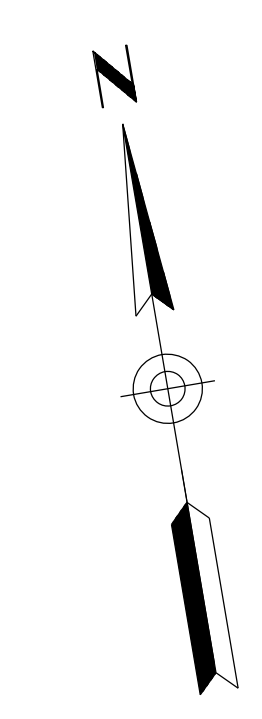
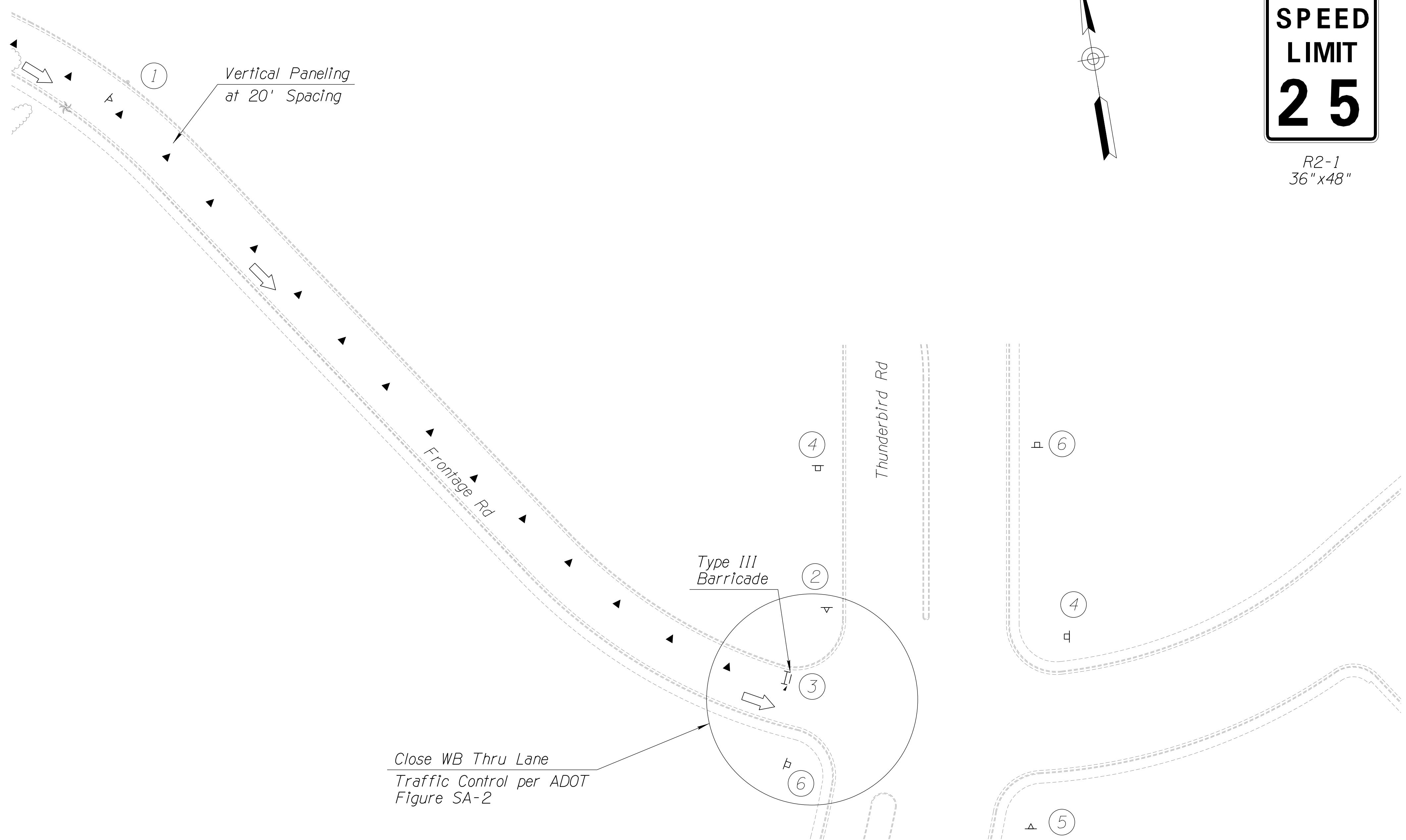
SHEET 7 OF 8

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 2A TRAFFIC CONTROL DETAILS (SHEET 7 OF 8)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. T-03.21

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	152	232	

060 MA 144



DETAIL TC-D

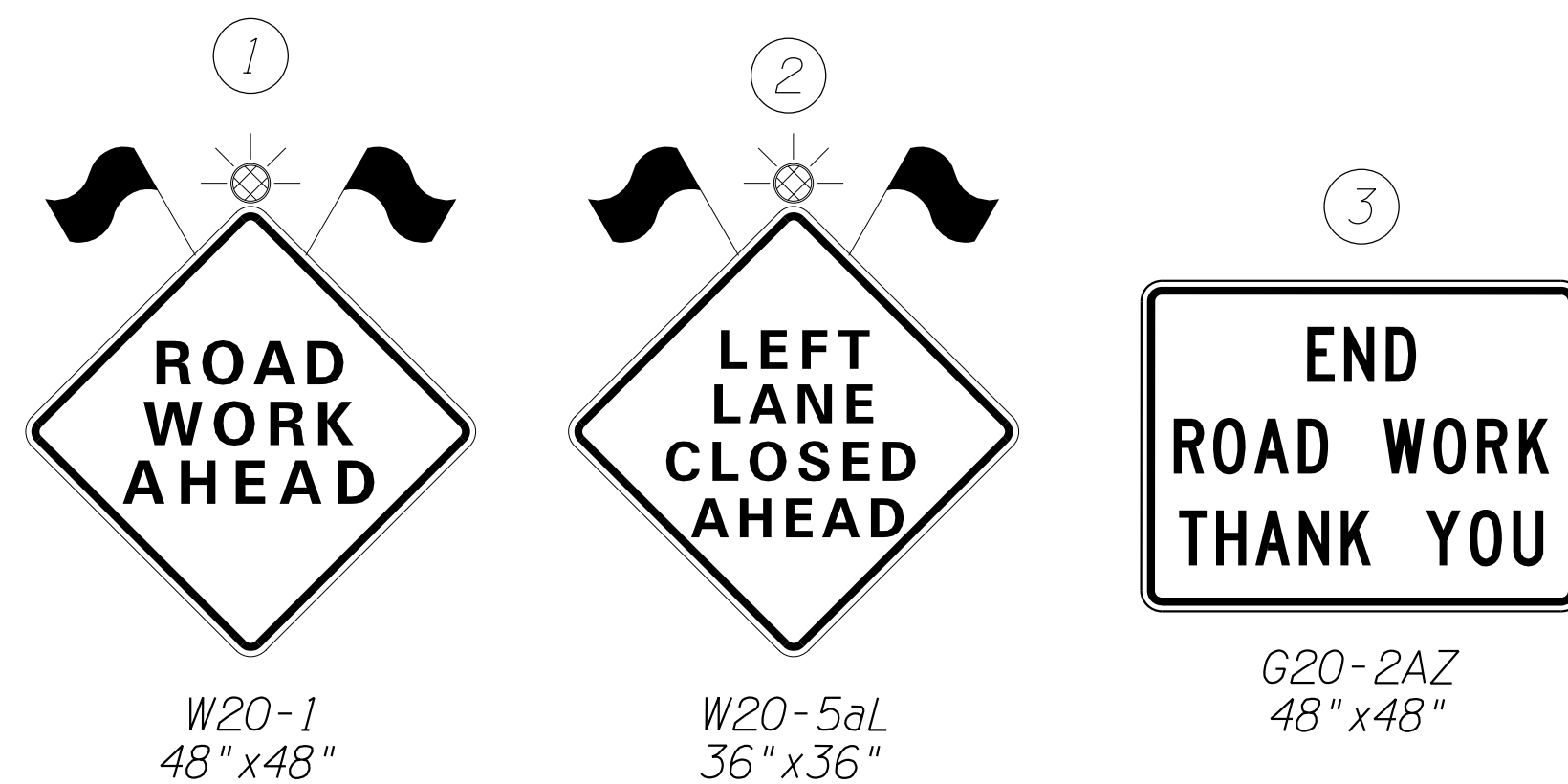
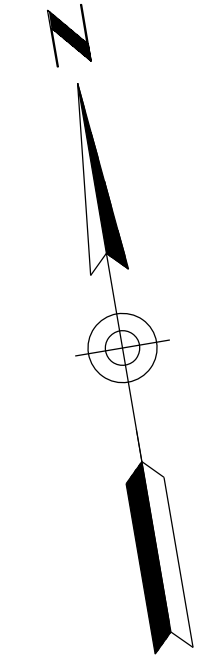
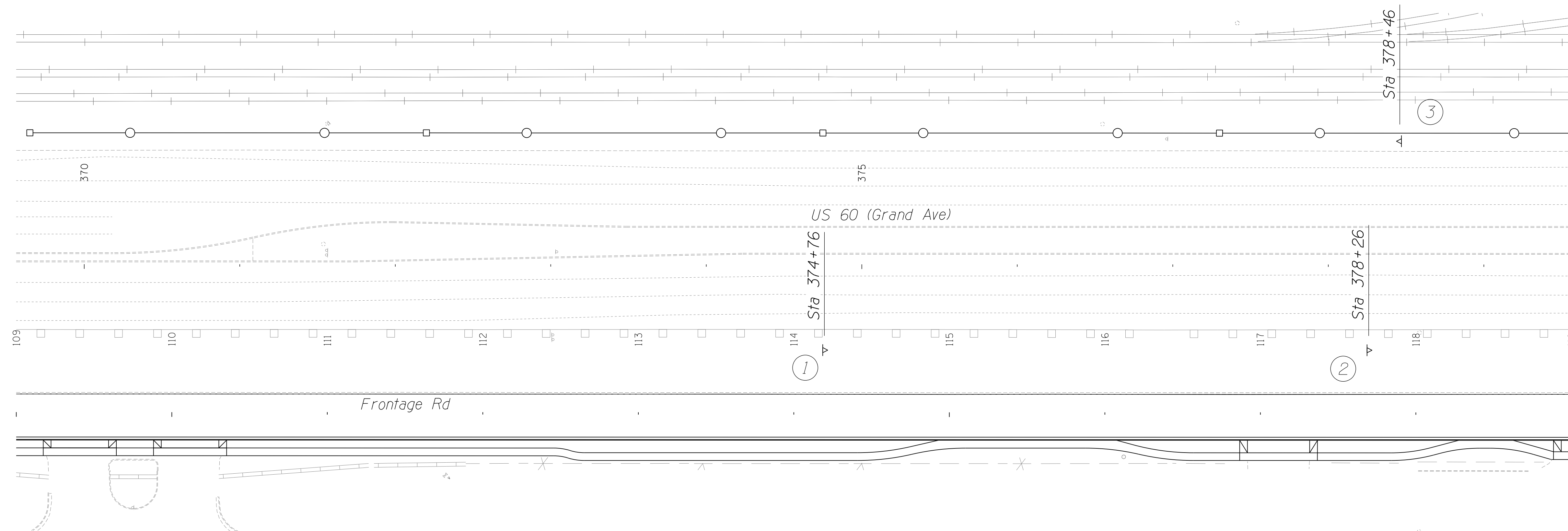
SHEET 8 OF 8

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLÉ <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 2A TRAFFIC CONTROL DETAILS (SHEET 8 OF 8)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. T-03.22

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	153	232	

060 MA 144



DETAIL TC-E

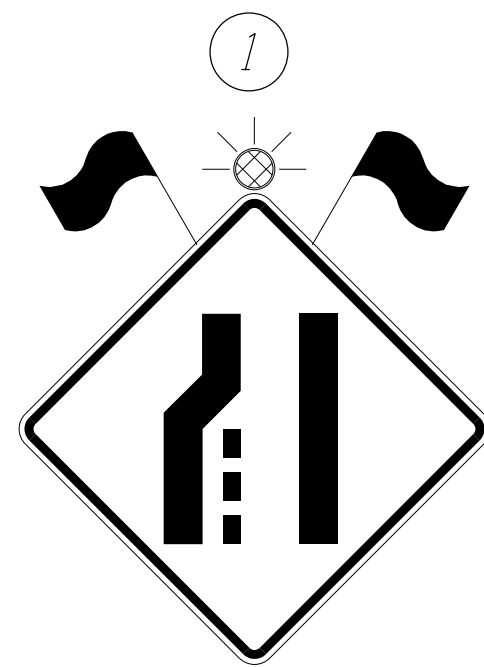
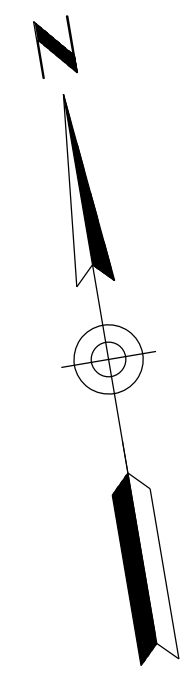
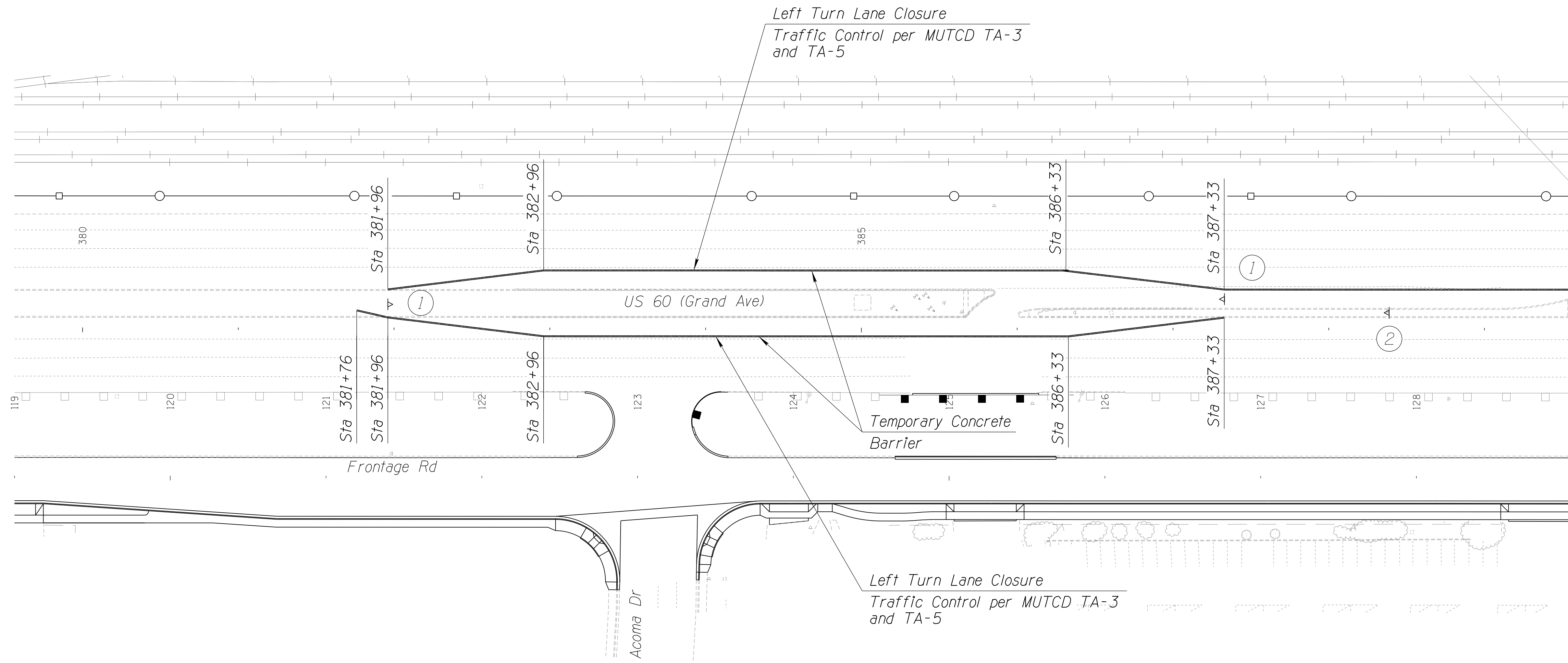
SHEET 1 OF 3

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 2B TRAFFIC CONTROL DETAIL (SHEET 1 OF 3)	DWG NO. T-03.23
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60				
TRACS NO. H8874 01C			OF	

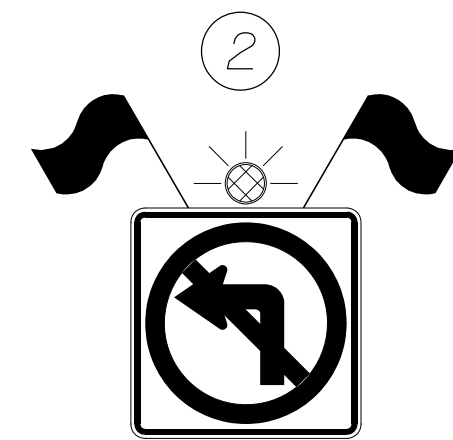
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	154	232	

060 MA 144



W4-2R
48" x 48"



R3-2
24" x 24"

DETAIL TC-E

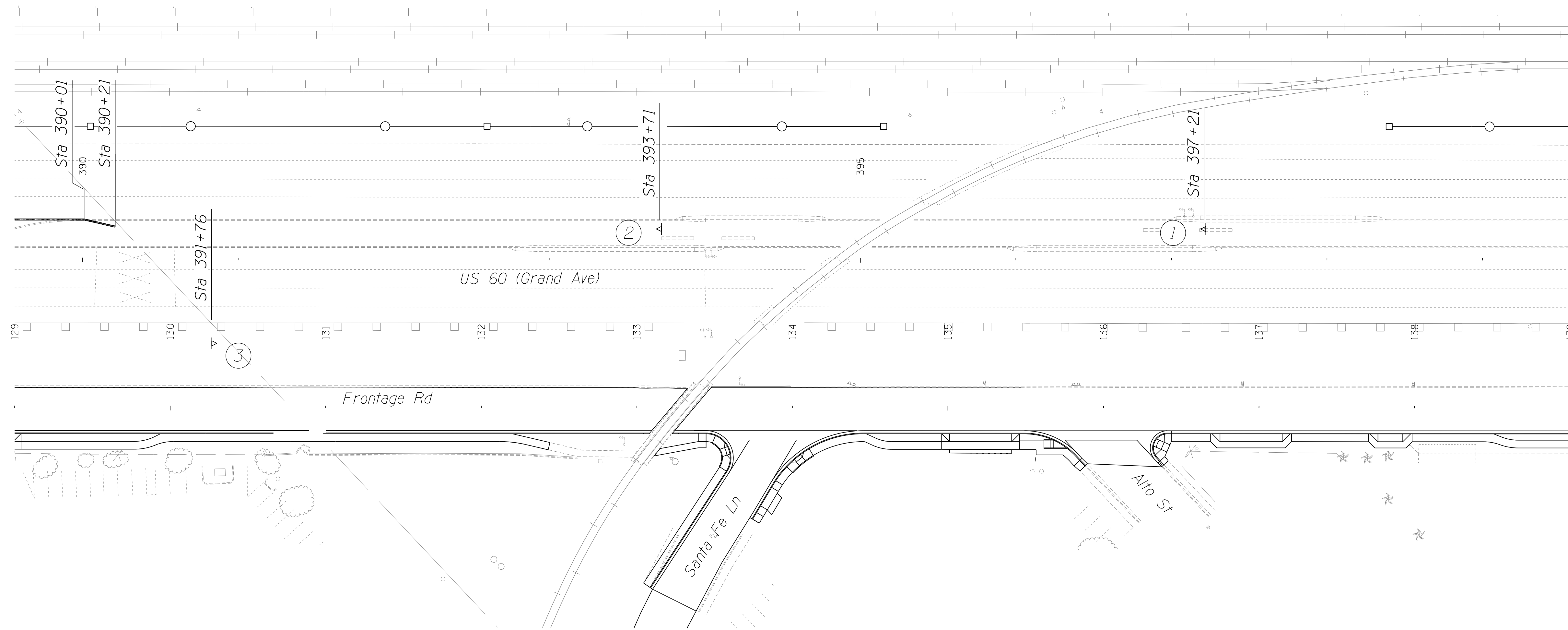
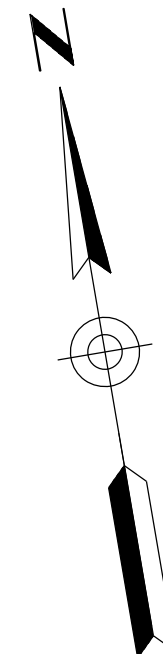
SHEET 2 OF 3

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 2B TRAFFIC CONTROL DETAIL (SHEET 2 OF 3)	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-03.24
TRACS NO. H8874 01C				OF

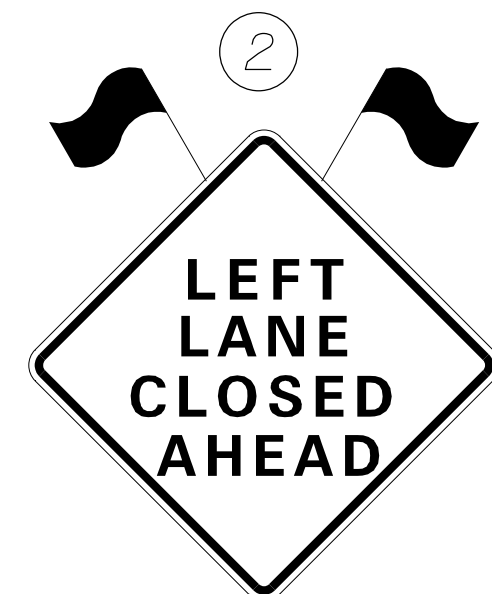
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	155	232	

060 MA 144



W20-1
48" x 48"



W20-5aL
36" x 36"



G20-2AZ
48" x 48"

DETAIL TC-E

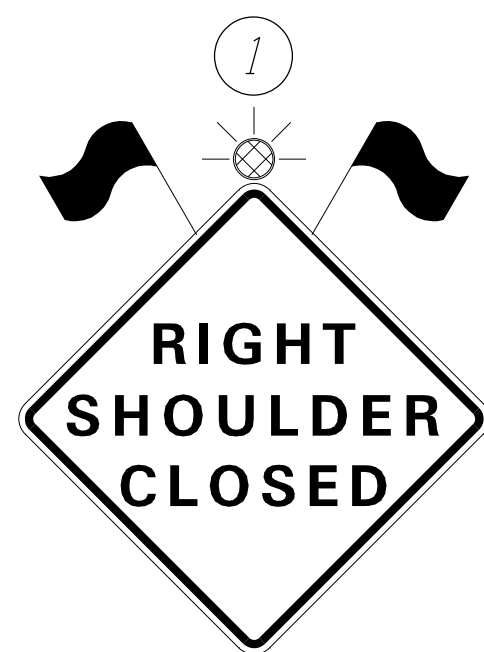
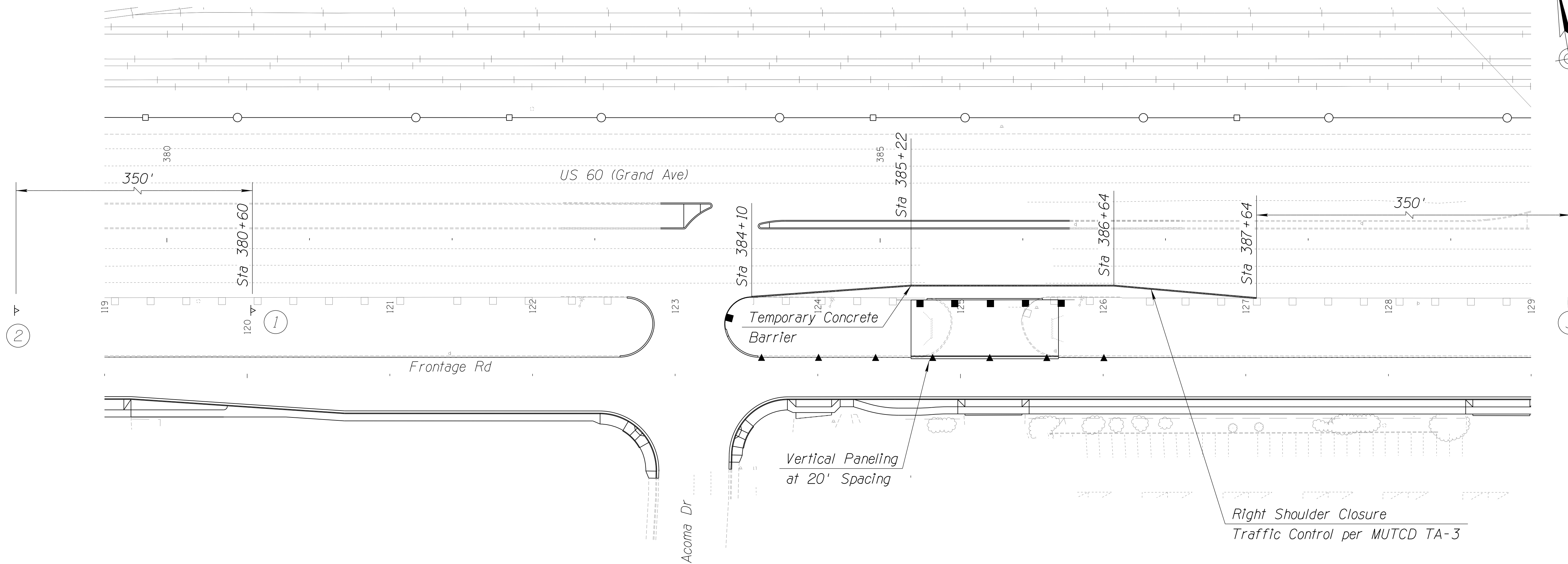
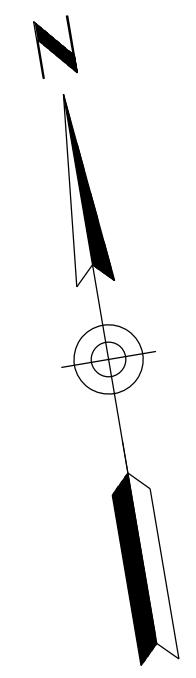
SHEET 3 OF 3

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			PHASE 2B TRAFFIC CONTROL DETAIL (SHEET 3 OF 3)	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-03.25
TRACS NO. H8874 01C				OF

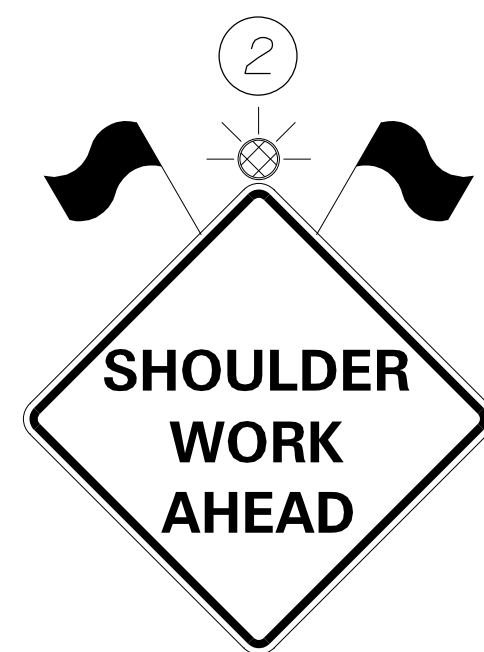
SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS DATE FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	156	232	

060 MA 144



W20-1
48" x 48"



W20-1
48" x 48"



G20-2AZ
48" x 36"

DETAIL TC-F

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PHASE 3 TRAFFIC CONTROL DETAIL	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. T-03.26 OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE

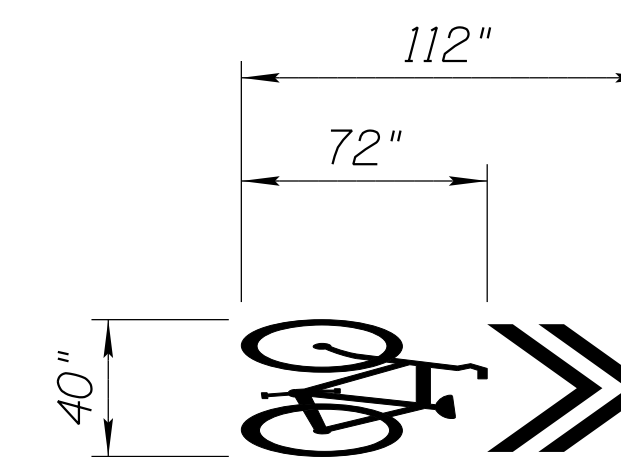
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	157	232	

060 MA 144

PAVEMENT MARKING NOTES:

- All pavement marking and construction shall conform to the latest editions of the ADOT Standard Drawings and Specifications, ADOT Signing and Marking Standard Drawings and the Manual on Uniform Traffic Control Devices unless otherwise noted in the special provisions or these plans.
- The pavement marking drawings are schematic only and not to scale. The Contractor shall follow all dimensions, details, and standards when installing pavement markings.
- The dimensions shown to pavement striping are to the center of the striping, or in the case of double striping, to the center of the double striping and are to the face of each curb, face of barrier, or in the absence of curb to edge of pavement, unless otherwise noted.
- Shoulder dimensions are to the face of barrier or gutter flow line where applicable.
- The pavement marking plans may be modified as directed by the Engineer.
- All stripes in conflict with the final pavement markings as shown in the plans shall be obliterated.
- The Contractor shall be responsible for the layout and installation of permanent pavement markings on final surface course following control points that have been set no more than 50 feet apart along the alignment of the striping.
- Where stripe obliteration is necessary, it shall be accomplished by approved methods, as indicated in the standard specifications. Painting over stripes, removal of pavement, and overlaying pavement do not constitute stripe obliteration.
- The Contractor shall clean the roadway surface to the satisfaction of the Engineer, by sweeping and air-jet blowing, immediately prior to the placement of all permanent markings. The roadway surface shall be dry and the air temperature shall not be less than 50°F and pavement temperature shall not be less than 40°F for the placement of thermoplastic striping.
- All final striping for local roads, freeway edge lines, and auxiliary lane lines shall be 90 mils (0.090 inch) thick extruded thermoplastic applied in accordance with Section 704 of the ADOT Standard Specifications.
- All final stop bars, crosswalks, arrows, legends, and transverse lines shall be white 90 mils (0.090 inch) thick extruded thermoplastic in accordance with Section 704 of the ADOT Standard Specifications, unless otherwise noted.
- All reflective raised pavement markers shall have an abrasion-resistant coating on the face of the prismatic reflectors and shall conform to the details of standard drawing number m-19. They shall be installed with a bituminous adhesive which is on the ADOT approved products list.
- All reflective raised pavement markers shall be installed so that the reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow.
- For broken striping, the raised pavement markers shall be placed to align with the broken striping. Where raised pavement markers are placed along solid striping, the nearest edge of each marker shall be offset 2 inches from the nearest edge of striping.
- All dimensions are in feet unless otherwise noted on the plans.
- Final thermoplastic pavement markings and Type 1 tape shall not be placed on the new surface course less than 30 days following placement of the final pavement lift. All pre-final lane lines and edge lines shall be 4" reflectorized paint. All gore lines and turn lane lines shall be 8" reflectorized paint. Pre-final markings shall be placed in the final location.
- Prior to application of the AR-ACFC, the Contractor shall remove all raised pavement markers and obliterate existing striping within the overlay limits.

PAVEMENT MARKING QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	QUANTITIES	4" EQUIVALENT
7040005	Pavement Marking (White Extruded Thermoplastic) (0.090")	L.FT.	1510	5569
7040006	Pavement Marking (Yellow Extruded Thermoplastic) (0.090")	L.FT.	11,820	11,820
7040074	Pavement Symbol (Extruded Thermoplastic) (ALKYD) (0.090")	EACH	69	N/A
7060015	Pavement Marker, Raised, Type D	EACH	180	N/A
7060018	Pavement Marker, Raised, Type G	EACH	35	N/A



Shared Lane Marking Detail

Scale: NTS

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			PAVEMENT MARKING NOTES	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-04.01
TRACS NO. H8874 01C				OF

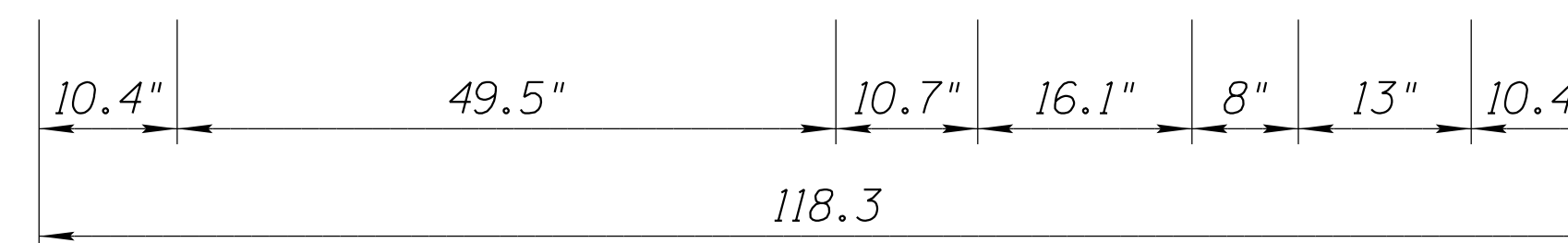
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	158	232	

060 MA 144

SIGNING NOTES:

1. All signs shall be in compliance with the Manual on Uniform Traffic Control Devices (MUTCD), 2009 edition, the Arizona supplement to the MUTCD, the ADOT Signing and Markings Standard Drawings, and the ADOT Traffic Engineering Manual of Approved Signs.
2. All sign locations are approximate. The Contractor shall verify actual sign locations and actual post lengths with the Engineer prior to constructing the foundations for the sign supports.
3. The Contractor shall be responsible for securing all underground utility locations where foundations are installed. Special care needs to be taken to insure that all underground utilities are avoided. Utility locations are not shown on the signing plans.
4. Where signs are being removed or replaced, the foundations shall be removed entirely or the foundation shall be removed a minimum of two feet below finished grade, as directed by the Engineer.
5. The bottom of each sign shall be at least 7 feet above the nearest edge of pavement and at least 7 feet above the ground under the sign.
6. Offsets for all signs shall be measured from the edge of the roadway to the nearest edge of sign.
7. Slip bases shall be installed in accordance with ADOT Standard Drawing S-1.
8. Retroreflective sheeting on all new signs shall meet ADOT Standard Specifications.
9. Retroreflective sheeting on all new signs shall meet criteria established in Section 1007 of the Standard Specifications and Section 380 of ADOT's Traffic Engineering, Guidelines and Processes.
10. All work shall be performed within the City of El Mirage or ADOT right of way.
11. The Contractor shall replace any signs, object markers, and delineators damaged as a result of the construction activities at the Contractor's expense.
12. Signing plans may be modified as directed by the Engineer.
13. All removed signs shall be transported to the wastewater treatment plant at 12000 W. Peoria Avenue in the same condition as they were removed and all removed structures and materials shall become the property of the Contractor when indicated as being removed and not relocated on the summaries and plans.
14. Existing signs not indicated in the sign summary that do not need to be removed or relocated shall remain. If construction activities require a sign assembly removal not noted in the plan, the sign assembly shall be replaced as new and placed as near as possible to the existing location as directed by the Engineer. The removal or replacement of sign assemblies for any construction activity shall be included in the cost of that activity. No further compensation shall be made.
15. All new ground-mounted signs shall be installed with two nuts per bolt. All bolts shall have hex heads, not slotted heads. Only cadmium plated or zinc plated steel washers shall be used between each bolt head and the face of the panel. The bolts and washers shall not be painted unless the bolt coincides with the sign legend.
16. All new signs shall be fabricated of flat aluminum as indicated in Section 608.
17. All new signs shall be installed on new square posts with foundations as indicated in ADOT Standard Drawings.
18. Shop drawings shall be required.
19. Shop drawings will not be required for guide signs.
20. Street name signs shall comply with Detail C1 and Detail C2 (City of El Mirage Std Dtl 131-1 and 131-2).
21. Sign posts shall comply with Detail C3 and Detail C4 (City of El Mirage Std Dtl 132-1 and 132-2).
22. Sign offset is generally 12 feet from lip of gutter to near edge of sign, but may be as close as 6 feet based on site conditions. Signs behind guardrail are generally placed 6 feet behind the face of guardrail. Signs generally should not be placed closer than 6 feet from the edge of paved shoulder or face of curb, except on urban streets where such an offset is impractical, in which case an offset of as small as 2 feet may be used.
23. The Contractor shall inventory all signs to be removed or covered and note damaged signs to the Engineer at time of covering or removal. All signs damaged by covering or removal shall be replaced by the Contractor at the Contractor's expense.

SIGNING QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	TOTAL
2020034	Remove Signs	L.SUM	1
6070038	Slip Base (New)	EACH	20
6070055	Sign Post (Perfortated) (2 1/2 S)	L.FT.	312
6070057	Sign Post (Perfortated) (2 1/2 T)	L.FT.	258
6070060	Foundation for Sign Post (Concrete)	EACH	46
6080005	Warning, Marker, or Regulatory Sign Panel	SQ.FT.	531
6080110	Remove and Reinstall Sign	EACH	1



D1-1; Sta 378+23 Rt
6.0" Radius, 1.0" Border, White on Green;
US 60 Grande Ave; Standard Arrow Custom 13" X 10.8"

Acoma Sign Detail

Scale: NTS

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING NOTES	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		DWG NO. T-04.02
TRACS NO. H8874 01C				OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plan Sht No.	Sign Number	Sign Code	Work					Offset (ft)	Mounting Height (ft)	Background Color	Panel					Ground Mounted					Overhead		Project Info						
			New	Existing							Width (in.)	Height (in.)	Area (sq. ft.)	Type	Bid Item Number	Foundations	Posts		New Slipbases	Stringer		Structure Type	Number of Lights	F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
				Replace Panel	Relocate Panel	Relocate Str.	Remove										To Remain	Type		Total length (ft)	Type			Total Length (ft)	9	ARIZ.	060-B-NFA	160	232
T-05.04	E5	R4-11	X					8		MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12											
T-05.05	E6	D1-1	X					2		ACOMA DR	118	24	19.7	RWM	6080005	2	2 1/2T	25	2							SEE DETAIL ON T-03.02			
T-05.05	W3	R4-11	X					2		MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12											
T-05.05	M4	R3-7R		X						RIGHT LANE MUST TURN RIGHT	30	30	6.3	RWM	6080005														
T-05.05	R3	R2-1 (25)		X						SPEED LIMIT 25 MPH	24	30	5.0	RWM	6080005														
T-05.05	R4	R2-1 (25)		X						SPEED LIMIT 25 MPH	24	30	5.0	RWM	6080005														
T-05.05	R5	R3-5R		X						RIGHT TURN ARROW ONLY	30	36	7.5	RWM	6080005	1	2 1/2S	12											
T-05.05	X1	R3-7R				X				RIGHT LANE MUST TURN RIGHT					2020034														
T-05.06	E7	R1-1	X					10.5		STOP	30	30	6.3	RWM	6080005	1	2 1/2T	13	1										
	+	W4-4aP	X							TRAFFIC FROM LEFT DOES NOT STOP	24	12	2.0	RWM	6080005														
T-05.06	N3	R3-8LQ	X							LEFT ONLY, THROUGH RIGHT	36	30	7.5	RWM	6080005											MOUNT ON EXST POST			
T-05.06	X2	R3-8LR				X				LEFT ONLY, RIGHT ONLY					2020034														
T-05.06	R6	R1-1		X						STOP	30	30	6.3	RWM	6080005														
	+	W4-4bP	X							ONCOMING TRAFFIC DOES NOT STOP	24	12	2.0	RWM	6080005														
T-05.05	E8	R3-5R	X							RIGHT TURN ARROW ONLY	30	36	7.5	RWM	6080005	1	2 1/2S	12											

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	060-B-NFA	160	232	

060 MA 144

Remarks

- Notes:
- The Engineer shall verify post lengths and elevations.
 - The Engineer may shift a sign in order to achieve a more desirable location.
 - Quantities are approximate and for the contractor's information only.
 - Minimum sheeting type shall be Type IX or Type XI for all signs.

Panel Types:

RWM: Regulatory, Warning or Marker
F-DA: Flat-sheet aluminum with direct applied or silk-screened characters
F-Dem: Flat-sheet aluminum with demountable characters
Ext: Aluminum extrusions
Incr: Aluminum sheet increment
Over: Overhead (New overlaid extrusions)

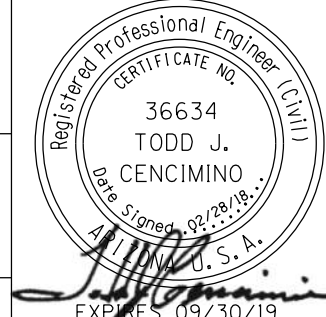
Post Types:

2S: 2" Single Perforated
2 1/2S: 2 1/2" Single Perforated
2T: 2" Telescoping
2 1/2T: 2 1/2" Telescoping
S4x7.7: Breakaway
W6x9: Breakaway
W8x18: Breakaway
W10x22: Breakaway

Colors:

BK: BLACK
BL: BLUE
BR: BROWN
GR: GREEN
RD: RED
WH: WHITE
YL: FLOURESCENT YELLOW

Stringer Types:
P: Square-tube post T: T-section (WT 3x6)

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	10/17		
CHECKED	TJC	10/17		
BURGESS & NIPLE			SIGNING SUMMARY SHEET	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60		TRACS NO. H8874 01C		
				DWG NO. T-04.04

Plan Sht No.	Sign Number	Sign Code	Work					Offset (ft)	Mounting Height (ft)	Background Color	Panel					Ground Mounted				Overhead		Project Info							
			New	Existing							Width (in.)	Height (in.)	Area (sq. ft.)	Type	Bid Item Number	Foundations	Posts		Stringer		Structure Type	Number of Lights	F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT	
				Replace Panel	Relocate Panel	Relocate Str.	Remove										Type	Total length (ft)	New Slipbases	Type									Total Length (ft)
				To Remain																									
T-05.06	X3	R1-1				X				STOP									9	ARIZ.	060-B-NFA	161	232						
	+	W4-4P				X				CROSS TRAFFIC DOES NOT STOP																			
T-05.06	M5	R1-1	X				14			STOP	30	30	6.3	RWM	6080005	1	2 1/2T	13	1										
	+	W4-4P				X				CROSS TRAFFIC DOES NOT STOP					2020034														
T-05.06	X8	R1-1				X				STOP					2020034														
	+	W4-4P				X				CROSS TRAFFIC DOES NOT STOP					2020034														
T-05.06	W4	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12											
T-05.06	X4	W1-7				X				TWO-DIRECTIONAL LARGE ARROW					2020034														
T-05.06	N1	R1-1	X				2			STOP	30	30	6.3	RWM	6080005	1	2 1/2T	15	1										
	+	R3-5R	X							RIGHT TURN ARROW ONLY	30	36	7.5	RWM	6080005														
T-05.06	W6	R1-1	X				8			STOP	30	30	6.3	RWM	6080005	1	2 1/2T	13	1										
	+	W4-4aP	X							TRAFFIC FROM RIGHT DOES NOT STOP	24	12	2.0	RWM	6080005														
T-05.06	N2	R6-1R	X				2			ONE WAY RIGHT ARROW	36	12	3.0	RWM	6080005	2	2 1/2T	22	2										
	+	OM1-2	X							TYPE 1 OBJECT MARKER (YELLOW ON BLACK)	18	18	2.25	RWM	6080005														
	+	OM1-2	X							TYPE 1 OBJECT MARKER (YELLOW ON BLACK)	18	18	2.25	RWM	6080005														
T-05.06	W5	R4-7	X				2			STAY RIGHT OF ISLAND	24	30	5.0	RWM	2020034	1	2 1/2S	12											
	+	R3-18	X							NO LEFT TURN, NO U-TURN	30	30	6.3	RWM	6080005														
T-05.06	W7	R3-5L	X				2			LEFT TURN ARROW ONLY	30	36	7.5	RWM	6080005	1	2 1/2T	13	1										
	+	R3-5bP	X							LEFT LANE	30	12	2.5	RWM	6080005														

060 MA 144

Remarks

Notes:

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 W6x9: Breakaway
 W8x18: Breakaway
 W10x22: Breakaway

Colors:

BK: BLACK
 BL: BLUE
 BR: BROWN
 GR: GREEN
 RD: RED
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Stringer Types:

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DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	10/17		
CHECKED	TJC	10/17		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING SUMMARY SHEET	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60			DWG NO. T-04.05	
TRACS NO. H8874 01C			OF	

Plan Sht No.	Sign Number	Sign Code	Work					Offset (ft)	Mounting Height (ft)	Background Color	Panel					Ground Mounted					Overhead		<table border="1"> <tr> <th>F.H.W.A. REGION</th> <th>STATE</th> <th>PROJECT NO.</th> <th>SHEET NO.</th> <th>TOTAL SHEETS</th> <th>AS BUILT</th> </tr> <tr> <td>9</td> <td>ARIZ.</td> <td>060-B-NFA</td> <td>162</td> <td>232</td> <td></td> </tr> <tr> <td colspan="6" style="text-align: center;">060 MA 144</td> </tr> </table>						F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT	9	ARIZ.	060-B-NFA	162	232		060 MA 144					
			F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS				AS BUILT																																			
			9	ARIZ.	060-B-NFA	162	232																																							
060 MA 144																																														
Existing	Remove	To Remain	Width (in.)	Height (in.)	Area (sq. ft.)	Type	Bid Item Number	Foundations	Posts	Stringer	Structure Type	Number of Lights	Remarks																																	
Replace Panel	Relocate Panel	Relocate Str.						Type	Total length (ft)	New Slipbases	Type	Total Length (ft)																																		
T-05.06	E9	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12																												
T-05.06	X6	R6-1R			X					ONE WAY RIGHT ARROW					2020034																															
T-05.06	X5	R4-7			X					STAY RIGHT OF ISLAND					2020034																															
	+	R3-18			X					NO LEFT TURN, NO U-TURN					2020034																															
T-05.06	X7	R1-1			X					STOP					2020034																															
	+	R3-5R			X					RIGHT TURN ARROW ONLY					2020034																															
T-05.06	M6	R3-5L		X	X		2			LEFT TURN ARROW ONLY	30	30	7.5	RWM	6080005	1	2 1/2T	13	1																											
	+	R3-5bP		X	X					LEFT LANE	30	12	2.5	RWM	6080005																															
T-05.07	M7	R1-1		X			2			STOP					6080005	1	2 1/2T	13	1																											
T-05.07	R7	W10-1		X						RAILROAD ADVANCED WARNING	30	30	4.9	RWM	6080005																															
T-05.07	W8	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12																												
T-05.07	E10	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12																												
T-05.08	R9	W1-7		X						TWO-DIRECTION LARGE ARROW	48	24	8.0	RWM	6080005																															
T-05.08	R8	R1-1		X						STOP	30	30	6.3	RWM	6080005																															
T-05.08	R10	W10-1		X						RAILROAD ADVANCE WARNING	30	30	4.9	RWM	6080005																															
T-05.08	R11	W7-1		X						TWO-DIRECTION LARGE ARROW	48	24	8.0	RWM	6080005																															

- Notes:
- The Engineer shall verify post lengths and elevations.
 - The Engineer may shift a sign in order to achieve a more desirable location.
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 - Minimum sheeting type shall be Type IX or Type XI for all signs.

Panel Types:

RWM: Regulatory, Warning or Marker
F-DA: Flat-sheet aluminum with direct applied or silk-screened characters
F-Dem: Flat-sheet aluminum with demountable characters
Ext: Aluminum extrusions
Incr: Aluminum sheet increment
Over: Overhead (New overlaid extrusions)

Post Types:

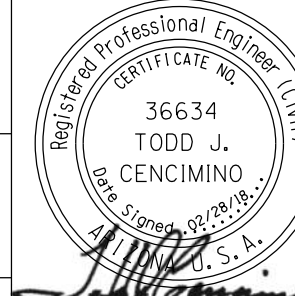
2S: 2" Single Perforated
2 1/2S: 2 1/2" Single Perforated
2T: 2" Telescoping
2 1/2T: 2 1/2" Telescoping
S4x7.7: Breakaway
W6x9: Breakaway
W8x18: Breakaway
W10x22: Breakaway

Colors:

BK: BLACK
BL: BLUE
BR: BROWN
GR: GREEN
RD: RED
WH: WHITE
YL: FLOURESCENT YELLOW

Stringer Types:

P: Square-tube post T: T-section (WT 3x6)

DESIGN	DCL	10/17	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	10/17		
CHECKED	TJC	10/17		
BURGESS & NIPLE			SIGNING SUMMARY SHEET	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60		TRACS NO. H8874 01C		
			DWG NO. T-04.06 OF	

Plan Sht No.	Sign Number	Sign Code	Work						Offset (ft)	Mounting Height (ft)	Background Color	Panel					Ground Mounted					Overhead		Remarks								
			New	Existing								Width (in.)	Height (in.)	Area (sq. ft.)	Type	Bid Item Number	Foundations	Posts		Stringer	Structure Type	Number of Lights										
				Replace Panel	Relocate Panel	Relocate Str.	Remove	To Remain										Type	Total length (ft)				New Slipbases		Type	Total Length (ft)						
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT																											
T-05.08	W9	R4-11	X					2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12									060 MA 144				
T-05.08	E11	R4-11	X					2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12													
T-05.08	R12	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
	+	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
T-05.08	M8	R1-1		X	X			9			STOP	30	30	6.3	RWM	6080005	1	2 1/2T	13	1												
T-05.08	X9	R4-7									STAY RIGHT OF ISLAND					2020034																
	+	OM-3R														2020034																
T-05.09	R13	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
	+	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
T-05.09	R14	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
	+	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
T-05.09	R15	W1-7		X							TWO-DIRECTION LARGE ARROW	48	24	8.0	RWM	6080005																
T-05.09	R16	R1-1		X							STOP	30	30	6.3	RWM	6080005																
T-05.09	R17	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
	+	R8-3		X							NO PARKING	18	18	2.3	RWM	6080005																
T-05.09	W10	R4-11	X					2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12													
T-05.09	E12	R4-11	X					2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12													

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	060-B-NFA	163	232	

060 MA 144

DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO.

Notes:

- The Engineer shall verify post lengths and elevations.
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2T: 2" Telescoping
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W6x9: Breakaway
W8x18: Breakaway
W10x22: Breakaway

Colors:

BK: BLACK
BL: BLUE
BR: BROWN
GR: GREEN
RD: RED
WH: WHITE
YL: FLOURESCENT YELLOW

Stringer Types:
P: Square-tube post T: T-section (WT 3x6)

DESIGN	NAME	DATE
	DCL	10/17
DRAWN	WWS	10/17
CHECKED	TJC	10/17

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

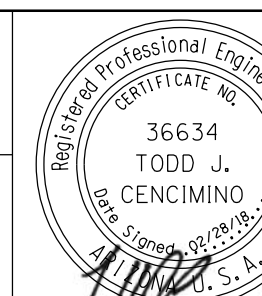
BURGESS & NIPLE
1500 N. PRIEST DR. SUITE 102
TEMPE, AZ 85281

SIGNING SUMMARY SHEET

ROUTE	LOCATION
US 60	GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C

DATE: 09/30/19
DWG NO. T-04.07
OF



Plan Sht No.	Sign Number	Sign Code	Work					Offset (ft)	Mounting Height (ft)	Background Color	Panel					Ground Mounted					Overhead		<table border="1"> <tr> <td>F.H.W.A. REGION</td> <td>STATE</td> <td>PROJECT NO.</td> <td>SHEET NO.</td> <td>TOTAL SHEETS</td> <td>AS BUILT</td> </tr> <tr> <td>9</td> <td>ARIZ.</td> <td>060-B-NFA</td> <td>164</td> <td>232</td> <td></td> </tr> <tr> <td colspan="6" style="text-align: center;">060 MA 144</td> </tr> </table>						F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT	9	ARIZ.	060-B-NFA	164	232		060 MA 144					
			F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS				AS BUILT																																			
			9	ARIZ.	060-B-NFA	164	232																																							
060 MA 144																																														
Existing	Replace Panel	Relocate Panel	Relocate Str.	Remove	To Remain	Legend	Width (in.)	Height (in.)	Area (sq. ft.)	Type	Bid Item Number	Foundations	Posts		Stringer			Structure Type	Number of Lights	Remarks																										
													Type	Total length (ft)	New	Type	Total Length (ft)																													
T-05.10	X10	R8-3				X	NO PARKING																																							
	+	R8-3				X	NO PARKING																																							
T-05.10	M9	R1-1	X				STOP					1	2 1/2T	13	1																															
	+	W4-4aP	X				TRAFFIC FROM LEFT DOES NOT STOP																																							
T-05.10	R18	R1-1	X				STOP																																							
	+	W4-4P				X	TRAFFIC EXITING GRAND AVE DOES NOT STOP																																							
	+	W4-4bP	X				ONCOMING TRAFFIC DOES NOT STOP																																							
T-05.10	N4	R3-8LR	X				LEFT ONLY, RIGHT ONLY																								MOUNT ON EXST POST															
T-05.10	X11	R3-5L				X	LEFT TURN ARROW ONLY																																							
T-05.10	R19	R1-1	X				STOP																																							
	+	W4-4aP	X				TRAFFIC FROM RIGHT DOES NOT STOP																																							
T-05.11	R20	W1-7	X				TWO-DIRECTION LARGE ARROW																																							
T-05.11	R21	R1-1	X				STOP																																							
T-05.10	W11	R4-11	X			2	MAY USE FULL LANE					1	2 1/2S	12																																
T-05.10	E13	R4-11	X			2	MAY USE FULL LANE					1	2 1/2S	12																																
T-05.11	W12	R4-11	X			2	MAY USE FULL LANE					1	2 1/2S	12																																
T-05.11	E14	R4-11	X			2	MAY USE FULL LANE					1	2 1/2S	12																																

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Ext: Aluminum extrusions
Incr: Aluminum sheet increment
Over: Overhead (New overlaid extrusions)

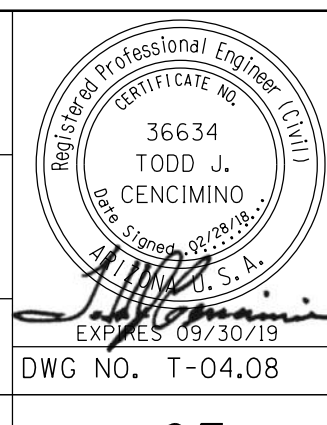
Post Types:

2S: 2" Single Perforated
2 1/2S: 2 1/2" Single Perforated
2T: 2" Telescoping
2 1/2T: 2 1/2" Telescoping
S4x7.7: Breakaway
W6x9: Breakaway
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W10x22: Breakaway

Colors:

BK: BLACK
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Stringer Types:
P: Square-tube post T: T-section (WT 3x6)

DESIGN	DCL	10/17	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	10/17		
CHECKED	TJC	10/17		

BURGESS & NIPLE
1500 N. PRIEST DR. SUITE 102
TEMPE, AZ 85281

SIGNING SUMMARY SHEET

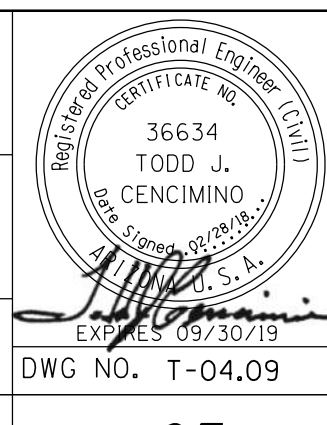
ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C

DWG NO. T-04.08

OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plan Sht No.	Sign Number	Sign Code	Work					Offset (ft)	Mounting Height (ft)	Background Color	Panel					Ground Mounted					Overhead		Project Information												
			New	Existing							Legend	Width (in.)	Height (in.)	Area (sq. ft.)	Type	Bid Item Number	Foundations	Posts		New Slipbases	Stringer		Structure Type	Number of Lights	F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT					
				Replace Panel	Relocate Panel	Relocate Str.	Remove											To Remain	Type		Total length (ft)	Type									Total Length (ft)	9	ARIZ.	060-B-NFA	165
			Remarks	Remarks	Remarks	Remarks	Remarks				Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks	Remarks				
T-05.12	R22	W1-7	X							TWO-DIRECTION LARGE ARROW	48	24	8.0	RWM	6080005																				
T-05.12	R23	R1-1	X							STOP	30	30	6.3	RWM	6080005																				
T-05.12	W13	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12																	
T-05.12	E15	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12																	
T-05.12	R24	R8-3	X							NO PARKING	18	18	2.3	RWM	6080005																				
T-05.13	M10	R1-1	X	X			12			STOP	30	30	6.3	RWM	6080005	1	2 1/2T	13	1																
	+	W4-4aP	X							TRAFFIC FROM LEFT DOES NOT STOP	24	12	2.0	RWM	6080005																				
T-05.13	R25	R8-3	X							NO PARKING	18	18	2.3	RWM	6080005																				
	+	R8-3	X							NO PARKING	18	18	2.3	RWM	6080005																				
T-05.13	R26	R1-1	X							STOP	30	30	6.3	RWM	6080005																				
	+	W4-4bP	X							ONCOMING TRAFFIC DOES NOT STOP	24	12	2.0	RWM	6080005																				
T-05.13	E16	R4-11	X				7			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12																	
T-05.13	R27	R1-1	X							STOP	30	30	6.3	RWM	6080005																				
	+	W4-4aP	X							TRAFFIC FROM RIGHT DOES NOT STOP	24	12	2.0	RWM	6080005																				
T-05.13	W14	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2S	12																	
T-05.14	R28	W1-7	X							TWO DIRECTION LARGE ARROW	48	24	8.0	RWM	6080005																				
Notes:			Panel Types:							Post Types:					Colors:			Stringer Types:																	
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DESIGN: DCL DRAWN: WWS CHECKED: TJC										ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES										SIGNING SUMMARY SHEET															
ROUTE: US 60					LOCATION: GRAND AVENUE FRONTAGE ROAD					TRACS NO. H8874 01C					DWG NO. T-04.09					OF															

DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS FINISHED PLANS SURVEY NO.

Plan Sht No.	Sign Number	Sign Code	Work					Offset (ft)	Mounting Height (ft)	Background Color	Panel					Ground Mounted					Overhead		Remarks
			New	Existing							Width (in.)	Height (in.)	Area (sq. ft.)	Type	Bid Item Number	Foundations	Posts		Stringer		Structure Type	Number of Lights	
				Replace Panel	Relocate Panel	Relocate Str.	Remove										To Remain	Type	Total length (ft)	New Slipbases			
T-05.14	R29	RI-1	X							STOP	30	30	6.3	RWM	6080005								
T-05.14	E17	R4-11	X				11			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2T	13	1				
	+	R3-9cP	X							END	30	12	2.5	RWM	6080005								
T-05.14	W15	R4-11	X				2			MAY USE FULL LANE	30	30	6.3	RWM	6080005	1	2 1/2T	13	1				
	+	R3-9cP	X							BEGIN	30	12	2.5	RWM	6080005								

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	060-B-NFA	166	232	
060 MA 144					

Notes:

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 W10x22: Breakaway

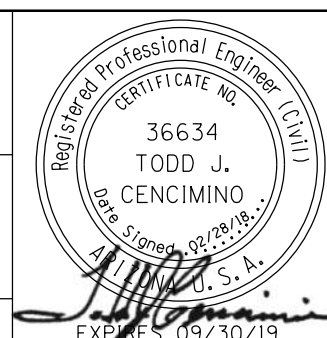
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 RD: RED
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P: Square-tube post T: T-section (WT 3x6)

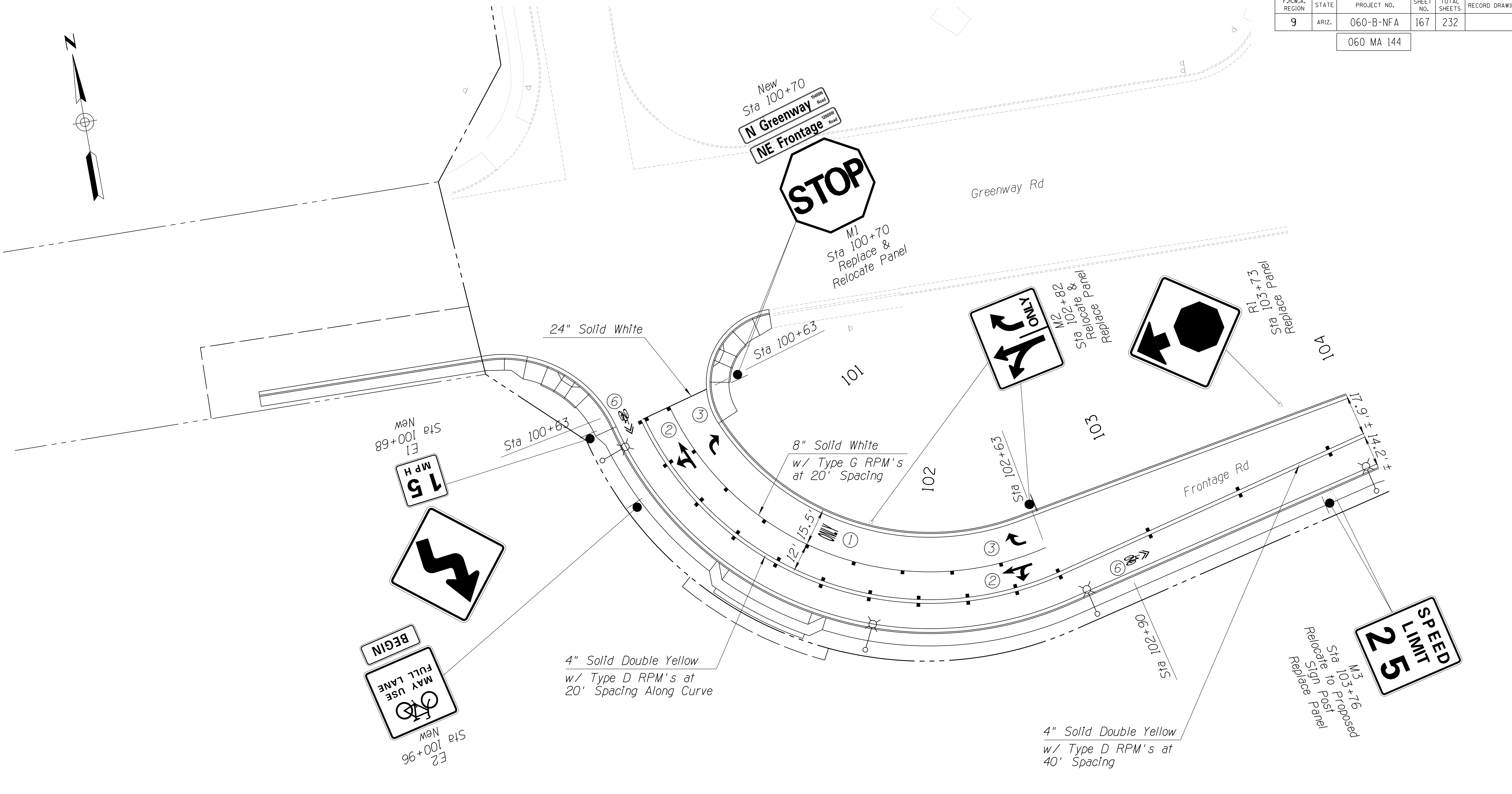
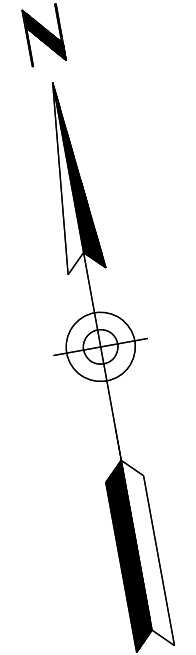
DESIGN	DCL	10/17	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	WWS	10/17	
CHECKED	TJC	10/17	
BURGESS & NIPLE			SIGNING SUMMARY SHEET
ROUTE	LOCATION		GRAND AVENUE FRONTAGE ROAD TRACS NO. H8874 01C
US 60			
DWG NO.			T-04.10



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	167	232	

060 MA 144

SURVEY NO. _____ DATE _____ REVISIONS- FINISHED PLANS- LOCATION- DATE-



Construction Notes:

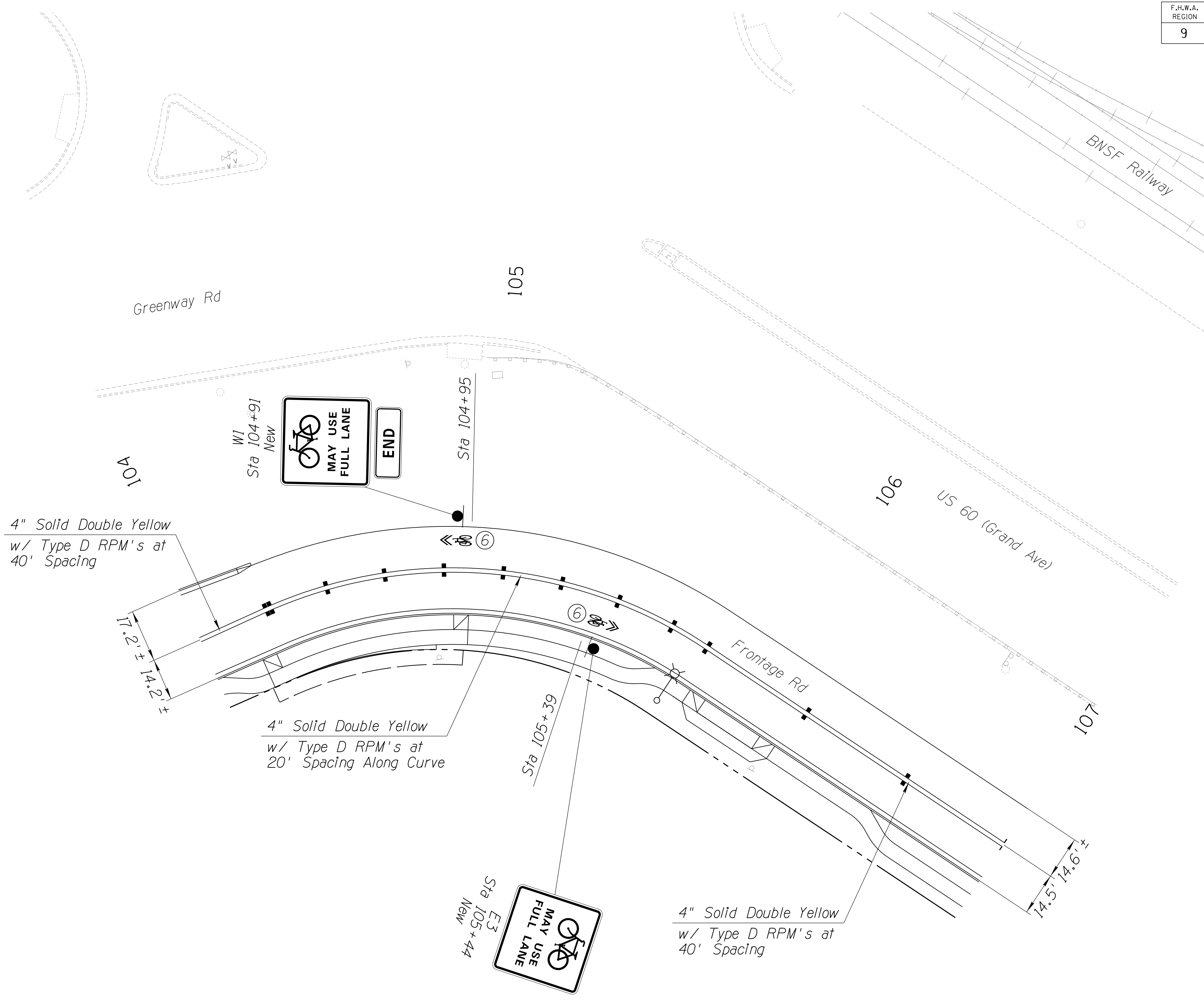
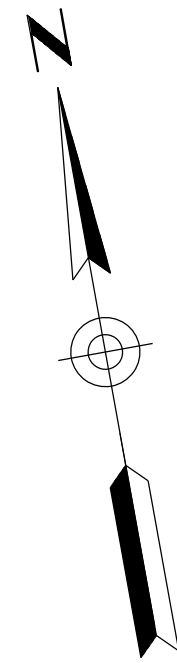
- ① Only Symbol per ADOT Std Dwg M-11.
- ② Thru and Left Turn Lane Arrow per ADOT Std Dwg M-11.
- ③ Right Turn Lane Arrow per ADOT Std Dwg M-11.

All stations are referenced to Frontage Rd Cst ℓ .

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE <small>1500 S. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			SIGNING & MARKING PLAN BEGIN PROJECT TO STA. 104+00	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			DWG NO. T-05.01 OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	168	232	

060 MA 144



Construction Notes:

- ⑥ Shared Lane Marking, see pavement marking detail.

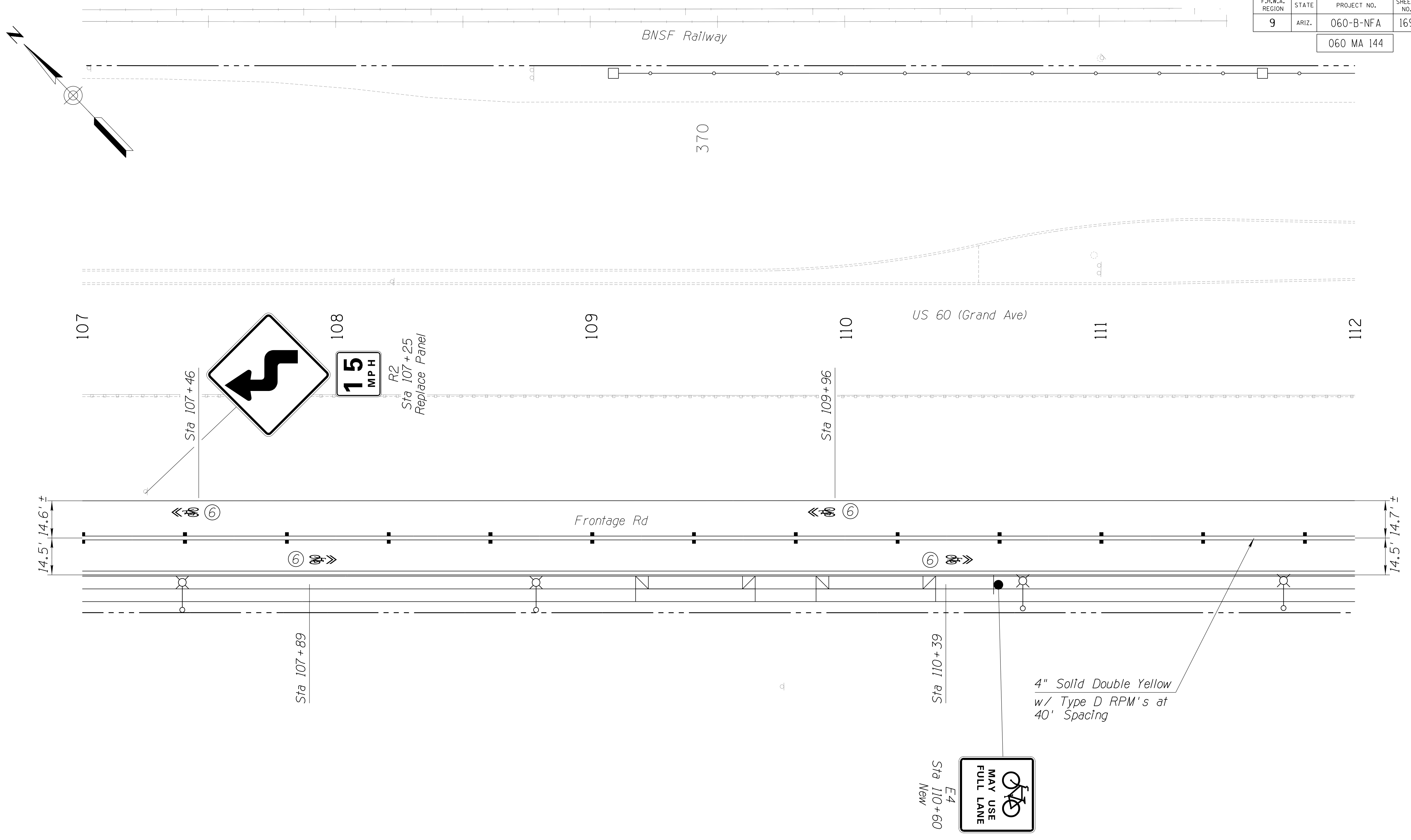
All stations are referenced to Frontage Rd Cst ☿.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 104+00 TO STA. 107+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.02
TRACS NO. H8874 01C				OF

SURVEY NO. | FINISHED PLANS | REVISIONS | DATE | LOCATION | FINISHED PLANS | REVISIONS | DATE | SURVEY NO. | FINISHED PLANS | REVISIONS | DATE | LOCATION | FINISHED PLANS | REVISIONS | DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	169	232	

060 MA 144



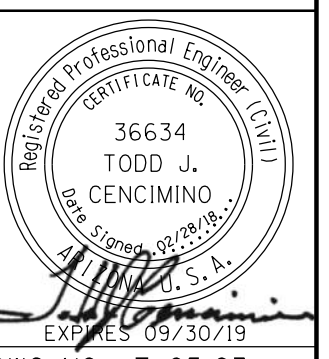
Construction Notes:

⑥ Shared Lane Marking, see pavement marking detail.

All stations are referenced to Frontage Rd Cst \pm .

4" Solid Double Yellow
w/ Type D RPM's at
40' Spacing

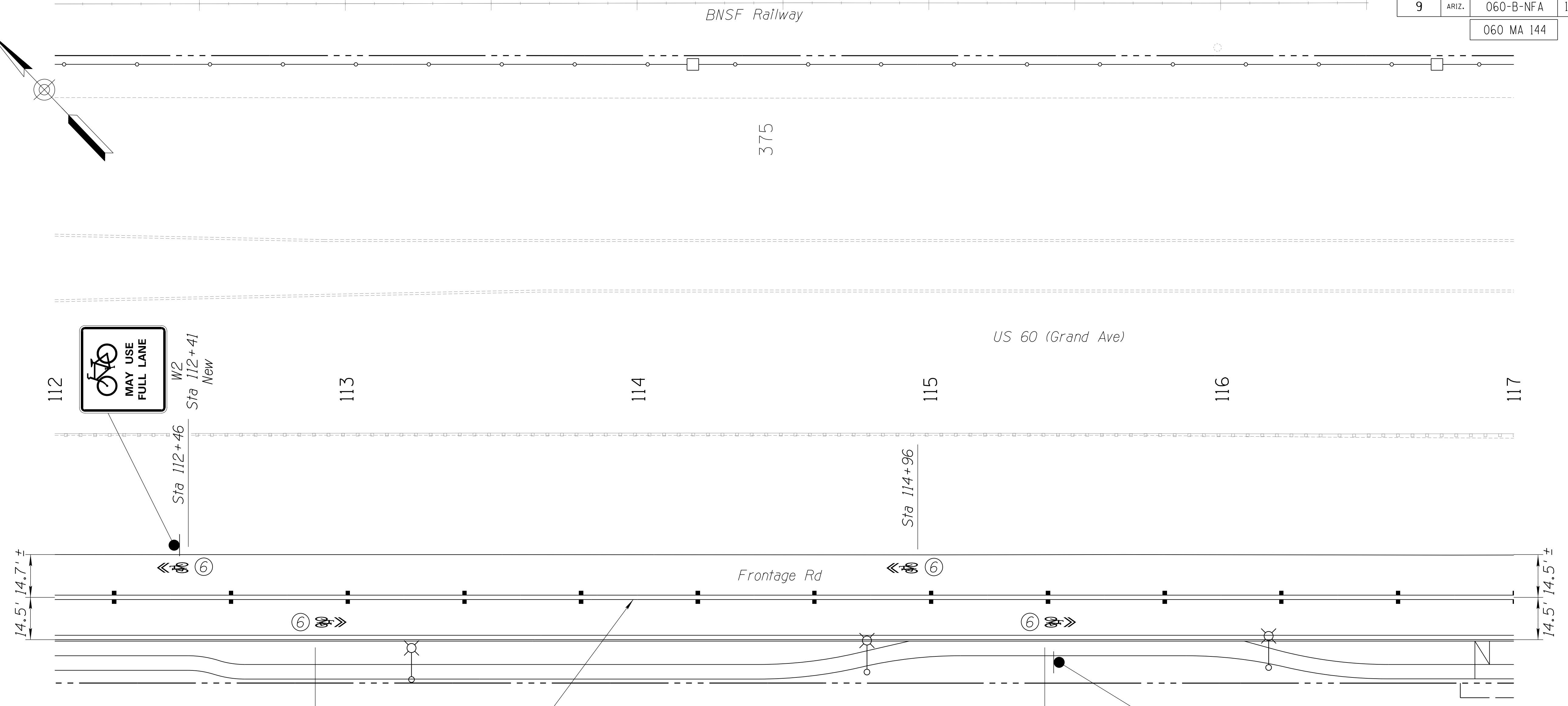
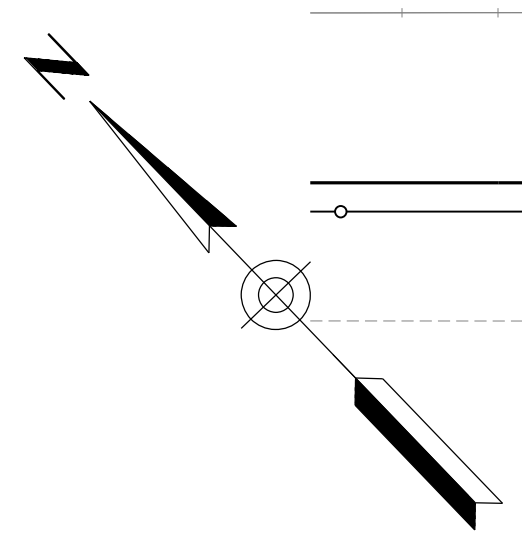
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	WWS	02/18	
CHECKED	TJC	02/18	
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			SIGNING & MARKING PLANS STA. 107+00 TO STA. 112+00
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
TRACS NO. H8874 01C			DWG NO. T-05.03



DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	170	232	

060 MA 144



4" Solid Double Yellow
w/ Type D RPM's at
40' Spacing

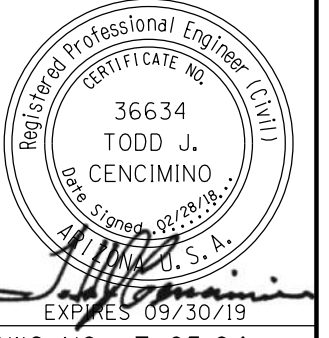


Construction Notes:

⑥ Shared Lane Marking, see pavement marking detail.

All stations are referenced to Frontage Rd Cst \perp .

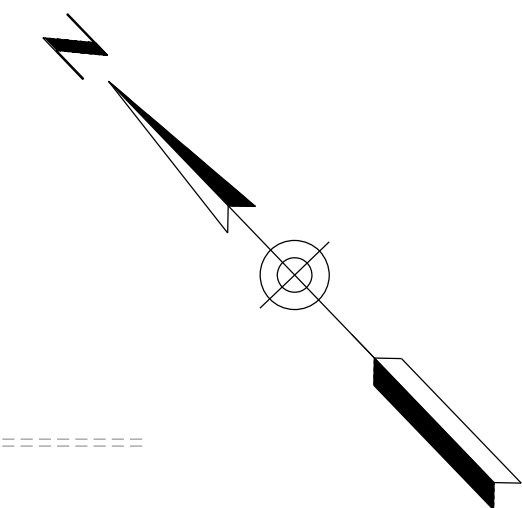
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	WWS	02/18	
CHECKED	TJC	02/18	
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			SIGNING & MARKING PLANS STA. 112+00 TO STA. 117+00
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
TRACS NO. H8874 01C			DWG NO. T-05.04



DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

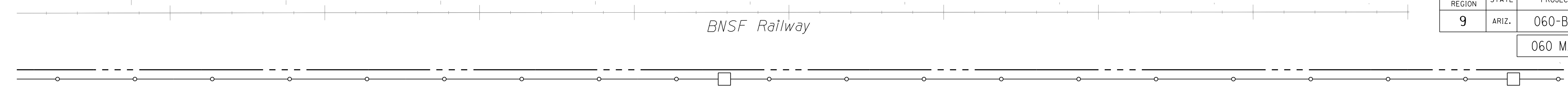
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	171	232	

060 MA 144



SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO.

Acoma Dr →



BNSF Railway

380

*Sta 378+21
E6
New

US 60 (Grand Ave)

117

119

120

122

W3
Sta 117+41
New

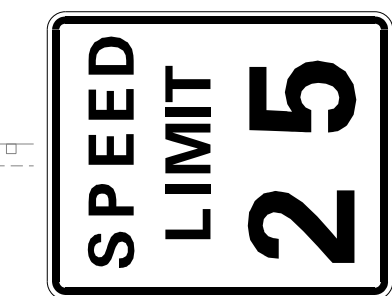


Sta 117+46

4" Solid Double Yellow
w/ Type D RPM's at
40' Spacing

Sta 119+96

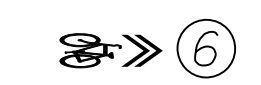
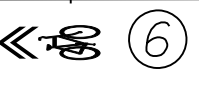
Sta 120+68



R3
Sta 121+42
Replace Panel

8" Solid White
w/ Type G RPM's
at 20' Spacing

14.5' 14.5' ±



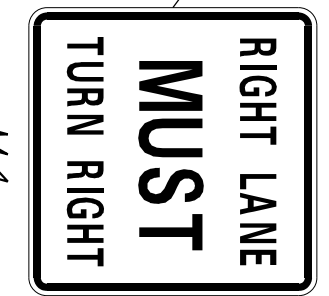
Frontage Rd



± 14.7' 12.5' 12' 14.7'

Sta 117+89

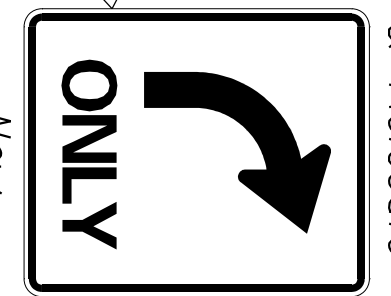
M4
Sta 119+22
Replace Panel



R4
Sta 121+27
Replace Panel

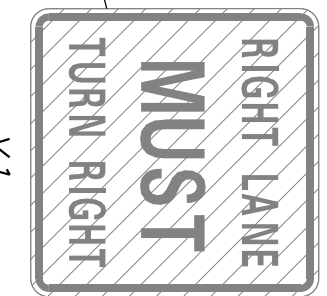


New
Sta 120+68



R5
Sta 120+68
Replace Panel
& Relocate

X1
Sta 121+94
Remove



Construction Notes:

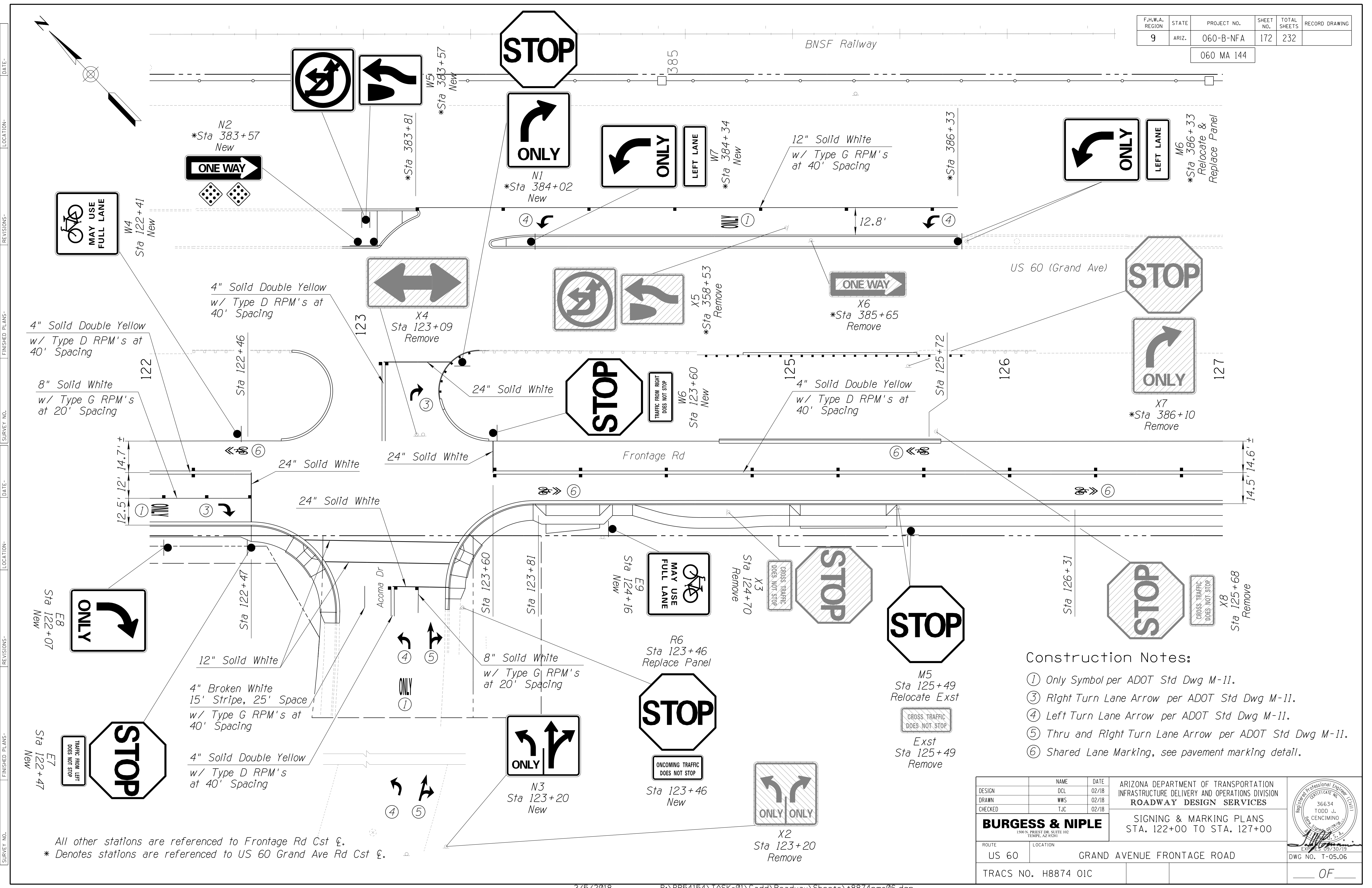
- ③ Right Turn Lane Arrow per ADOT Std Dwg M-11.
- ⑥ Shared Lane Marking, see pavement marking detail.

All stations are referenced to Frontage Rd Cst ξ .
 * Denotes stations referenced to US 60 Grand Ave Rd Cst ξ .

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 117+00 TO STA. 122+00	
ROUTE	LOCATION	GRAND AVENUE FRONTAGE ROAD		
US 60		GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C				DWG NO. T-05.05
				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	172	232	

060 MA 144



Construction Notes:

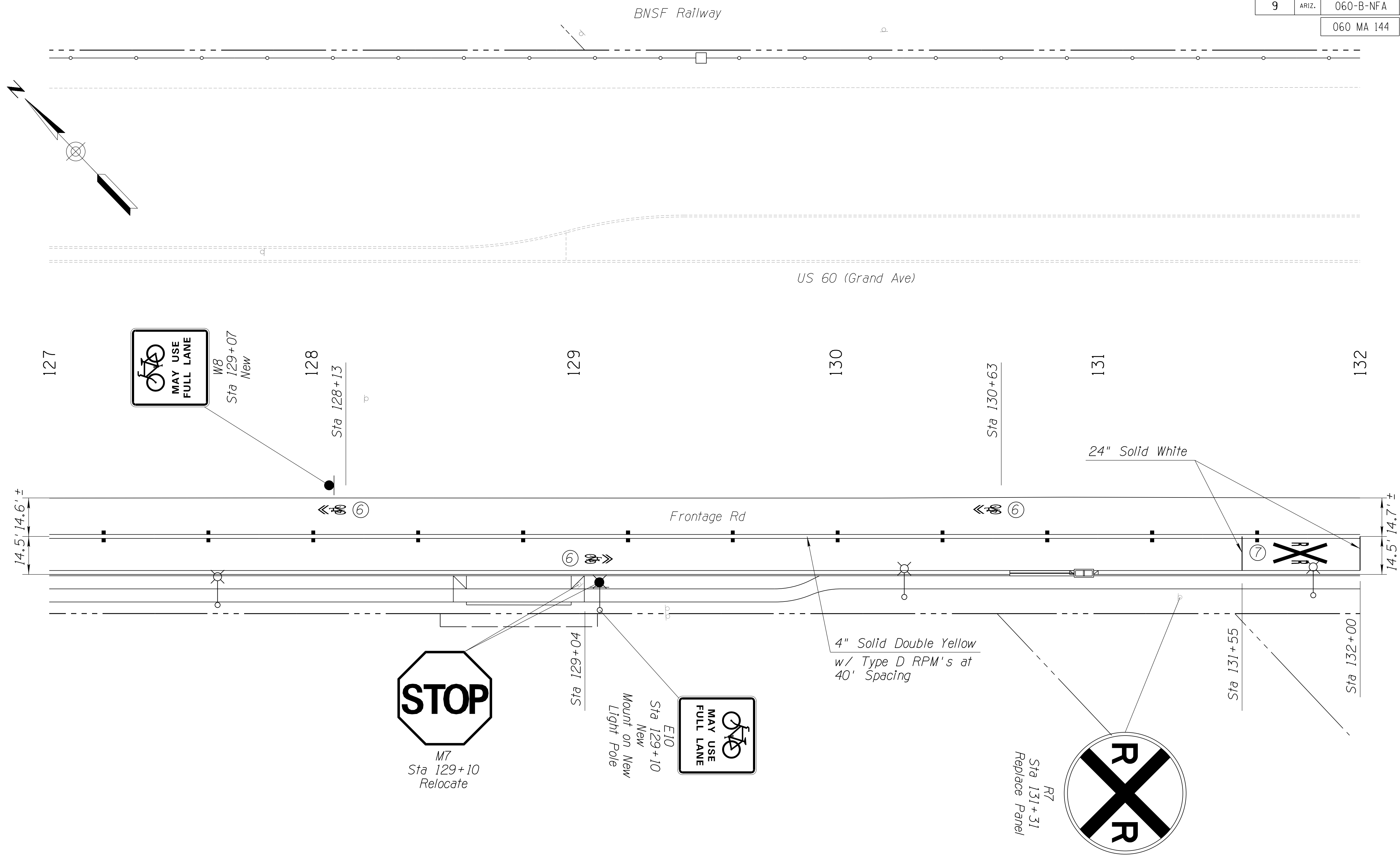
- ① Only Symbol per ADOT Std Dwg M-11.
- ③ Right Turn Lane Arrow per ADOT Std Dwg M-11.
- ④ Left Turn Lane Arrow per ADOT Std Dwg M-11.
- ⑤ Thru and Right Turn Lane Arrow per ADOT Std Dwg M-11.
- ⑥ Shared Lane Marking, see pavement marking detail.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES		
DRAWN	WWS	02/18			
CHECKED	TJC	02/18			
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			SIGNING & MARKING PLANS STA. 122+00 TO STA. 127+00		
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			DWG NO. T-05.06		

All other stations are referenced to Frontage Rd Cst ξ .
 * Denotes stations are referenced to US 60 Grand Ave Rd Cst ξ .

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	173	232	

060 MA 144

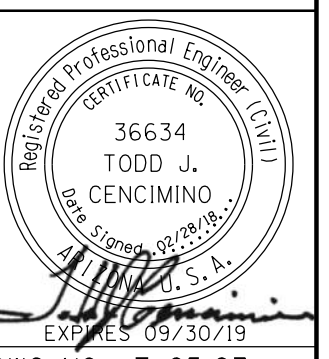


Construction Notes:

- ⑥ Shared Lane Marking, see pavement marking detail.
- ⑦ Railroad Crossing Marking per ADOT Std Dwg M-5.

All stations are referenced to Frontage Rd Cst ℓ .

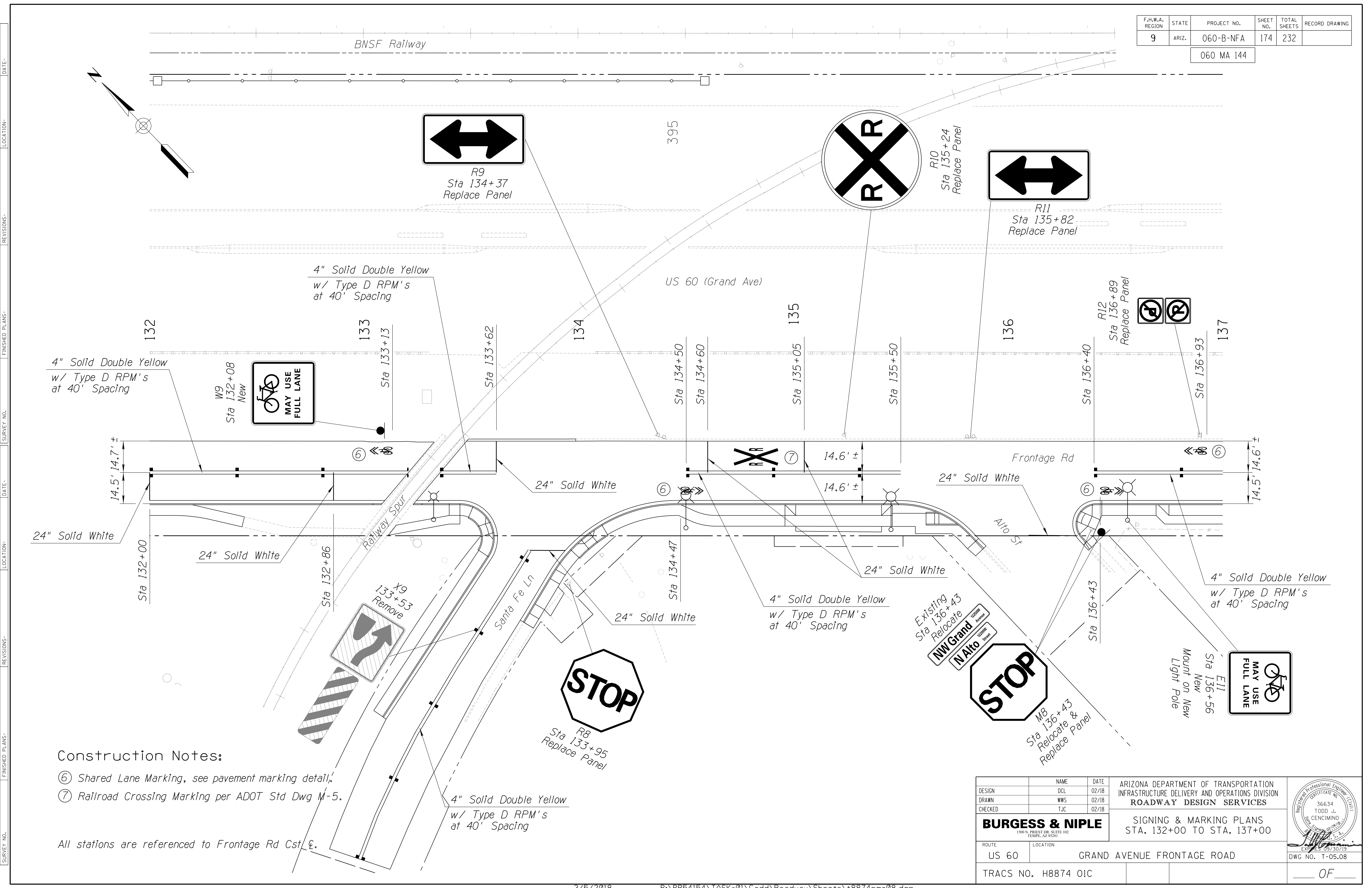
DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES
DRAWN	WWS	02/18	
CHECKED	TJC	02/18	
BURGESS & NIPLE <small>1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281</small>			SIGNING & MARKING PLANS STA. 127+00 TO STA. 132+00
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
TRACS NO. H8874 01C			DWG NO. T-05.07



SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	174	232	

060 MA 144



Construction Notes:

- ⑥ Shared Lane Marking, see pavement marking detail.
- ⑦ Railroad Crossing Marking per ADOT Std Dwg M-5.

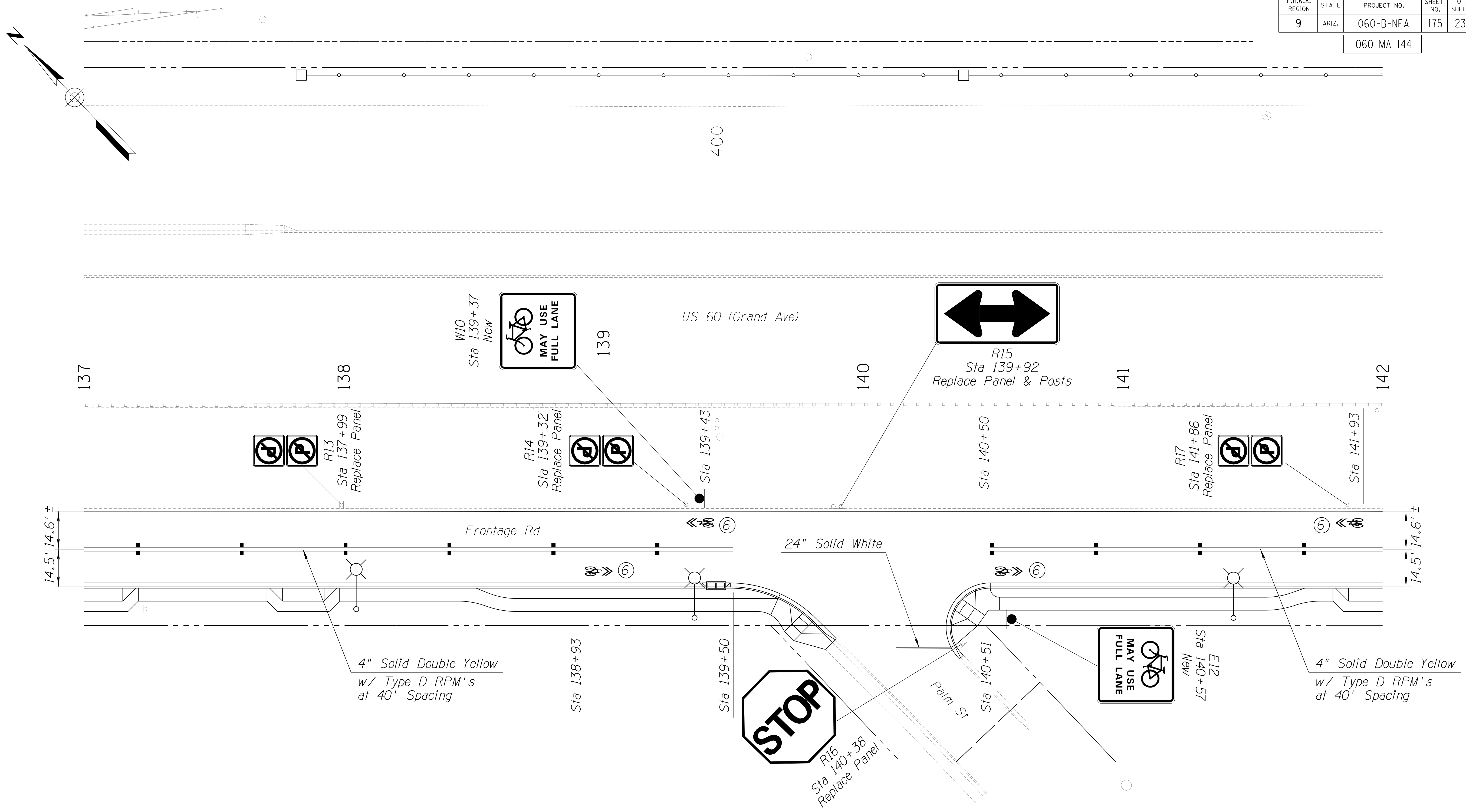
All stations are referenced to Frontage Rd Cst. &.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 132+00 TO STA. 137+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.08
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	175	232	

060 MA 144



Construction Notes:

⑥ Shared Lane Marking, see pavement marking detail.

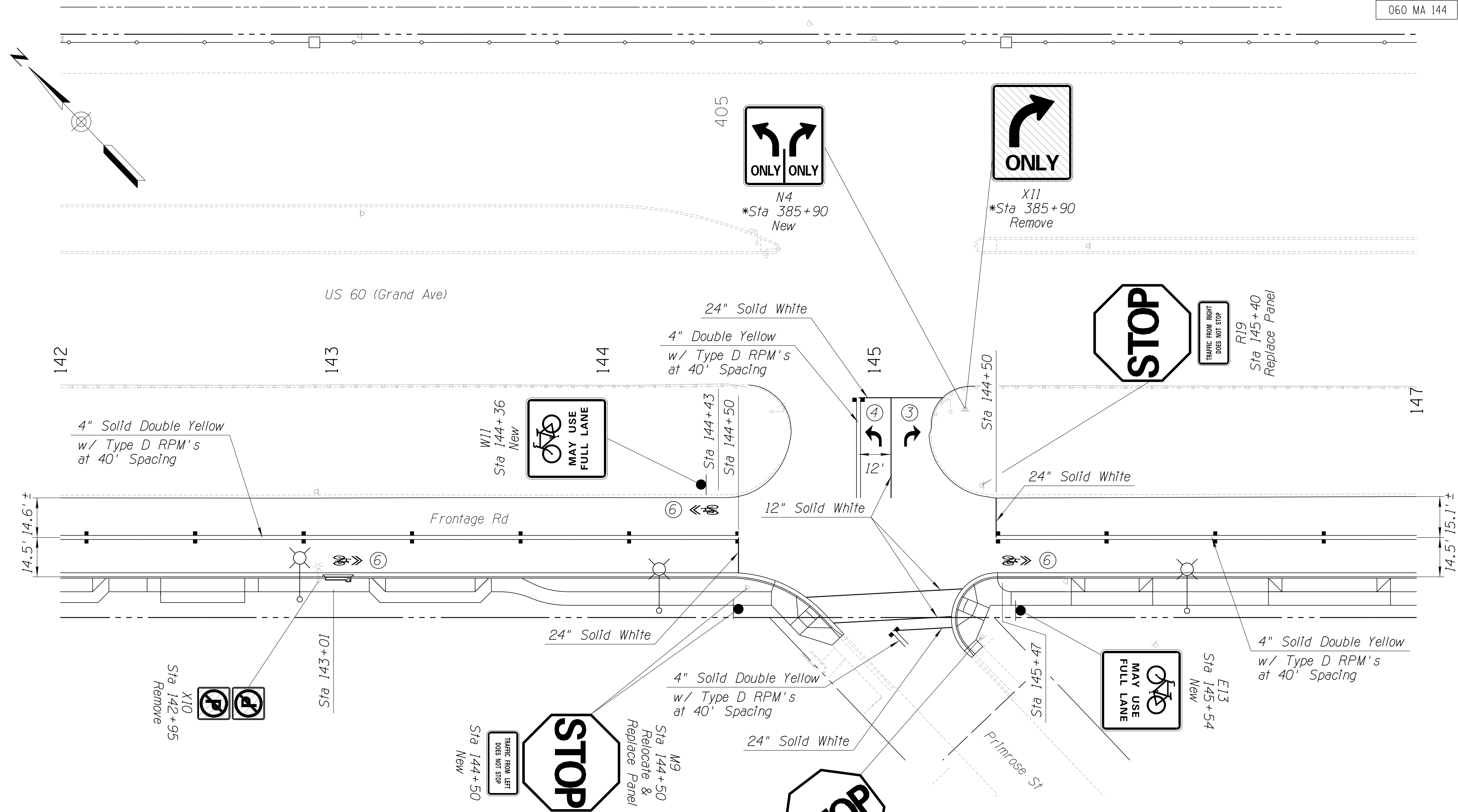
All stations are referenced to Frontage Rd Cst &.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 137+00 TO STA. 142+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.09
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	176	232	

060 MA 144



Construction Notes:

- ③ Right Turn Lane Arrow per ADOT Std Dwg M-11.
- ④ Left Turn Lane Arrow per ADOT Std Dwg M-11.
- ⑥ Shared Lane Marking, see pavement marking detail.

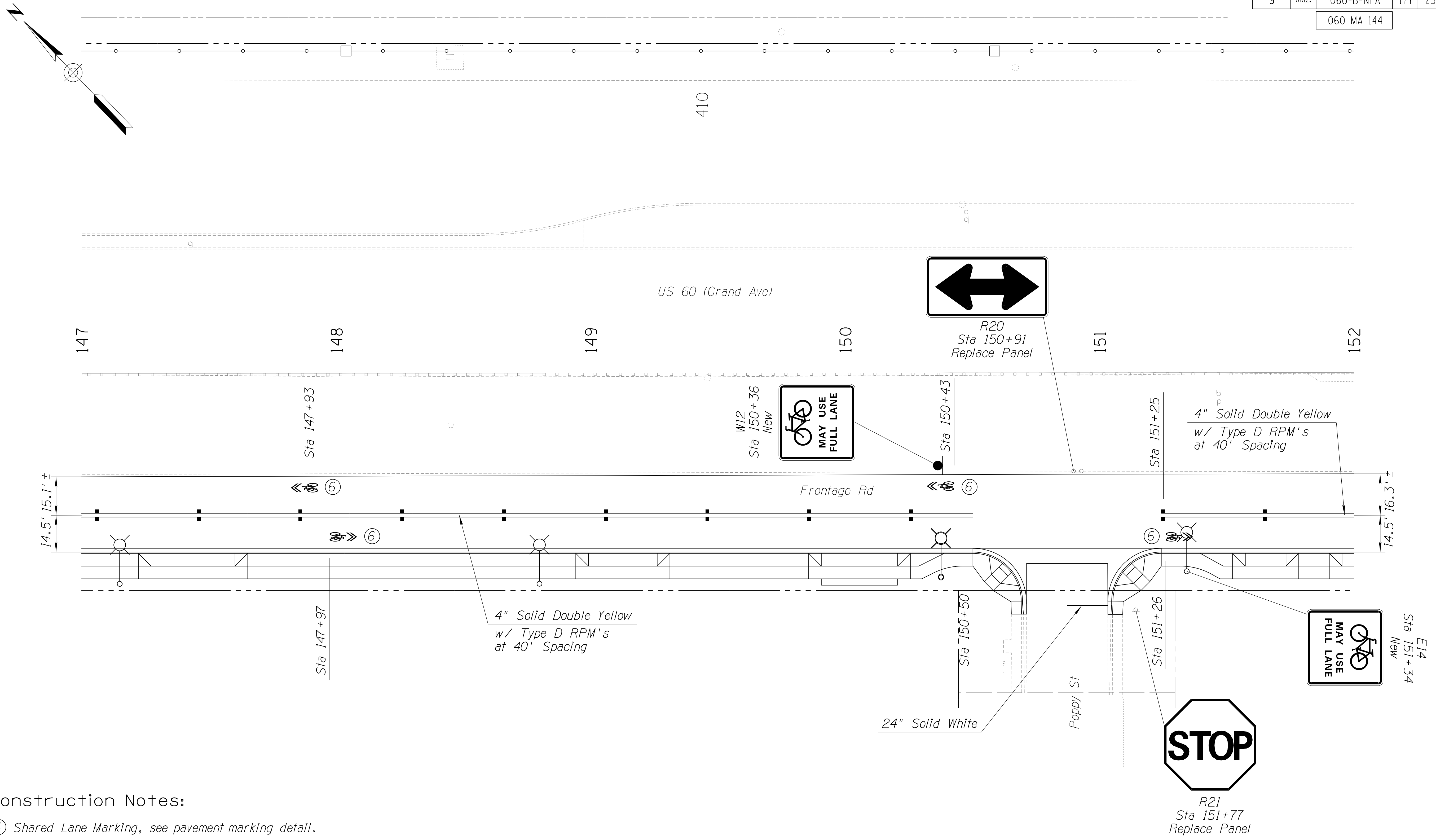
All other stations are referenced to Frontage Rd Cst &.
 * Denotes stations are referenced to US 60 Grand Ave Rd Cst &.

STOP
 R18
 Sta 145+40
 Replace Panel
TRAFFIC EXITING GRAND AVE DOES NOT STOP
 Existing
 Sta 145+40
 Remove
ONCOMING TRAFFIC DOES NOT STOP
 Sta 145+40
 New

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 142+00 TO STA. 147+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.10
TRACS NO. H8874 01C				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	177	232	

060 MA 144



Construction Notes:

⑥ Shared Lane Marking, see pavement marking detail.

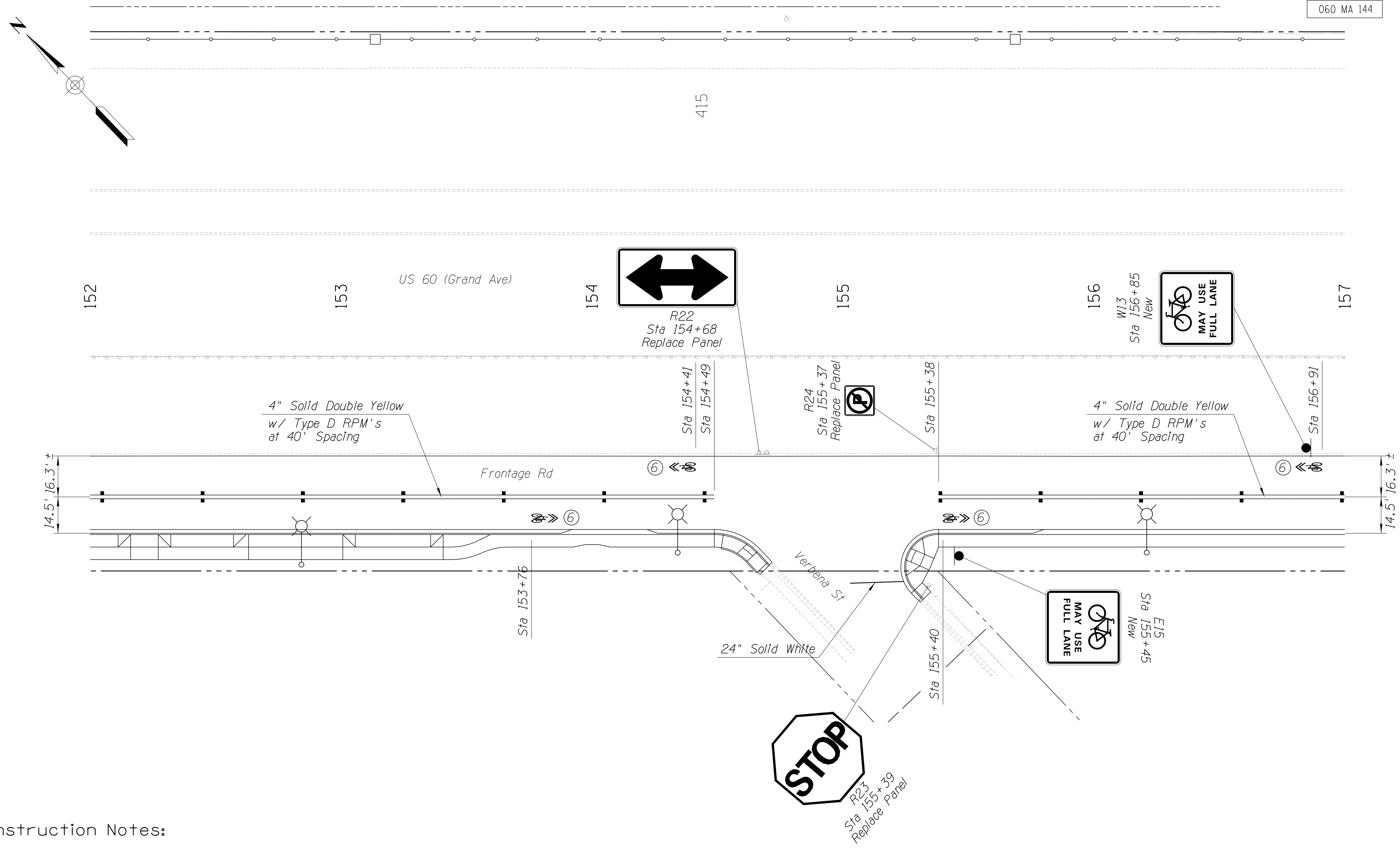
All stations are referenced to Frontage Rd Cst ℓ .

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 147+00 TO STA. 152+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.11
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	178	232	

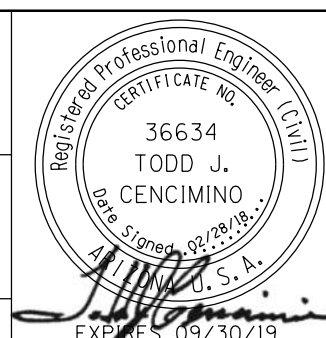
060 MA 144



Construction Notes:

⑥ Shared Lane Marking, see pavement marking detail.

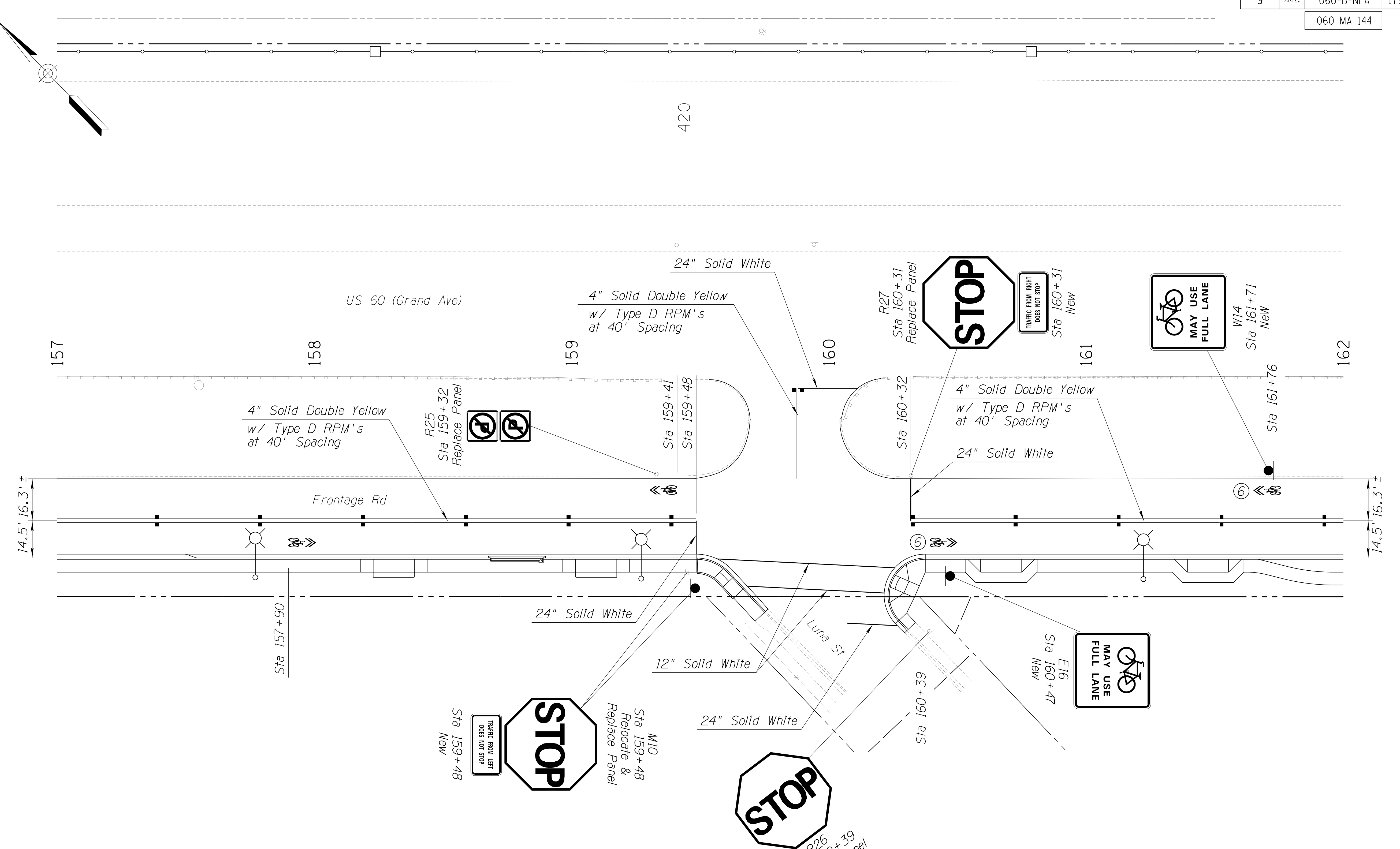
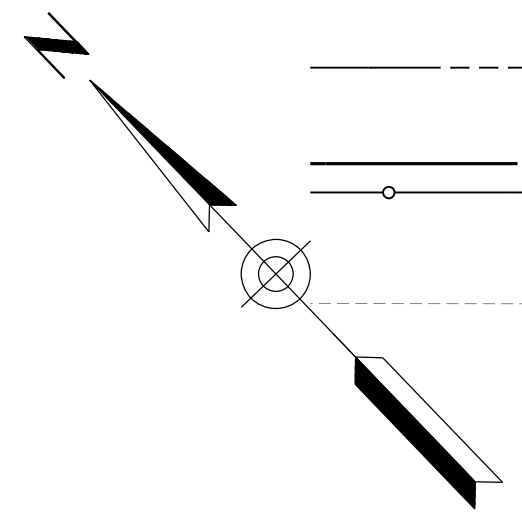
All stations are referenced to Frontage Rd Cst &.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 152+00 TO STA. 157+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.12
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	179	232	

060 MA 144



Construction Notes:

⑥ Shared Lane Marking, see pavement marking detail.

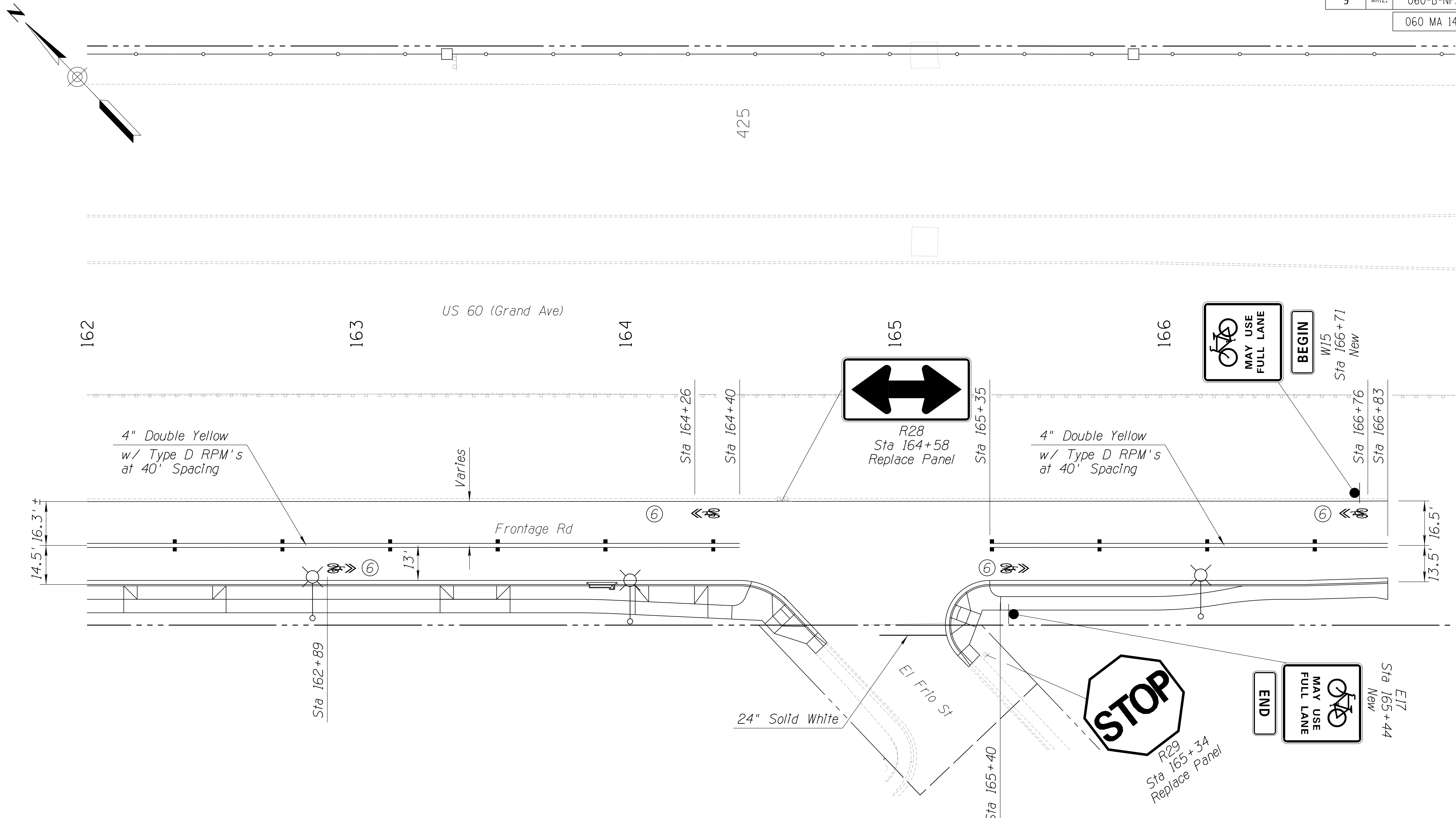
All stations are referenced to Frontage Rd Cst ☐.

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 157+00 TO STA. 162+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.13
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS REVISIONS DATE LOCATION DATE FINISHED PLANS REVISIONS DATE LOCATION DATE FINISHED PLANS REVISIONS DATE SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	180	232	

060 MA 144



Construction Notes:

- ⑥ Shared Lane Marking, see pavement marking detail.

All stations are referenced to Frontage Rd Cst \perp .

DESIGN	DCL	02/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SERVICES	
DRAWN	WWS	02/18		
CHECKED	TJC	02/18		
BURGESS & NIPLE 1500 N. PRIEST DR. SUITE 102 TEMPE, AZ 85281			SIGNING & MARKING PLANS STA. 162+00 TO STA. 167+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	DWG NO. T-05.14
TRACS NO. H8874 01C				OF

SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS DATE FINISHED PLANS SURVEY NO. DATE LOCATION REVISIONS DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	181	232	

060 MA 144

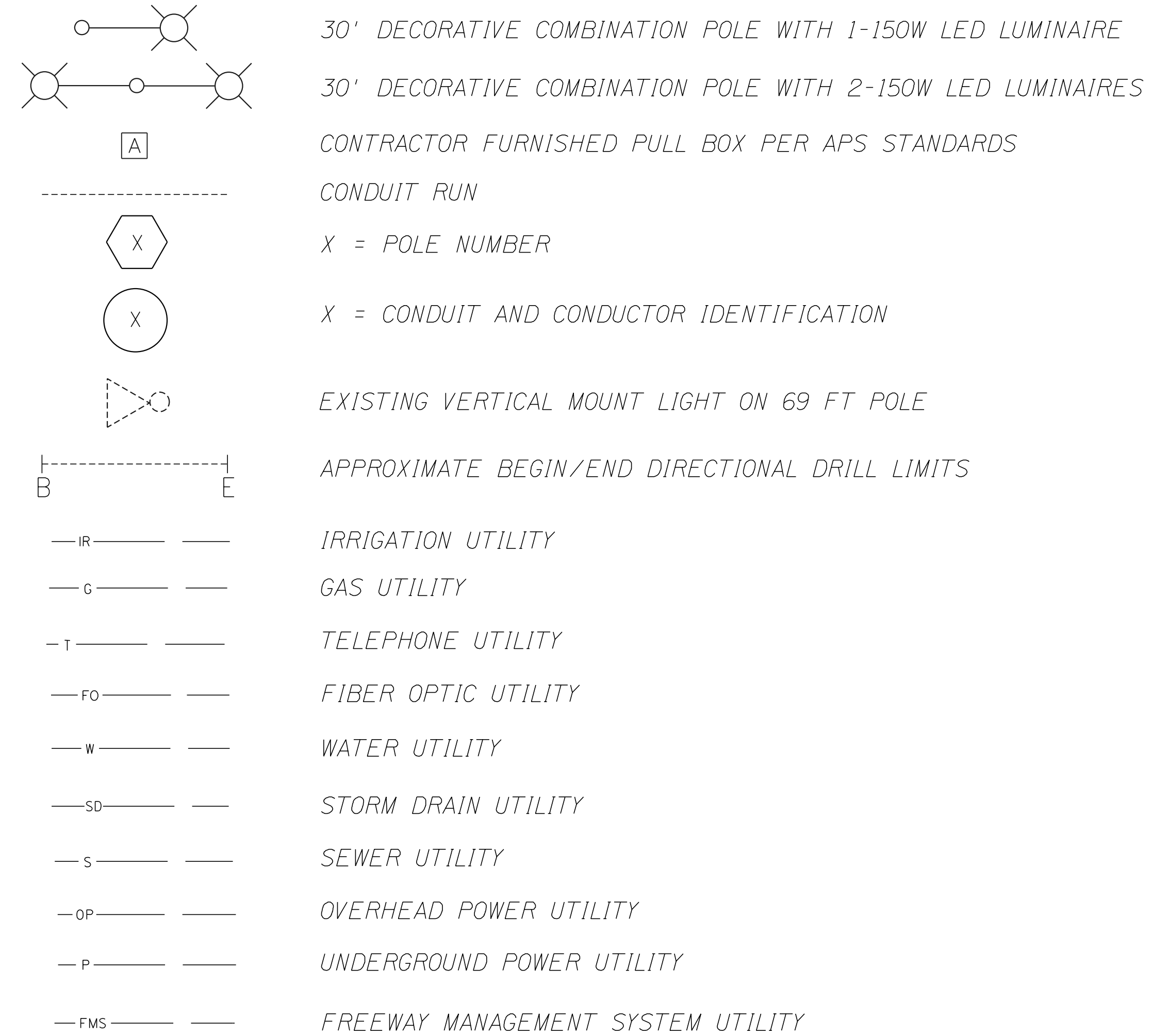
LIGHTING CONSTRUCTION NOTES:

- 1 LIGHTING CONDUIT SHALL BE AT A MINIMUM DEPTH OF 36 INCHES BELOW FINISHED GRADE PER ITS STANDARD DRAWING FM-1.01. CONDUITS SHALL BE INSTALLED WITHIN THE ROW.
- 2 CONTRACTOR SHALL INSTALL A CONTRACTOR FURNISHED NO. 5 PULL BOX PER APS STANDARDS ADJACENT TO EACH POLE.
- 3 CONDUIT SHALL BE INSTALLED BY DIRECTIONAL DRILL WHERE INDICATED.
- 4 EXISTING LIGHT POLE. PROTECT IN PLACE.
- 5 CONTRACTOR SHALL INSTALL POLE, LUMINAIRE, CONDUIT, AND PULL BOX WITHIN CITY RIGHT OF WAY. TYPICAL ALL NEW POLES.
- 6 REMOVE EXISTING DIRECT BURY POLE, MAST ARM, LUMINAIRE. SALVAGE TO APS. REFER TO GENERAL NOTES DRAWING NO. T-05.02.
- 7 LAST POLE THIS PROJECT.
- 8 PROTECT EXISTING 3 INCH CONDUIT TO FACILITATE ROADWAY INSTALLATION.
- 9 INSTALL NEW POLES (NO. 41, 42, 45) AND PULL BOXES IN AREA BETWEEN SIDEWALK AND FENCE.
- 10 EXISTING INTERSECTION LIGHT TO REMAIN.
- 11 SPECIAL 3'x3'x3' CONCRETE BLOCK FOUNDATION IN LIEU OF 24" ϕ X 6 FT. POLE FOUNDATION TO AVOID CONFLICT WITH EXISTING UTILITIES.
- 12 HAND DIG TO LOCATE TELEPHONE LINE. ADJUST POLE BASE LOCATION TO AVOID CONFLICT.
- 13 HAND DIG TO LOCATE WATER AND TELEPHONE LINES. ADJUST POLE BASE LOCATION TO AVOID CONFLICT.
- 14 HAND DIG TO LOCATE WATER LINE. ADJUST POLE BASE LOCATION TO AVOID CONFLICT.
- 15 HAND DIG TO LOCATE FIBER OPTIC AND TELEPHONE LINES. ADJUST POLE BASE LOCATION TO AVOID CONFLICT.
- 16 HAND DIG TO LOCATE GAS LINE. ADJUST POLE BASE LOCATION TO AVOID CONFLICT.
- 17 NEW POLE WITH 2-150W LUMINAIRES, 180 DEGREES APART. REFER TO DETAIL A SHEET T-05-18.
- 18 HAND DIG TO LOCATE CATV LINE. ADJUST POLE BASE LOCATION TO AVOID CONFLICT.

CONDUIT AND CONDUCTOR SCHEDULE:

CONDUIT RUN NUMBERS		1	2
	CONDUIT SIZE (INCHES)	1	2.5
AWG	CONDUIT USE		
#10	LIGHTING (POLE TO PULL BOX)	2	
#6	INSULATED GREEN BOND	1	
	PROVIDED BY UTILITY COMPANY		X

LIGHTING SYMBOLS LEGEND:

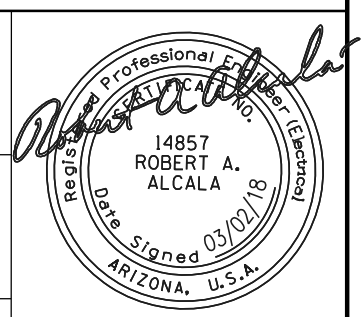


LIGHTING ABBREVIATIONS:

ADOT	ARIZONA DEPARTMENT OF TRANSPORTATION
APS	ARIZONA PUBLIC SERVICE
SRP	SALT RIVER PROJECT
CITY	CITY OF EL MIRAGE
CONST	CONSTRUCTION
DWG	DRAWING
EXST	EXISTING
FMS	FREE MANAGEMENT SYSTEM
LED	LIGHT EMITTING DIODE
NEC	NATIONAL ELECTRIC CODE
NO.	NUMBER
ROW	RIGHT OF WAY



DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES
DRAWN	SC	DATE	03/18	
CHECKED	RAA	DATE	03/18	
RAALCALA consulting electrical engineering				ROADWAY LIGHTING FRONTAGE ROAD LEGEND AND ABBREVIATIONS
PROJECT #	14007-1	ROUTE	US 60	
LOCATION	GRAND AVENUE FRONTAGE ROAD			EXPIRES 03/31/2020
TRACS NO.	H8874 01C			SHEET T-05-01
				OF



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	182	232	

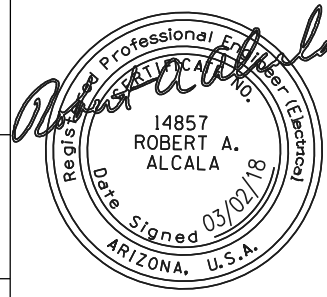
060 MA 144

Lighting General Notes:

1. All work shall conform to the Arizona Department of Transportation (ADOT) standard specifications for road and bridge construction 2008, 2012 standard drawings for traffic signals and lighting, and the special provisions including subsequent addenda prior to bid.
2. The location of utilities are approximate. The contractor shall be responsible, per section 730-6 of the ADOT standard specifications for road and bridge construction, for contacting all utilities (including blue stake center) for exact location prior to any construction activity. The contractor shall be responsible for maintaining proper clearances as required by the utility company and adhering to the requirements stipulated in permits. The contractor shall coordinate all conduit, pull box, and foundation installations with other project trade groups.
3. The contractor shall coordinate the construction work requirements of the lighting plans with construction work requirements of the total project plan set(s). The contractor's work shall be installed in a timely and coordinated basis with the other project trade groups.
4. The plans show the general path and location of the conduit in relation to major physical features. The locations of other utilities and other secondary objects along the conduit path may not be shown in the plans but shall be identified by the contractor as the conduit route is marked just prior to the installation. The information on the drawings concerning the type and location of existing underground and overhead utilities is approximate and has not been independently verified by the engineer or the engineer's agent. The contractor shall determine the exact location of all existing utilities and shall be fully responsible for any and all damages which might result from the contractor's failure to locate and preserve any and all underground and overhead utilities.
5. The contractor shall stake all pole foundation, pull box, and conduit locations and obtain approval from the engineer prior to any excavation or trenching activities.
6. The contractor shall submit a request in writing to the ADOT resident engineer when field adjustments of the poles are necessary to avoid conflict with utilities or construction. The poles may be moved plus/minus 5 feet in any direction without adversely affecting performance requirements.
7. Top of pull boxes shall be installed at finish grade elevation(s).
8. Once installed, all luminaires shall be energized for 48 hours before final acceptance in accordance with section 732-2.03 of the ADOT standard specifications for road and bridge construction.
9. The contractor shall place warning tape in all trenches in which new conduit is placed per section 732-2.02 and 732-3.01 in the ADOT standard specifications for road and bridge construction. The cost of the warning tape and installation shall be incidental to the cost of the conduit and not paid for separately.
10. Material and equipment shall be installed in accordance with current standards and recommendations of the Nation Electrical Code, the National Electrical Safety Code, and with the local codes which apply. Where discrepancies arise between codes, the most restrictive regulation shall apply.
11. Removed or relocated poles shall have their void completely filled unless otherwise directed by the engineer. Backfill, disposal and compaction shall be incidental to the removal of the pole.
12. The contractor shall warranty all work in compliance with ADOT standard specifications section 106.13 from the date of final acceptance by the resident engineer, against defects in workmanship, failure, malfunction of material and/or equipment. This warranty shall be in writing to the City at the time of issuing final acceptance. Materials and workmanship found to be defective within this warranty period shall be replaced without cost to ADOT or the City.
13. The contractor shall contact the utility company for the location of the service drop, the inspection of the trench and the installation of the conduit. The contractor shall contact, through the engineer, Bobby Garza with APS at (602) 371-7989. Each conduit shall terminate in a pull box and/or pole foundation.
14. APS pull box shall be furnished by APS and installed by the contractor at locations as indicated in the roadway lighting plans.
15. All luminaires shall be individually fused per APS requirements.
16. All luminaires shall be marked with their lamp wattage (i.e. 150 LED). These markings shall be clearly visible from the ground.
17. The contractor shall restore all property, landscaping, paving, and driveways that are disturbed during construction to their original condition in conformance with section 107.11 of the ADOT standard specifications for road and bridge construction.
18. Prior to ordering any materials or doing any work, the contractor shall verify dimensions at the site and immediately report any discrepancies to the resident engineer. The contractor shall not proceed with any work until the resident engineer renders a decision. No extra changes or compensation will be allowed for the differences in actual dimensions and dimensions indicated on the drawings.
19. The contractor shall comply with all licensing requirements set forth by the State Registrar of Contractor's office to perform work relating to street light installation in the project right-of-way.
20. The conduit which will not have circuit wire or cable pulled into it during construction shall have detectable mule tape pull wire installed in it and the ends sealed in a utility company approved manner to keep all moisture and foreign matter out of the conduit.
21. Record drawing requirements shall consist of recording, by the contractor, any change or deviation on a set of approval plans. Record drawings shall be furnished to the inspector at the completion of the project. Final payment shall not be made until the record drawing prints are accepted by the engineer.
22. The contractor shall examine all general construction drawings and visit the construction site to become familiar with existing conditions under which they will operate.
23. The contractor shall maintain existing lighting throughout project. The contractor shall provide temporary lighting where required in order to maintain existing lighting levels during construction. Temporary lighting shall be considered incidental to light pole pay item and will not be paid for separately.
24. The contractor shall perform a ground resistance test for each installed ground rod and each pole foundation grounding coil in accordance with section 732-3.03. All tests shall be documented and submitted to the ADOT engineer for approval. The cost for this test shall be considered incidental to the light pole pay item and no additional payment shall be made for this test.
25. All new pole foundations shall be inspected by City and APS Inspector prior to placement of concrete. Placement of all steel/aluminum poles shall provide 10-foot minimum clearance from steel pole/arms/fixtures and all signal features to any electrical high voltage power lines.
26. All removed roadway lighting poles and feature, to include all electrical wiring and conductors, shall be salvaged to APS. The contractor shall transport all equipment to APS in the same condition as it was removed. The contractor shall, through the engineer, contact APS to coordinate delivery.

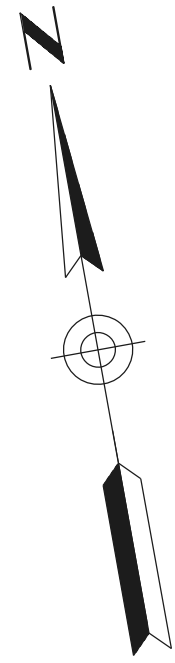
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.



DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES	
DRAWN	SC	03/18	ROADWAY LIGHTING FRONTAGE ROAD		
CHECKED	RAA	03/18	LIGHTING AND GENERAL NOTES		
PROJECT #1407-1		ROUTE		EXP. DATES	
RAALCALA & ASSOCIATES, INC. consulting electrical engineering 14857 ROBERT A. ALCALA ARIZONA U.S.A.		LOCATION		SHEET	
US 60		GRAND AVENUE FRONTAGE ROAD		T-05.02	
TRACS NO. H8874 01C				OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	183	232	

060 MA 144



PC STA 100+32.60
BEGIN PROJECT

GREENWAY ROAD

MATCH LINE STA. 104+00.00

END OF WEST SERVICE BY APS.

Frontage Rd Cst ϵ

101

101

102

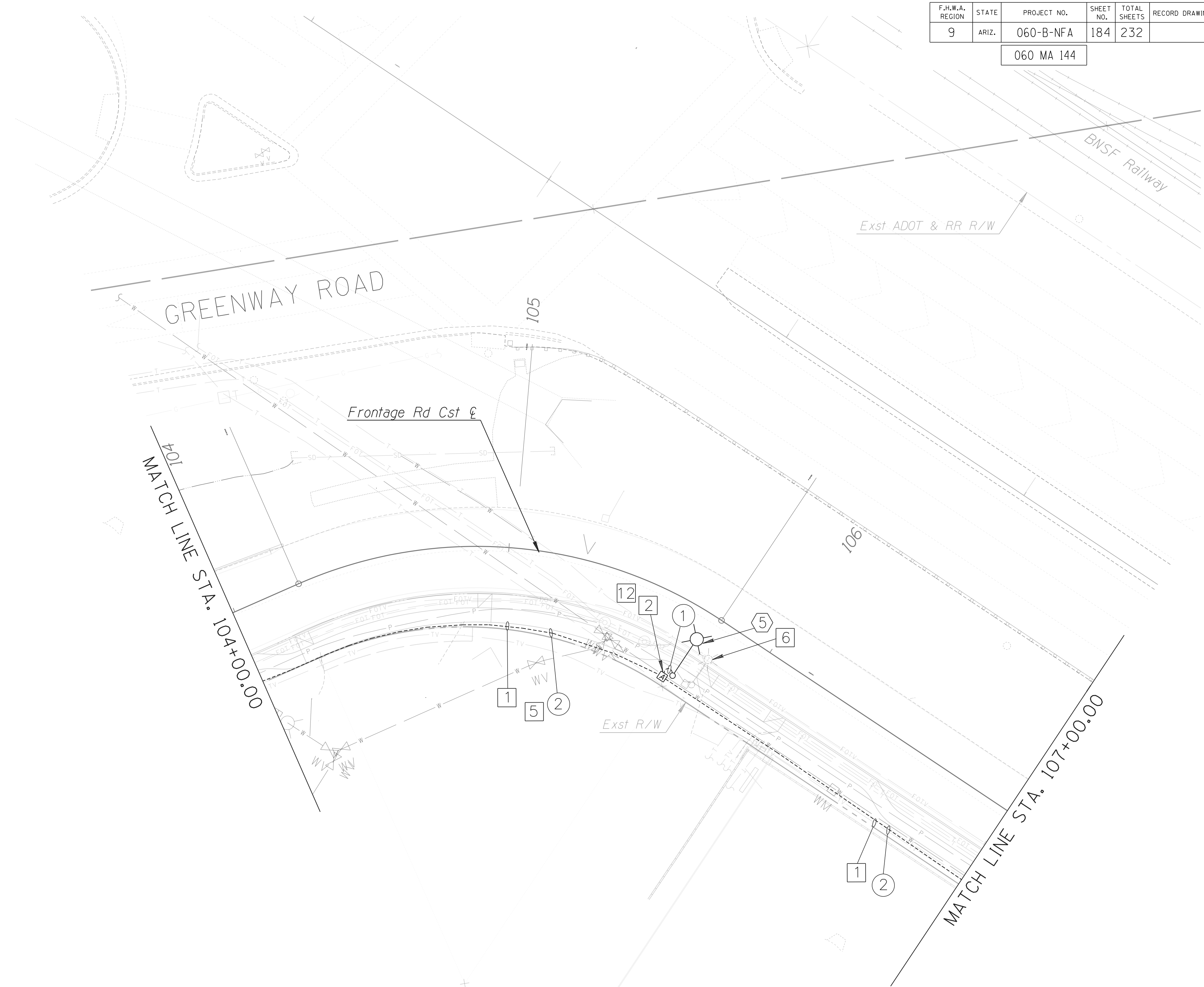
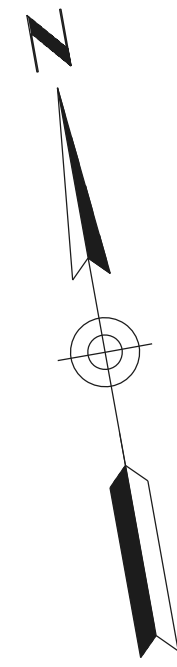
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	RAA	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD BEGIN PROJECT TO STA. 104+00	
DRAWN	SC	03/18		
CHECKED	RAA	03/18		
RAALCALA consulting electrical engineering PROJECT #14007-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD TRACS NO. H8874 01C			SHEET T-05.03 OF	

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Blue Stakes Center
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	184	232	

060 MA 144



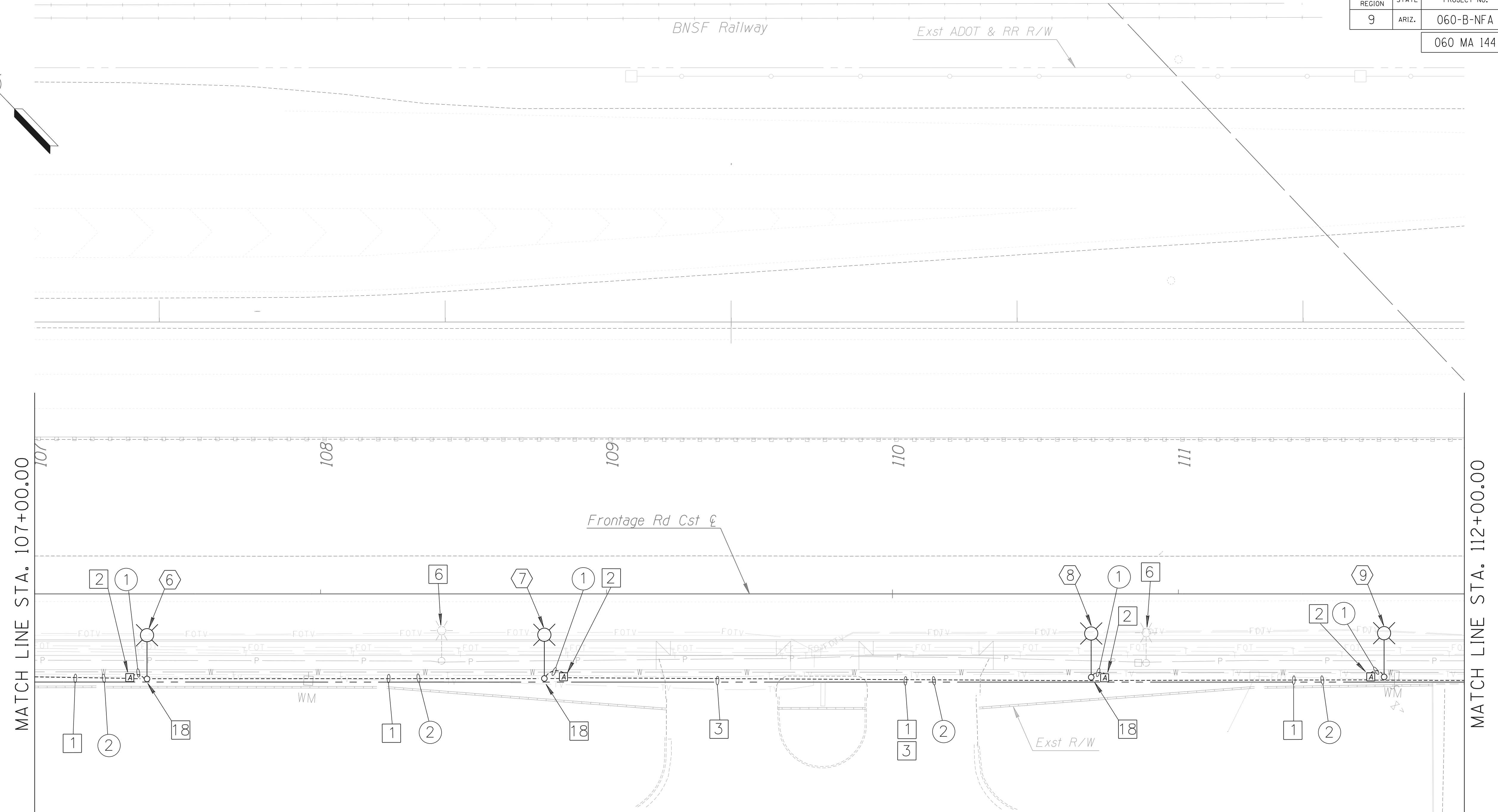
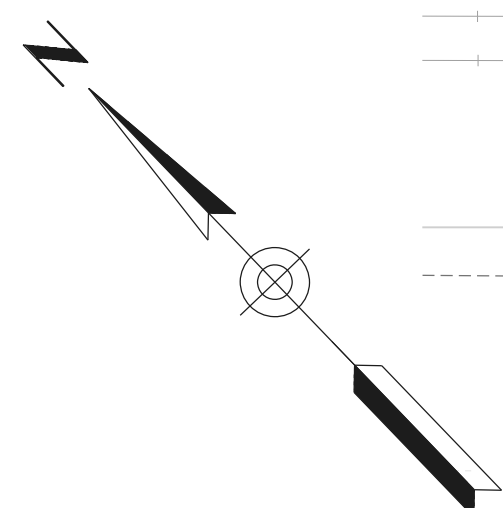
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 104+00 TO STA. 107+00	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
		PROJECT #14007-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD		SHEET T-05-04 OF	
TRACS NO. H8874 01C					

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	185	232	

060 MA 144

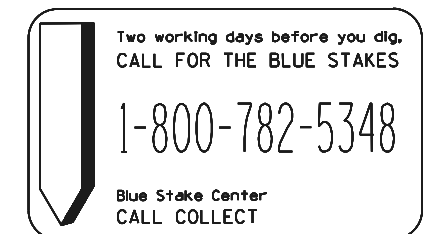


MATCH LINE STA. 107+00.00

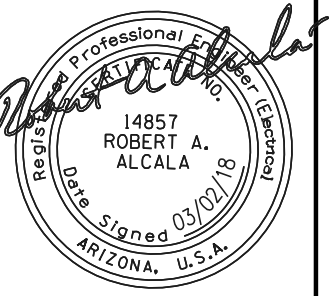
MATCH LINE STA. 112+00.00

GENERAL NOTES THIS SHEET
 A. Meander sidewalk around pole location for poles 6,7,8,9.

SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE



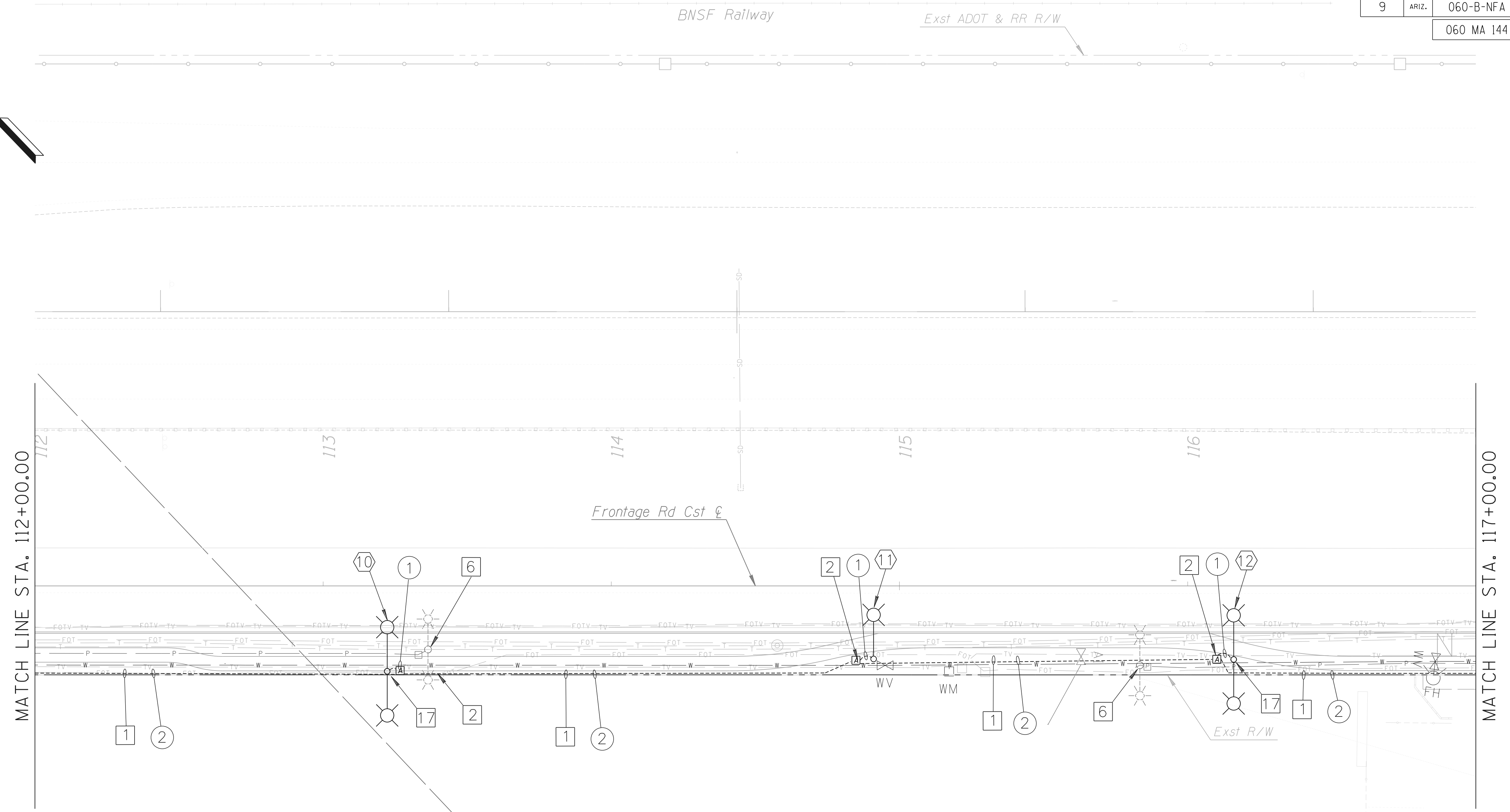
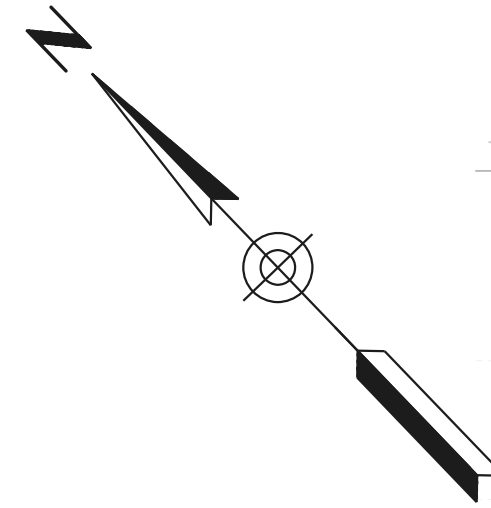
DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES
DRAWN	SC	DATE	03/18	
CHECKED	RAA	DATE	03/18	
RAALCALA consulting electrical engineering		ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 107+00 TO STA. 112+00		
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	EXPIRES 03/31/2020
TRACS NO. H8874 01C				SHEET T-05-05



OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	186	232	

060 MA 144

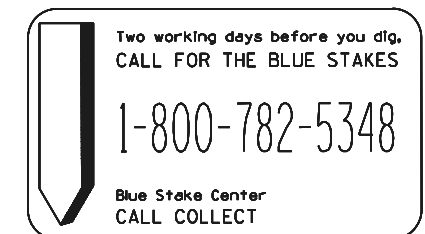


MATCH LINE STA. 112+00.00

MATCH LINE STA. 117+00.00

GENERAL NOTES THIS SHEET
 A. Meander sidewalk around pole location for poles 10,11,12.

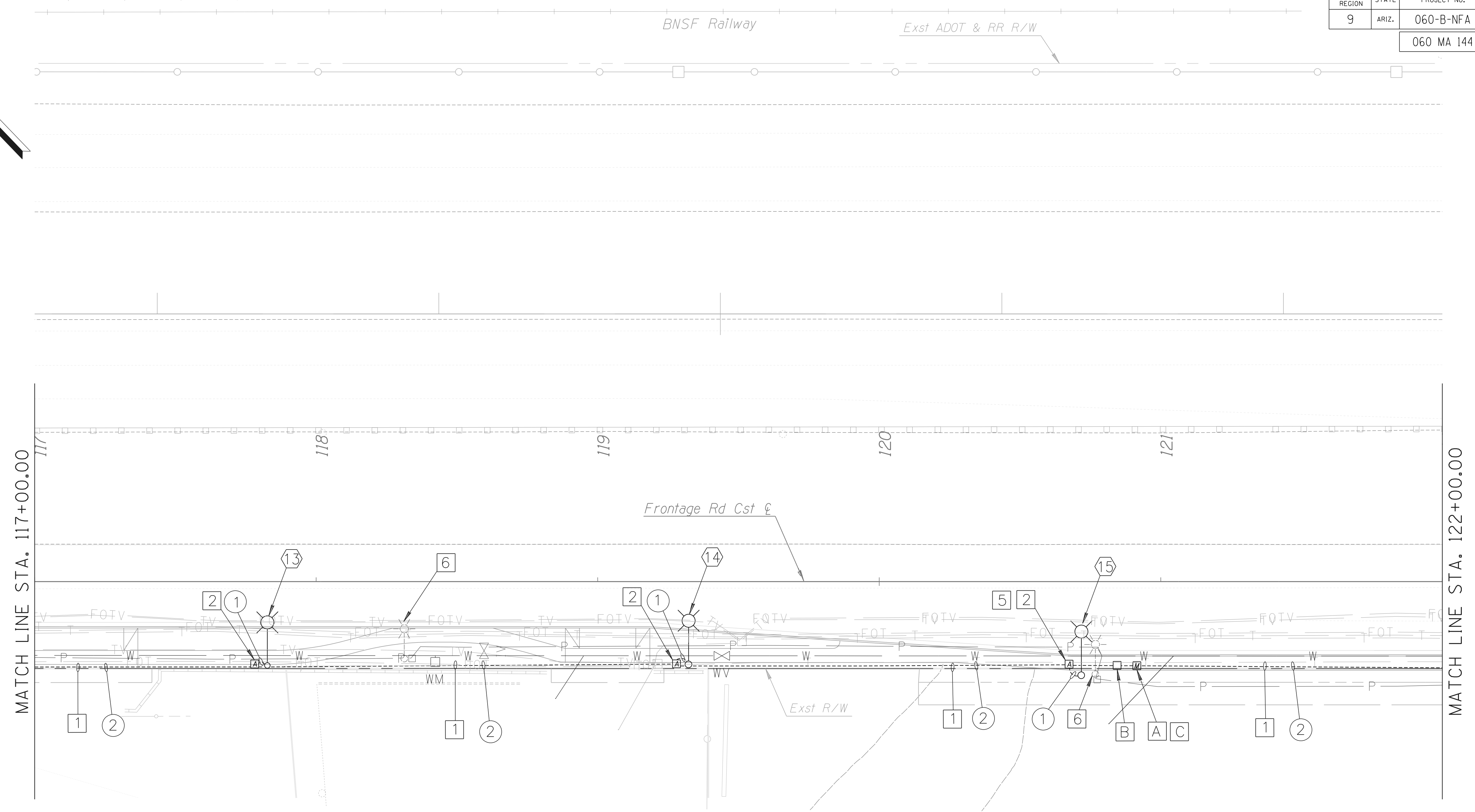
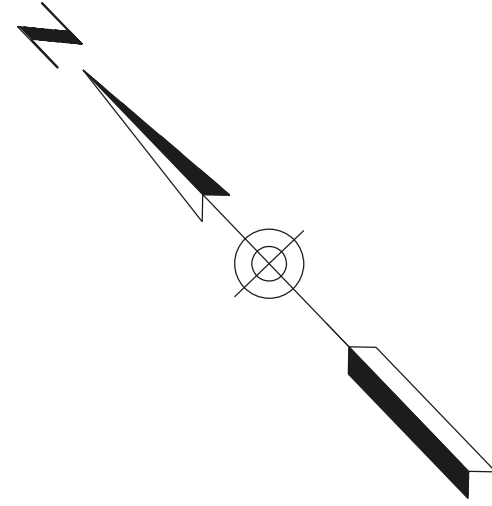
DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 112+00 TO STA. 117+00	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
		PROJECT #1407-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD		SHEET T-05-06 OF	
TRACS NO. H8874 01C					



SURVEY NO. LOCATION- FINISHED PLANS- REVISIONS- DATE- SURVEY NO. LOCATION- FINISHED PLANS- REVISIONS- DATE- SURVEY NO. LOCATION- FINISHED PLANS- REVISIONS- DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	187	232	

060 MA 144



MATCH LINE STA. 117+00.00

MATCH LINE STA. 122+00.00

GENERAL NOTES THIS SHEET

A. Meander sidewalk around pole location for poles 13,14.

KEY NOTES THIS SHEET

- A. New meter pedestal per APS requirements.
- B. New point of connection per APS requirements.
- C. Location is proposed location, contact APS for final location.

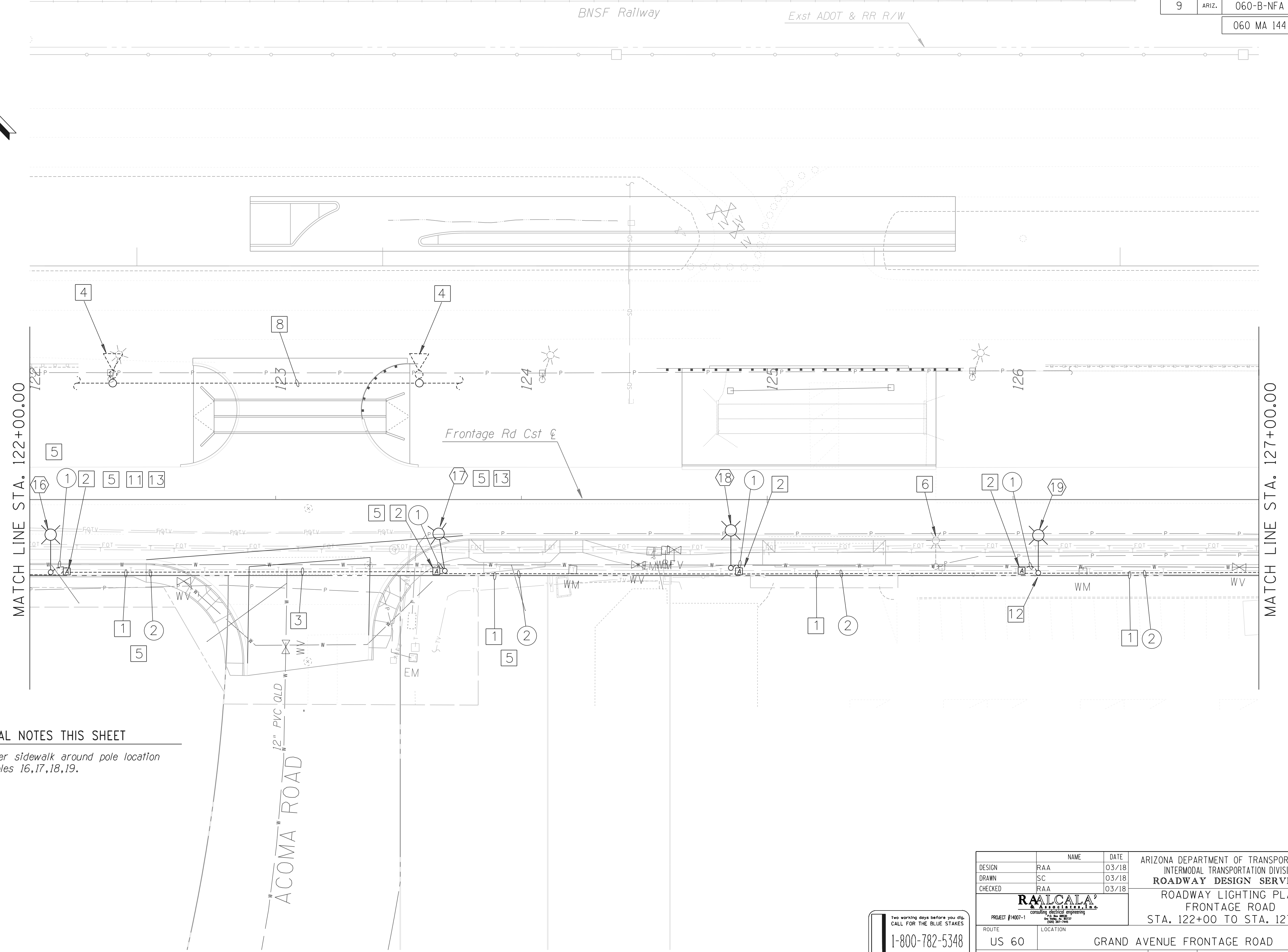
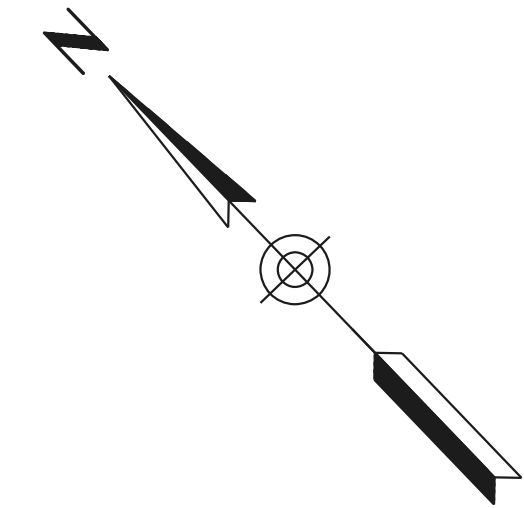
DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 117+00 TO STA. 122+00	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
		PROJECT #1407-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD		EXPIRES 03/31/2020 SHEET T-05-07	
TRACS NO. H8874 01C				OF	

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SURVEY NO. DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	188	232	

060 MA 144



GENERAL NOTES THIS SHEET

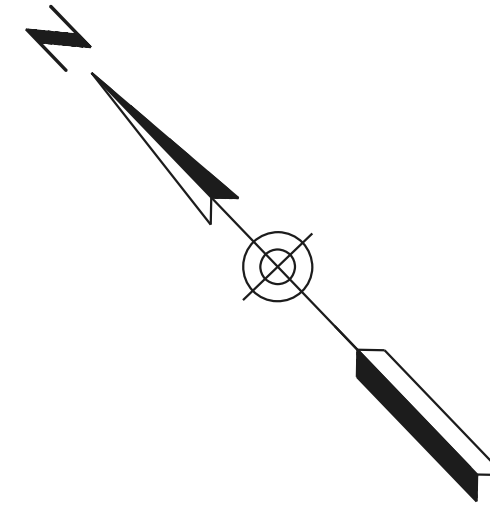
A. Meander sidewalk around pole location for poles 16,17,18,19.

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 122+00 TO STA. 127+00	
DRAWN	SC	DATE	03/18		
CHECKED	RAA	DATE	03/18		
		PROJECT #1407-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD		EXPIRES 03/31/2020 SHEET T-05-08	OF
PROJECT #1407-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD TRACS NO. H8874 01C		1-800-782-5348 Blue Stone Center CALL COLLECT			

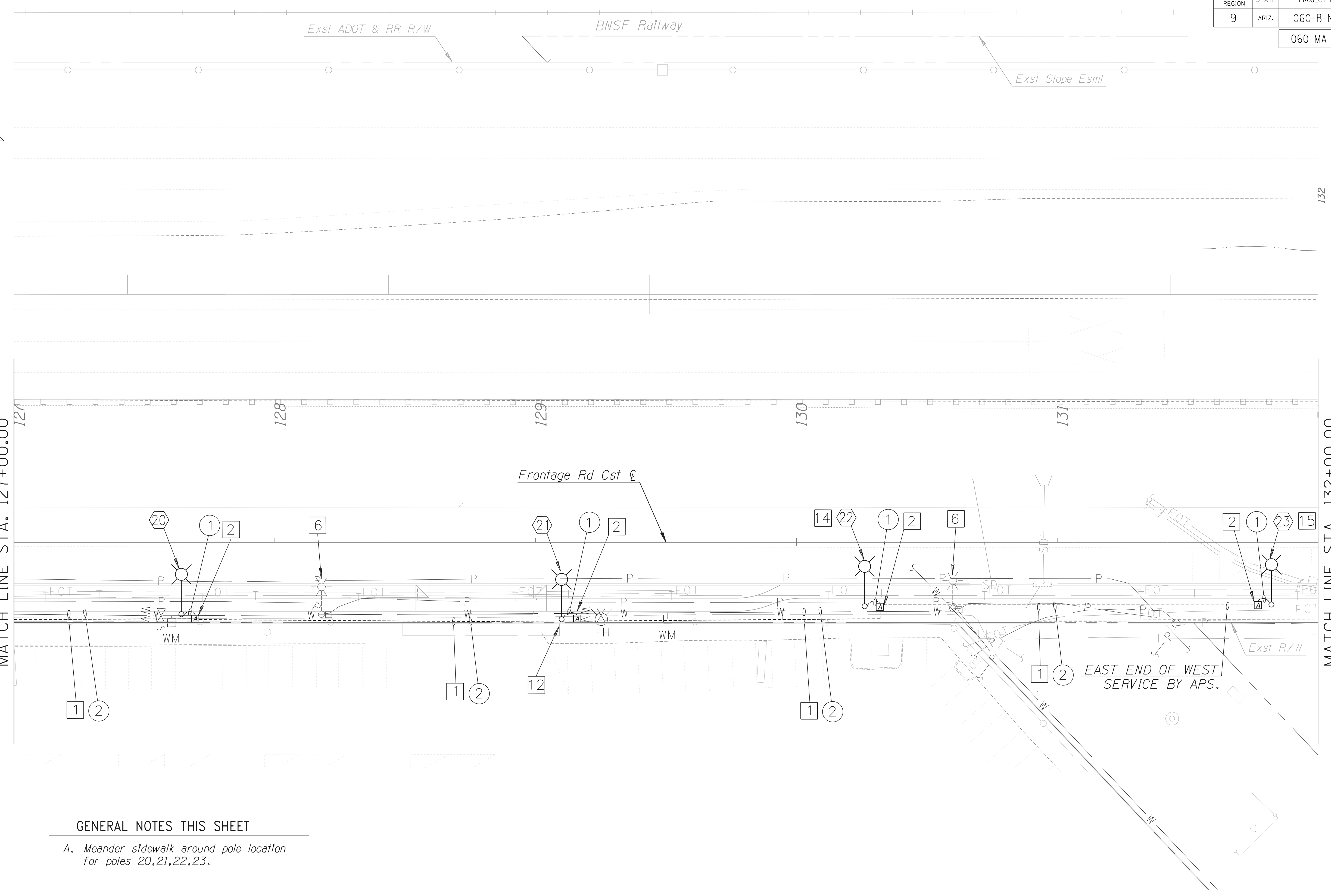
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	189	232	

060 MA 144



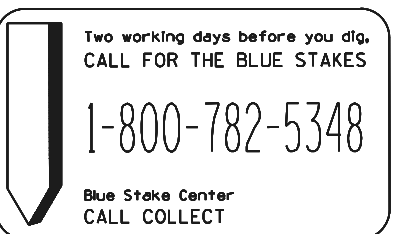
MATCH LINE STA. 127+00.00

MATCH LINE STA. 132+00.00



GENERAL NOTES THIS SHEET

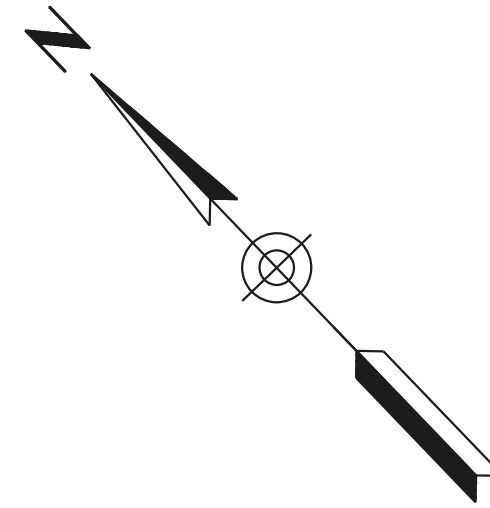
A. Meander sidewalk around pole location for poles 20,21,22,23.



DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 127+00 TO STA. 132+00	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
		TRACS NO. H8874 01C		SHEET T-05-09 OF	

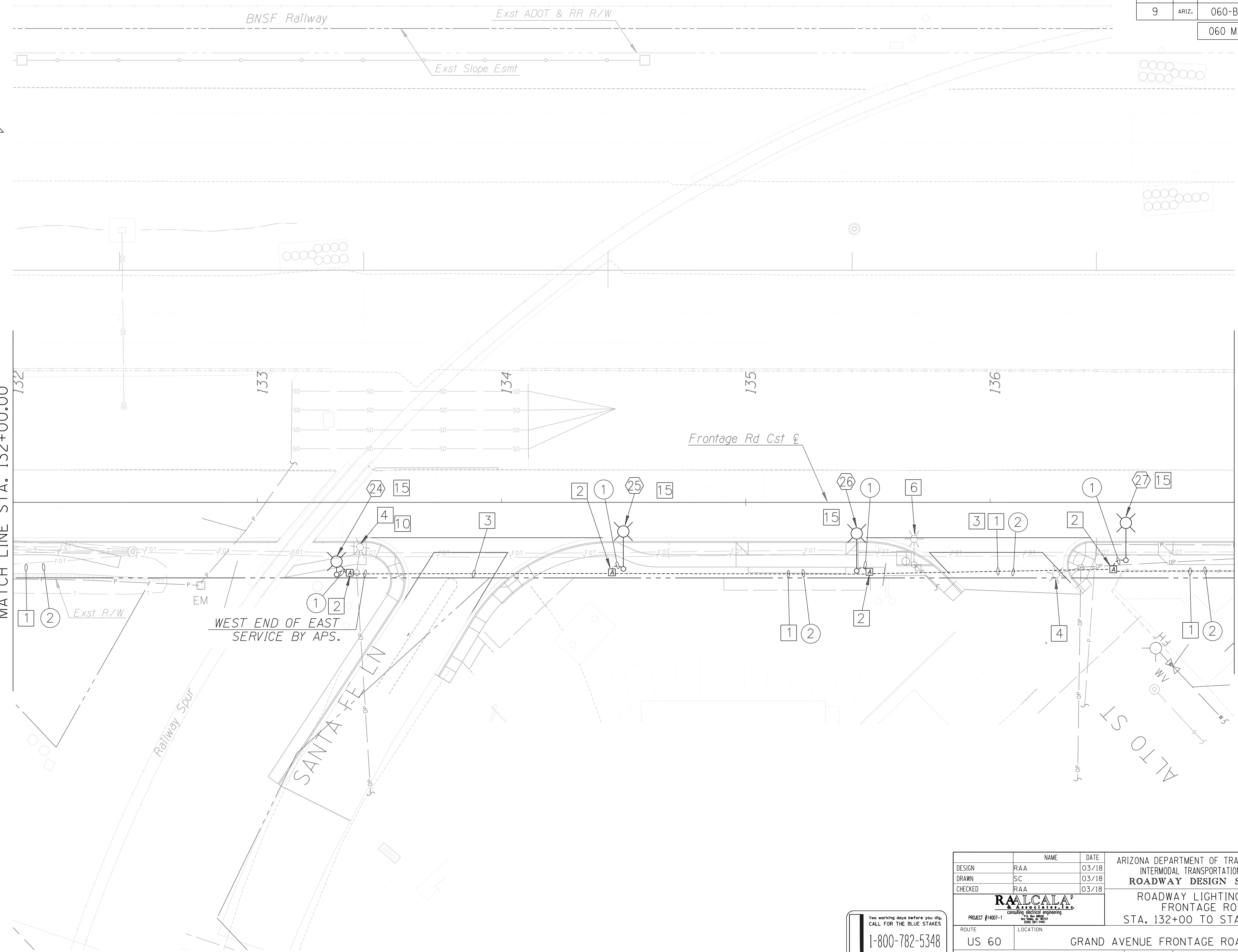
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	190	232	

060 MA 144



MATCH LINE STA. 132+00.00

MATCH LINE STA. 137+00.00



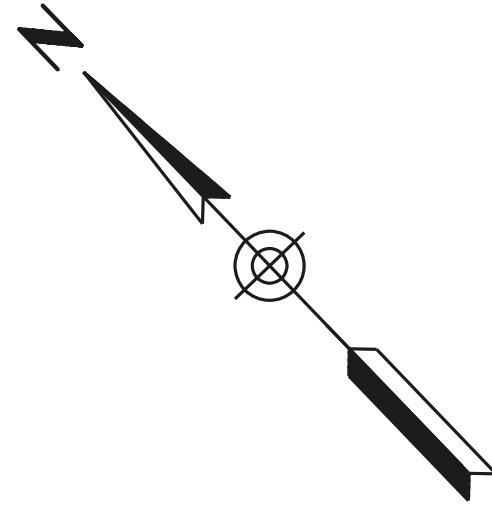
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES	
DRAWN	SC	DATE	03/18		
CHECKED	RAA	DATE	03/18		
PROJECT #1407-1				ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 132+00 TO STA. 137+00	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			SHEET T-05-10		EXPIRES 03/31/2020

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CALL FOR THE BLUE STAKES
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Blue Stake Center
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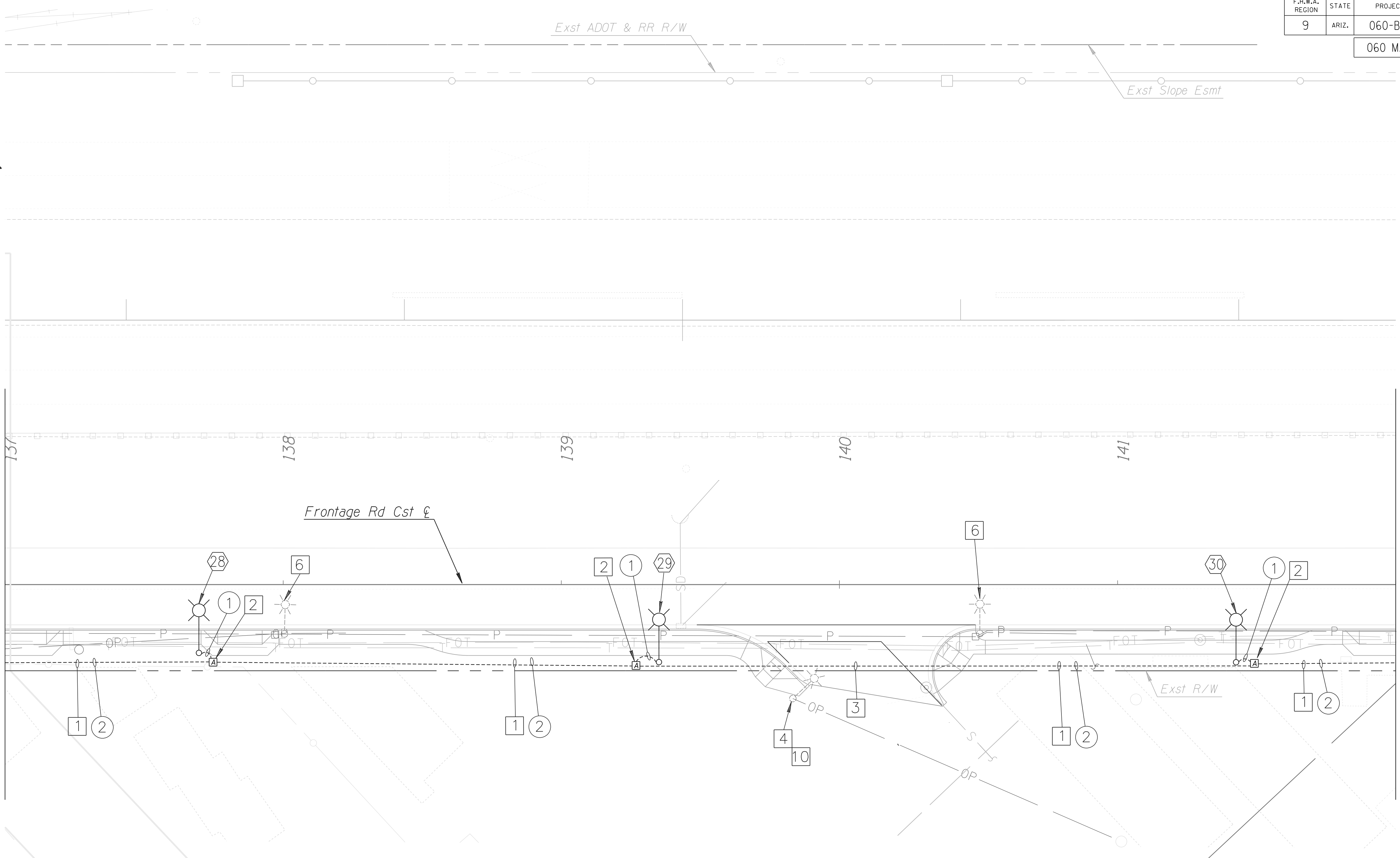
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	191	232	

060 MA 144



MATCH LINE STA. 137+00.00

MATCH LINE STA. 142+00.00



GENERAL NOTES THIS SHEET

A. Meander sidewalk around pole location for poles 28,29,30.

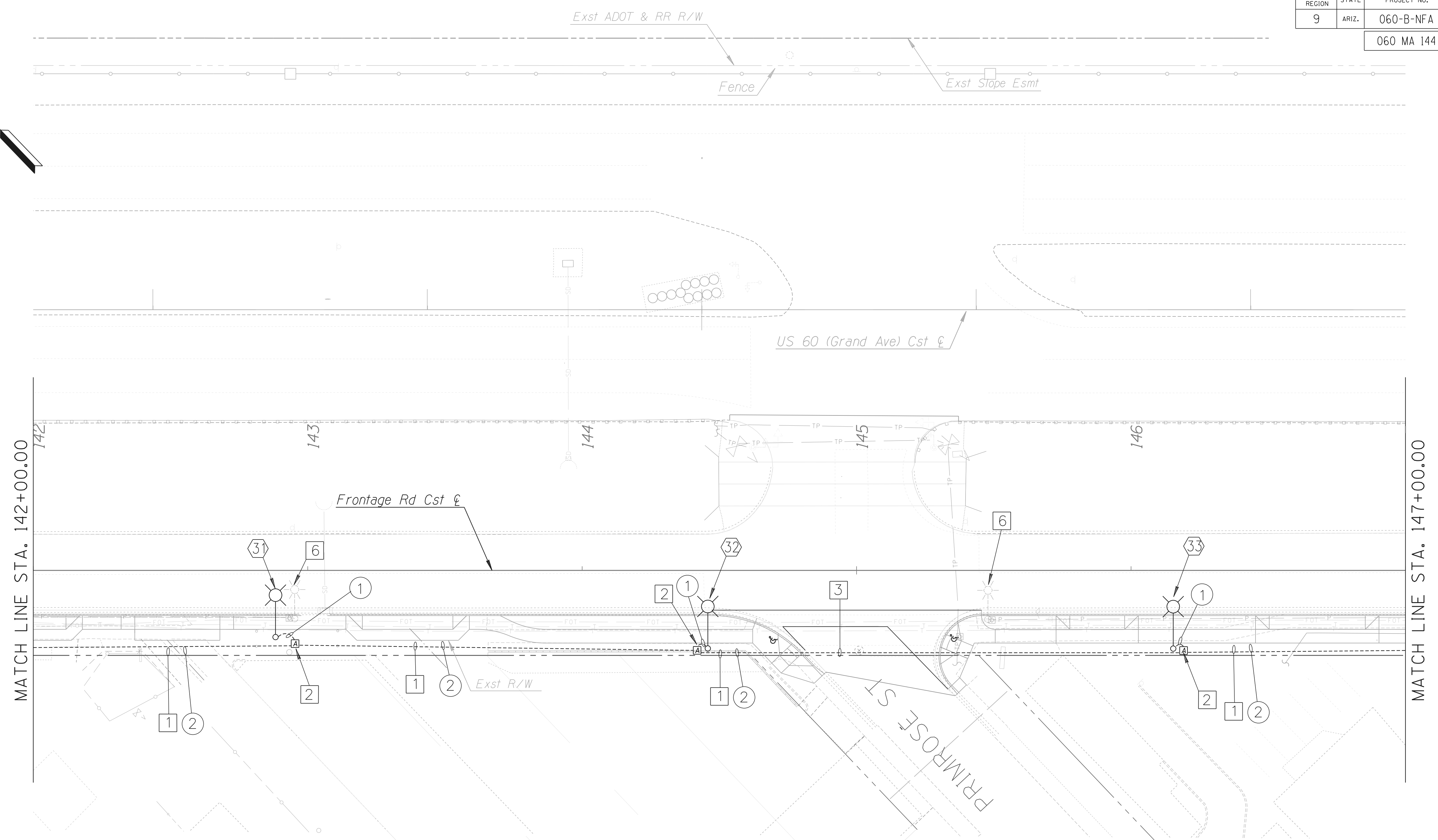
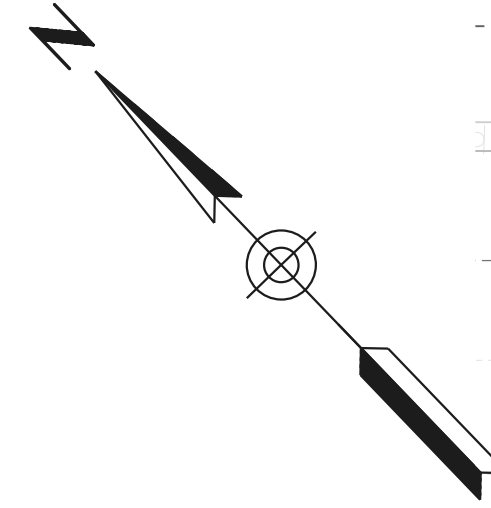
SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

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CALL FOR THE BLUE STAKES
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DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 137+00 TO STA. 142+00	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
		PROJECT #1407-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD TRACS NO. H8874 01C		SHEET T-05-11 OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	192	232	

060 MA 144



MATCH LINE STA. 142+00.00

MATCH LINE STA. 147+00.00

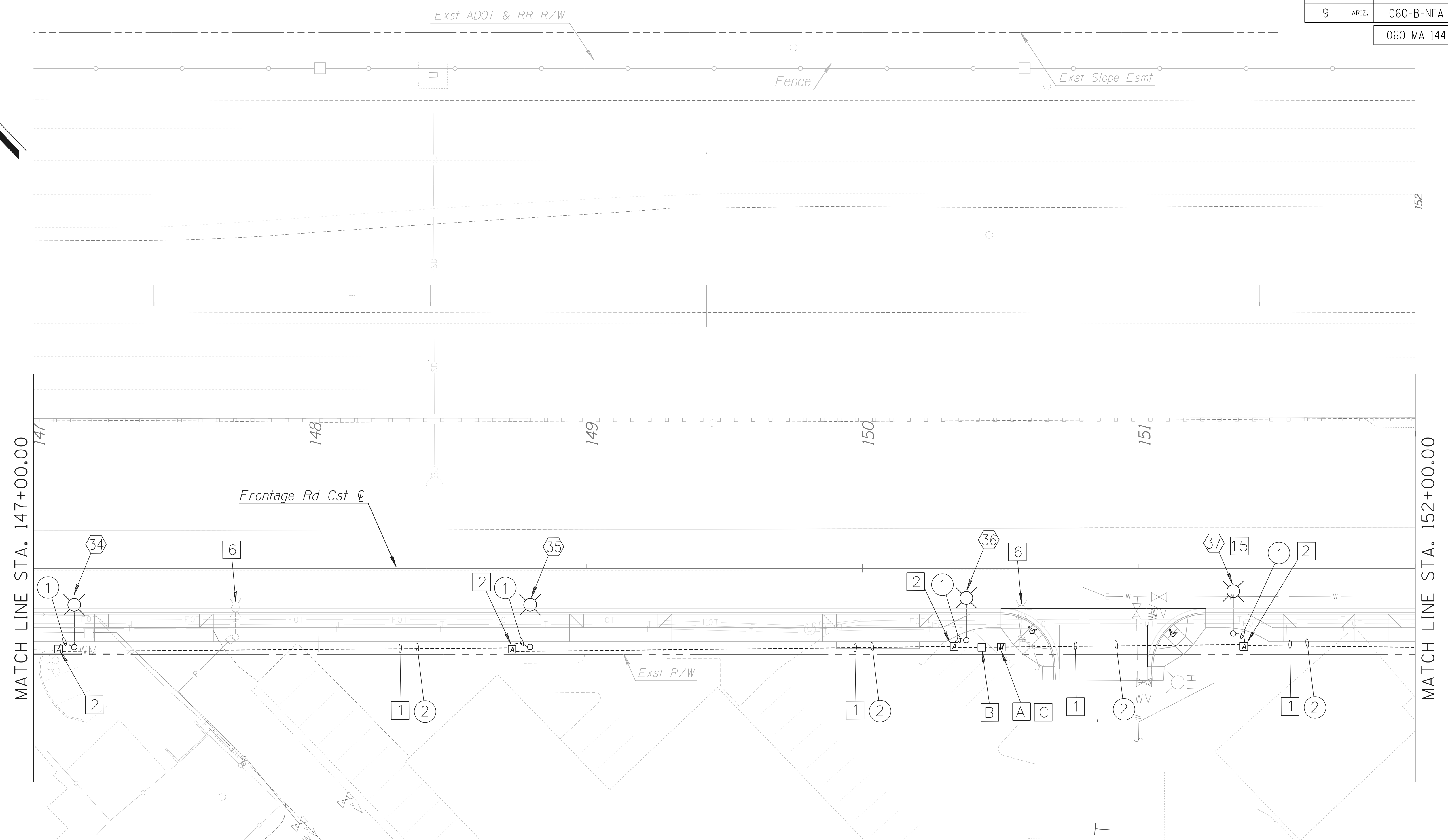
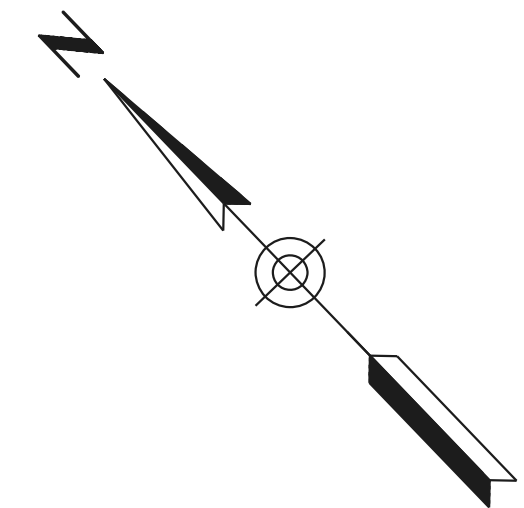
GENERAL NOTES THIS SHEET
 A. Meander sidewalk around pole location for poles 31,32,33.

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 142+00 TO STA. 147+00	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
		PROJECT #1407-1 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD		SHEET T-05-12 OF	
TRACS NO. H8874 01C					

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	193	232	

060 MA 144



MATCH LINE STA. 147+00.00

MATCH LINE STA. 152+00.00

KEY NOTES THIS SHEET

- A. New meter pedestal per APS requirements.
- B. New point of connection per APS requirements.
- C. Location is proposed location, contact APS for final location.

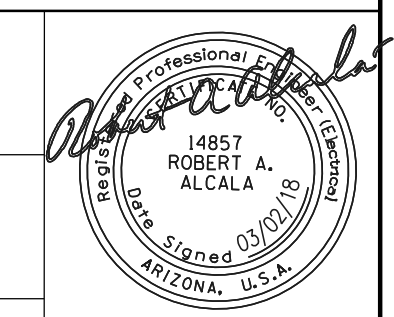
POPPY ST

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES
DRAWN	SC	DATE	03/18	
CHECKED	RAA	DATE	03/18	
RAALCALA consulting electrical engineering				ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 147+00 TO STA. 152+00
PROJECT #	14007-1	ROUTE	US 60	
LOCATION		GRAND AVENUE FRONTAGE ROAD		EXPIRES 03/31/2020
TRACS NO. H8874 01C				SHEET T-05-13

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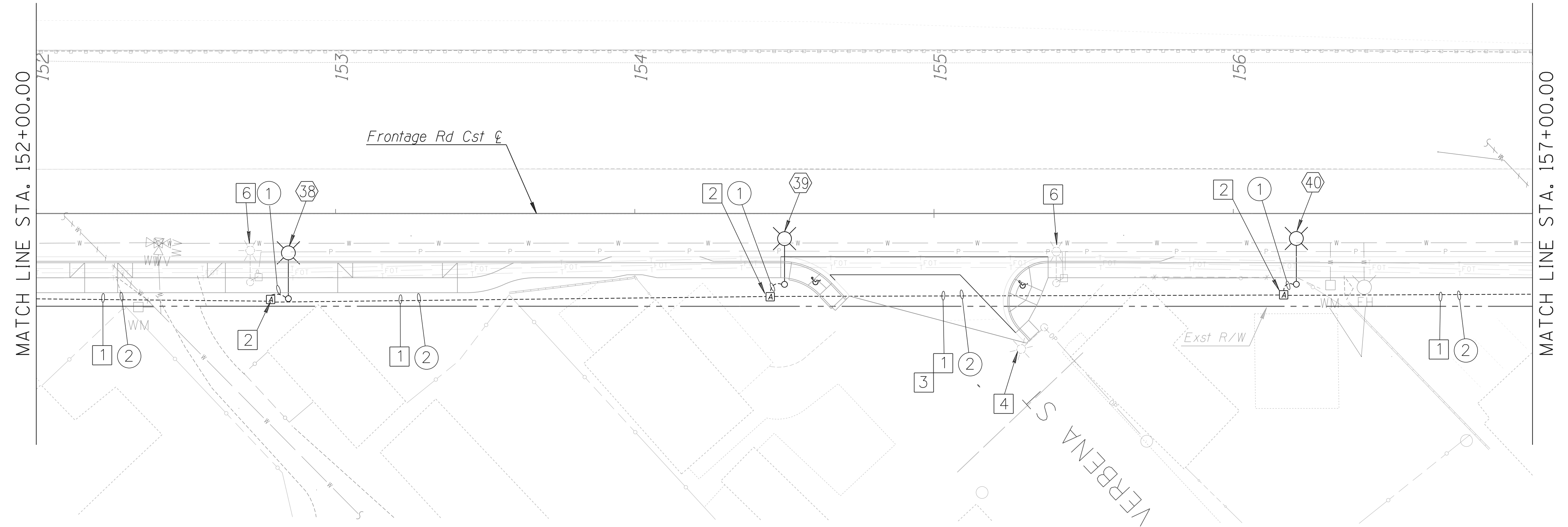
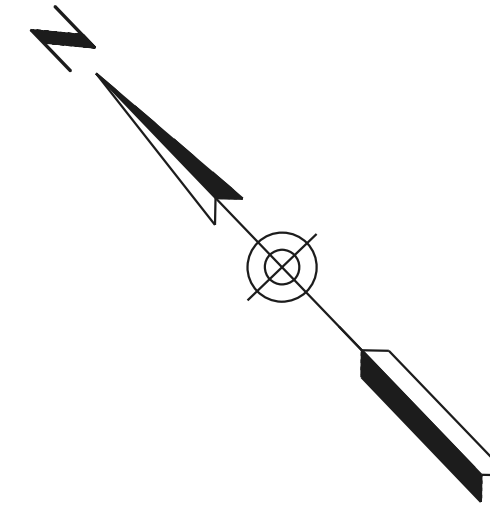


OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	194	232	

060 MA 144



MATCH LINE STA. 152+00.00

MATCH LINE STA. 157+00.00

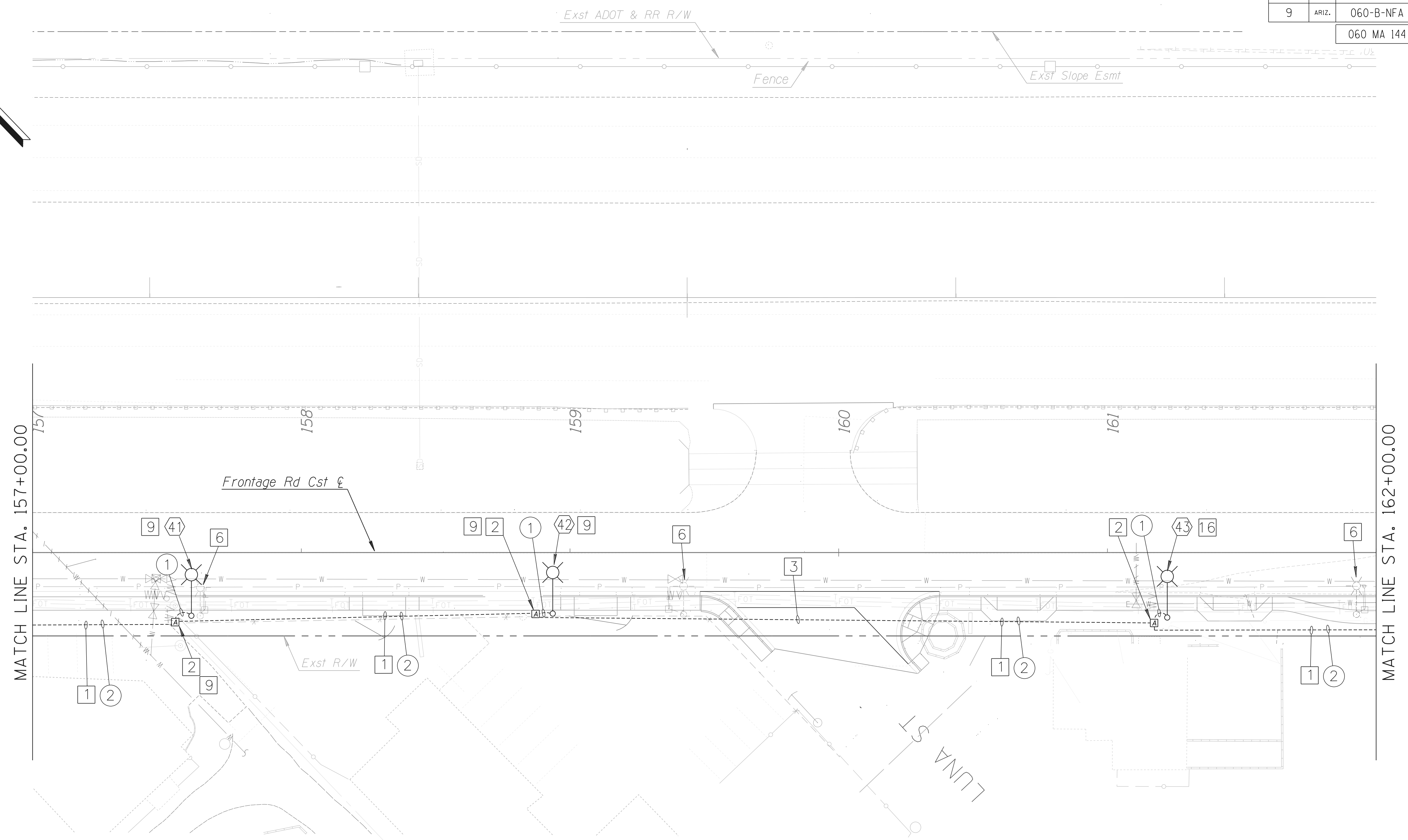
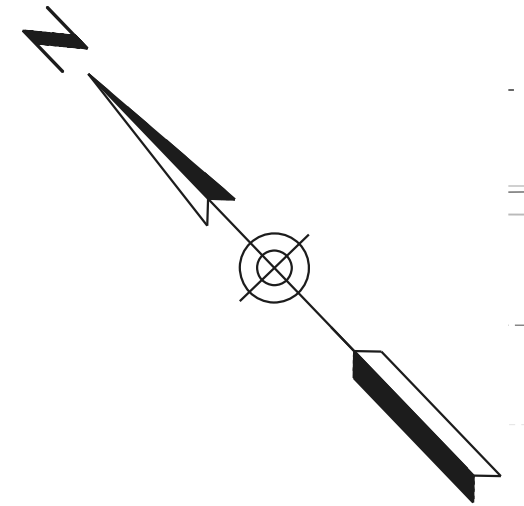
SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

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Blue Stone Center
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DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES	
DRAWN	SC	DATE	03/18		
CHECKED	RAA	DATE	03/18		
		ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 152+00 TO STA. 157+00		EXPIRES 03/31/2020 SHEET T-05-14	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	TRACS NO. H8874 01C OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	195	232	

060 MA 144



MATCH LINE STA. 157+00.00

MATCH LINE STA. 162+00.00

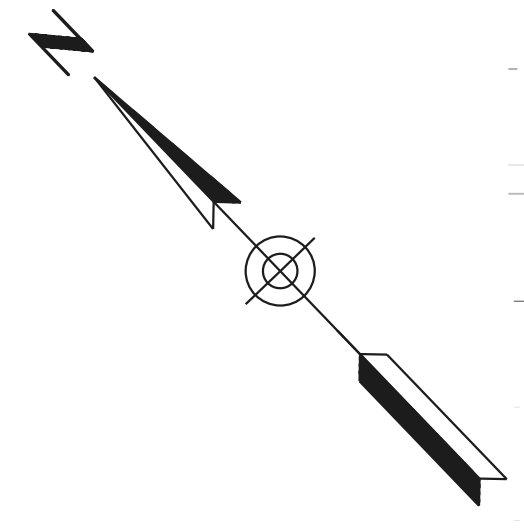
SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD STA. 157+00 TO STA. 162+00	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
			TRACS NO. H8874 01C		EXPIRES 03/31/2020 SHEET T-05-15
					OF

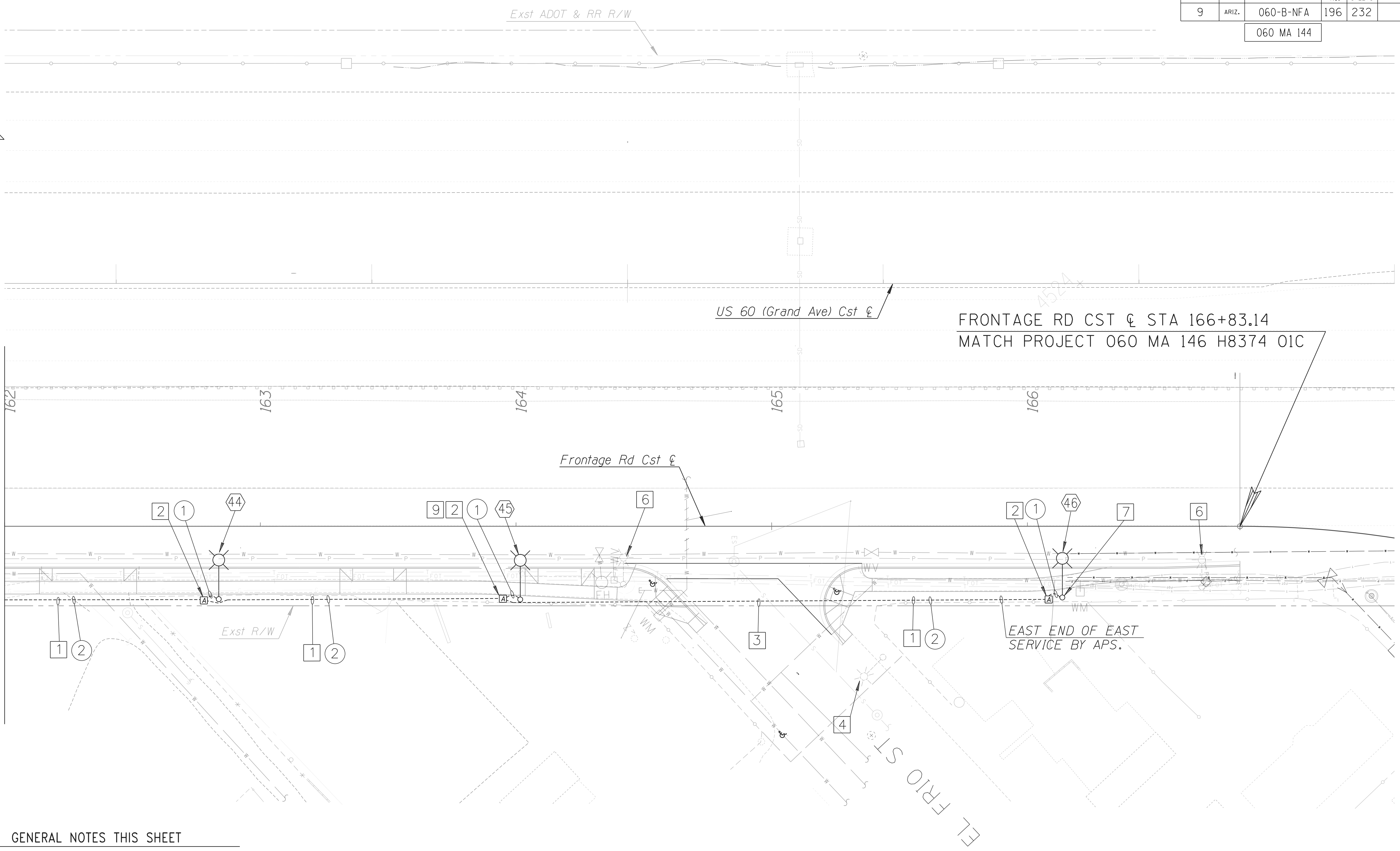
ccccSYSTEMEcccc cccccDGNcSPECIFICATIONcccc

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	196	232	

060 MA 144



MATCH LINE STA. 162+00.00



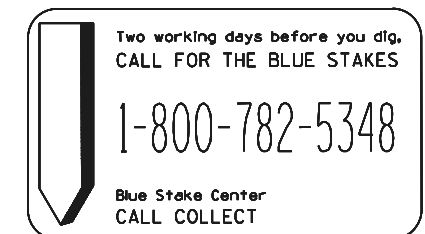
FRONTAGE RD CST & STA 166+83.14
MATCH PROJECT 060 MA 146 H8374 01C

EAST END OF EAST SERVICE BY APS.

GENERAL NOTES THIS SHEET

- A. Meander sidewalk around pole location for poles 44,45,46.

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN PLAN SHEET STA. 162+00 TO STA. 166+83	
DRAWN	SC	03/18			
CHECKED	RAA	03/18			
		ROUTE US 60		LOCATION GRAND AVENUE FRONTAGE ROAD	
TRACS NO., H8874 01C				SHEET T-05-16 OF	



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	197	232	

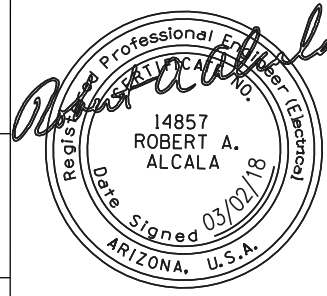

060 MA 144

POLE AND LUMINAIRE SCHEDULE

POLE NUMBER	ROADWAY	STATION	OFFSET (FT)	POLE TYPE	MOUNTING HEIGHT	FOUNDATION HEIGHT	MAST ARM	TYPE	WATTAGE	LUMINAIRE DIST TYPE	NOTES
1	FRONTAGE ROAD	100+75	26 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 1, WEST APS SERVICE.
2	FRONTAGE ROAD	101+71	23 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 2, WEST APS SERVICE.
3	FRONTAGE ROAD	103+95	25 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 3, WEST APS SERVICE.
4	FRONTAGE ROAD	104+11	23 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 4, WEST APS SERVICE.
5	FRONTAGE ROAD	105+76	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 5, WEST APS SERVICE.
6	FRONTAGE ROAD	107+39	30 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 6, WEST APS SERVICE.
7	FRONTAGE ROAD	108+78	30 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 7, WEST APS SERVICE.
8	FRONTAGE ROAD	110+69	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 8, WEST APS SERVICE.
9	FRONTAGE ROAD	111+72	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 9, WEST APS SERVICE.
10	FRONTAGE ROAD	113+22	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	2-150W	TYPE III	PER DETAIL A. POLE 10, WEST APS SERVICE.
11	FRONTAGE ROAD	115+05	25 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 11, WEST APS SERVICE.
12	FRONTAGE ROAD	116+22	25 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	2-150W	TYPE III	PER DETAIL A. POLE 12, WEST APS SERVICE.
13	FRONTAGE ROAD	117-83	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 13, WEST APS SERVICE.
14	FRONTAGE ROAD	119+32	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 14, WEST APS SERVICE.
15	FRONTAGE ROAD	120+72	33 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 15, WEST APS SERVICE.
16	FRONTAGE ROAD	122+08	30 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 16, WEST APS SERVICE.
17	FRONTAGE ROAD	123+68	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 17, WEST APS SERVICE.
18	FRONTAGE ROAD	124+85	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 18 WEST APS SERVICE.
19	FRONTAGE ROAD	126+10	30 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 19, WEST APS SERVICE.
20	FRONTAGE ROAD	127+64	30 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 20, WEST APS SERVICE.
21	FRONTAGE ROAD	129+10	30 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 21, WEST APS SERVICE.
22	FRONTAGE ROAD	130+26	25 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 22, WEST APS SERVICE.
23	FRONTAGE ROAD	131+82	24 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 23, WEST APS SERVICE.
24	FRONTAGE ROAD	133+32	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 24, WEST APS SERVICE.
25	FRONTAGE ROAD	134+50	27 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 25, EAST APS SERVICE.
26	FRONTAGE ROAD	135+45	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 26, EAST APS SERVICE.
27	FRONTAGE ROAD	136+56	24 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 27, EAST APS SERVICE.
28	FRONTAGE ROAD	137+70	25 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 28, EAST APS SERVICE.
29	FRONTAGE ROAD	139+35	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 29, EAST APS SERVICE.
30	FRONTAGE ROAD	140+43	27 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 30, EAST APS SERVICE.
31	FRONTAGE ROAD	142+88	24 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 31, EAST APS SERVICE.
32	FRONTAGE ROAD	144+46	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 32, EAST APS SERVICE.
33	FRONTAGE ROAD	146+15	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 33, EAST APS SERVICE.
34	FRONTAGE ROAD	147+15	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 34, EAST APS SERVICE.
35	FRONTAGE ROAD	148+80	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 35, EAST APS SERVICE.
36	FRONTAGE ROAD	150+38	25 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 36, EAST APS SERVICE.
37	FRONTAGE ROAD	151+34	24 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 37, EAST APS SERVICE.
38	FRONTAGE ROAD	152+84	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 38, EAST APS SERVICE.
39	FRONTAGE ROAD	154+46	24 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 39, EAST APS SERVICE.
40	FRONTAGE ROAD	156+21	24 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 40, EAST APS SERVICE.
41	FRONTAGE ROAD	157+59	23 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 41, EAST APS SERVICE.
42	FRONTAGE ROAD	158+94	23 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 42, EAST APS SERVICE.
43	FRONTAGE ROAD	161+32	24 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 43, EAST APS SERVICE.
44	FRONTAGE ROAD	162+84	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 44, EAST APS SERVICE.
45	FRONTAGE ROAD	164+01	29 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 45, EAST APS SERVICE.
46	FRONTAGE ROAD	166+14	28 R	DECORATIVE STREET	27' -11"	6' 0" FLUSH, DETAIL 1945	24"	LED	150W	TYPE III	PER DETAIL 8048. POLE 46, EAST APS SERVICE.

REVISIONS- LOCATION- DATE- SURVEY NO. FINISHED PLANS- REVISIONS- LOCATION- DATE- SURVEY NO. FINISHED PLANS-

Two working days before you dig
CALL FOR THE BLUE STAKES
1-800-782-5348
Blue Stakes Center
CALL COLLECT

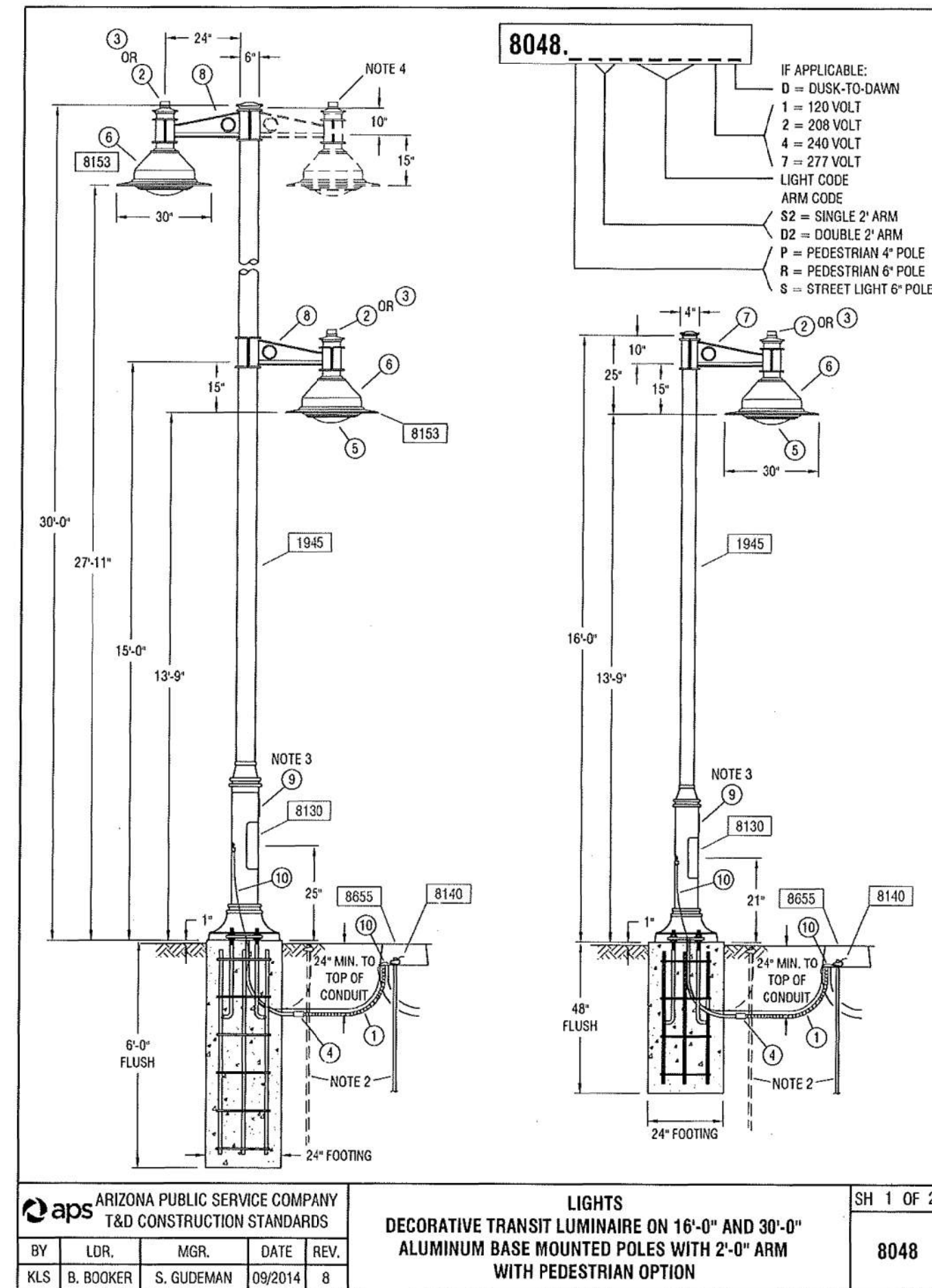
DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES ROADWAY LIGHTING PLAN FRONTAGE ROAD POLE SCHEDULE	 EXPIRES 03/31/2020
DRAWN	SC	DATE	03/18		
CHECKED	RAA	DATE	03/18		
		ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
PROJECT #1407-1		TRACS NO. H8874 01C		SHEET T-05-17	
				OF	

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* APPROVED LUMINAIRES

KING LED TECHNOLOGY
150W TYPE 3 - MODEL NO.
K830-P4FL-III-150(SSL)-8084



DETAIL
SCALE: N.T.S.

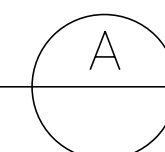


TABLE 1

LIGHT CODE	POLE DIA	APN	WATTS	TYPE	VOLTS	INITIAL LUMENS	MOUNTING HEIGHT
DH30	6"	00074497	100		120/208/240/277	9500	13'-9"
DH31	6"	00085973	150	HPS	120/208/240/277	16000	27'-11"
DH32	6"	00074025	250		120/208/240/277	30000	27'-11"
DL65	4" OR 6"	00135384	75		120/208/240/277	8147	13'-9"
DL67	6"	00135385	100	LED	120/208/240/277	9522	27'-11"
DL69	6"	00135386	150		120/208/240/277	14895	27'-11"

NOTES:
1. ADJUST PHOTO EYE TO FACE NORTH.
2. A GROUND ROD IS PROVIDED WITH THE J-BOX. WHERE A GROUND ROD CAN NOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES. CUSTOMER OWNED EQUIPMENT MAY REQUIRE THE GROUND ROD INSTALLED NEXT TO THE POLE.
3. SIGN, 'NOTICE THIS POLE IS OWNED AND MAINTAINED BY APS. DISCONNECT INSIDE', IS REQUIRED ON ALL DUSK-TO-DAWN AND AREA LIGHTING APPLICATIONS.
4. POLE THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.
5. THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARM IS SPECIFIED.
6. BROWN PHOTO CONTROL IS A FAIL OFF CONTROL AND SHALL BE USED WITH ALL INDUCTION AND LED LUMINAIRES.
7. SEE SPEC 8130 - 8140 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.
8. BASE MOUNTED POLES ARE DESIGNED FOR UNDERGROUND FEED ONLY.
9. ON 277 VOLT STREET LIGHT CIRCUIT, INSTALL A '277 VOLT' MICARTA TAG ON CABLE IN J-BOX. TAG PROVIDED BY SPEC 8129.

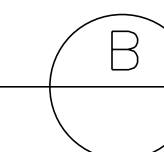
ITEM	QTY	DESCRIPTION	APN
1	5	CONDUIT PLAST FLEX 2"	3290862
2	1	CONTROL PHOTO MULTI-BLACK	00083965
3	VAR	CONTROL PHOTO MULTI-BR-20	00073241
4	1	COUPLING 2" PVC	3290690
5	1	LAMP - SEE 8164 - 8171	
6	1	LUMINAIRE - SEE TABLE 1	
7	1	MAST ARM STLY 2' TRANSIT 4'	00074626
8	1	MAST ARM STLY 2' TRANSIT 6'	00074498
9	1	SIGN POLE OWNED BY APS	00050092
10	10	WIRE BARE #6 SOLID CU	33907580

aps ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

LIGHTS
DECORATIVE TRANSIT LUMINAIRE ON 16'-0\"/>

SH 2 OF 2
8048

DETAIL
SCALE: N.T.S.

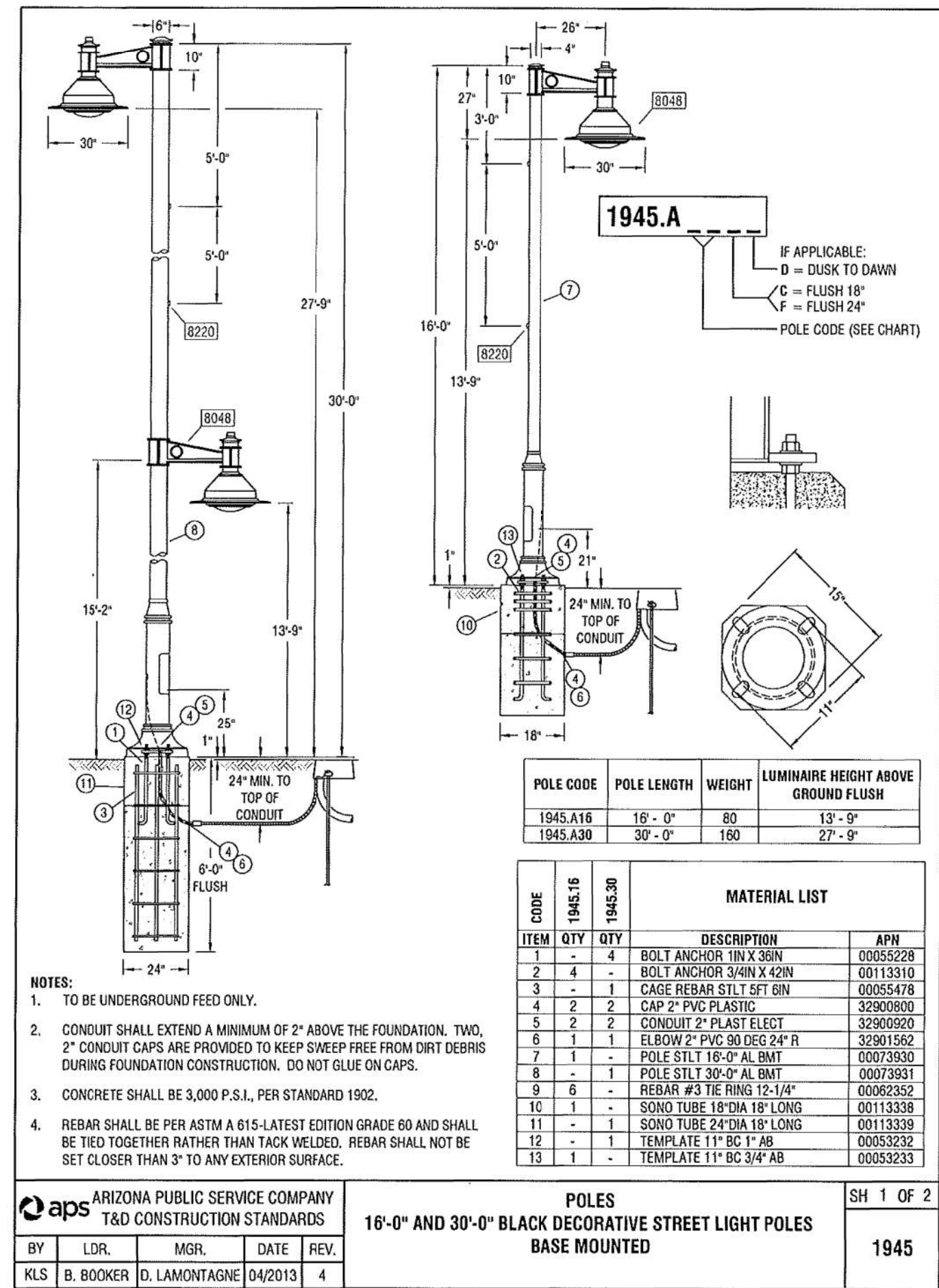


DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES
DRAWN	SC	DATE	03/18	
CHECKED	RAA	DATE	03/18	
				FRONTAGE ROAD LIGHTING DETAILS
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
				EXPIRES 03/31/2020
TRACS NO. H8874 01C				SHEET T-05-18
				OF

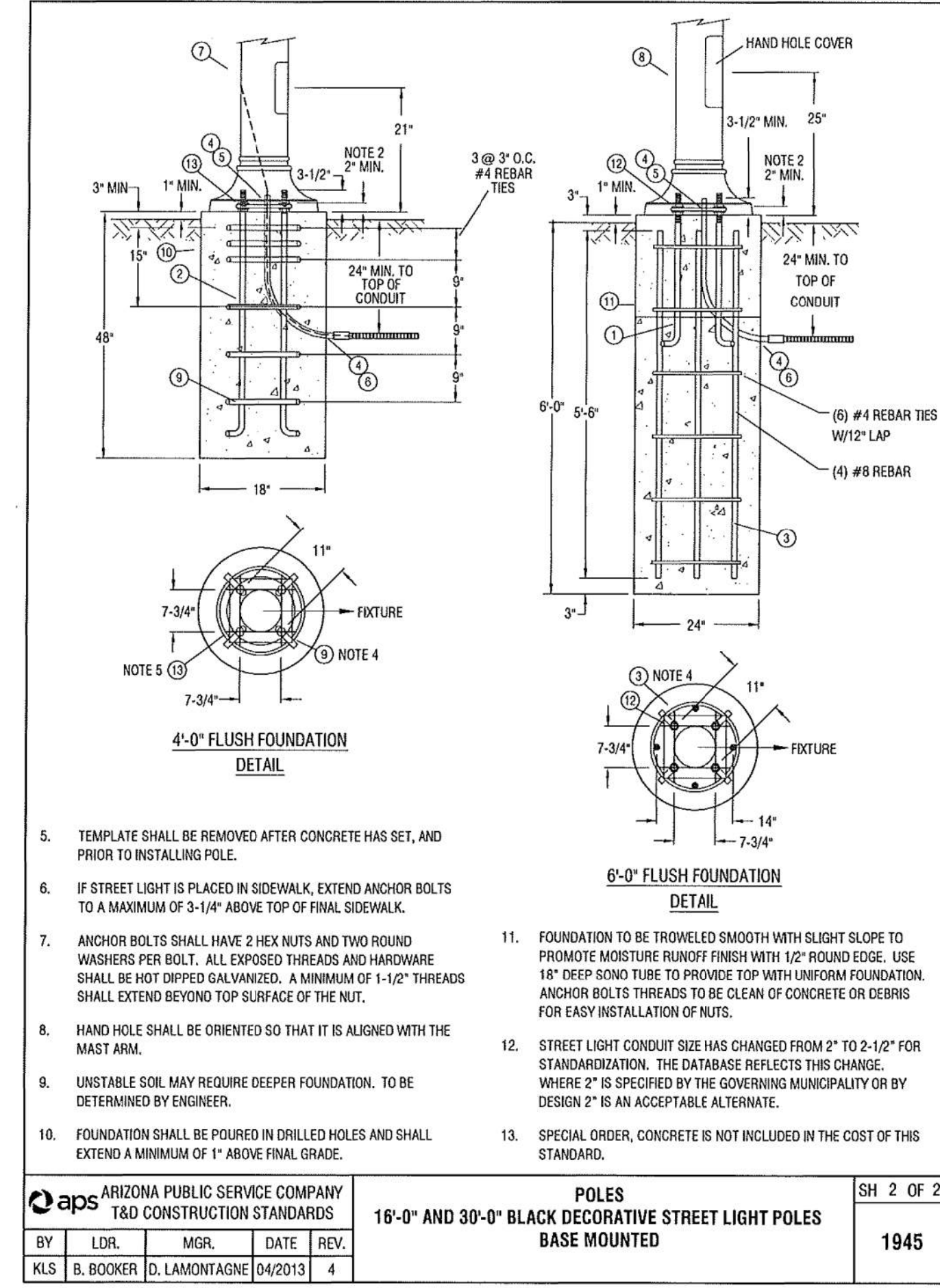
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	199	232	

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1945.A30FD



DECORATIVE STREET LIGHT POLE AND FOUNDATION (A)
SCALE: N.T.S.



DECORATIVE STREET LIGHT POLE AND FOUNDATION (B)
SCALE: N.T.S.

DESIGN	RAA	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY DESIGN SERVICES
DRAWN	SC	DATE	03/18	
CHECKED	RAA	DATE	03/18	
				FRONTAGE ROAD LIGHTING DETAILS
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	EXPIRES 03/31/2020
PROJECT	14007-1			SHEET T-05-19
				TRACS NO. H8874 01C
				OF

GENERAL LANDSCAPE AND IRRIGATION NOTES:

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	200	232	

060 MA 144

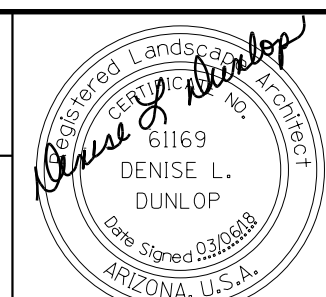

1. All landscape and irrigation installation shall be installed per the approved plans and shall comply with all applicable ADOT Standard Specifications for Roads and Bridges, 2008 edition, and any revisions to it. Any deviations to the approved plans require ADOT approval.
2. It is the contractor's responsibility to inspect the job site to become familiar with all existing conditions that could affect the installation of any work set forth in these plans or ADOT specifications prior to submitting a bid.
3. Contractor to verify limits of disturbance throughout the project. Bring discrepancies immediately to the attention of the Engineer.
4. Clear zone requirements:
 - A. Concrete Drainage Channels:
Maintain a 15' clear zone between the edge of the concrete drainage channel and tree canopies.
 - B. Irrigation valve boxes:
Maintain a 10' clear zone between the edge of irrigation valve boxes and trees.
 - C. Paved surfaces:
Maintain a 5' clear zone between mature spread of shrubs and ground covers and all paved surfaces. Setback to plant center shall be 10'. 30' clear zone shall be maintained between tree trunks and the closest driving lane.
5. All work to be confined within the existing limits of disturbance.
6. Plants shall be field adjusted to allow for maintenance roadway access into each area. All adjustments require prior approval from the Engineer.
7. The contractor is responsible for the removal and disposal of any debris resulting from the construction at no cost to department. At no time shall any of this material obstruct the normal operation of any adjoining street or any of the active areas associated with this project.
8. The job site at the completion of the construction shall be cleaned of any debris resulting from the construction. No job will be considered complete until all curbs, gutters, and pavement have been swept clean of all dirt and debris.
9. Substantial completion and final acceptance shall be in accordance with ADOT Standard Specification Sections 105.19 and 105.20. The City of El Mirage's representatives shall be present at the substantial completion and final acceptance inspections.
10. Separate inspections are required for the backflow preventer and related electrical connections.
11. The above inspections require a minimum of 48 hours prior notification to ADOT.
12. The horizontal locations of the existing utilities are shown in their approximate location. The vertical location of existing utilities are shown only where verified by field survey methods. The contractor shall be responsible to adhere to all current Blue Stake laws and Section 107.15 of the Standard Specifications.
13. All equipment and materials not shown or specified in these plans and special provisions or in ADOT Standard Specifications, but which are required to complete this installation, shall be supplied by the contractor as part of this contract work and shall be considered incidental to the work involved.
14. The contractor is advised that damage to any portion of this project's existing bridges, bridge abutments, slope pavements, curbs, gutters, pavements and surrounding areas not noted on the plans to be disturbed due to construction operations is to be repaired at the contractor's expense.
15. Plant locations are diagrammatic. The contractor shall flag tree and shrub locations for 1 gallon plants and larger. Locations shall be approved by the ADOT Resident Landscape Architect prior to installation.
16. No trees, shrubs, or cacti shall be planted where they could conceal or partially obscure the view of any traffic sign or signal.

17. It is the contractor's responsibility to ensure that tree trunk locations comply with the 2012 ADOT Roadway Design Guidelines.
18. Avoid planting shrubs adjacent to tree trunks at a distance equal to two-thirds the distance from the trunk to the edge of mature canopy.
19. No plant material to be placed in the last 200 feet of the gore point.
20. All plant material shall conform to the standards set forth in the "American Standard for Nursery Stock" by the American Association of Nurserymen. Contractor is required to submit a "Pruning, Staking/Guying, and Irrigation Plan" prior to construction. All trees noted in the plant list shall include the cost of staking and/or guying.
21. ADOT reserves the right to inspect all containerized plants for condition of the root ball. The contractor shall supply additional plants at no cost to ADOT if plant is rejected.
22. The plant pits are to be inspected by ADOT prior to planting by the contractor. The contractor shall request an inspection 48 hours in advance.
23. Plant pit depth shall be measured on the low side of plant pit when on a slope.
24. All plants shall be centered in plant pits.
25. Final plant material placement in the field may be required to be adjusted where it is in conflict with either overhead or buried utilities.
26. Plant material foliage shall not encroach closer than two feet (2') from the edge of any manhole, valve, or water meter, or 15' from edge of utilities poles.
27. The plant pit soil mixture shall comply with Section 806-2.05 of the ADOT Standard Specifications and these Specific Provisions. The soil mixture shall be thoroughly mixed prior to backfilling and shall be installed in six inch (6") lifts. Each lift shall be water settled without puddling. Contractor shall not overfill the pit when water settling or cause any runoff in the area.
28. Landscape graded areas are to be raked and compacted as specified and shown on details and left smooth and even with a finish grade. Planted and non-planted areas shall be one inch (1") below all adjacent curbs and paving.
29. The contractor shall install granite mulch per ADOT Standard Specifications and Section 803-3.02 of the Special Provisions. The pre-emergent herbicide shall be applied in accordance with Section 803-3.02 of these Special Provisions and as recommended by the manufacturer.
30. The contractor shall provide granite mulch samples, in accordance with the specifications, to ADOT for approval prior to installation. .25 ton of each color (covers an area approximately 5' x 5') sample shall be placed at a location to be determined by the ADOT Resident Landscape Architect.
31. Irrigation components and lines are diagrammatic. Exact locations shall be field verified by the contractor and approved by the Resident Landscape Architect. The Resident Landscape Architect shall check, approve, or make adjustments as necessary.
32. The contractor shall locate all irrigation system components (controllers, backflow preventers, remote control valves, gate valves, and the routing of all mainline, sub-mainline, and pipe laterals) in landscape planting areas and obtain ADOT's approval prior to installation.
33. Contractor shall coordinate with Bryce Christo PE, City of El Mirage, at (623) 876-2974 in order to locate controllers and backflow prevention devices.
34. All irrigation equipment including controllers, backflow preventers, remote control valves, gate valves, and associated piping are to be installed per ADOT specifications and the Special Provisions.

35. The contractor shall be responsible for all adjustments and proper emitter selections as necessary to guarantee coverage of all plant material.
36. A hot wire for each remote control valve shall be tagged with a valve number for field inspection anywhere wire is exposed in the field such as valve boxes and pull boxes.
37. Fabricate surge arrest/expansion coils in all control wire at splice to RCV pigtails. Wrap control wire around a 1" pipe a minimum of ten times. All coils and splices must be above the floor for the valve box.
38. The contractor shall maintain field redlines and present the field redlines to the Engineer at a minimum of every two weeks for the duration of Construction. A final presentation of field redlines to ADOT's Resident Landscape Architect is required for approval.
39. The term Landscape Architect, Resident Landscape Architect, and Engineer are used interchangeably throughout the document. The term Landscape Architect, Resident Landscape Architect, and Engineer shall be interpreted to mean the Department Landscape Architect.

LANDSCAPE ESTABLISHMENT:

1. Repair erosion damage immediately.
2. Remove any paper and container debris from ROW.
3. Control noxious weeds & undesirable grasses from ROW.
4. Remove tree stakes & braces as directed by Resident Landscape Architect and in accordance with the contractor's approved Pruning, Staking/Guying, and Irrigation Plan. Contractor shall submit the Pruning, Staking/Guying, and Irrigation Plan to the Resident Landscape Architect at the Preconstruction conference.
5. Trees shall be pruned to remove broken, crossed or diseased branches.
6. Prune all trees and shrubs for visibility of traffic, signs, delineators and curb edge.
7. Allow all plants to grow into a natural multi-trunk tree/shrub formation.

DESIGN	DH	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES		
DRAWN	DH	03/18			
CHECKED	DD	03/18			
 J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com			LANDSCAPE & IRRIGATION GENERAL NOTES		
ROUTE	LOCATION		Expires: 12/31/2018		
US 60	GRAND AVENUE FRONTAGE ROAD		DWG NO. R-01.01		
TRACS NO. H8874 01C			OF		

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

LANDSCAPE LEGEND

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
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GENERAL NOTES

- * It is the contractor's responsibility to ensure that tree trunk locations comply with ADOT Roadway Design Guidelines.
- * Planting and Irrigation designs are diagrammatic, exact locations to be determined by the Landscape Architect.
- * No tree or shrub shall be planted so as to conceal the view of any highway sign or signal.
- * Plant pit depth shall be measured on the low side when on a slope.
- * Plants shall be centered in planting pits.
- * Plants shall be field adjusted to allow for maintenance roadway access into each area, with prior approval of Landscape Architect/Engineer.
- * All trees noted in the plant list to be staked shall include the cost for staking and/or guying as directed by the Landscape Architect.
- * No new right-of-way easements are required.
- * Contractor shall submit to the Department's Landscape Architect/Engineer at the pre-construction conf. the "Pruning, Staking, and Guying Plan" for approval.

INERT MATERIAL NOTES

- * Granite Mulch and Decomposed Granite shall be placed from the back of curb to the limits as shown on the project plans.
- * Granite Mulch and Decomposed Granite shall be placed at a minimum depth of 2". Riprap Gradation 'A' shall be placed at a minimum depth of 6". Riprap Gradation 'B' shall be placed at a minimum depth of 12". Rock Mulch Gradation 'C' shall be placed at a minimum depth of 3". Aggregate Subbase, Class 6 shall be placed at a minimum depth of 4".
- * Decomposed Granite, Granite Mulch, Riprap and Rock Mulch shall be paid by gradation regardless of color.
- * Contractor shall place 2" of Granite Mulch over all Lighting Systems Electrical Junction Boxes.

SYM	ABV	BOTANICAL NAME	COMMON NAME	SIZE	TYPE	REMARKS	QNT
TREES:							
+	Ca	Caesalpinia cacalaco	'Smoothie' Cascalote	24" Box	Multi-Trunk*	Triple Staking	18
⊕	Pc	Pistacia chinensis	'Red Push' Pistache	36" Box	Single-Trunk*	Double Staking	23
○	Qv	Quercus virginiana	Southern Live Oak	36" Box	Single-Trunk*	Double Staking	4
SHRUBS:							
⊙	Am	Acalypha monostachya	Raspberry Fuzzies	5-Gal	Shrub	--	146
☞	Bm	Buddleia marrubifolia	Wooly Butterfly Bush	5-Gal	Shrub	--	25
⊙	Cc	Callistemon citrinus 'Little John'	Little John Bottle Brush	5-Gal	Shrub	--	53
⊙	Ef	Encelia farinosa	Brittle Bush	5-Gal	Shrub	--	18
⊙	Em	Eremophila maculata 'Valentine'	Emu Bush	5-Gal	Shrub	--	31
⊙	Lc	Lecuophyllum candidum	'Thunder Cloud' Sage	5-Gal	Shrub	--	34
⊙	Rp	Ruellia peninsularis	Desert Ruellia	5-Gal	Shrub	--	33
⊙	Ss	Sophora secundiflora	Texas Mountain Laurel	15-Gal	Shrub	--	60
ACCENTS:							
⊙	Hp	Hesperaloe parviflora 'Perpa' Brakelights	Brakelights Red Yucca	5-Gal	Accent	--	355
*	Pm	Pedilanthus macrocarpus	Lady Slipper	5-Gal	Accent	--	59
GROUNDCOVER:							
⊕	Ls	Lantana species 'New Gold'	Lantana 'New Gold'	5-Gal	Groundcover	--	315
⊙	Rb	Ruellia brittoniana 'Katte'	Little Katie Ruellia	5-Gal	Accent	--	211

* STAKE TREE AS PER DETAIL L1, L2, L3 AND L4 ON DWG. NO. L-2.01

OVERALL PROJECT LANDSCAPE QUANTITIES SUMMARY

ITEM	UNIT	QUANTITIES
Tree (24" Box)	Each	18
Tree (36" Box)	Each	27
Shrub (Fifteen Gallon)	Each	60
Shrub (Five Gallon)	Each	340
Accent (Five Gallon)	Each	414
Groundcover (Five Gallon)	Each	526
Decomposed Granite (1/2" Screened, Brown)	Sq. Yd.	4,971

NOTE TO CONTRACTOR:

All quantities and measurements of materials listed on this sheet are approximate. It is the responsibility of the contractor to verify all measurements and quantities.

DESIGN	DH	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES	
DRAWN	DH	03/18		
CHECKED	DD	03/18		
			LANDSCAPE SUMMARY	
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2design.us			GRAND AVENUE FRONTAGE ROAD DWG NO. R-01.02	
ROUTE		LOCATION		Expires: 12/31/2018
US 60		GRAND AVENUE FRONTAGE ROAD		DWG NO. R-01.02
TRACS NO. H8874 01C				OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO. DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	202	232	

060 MA 144

Tree Centered in Pit

Lodge Pole Pine Stakes, 10 Foot Long, 2" Diameter, 2 Required. Place Outside of Planting Pit.

1" Decomposed Granite/Granite Mulch Over Plant Pit where Granite Shown on Plan (Typ)

Prepared Soil

Root Ball

One Continuous 1" Wide Woven Tree Tie Strap Wrapped Around Stake And Tree Trunk and Stapled To Stake. Place Near Top And At Trunk Mid-Point

Establish minimum 1" high positive drainage away from base of tree

4" Deep Watering Basin Shall be Gentle and Uniform Throughout with No Obstrusive Edges

Finish Sub-Grade w/o Granite 2" Depth Granite Over Non-Plant Pit Areas

Plant Pit to be 3 Times Rootball Width and Same Depth

3 x Dia. of the Rootball

NOTES:

1. Install stakes with specific tree species as noted per Landscape Legend on Dwg No R-01.01.
2. Stakes should be installed such that they provide the best protection against prevailing winds.
3. Place opposing tree wraps near top and at mid-point of trunk.
4. Contractor shall follow the approved submitted pruning, staking/guying, and irrigation plan.
5. Roughen bottom and sides of excavated hole prior to setting.
6. Staking installed per approved "Pruning, Staking, Guying & Irrigation Plan.

DETAIL L1_{NTS}

STANDARD TRUNK TREE PLANTING AND STAKING

Tree Centered in Pit

Lodge Pole Pine Stakes, 10 Foot Long, 2" Diameter, 3 Required. Place Outside of Planting Pit

1" Decomposed Granite/ Granite Mulch Over Plant Pit where Granite Shown on Plan (Typ)

2" Depth Granite Over Non-Plant Pit Areas

Finish Sub-Grade

Undisturbed Soil

Root Ball

One Continuous 1" Wide Woven Tree Tie Strap Wrapped Around Stake And Tree Trunk and Stapled To Stake. Place Near Top And At Trunk Mid-Point

4" Deep Watering Basin Shall be Gentle and Uniform Throughout with No Obstrusive Edges

Establish minimum 1" high positive drainage away from base of tree

Prepared Soil

3 x Dia. of the Rootball

NOTES:

1. Install stakes with specific tree species as noted per Landscape Legend on Dwg No R-01.01.
2. Stakes should be installed such that they provide the best protection against prevailing winds.
3. Place opposing tree wraps near top and at mid-point of trunk.
4. Contractor shall follow the approved submitted pruning, staking/guying, and irrigation plan.
5. Roughen bottom and sides of excavated hole prior to setting.

DETAIL L3_{NTS}

MULTI-TRUNK TREE PLANTING

Tree Trunk

Lodgepole Pine, 2" dia.

Second Strap to Wrap to First Strap Only. Alternate Sides From Top Straps to Mid Point Straps

Outside of Planting Pit

One Continuous 1" Wide Woven Tree Tie Strap Wrapped Around Stake and Tree Trunk and Stapled to Stake.

Staple Strap to Pole

NOTES:

1. Install stakes with specific tree species as noted per Landscape Legend on Dwg No R-01.01.
2. Stakes should be installed such that they provide the best protection against prevailing winds.
3. Place opposing tree wraps near top and at mid-point of trunk.

DETAIL L2_{NTS}

TREE DOUBLE STAKING DETAIL

Staple Strap to Pole

One Continuous 1" Wide Woven Tree Tie Strap Wrapped Around Stake and Tree Trunk and Stapled to Stake.

Tree Trunk Typ

Attach Woven Tree Tie to Largest Tree Trunks

Lodgepole Pine, 2" Dia


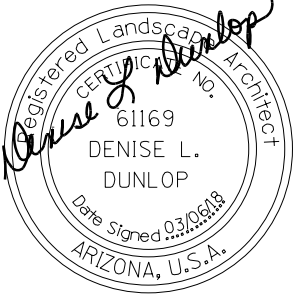
Outside of Planting Pit

NOTES:

1. Install stakes with specific tree species as noted per Landscape Legend on Dwg No R-01.01.
2. Stakes should be installed such that they provide the best protection against prevailing winds.
3. Place opposing tree wraps near top and at mid-point of trunk.

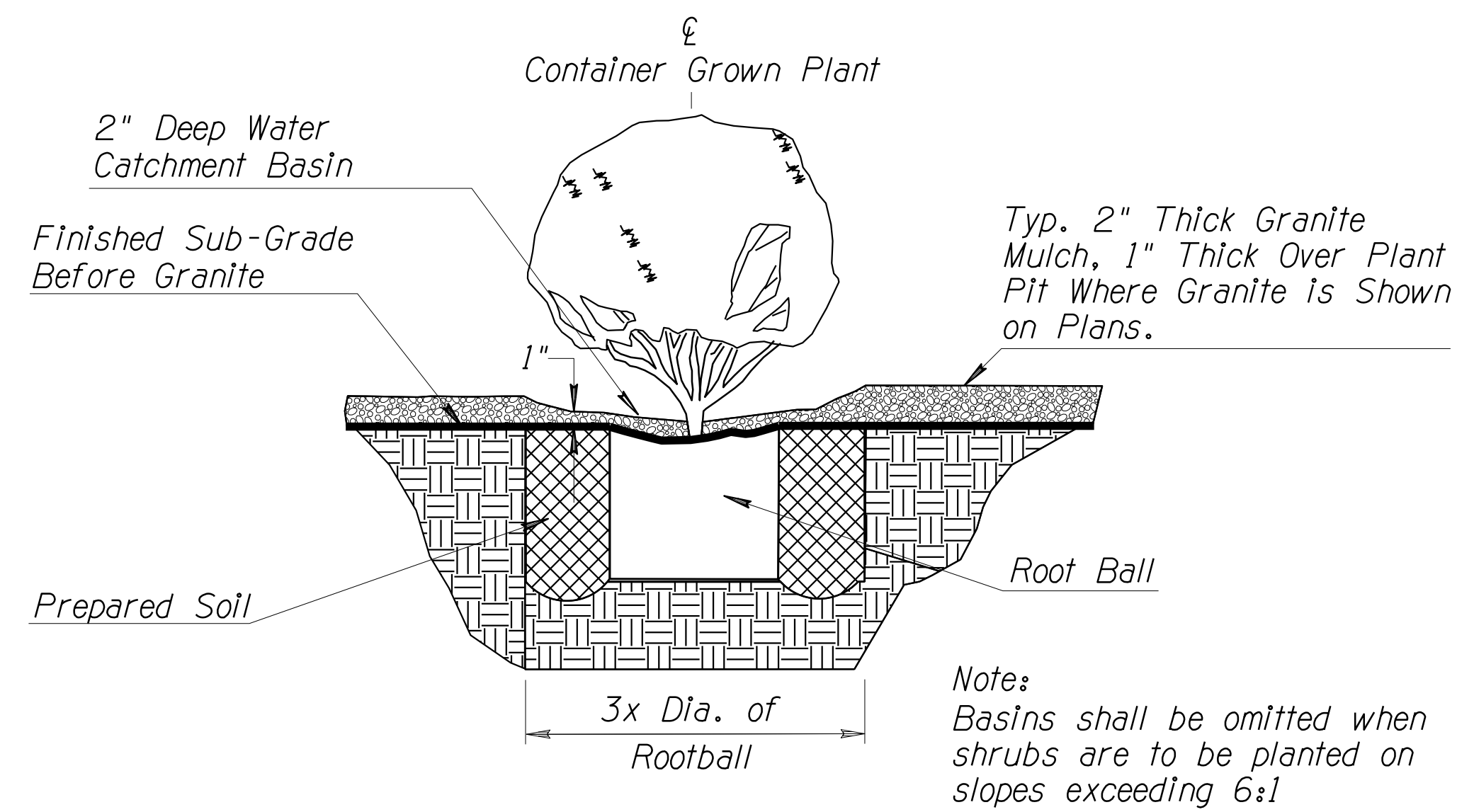
DETAIL L4_{NTS}

TREE TRIPLE STAKING DETAIL

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DH		03/18	
DH		03/18	
DD		03/18	
 J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com			LANDSCAPE DETAILS L1, L2, L3 & L4 
ROUTE	LOCATION	Expires: 12/31/2018	
US 60	GRAND AVENUE FRONTAGE ROAD	DWG NO. R-01.03	
TRACS NO. H8874 OIC		OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	203	232	

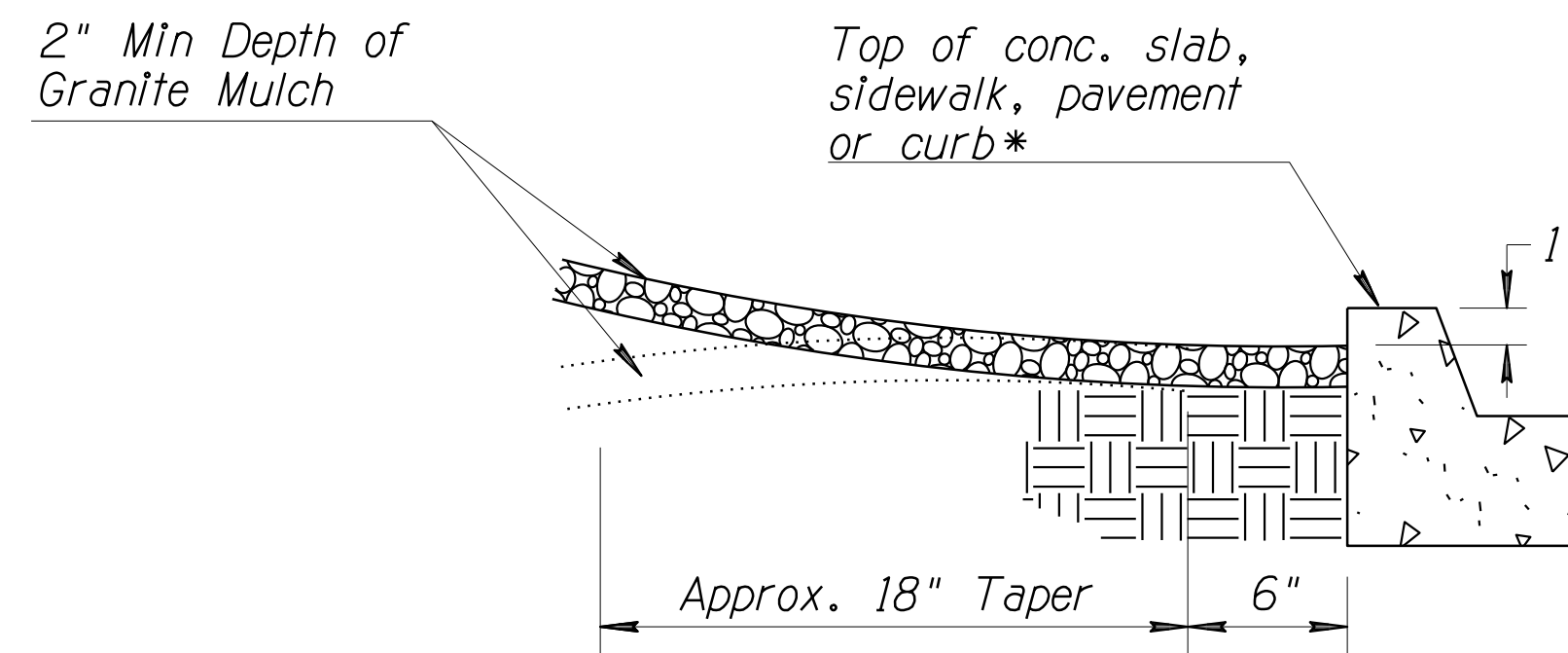
060 MA 144



DETAIL L5_{NTS}

SHRUB / ACCENT / GROUND COVER / CACTI / VINE PLANTING

* = Finished grade of granite mulch shall be 1" below adjoining items. Excavate or fill as req'd.



NOTE:
Hold granite mulch 1" below finish grade of adjoining surface for 6" min., then taper granite mulch bottom for approx. 18" to match finished grade or as approved by the Landscape Architect.

DETAIL L6_{NTS}

GRANITE MULCH / EDGE FINISH

DATE - LOCATION - REVISIONS - FINISHED PLANS - SURVEY NO.

DESIGN	DH	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES	
DRAWN	DH	03/18		
CHECKED	DD	03/18		
			LANDSCAPE DETAILS L5 & L6	
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		Expires: 12/31/2018
TRACS NO. H8874 01C			DWG NO.	R-01.04
				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	204	232	

060 MA 144

LANDSCAPE LEGEND

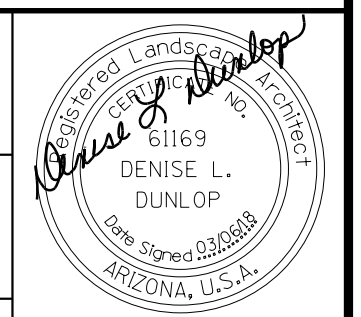
SYM	ABV	QTY
TREES:		
⊕	Ca	2
⊕	Pc	0
⊕	Qv	1
SHRUBS:		
⊕	Am	22
⊕	Bm	0
⊕	Cc	9
⊕	Ef	0
⊕	Em	0
⊕	Lc	0
⊕	Rp	0
⊕	Ss	2
Accents:		
⊕	Hp	66
⊕	Pm	0
Groundcover:		
⊕	Ls	42
⊕	Rb	18

INERT MATERIALS LEGEND		
SYM.	DESCRIPTION	QUANTITY
⊕	1/2" Screened DG Color: Dark Brown	797 Sq. Yd.

--- SDL ---
SIGHT DISTANCE LINE (SDL)

DESIGN	NAME	DATE
DH		03/18
DD		03/18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES



LANDSCAPE PLAN SHEET
STA. 100+00 TO STA. 107+00

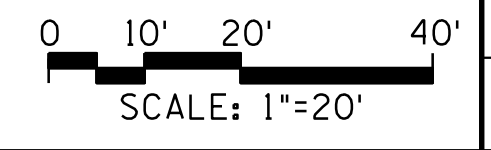
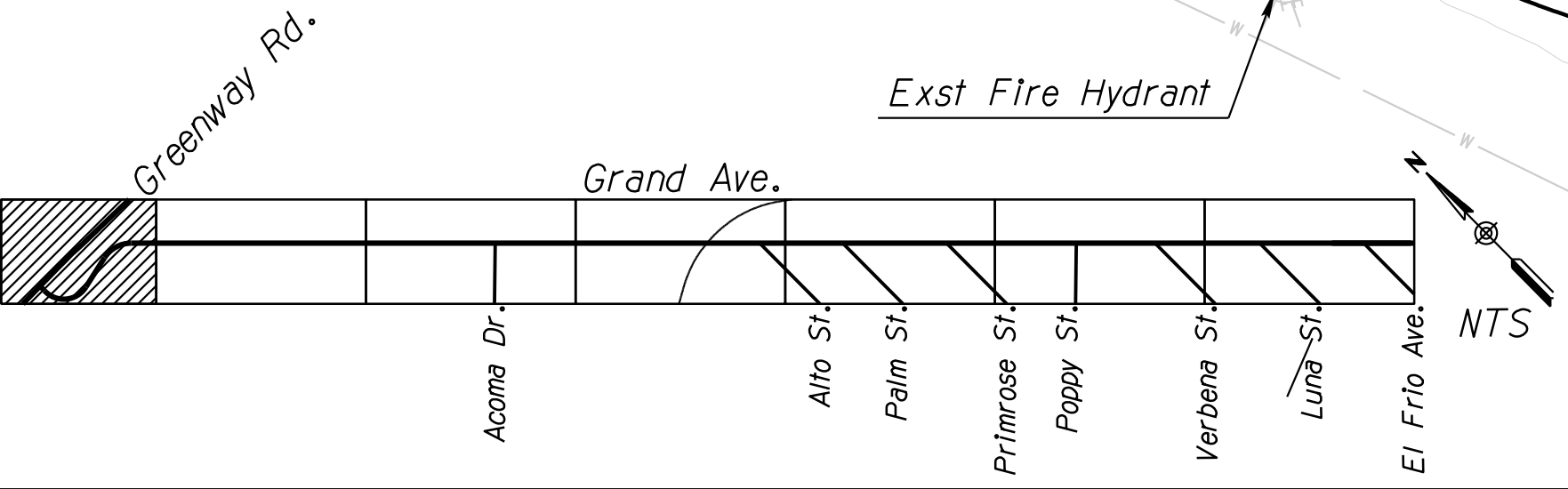
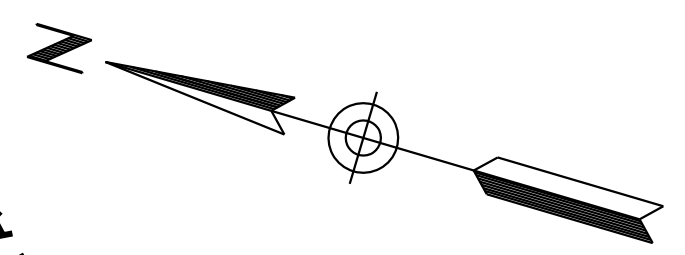
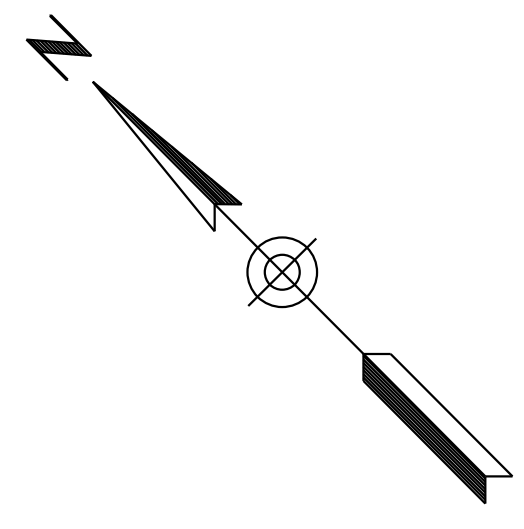
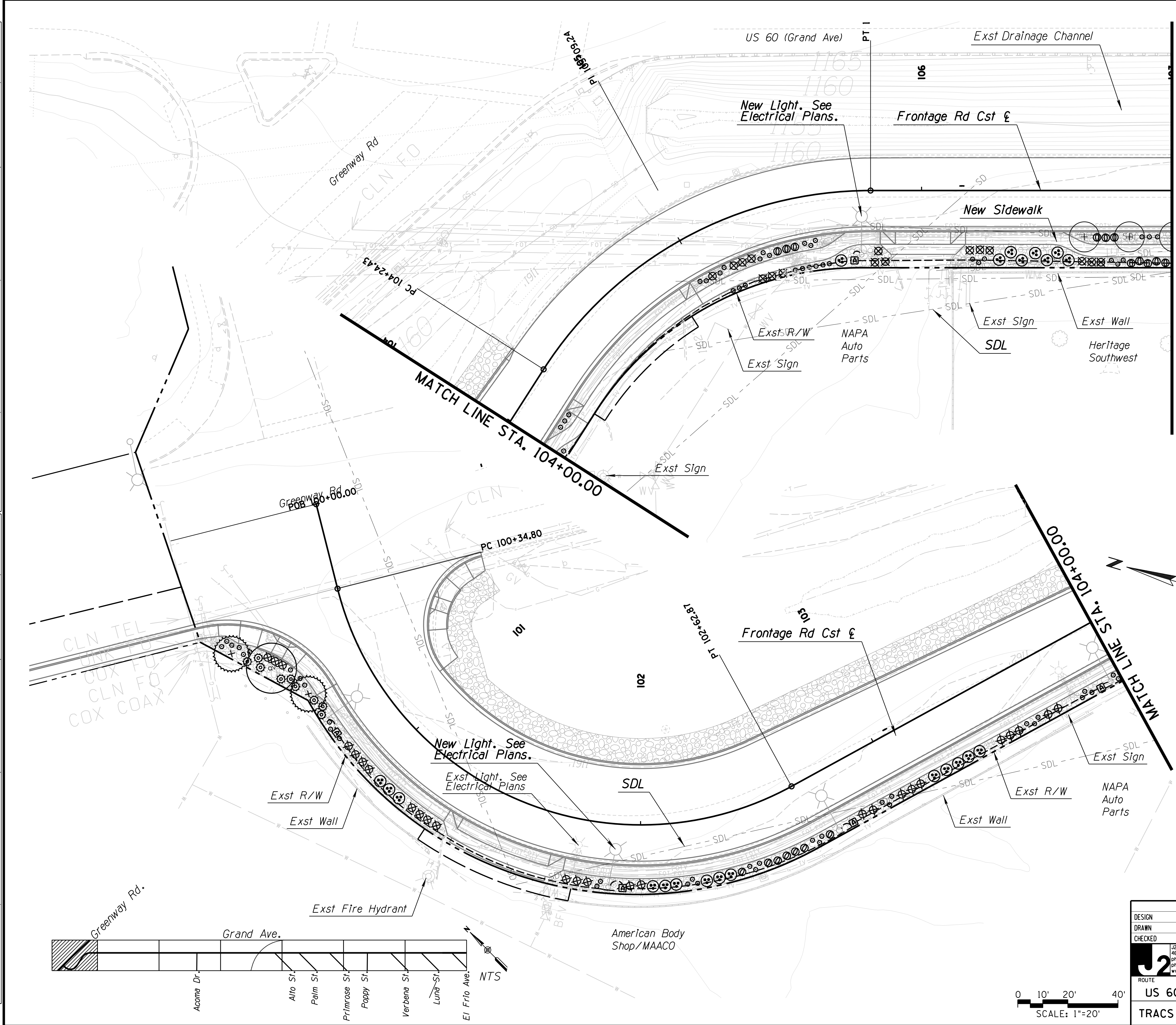
J2 engineering and environmental design
4649 east cotton gin loop, suite B2
phoenix, arizona 85040
phone: 602.438.2221
www.j2design.us

ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD

Expires: 12/31/2018
DWG NO. R-01.05

TRACS NO. H8874 01C

OF



SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	205	232	

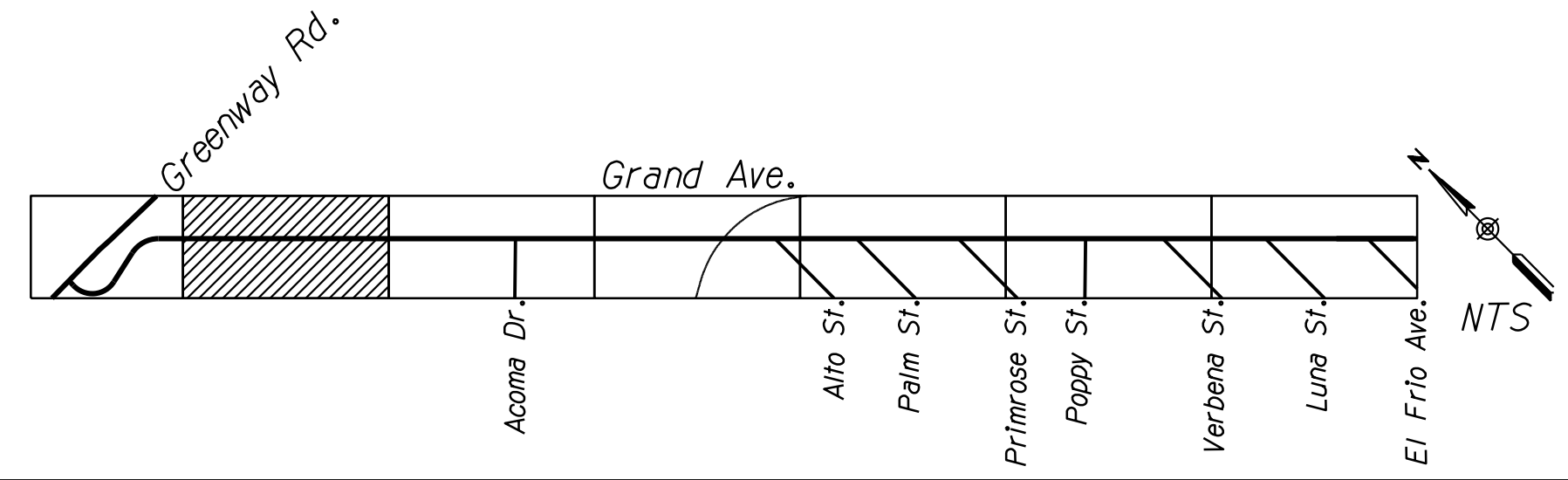
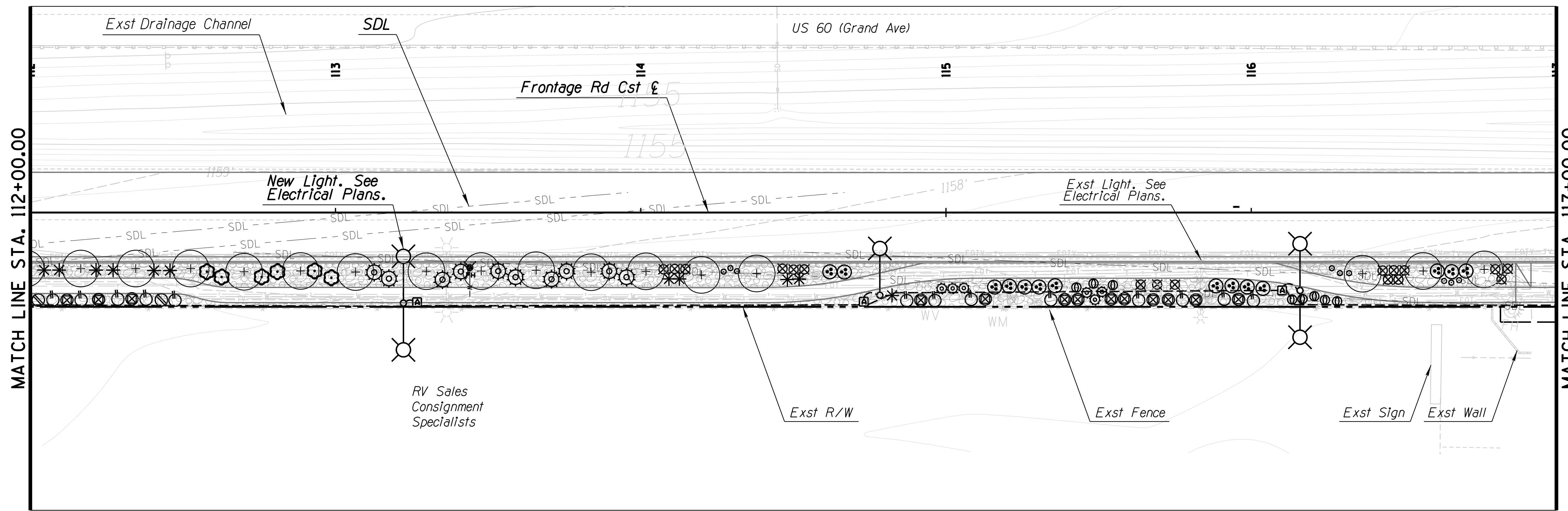
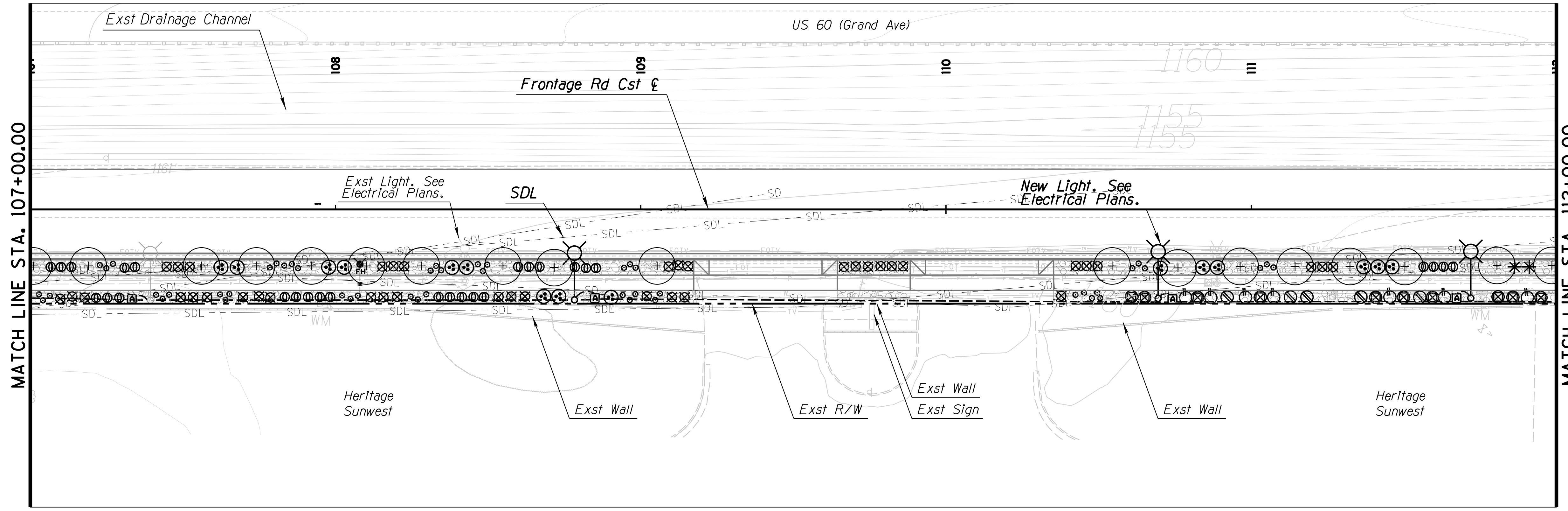
060 MA 144

LANDSCAPE LEGEND

SYM	ABV	QTY
TREES:		
⊕	Ca	0
⊕	Pc	0
⊕	Qv	0
SHRUBS:		
⊕	Am	29
⊕	Bm	20
⊕	Cc	16
⊕	Ef	0
⊕	Em	6
⊕	Lc	23
⊕	Rp	7
⊕	Ss	34
Accents:		
⊕	Hp	57
*	Pm	13
Groundcover:		
⊕	Ls	57
⊕	Rb	36

INERT MATERIALS LEGEND		
SYM.	DESCRIPTION	QUANTITY
⊕	1/2" Screened DG Color: Dark Brown	814 Sq. Yd.

--- SDL ---
SIGHT DISTANCE LINE (SDL)



DESIGN	NAME	DATE
DESIGNED	DH	03/18
DRAWN	DH	03/18
CHECKED	DD	03/18

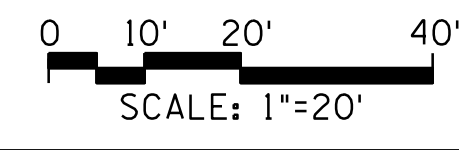
J2 engineering and environmental design
4649 east cotton gin loop, suite B2
phoenix, arizona 85040
phone: 602.438.2221
www.j2designus.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

LANDSCAPE PLAN SHEET
STA. 107+00 TO STA. 117+00

ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C



SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	206	232	

060 MA 144

LANDSCAPE LEGEND

SYM	ABV	QTY
TREES:		
⊕	Ca	0
⊕	Pc	0
⊕	Qv	0
SHRUBS:		
⊕	Am	29
⊕	Bm	0
⊕	Cc	1
⊕	Ef	0
⊕	Em	5
⊕	Lc	5
⊕	Rp	7
⊕	Ss	14
Accents:		
⊕	Hp	34
*	Pm	12
Groundcover:		
⊕	Ls	32
⊕	Rb	26

INERT MATERIALS LEGEND		
SYM.	DESCRIPTION	QUANTITY
⊕	1/2" Screened DG Color: Dark Brown	612 Sq. Yd.

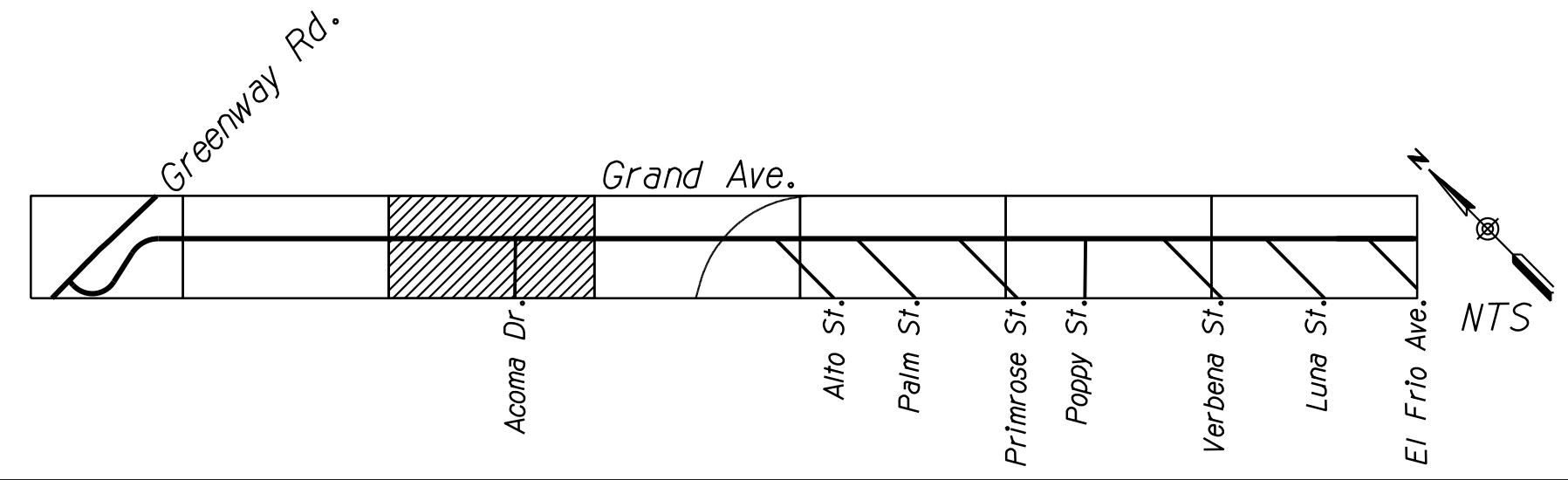
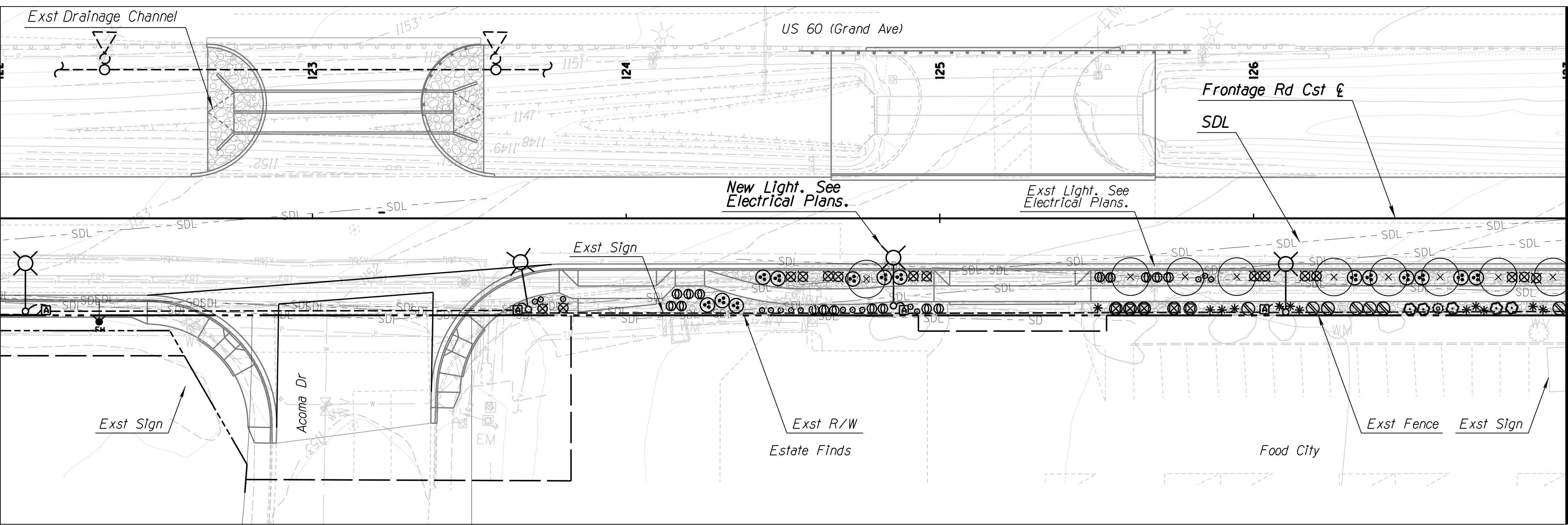
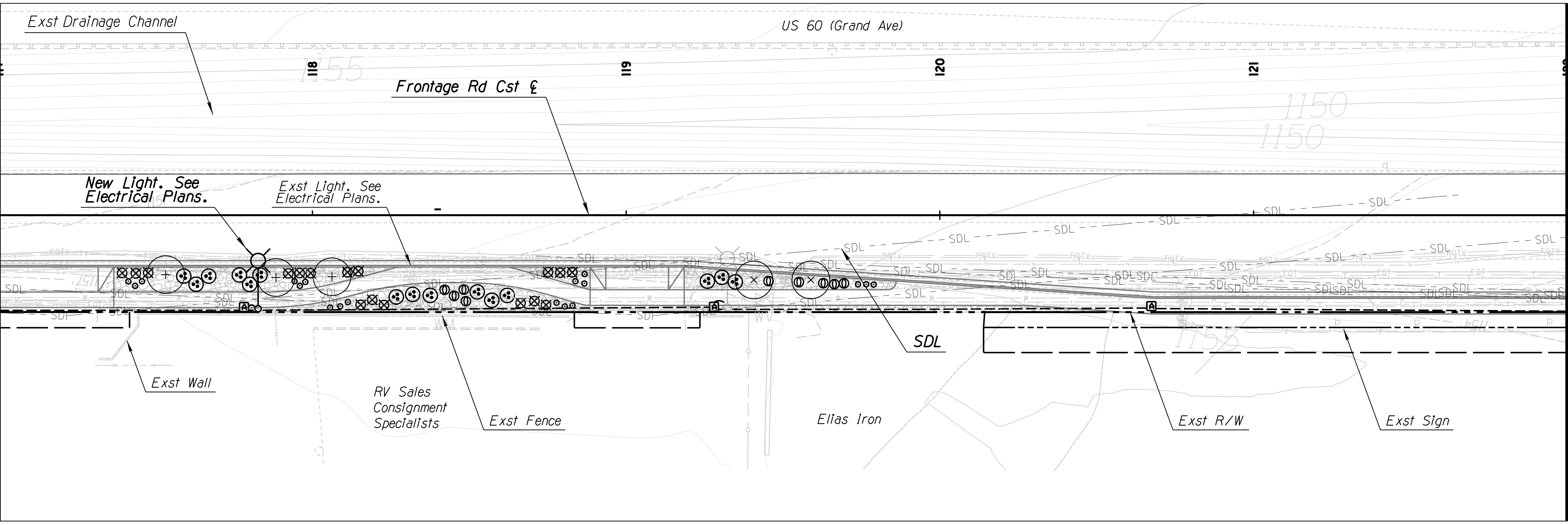
--- SDL ---
SIGHT DISTANCE LINE (SDL)

MATCH LINE STA. 117+00.00

MATCH LINE STA. 122+00.00

MATCH LINE STA. 122+00.00

MATCH LINE STA. 127+00.00



DESIGN	DH	NAME	DATE
DRAWN	DH		03/18
CHECKED	DD		03/18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

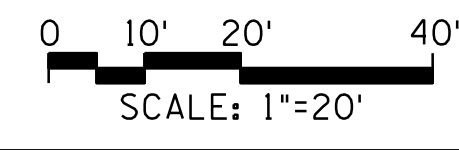
LANDSCAPE PLAN SHEET
STA. 117+00 TO STA. 127+00

ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C

Expires: 12/31/2018
DWG NO. R-01.07

OF

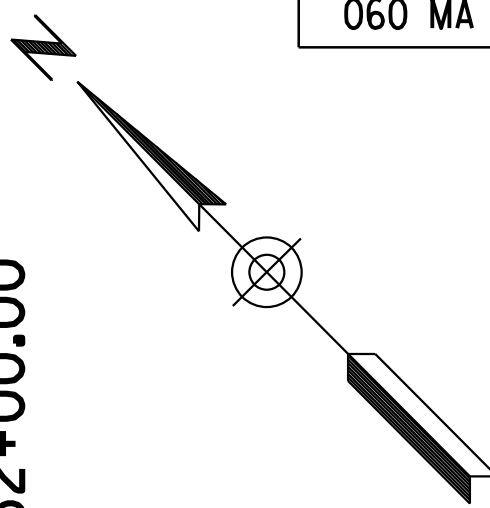


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	207	232	

060 MA 144

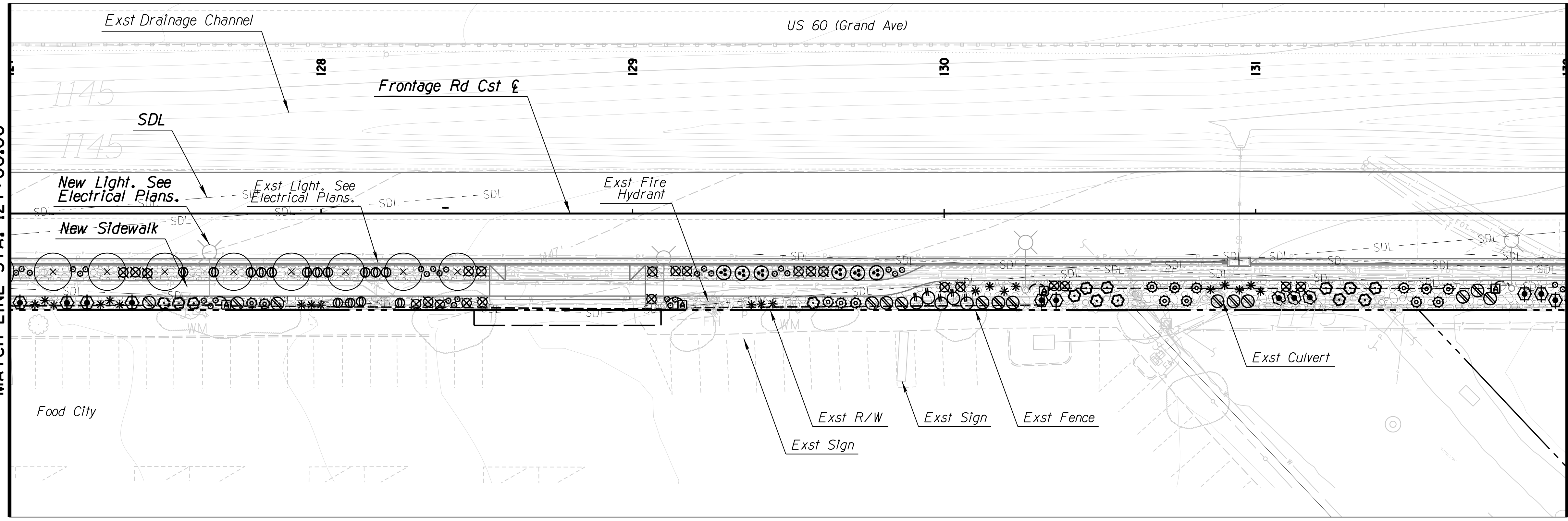
LANDSCAPE LEGEND

SYM	ABV	QTY
TREES:		
⊕	Ca	3
⊕	Pc	2
⊕	Qv	0
SHRUBS:		
⊕	Am	6
⊕	Bm	5
⊕	Cc	15
⊕	Ef	13
⊕	Em	14
⊕	Lc	0
⊕	Rp	15
⊕	Ss	10
Accents:		
⊕	Hp	49
*	Pm	24
Groundcover:		
⊕	Ls	46
⊕	Rb	21



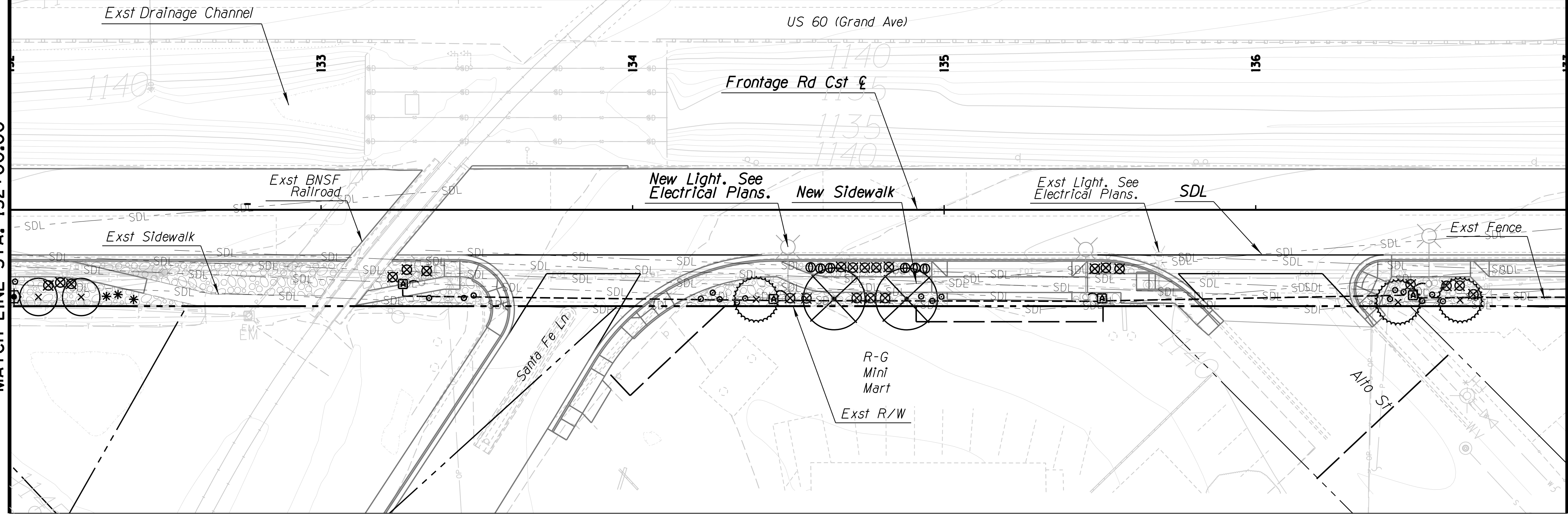
MATCH LINE STA. 127+00.00

MATCH LINE STA. 132+00.00



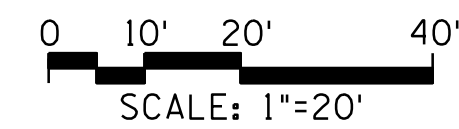
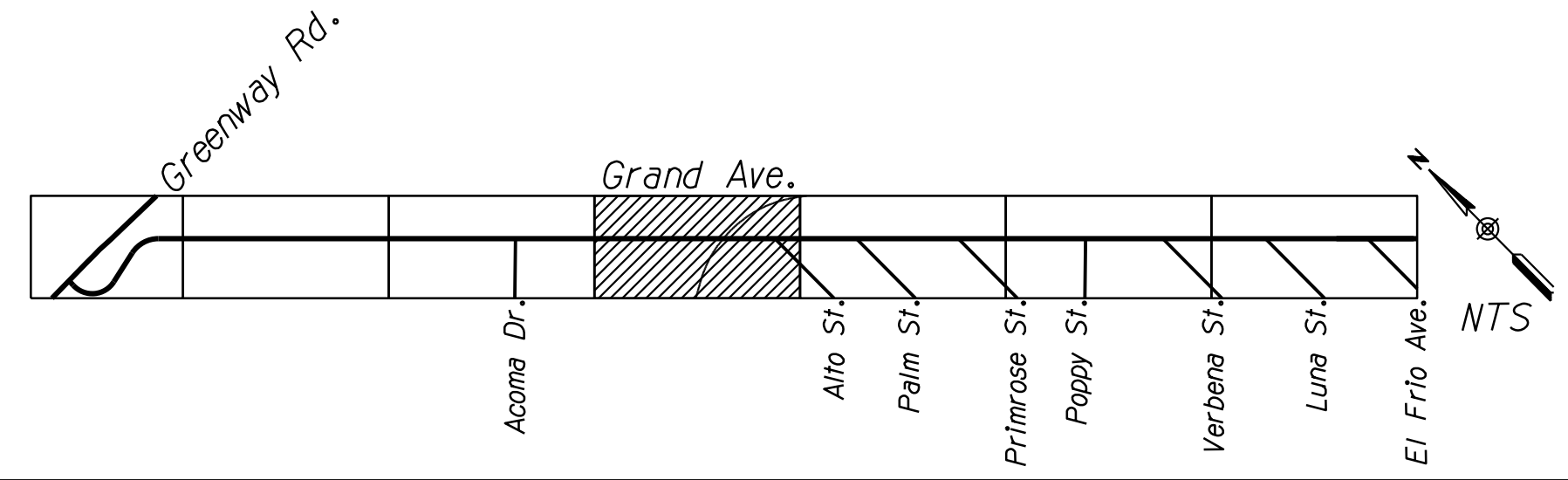
MATCH LINE STA. 132+00.00

MATCH LINE STA. 137+00.00



INERT MATERIALS LEGEND		
SYM.	DESCRIPTION	QUANTITY
⊕	1/2" Screened DG Color: Dark Brown	742 Sq. Yd.

--- SDL ---
SIGHT DISTANCE LINE (SDL)



DESIGN	DH	NAME	DATE
DRAWN	DH		03/18
CHECKED	DD		03/18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

LANDSCAPE PLAN SHEET
STA. 127+00 TO STA. 137+00

ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C

DWG NO. R-01.08

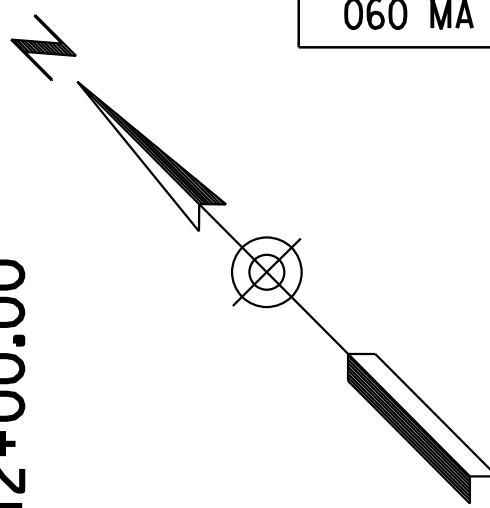
OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	208	232	

060 MA 144

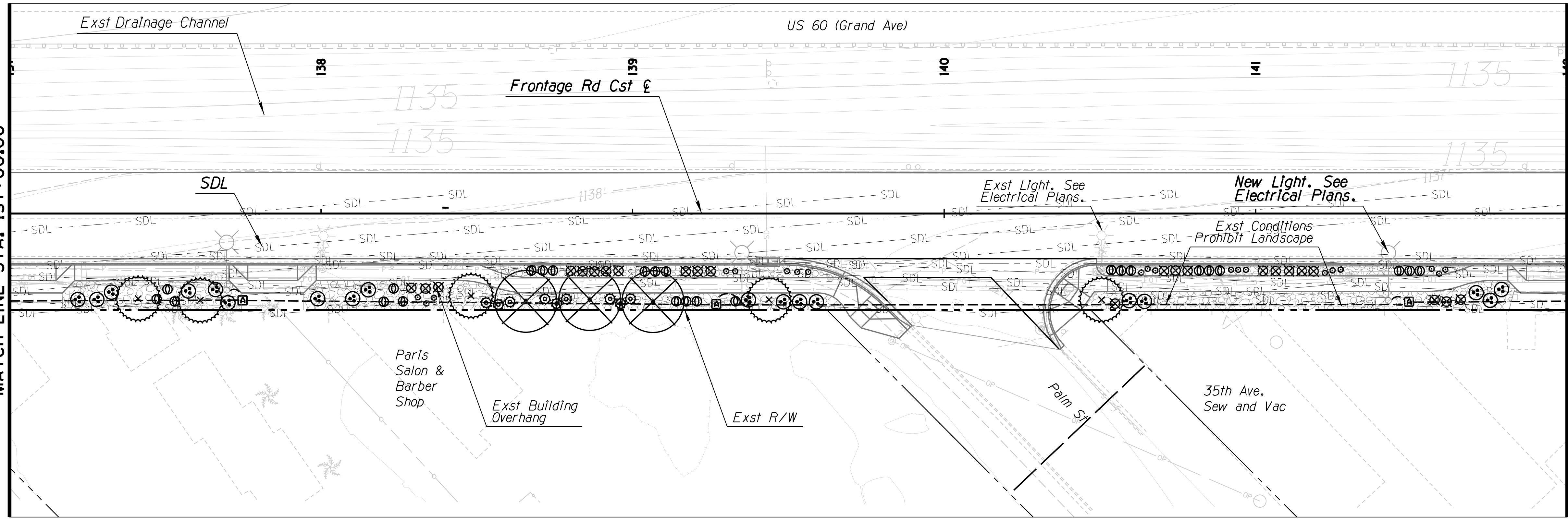
LANDSCAPE LEGEND

SYM	ABV	QTY
TREES:		
+	Ca	7
⊕	Pc	9
○	Qv	0
SHRUBS:		
⊗	Am	33
⊙	Bm	0
⊛	Cc	9
⊕	Ef	0
⊕	Em	0
⊕	Lc	0
⊕	Rp	0
+	Ss	0
Accents:		
⊗	Hp	51
*	Pm	7
Groundcover:		
⊕	Ls	50
⊕	Rb	44



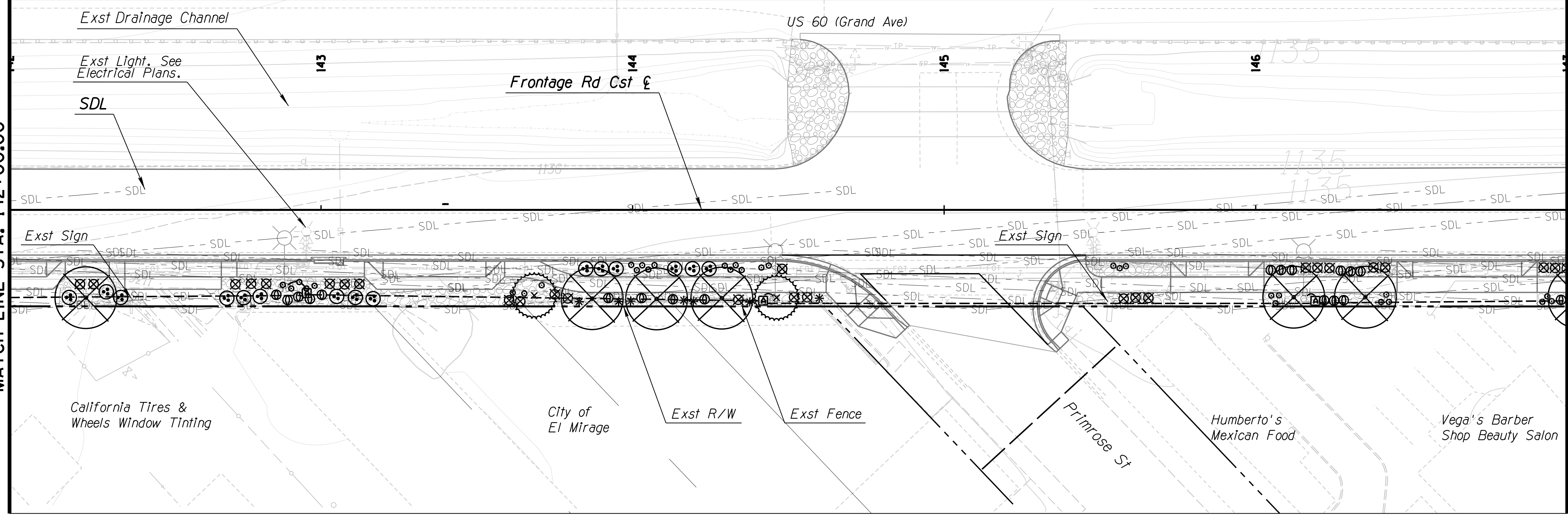
MATCH LINE STA. 137+00.00

MATCH LINE STA. 142+00.00



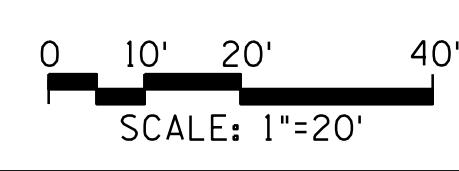
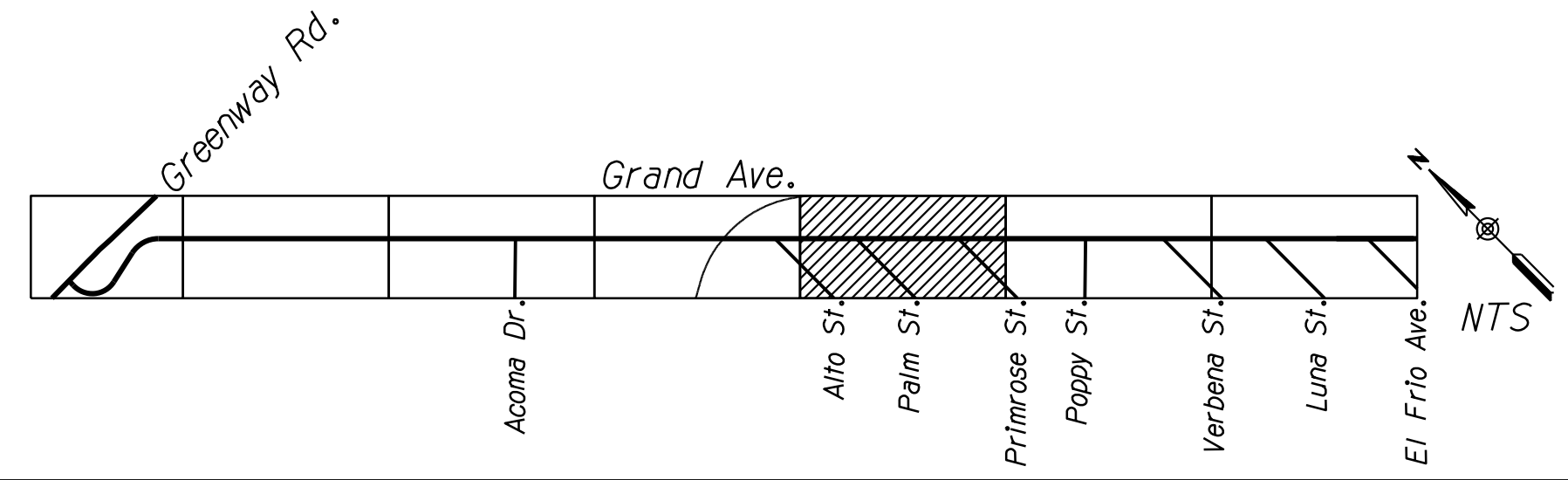
MATCH LINE STA. 142+00.00

MATCH LINE STA. 147+00.00



INERT MATERIALS LEGEND		
SYM.	DESCRIPTION	QUANTITY
⊕	1/2" Screened DG Color: Dark Brown	808 Sq. Yd.

--- SDL ---
SIGHT DISTANCE LINE (SDL)



DESIGN	DH	DATE	03/18
DRAWN	DH	DATE	03/18
CHECKED	DD	DATE	03/18

J2 engineering and environmental design
4649 east cotton gin loop, suite B2
Phoenix, Arizona 85040
phone: 602.438.2221
www.j2designus.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

LANDSCAPE PLAN SHEET
STA. 137+00 TO STA. 147+00

ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C

Expire: 12/31/2018
DWG NO. R-01.09

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	209	232	

060 MA 144

LANDSCAPE LEGEND

SYM	ABV	QTY
TREES:		
⊕	Ca	4
⊕	Pc	11
⊕	Qv	2
SHRUBS:		
⊕	Am	19
⊕	Bm	0
⊕	Cc	0
⊕	Ef	0
⊕	Em	0
⊕	Lc	0
⊕	Rp	0
⊕	Ss	0
Accents:		
⊕	Hp	52
⊕	Pm	0
Groundcover:		
⊕	Ls	50
⊕	Rb	33

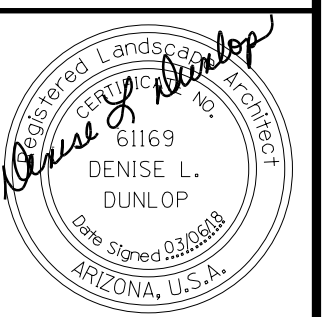
INERT MATERIALS LEGEND		
SYM.	DESCRIPTION	QUANTITY
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--- SDL ---
SIGHT DISTANCE LINE (SDL)

DESIGN	NAME	DATE
DH		03/18
DRAWN		03/18
CHECKED		03/18

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

LANDSCAPE PLAN SHEET
STA. 147+00 TO STA. 157+00

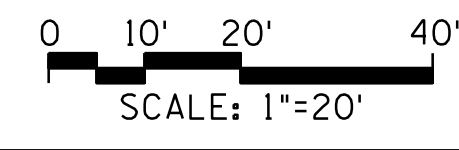
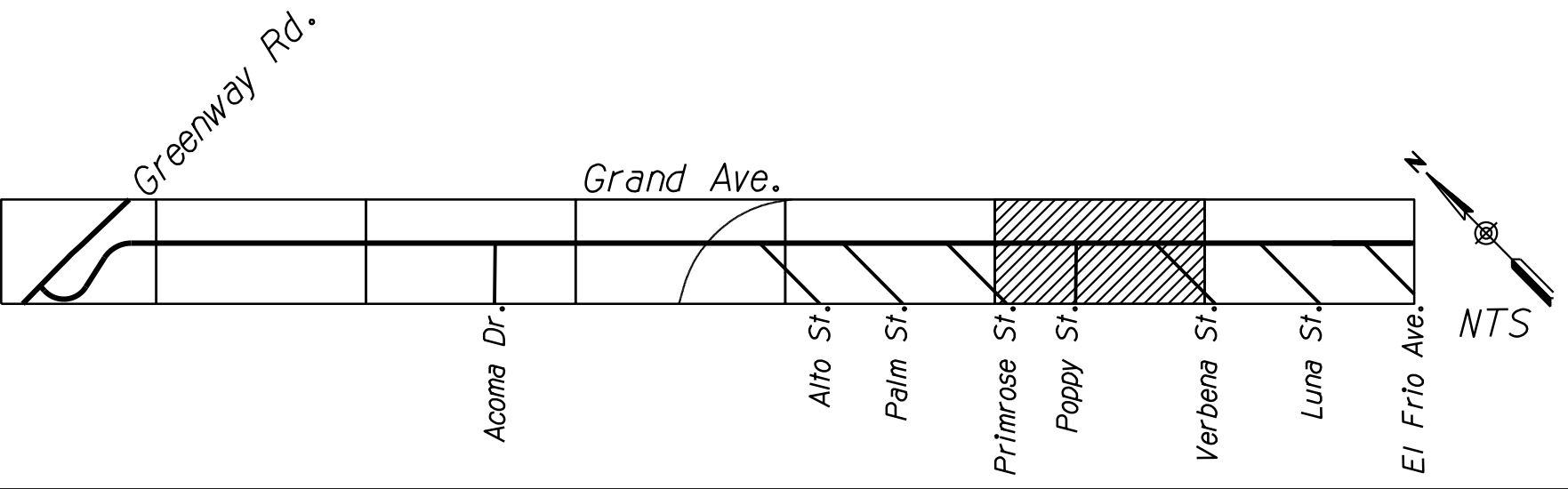
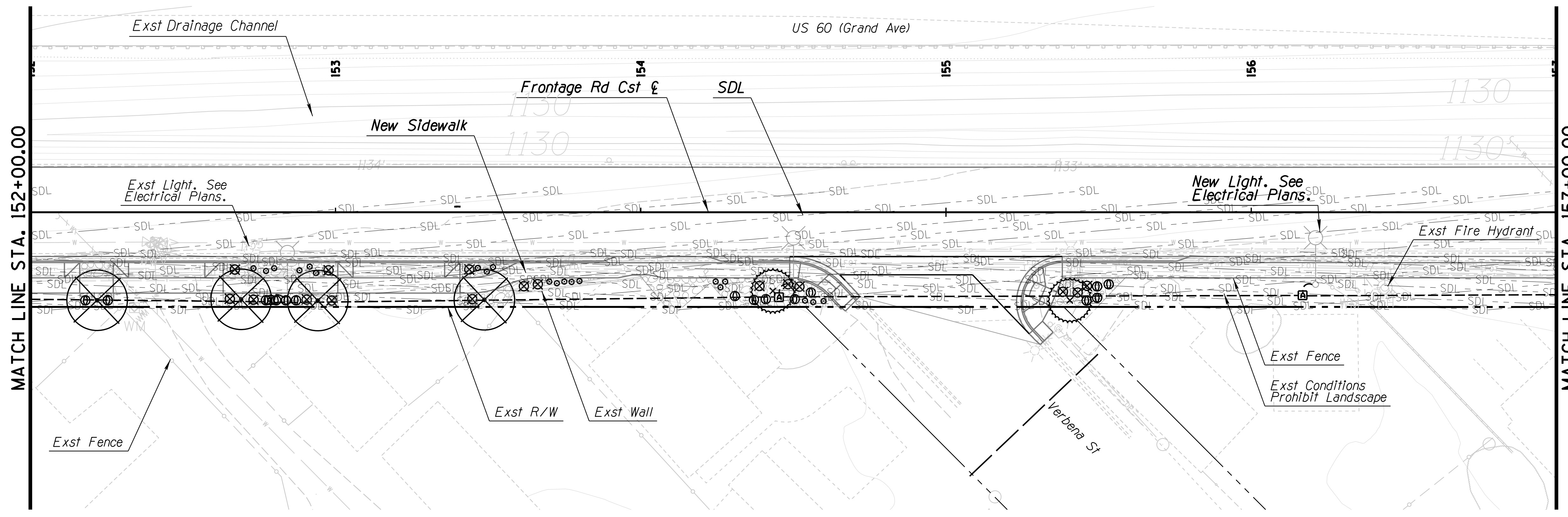
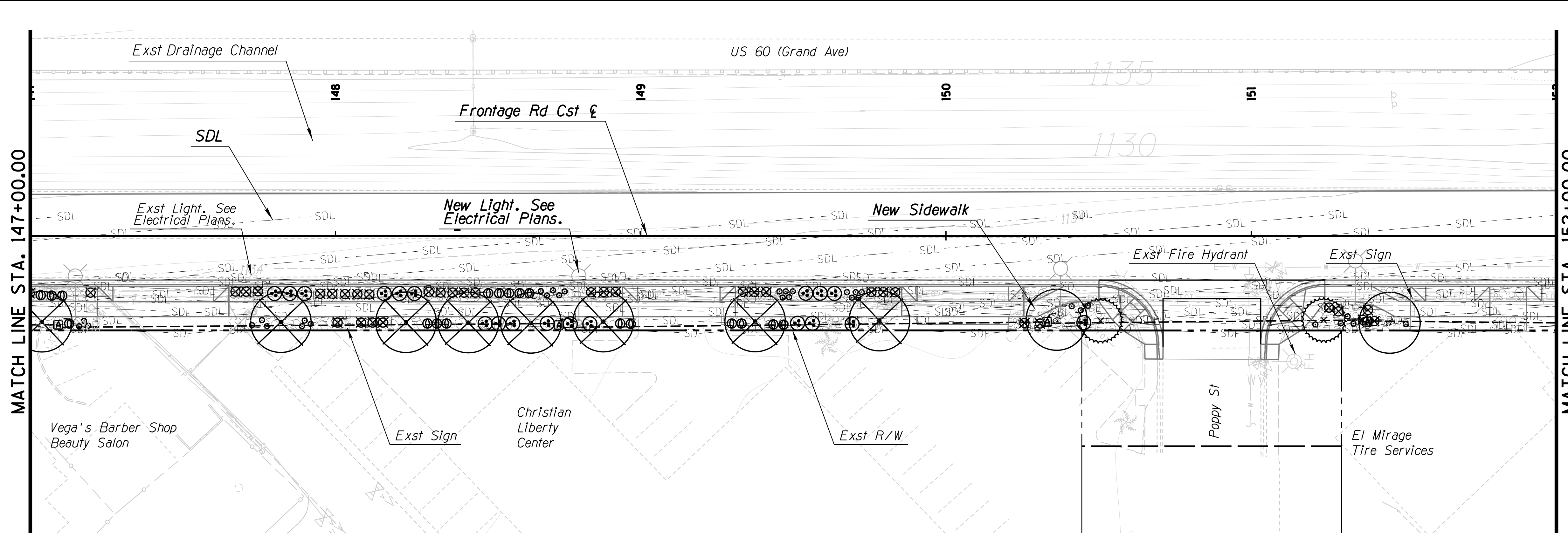


ROUTE	LOCATION
US 60	GRAND AVENUE FRONTAGE ROAD

Expires: 12/31/2018
DWG NO. R-01.10

TRACS NO. H8874 01C

OF



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	210	232	

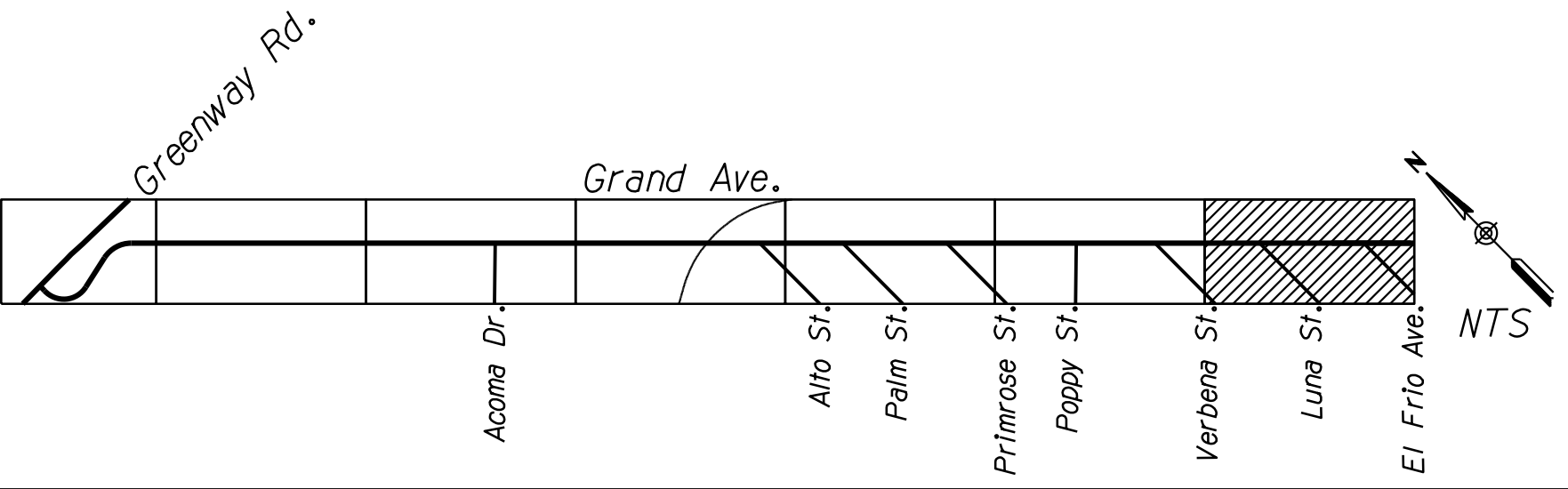
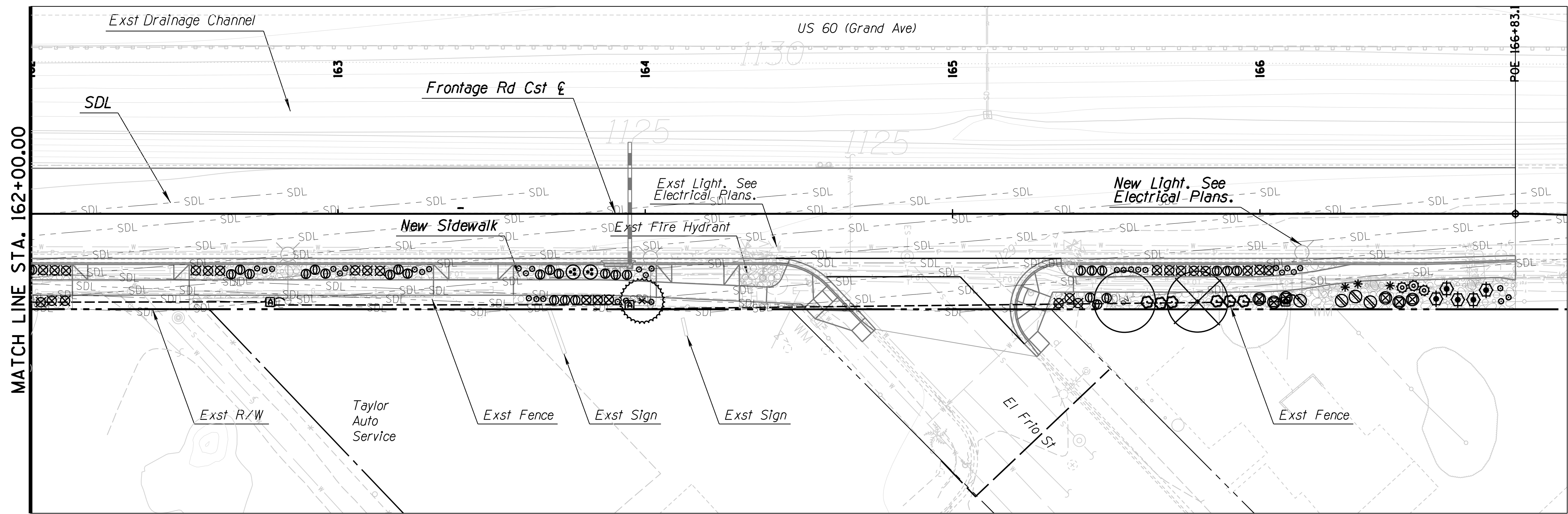
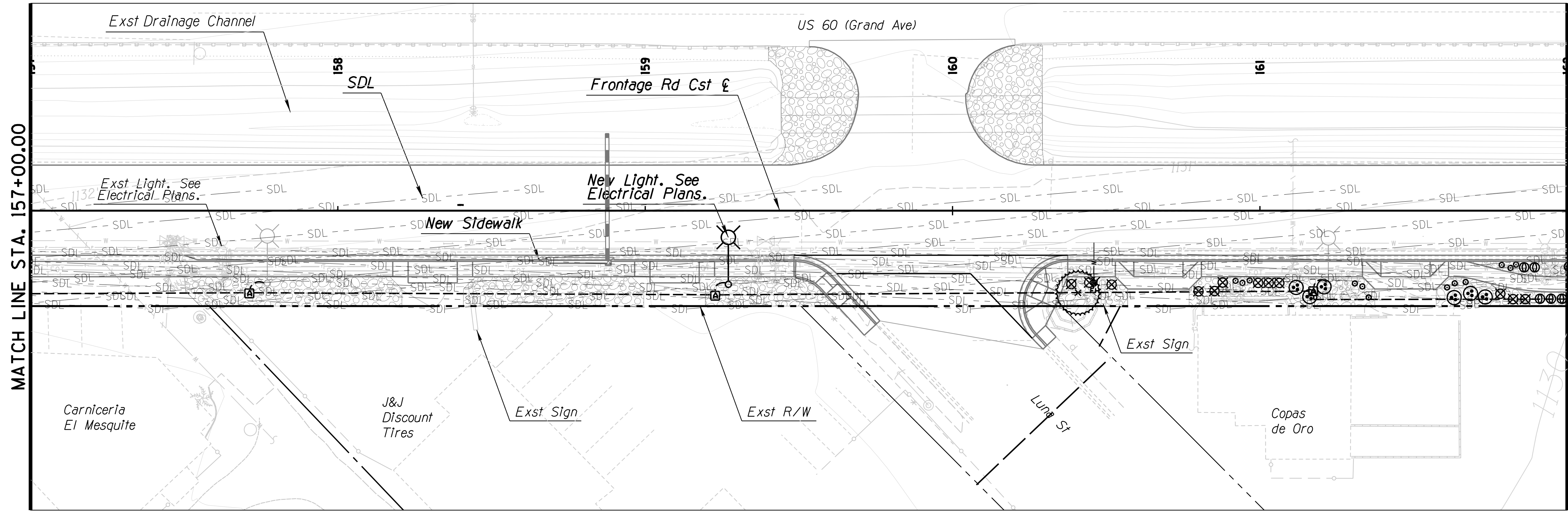
060 MA 144

LANDSCAPE LEGEND

SYM	ABV	QTY
TREES:		
⊕	Ca	2
⊕	Pc	1
⊕	Qv	1
SHRUBS:		
⊕	Am	8
⊕	Bm	0
⊕	Cc	3
⊕	Ef	5
⊕	Em	6
⊕	Lc	6
⊕	Rp	4
⊕	Ss	0
Accents:		
⊕	Hp	46
*	Pm	3
Groundcover:		
⊕	Ls	38
⊕	Rb	33

INERT MATERIALS LEGEND		
SYM.	DESCRIPTION	QUANTITY
⊕	1/2" Screened DG Color: Dark Brown	755 Sq. Yd.

--- SDL ---
SIGHT DISTANCE LINE (SDL)



DESIGN	NAME	DATE
DESIGN	DH	03/18
DRAWN	DH	03/18
CHECKED	DD	03/18

J2 engineering and environmental design
4649 east cotton gin loop, suite B2
phoenix, arizona 85040
phone: 602.438.2221
www.j2designus.com

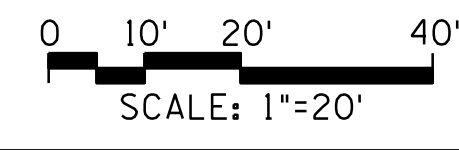
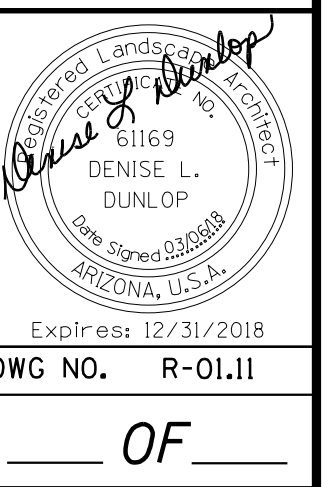
ROUTE	LOCATION
US 60	GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

LANDSCAPE PLAN SHEET
STA. 157+00 TO STA. 167+00

Expires: 12/31/2018
DWG NO. R-01.11



IRRIGATION EQUIPMENT SUMMARY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	211	232	

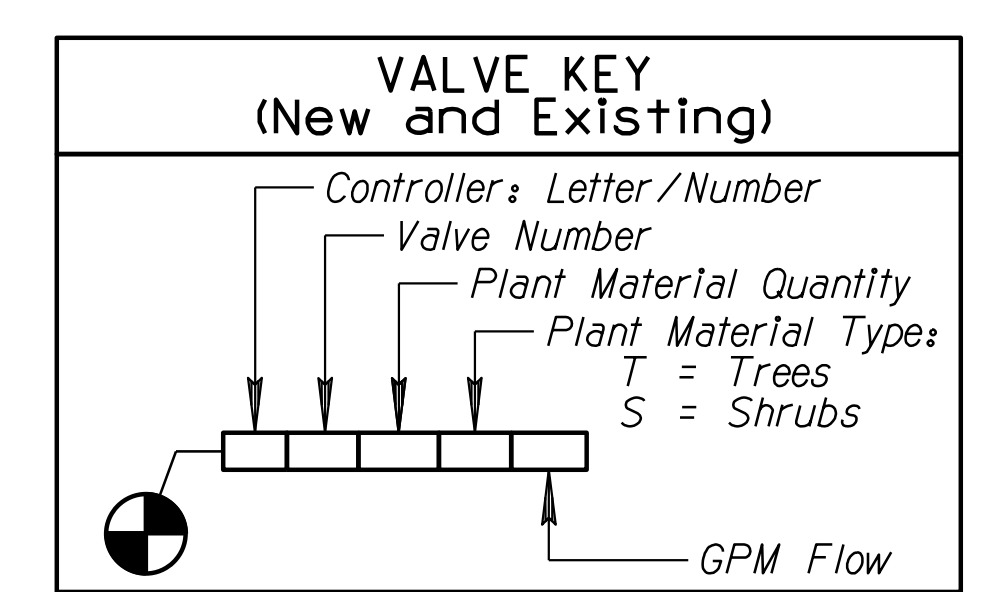
060 MA 144

SYMBOL	DESCRIPTION
	New Water Meter: 1" Size - See Civil Plans
	Existing Water Meter: 1" Size - Protect in Place
	New Backflow Preventer: 1" Reduced Pressure Backflow Preventer. Mount within Steel Enclosure and a Concrete Pad. Enclosure shall be Powdered Coated Tan by Manufacturer.
	Existing Backflow Preventer: 1" Size - Protect in Place
	New Irrigation Controller: Calsense CS3-2W-S1-CS3-LR-LR-Stubby-TP-110-CS3-2Wire-Opt-CS3-2W-Poc = 128 Station Two Wire Controller Mounted in Heavy Duty Stainless Steel Pedestal Enclosure with One Antenna Hole (CS3-2W-S1), Factory Installed Local Radio (CS3-LR), Local Radio GPRS Stubby Antenna with 3 feet of Cable (LR-Stubby), Surge Arrestor & Transient Protection Board (TP-110), Two Wire Terminal Card (CS3-2Wire-Opt), & Two Wire Point of Connection (CS3-2W-POC). Also include CS3RR Hand Held Remote & P-7354-D Two Wire Cable in 1-1/4" Sch 40 Electrical Conduit. Install & Clearly Label Wires for master Valve & Flow Meter.
	Existing Irrigation Controller: Protect in Place.
	New Electric Meter:
	Existing Electric Meter: Protect in Place.
	New Master Valve: 1" (Normally Open) Control Valve
	New Flow Meter: 1" Brass Calsense FM-1B or Equal
	New Ball Valve: 1.5" Bronze Full Port Ball Valve with Stainless Steel Handle
	Remote Control Valve: 1" Control Valve
	Pressure Regulator & Filter: 3/4" Regulator at 30 PSI & 3/4" Wye Filter with 200 Mesh Screen
	Surge Protector: 5/8" Copper Grounding Rod & Lighting Arrestor Connected to Two Wire Cable in 7" Round Valve Box.
	Quick Coupler: 1" Brass Two Piece Body Valve with Locking Rubber Cover & 3/4" Outlet in 10" Round Tan Valve Box. Provide Two Valve Keys, Hose Swivels & Locking Cover Keys to City.
	Flush End Cap- 3/4" x 3/4" MHT Outlet with 3/4" PVC Ball Valve in 6" Valve Box.
NOT SHOWN	Multi-Outlet Emitter- 6 Port Emitters with 0.250 Barbed Inlet (See Emitter Schedule on Dwg No I-1.02 for Required Emitter Quantities & Flows per Plant Species)
	Mainline Pipe- 1.5" Schedule 40 PVC
	Tree Lateral Pipe- 3/4" SDR 21 Class 200 PVC
	Shrub Lateral Pipe- 3/4" SDR 21 Class 200 PVC
	Pipe Sleeves- 3" or 6" Schedule 40 PVC, or 12" HDPE (Size as Noted on Plans)

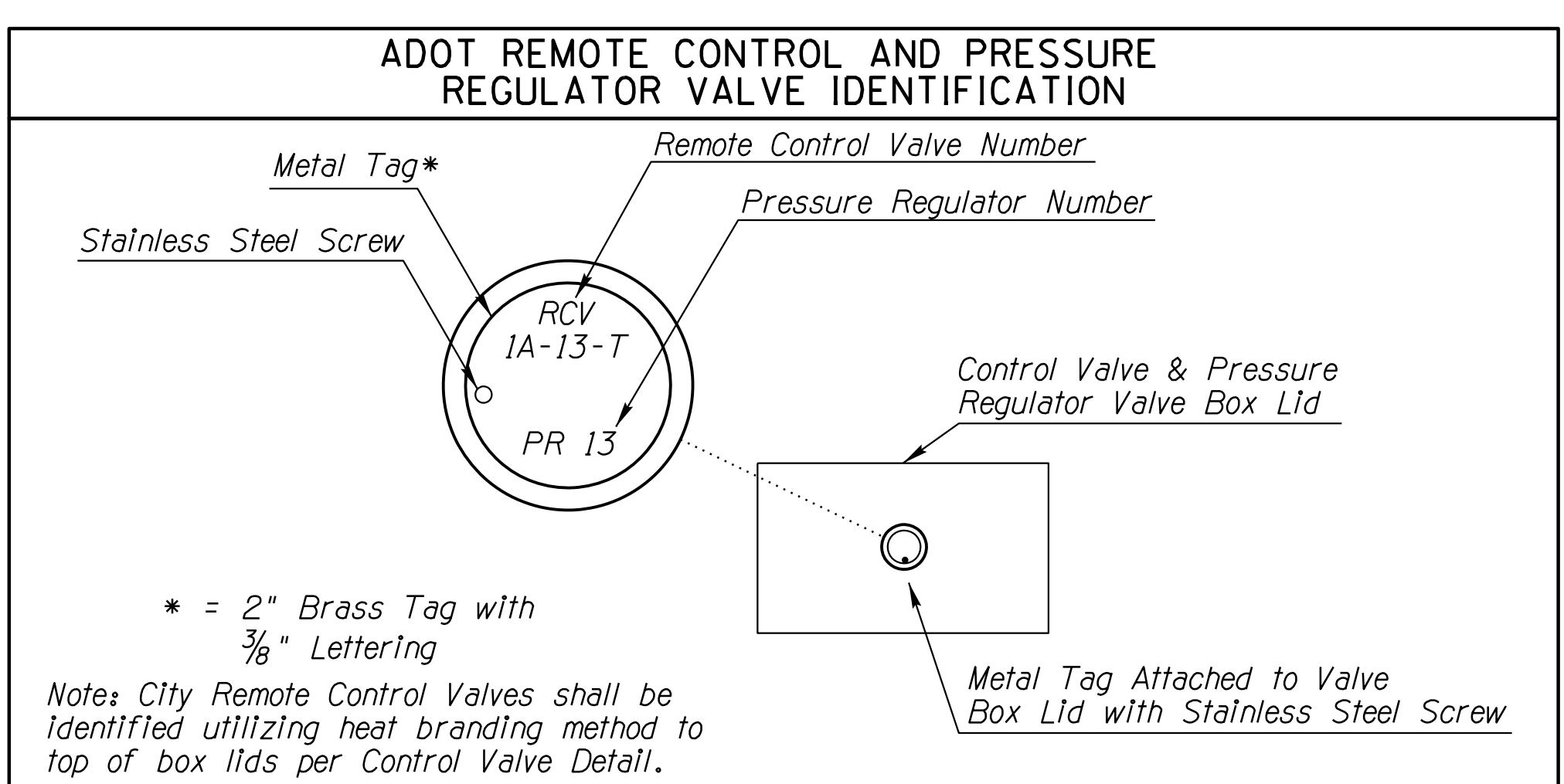
IRRIGATION EQUIPMENT SUMMARY						
KEY	3/4"	1 1/2"	3"	6"	12"	EACH
						2
						2
						2
						2
						3
						3
						5
						18
						18
						12
						8
Multi Emitter						760
Sch 40 Mainline	4,466					
CL 200 Tree	5,292					
CL 200 Shrub	7,908					
			381	1,244	679	

EMITTER SCHEDULE

SYM	ABV	BOTANICAL NAME	EMITTER TYPE	OUTPUT GPH	NUMBER OF OUTLETS	TOTAL GPH	PLACEMENT TYPE	ANNUAL RUN HOURS	ANNUAL WATER USE GALLONS
TREES and PALMS:									
+	Cc	Caesalpinia cacalaco	Multi	2.3	10	23.0	A	146	3358
+	Pc	Pistachia chinensis	Multi	2.3	12	27.6	A	146	4030
-	Qv	Quercus virginiana	Multi	2.3	12	27.6	A	146	4030
+	Ss	Sophora secundiflora	Multi	2.3	10	23.0	A	146	3358
SHRUBS:									
+	Am	Acalypha monostachya	Multi	1.2	3	3.6	C	82	295
+	Bm	Buddleja marrubifolia	Multi	1.2	1	1.2	C	82	99
+	Cc	Callistemon citrinus 'Little John'	Multi	1.2	2	2.4	C	82	197
+	Ef	Encelia farinosa	Multi	1.2	1	1.2	C	82	99
+	Em	Eremophila maculata 'Valentine'	Multi	1.2	2	2.4	C	82	197
+	Lc	Leucophyllum candidum 'Thunder Cloud'	Multi	1.2	2	2.4	C	82	197
+	Rp	Ruellia peninsularis	Multi	1.2	2	2.4	C	82	197
ACCENTS:									
+	Hp	Hesperaloe x 'Brakelights'	Multi	1.2	1	1.2	C	82	99
+	Pm	Pedilanthus macrocarpa	Multi	1.2	2	2.4	C	82	197
Groundcovers:									
+	Ls	Lantana specles 'New Gold'	Multi	1.2	1	1.2	C	82	99
+	Rb	Ruellia brittoniana 'Katie'	Multi	1.2	1	1.2	C	82	99



Notes:
 1. Intended Design Pressure = 60 PSI with a targeted Distribution Uniformity of 84+%.
 2. Irrigation lines may be shown outside of landscape areas for graphic clarity- install all equipment in planting areas only within ADOT or City dedicated Right-Of-Ways.

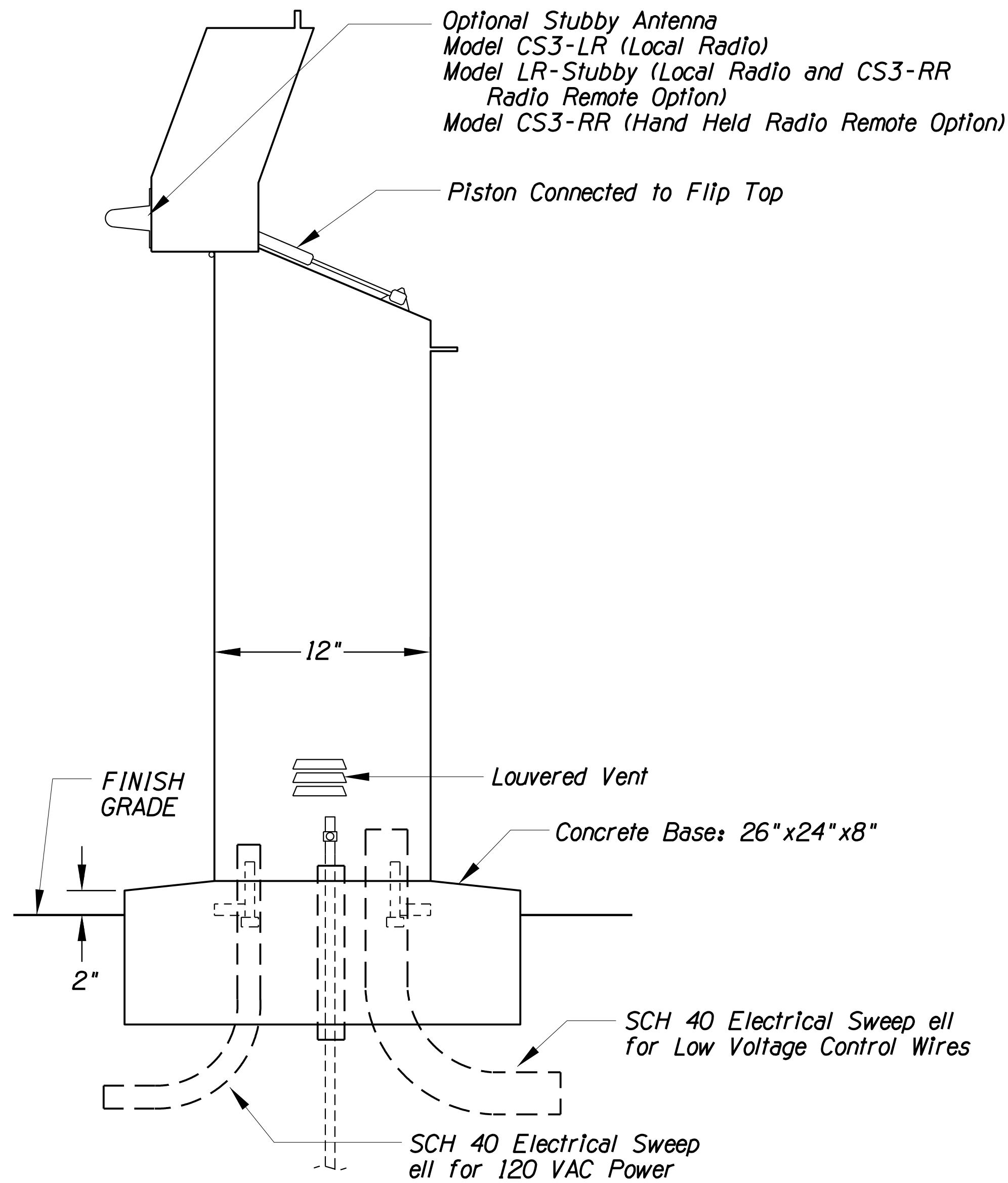
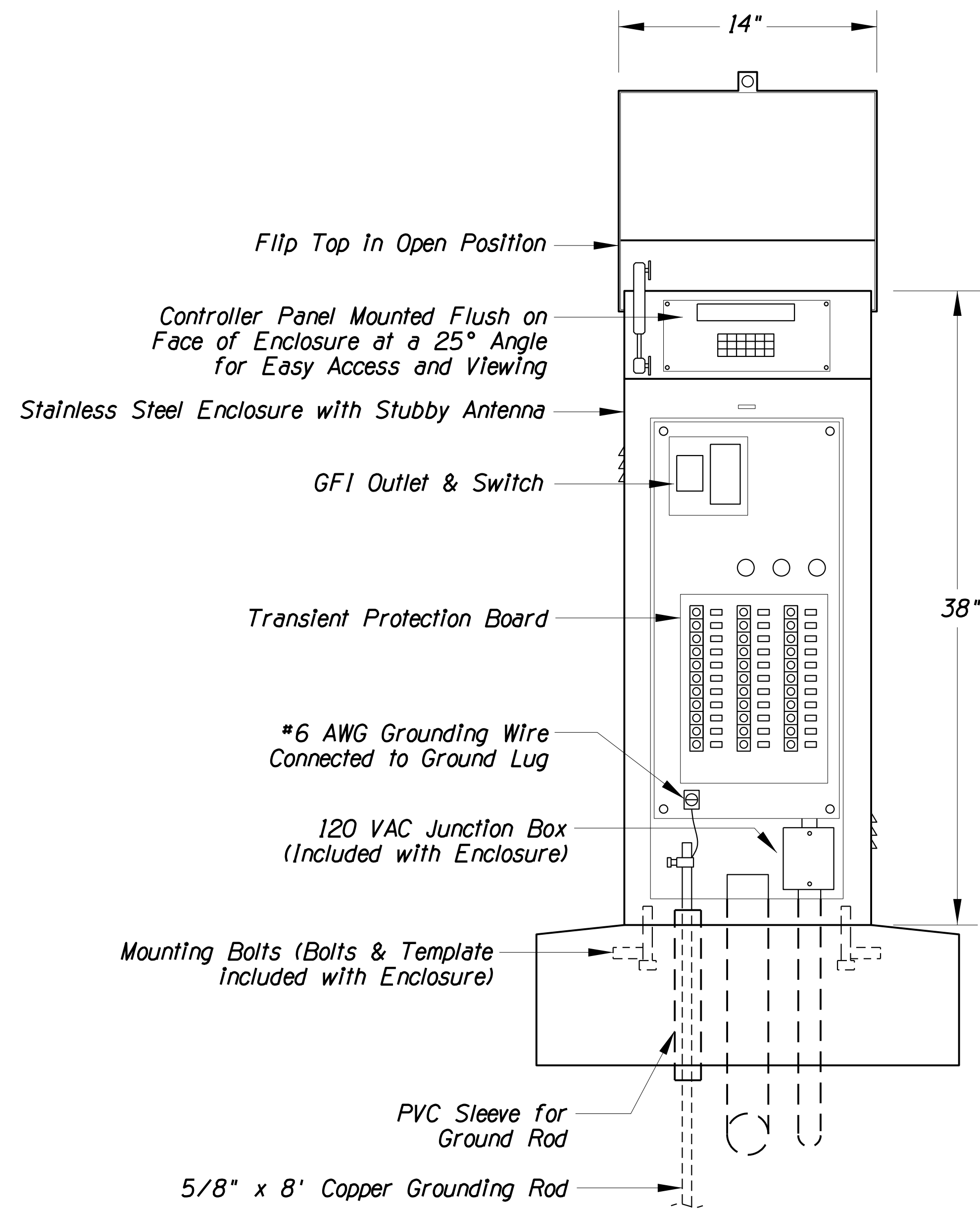


* = 2" Brass Tag with 3/8" Lettering
 Note: City Remote Control Valves shall be identified utilizing heat branding method to top of box lids per Control Valve Detail.

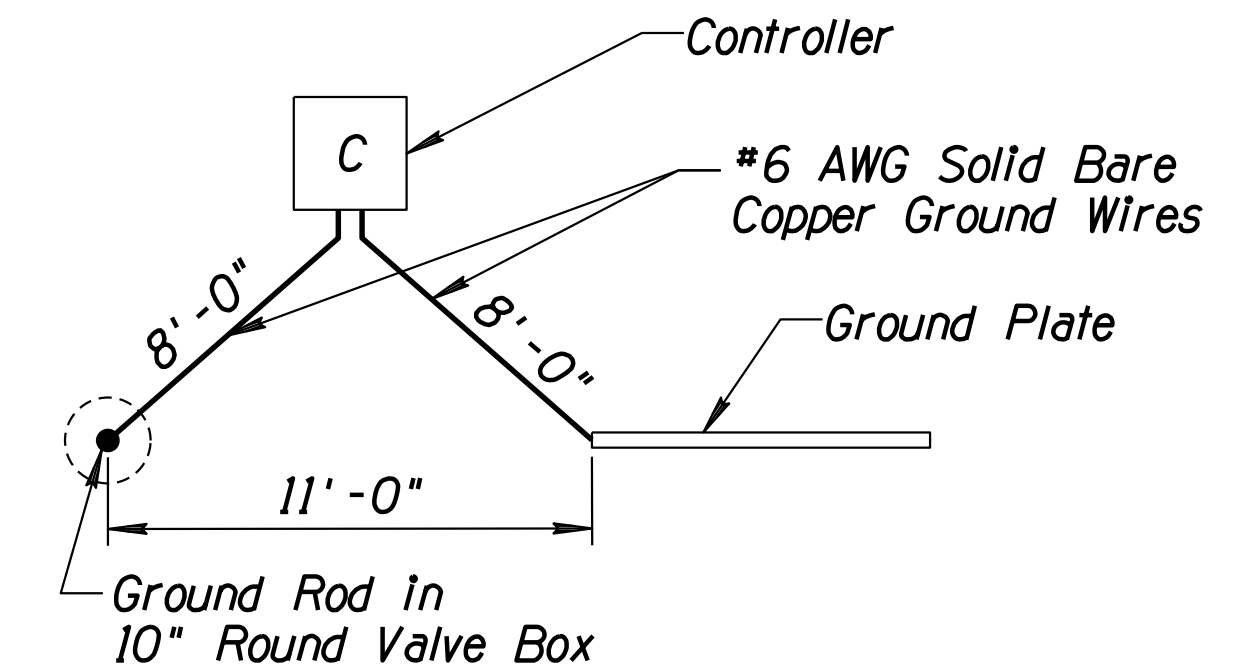
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DRAWN	SP	DATE	03/18	
CHECKED	DD	DATE	03/18	
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com				REGISTERED LANDSCAPE ARCHITECT CERTIFICATE NO. 34191 J. SEETH PLACKO
IRRIIGATION SUMMARY			PIRES: 09/30/2020 DWG NO. R-2.01	
US 60		GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 OIC				OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	212	232	

060 MA 144



Note:
Side Elevation Applies to Both Single and Dual Controller Configurations.



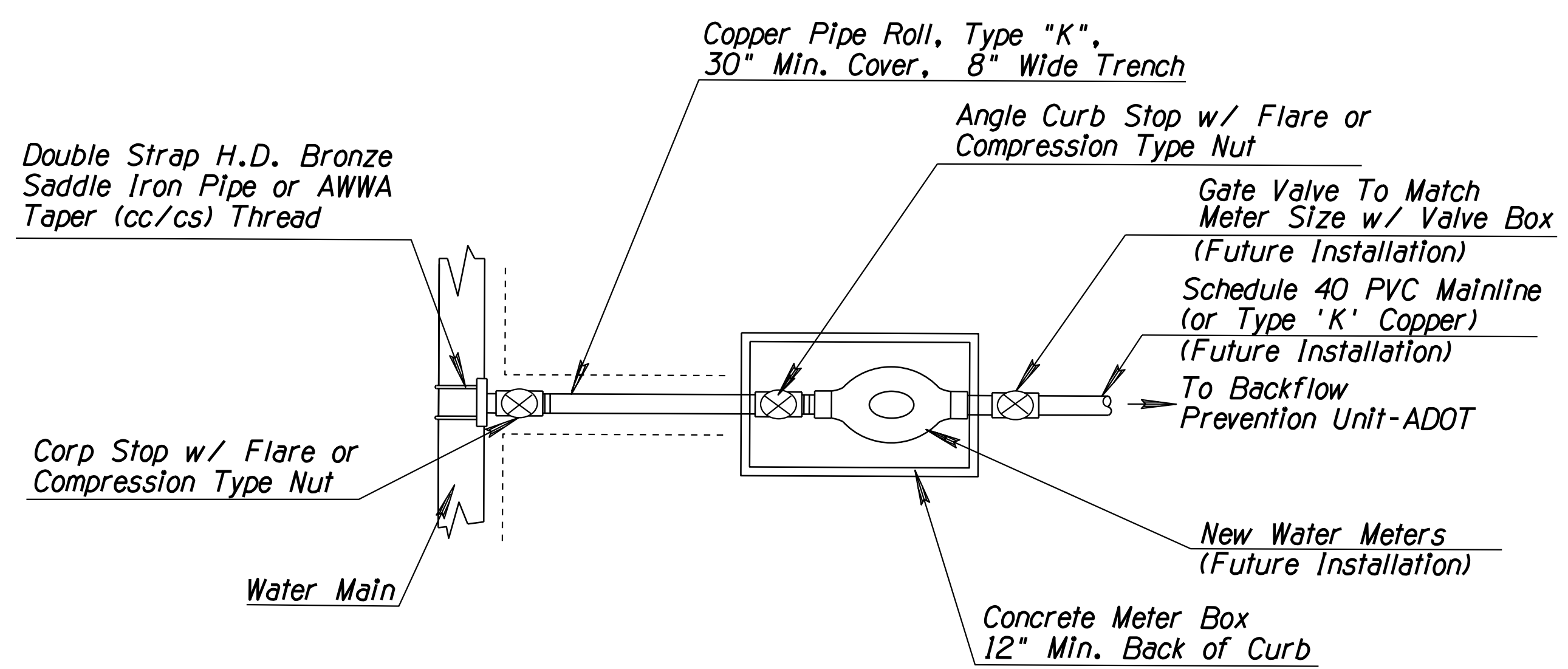
GROUNDING PLAN

DETAIL 11 NTS
IRRIGATION CONTROLLER

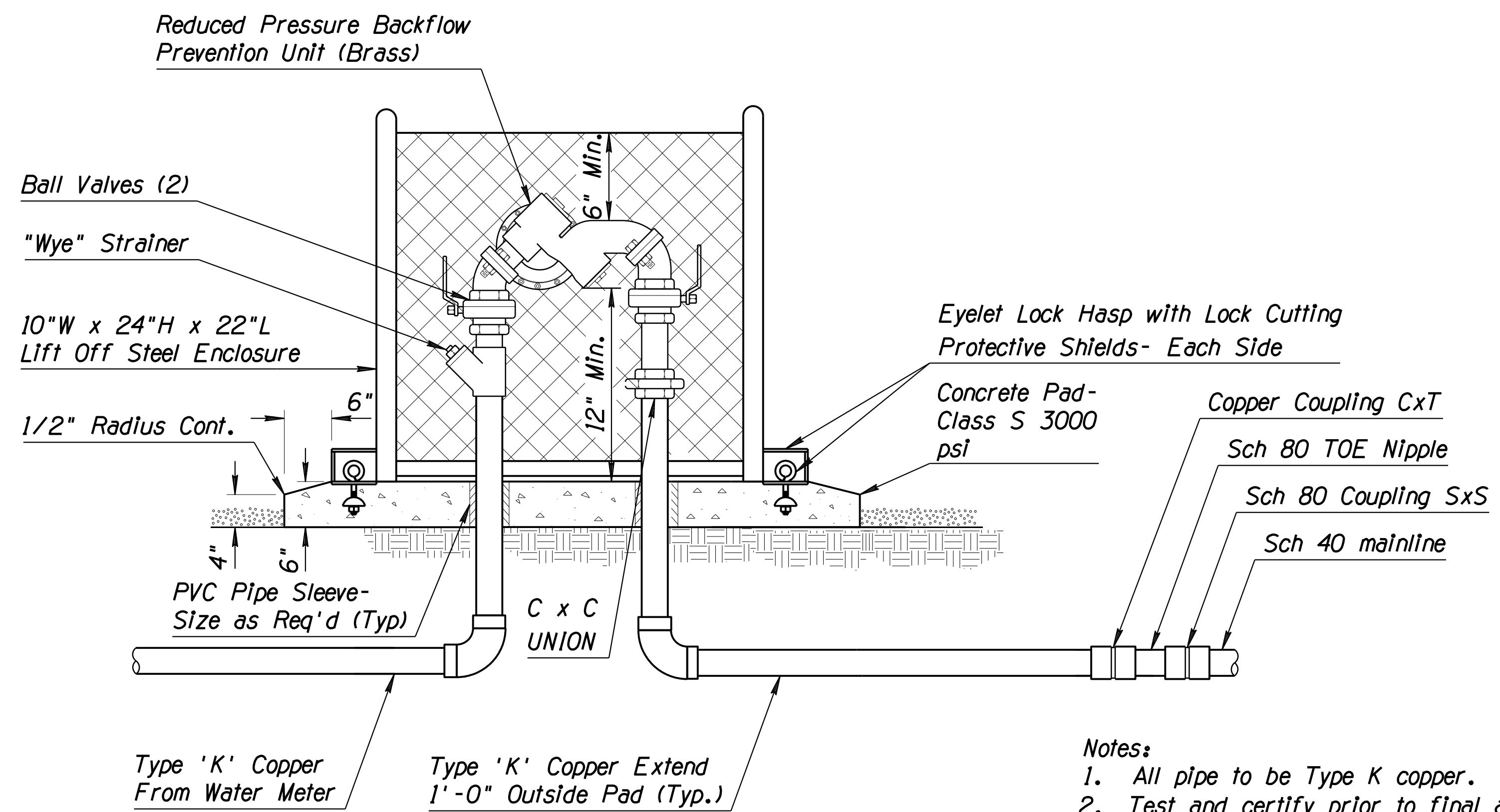
DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
SP		03/18	IRRIGATION DETAILS 11
DRAWN	SP	03/18	
CHECKED	DD	03/18	
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2design.us			
ROUTE	LOCATION	DWG NO. R-2.02	
US 60	GRAND AVENUE FRONTAGE ROAD	TRACS NO. H8874 01C	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	213	232	

060 MA 144

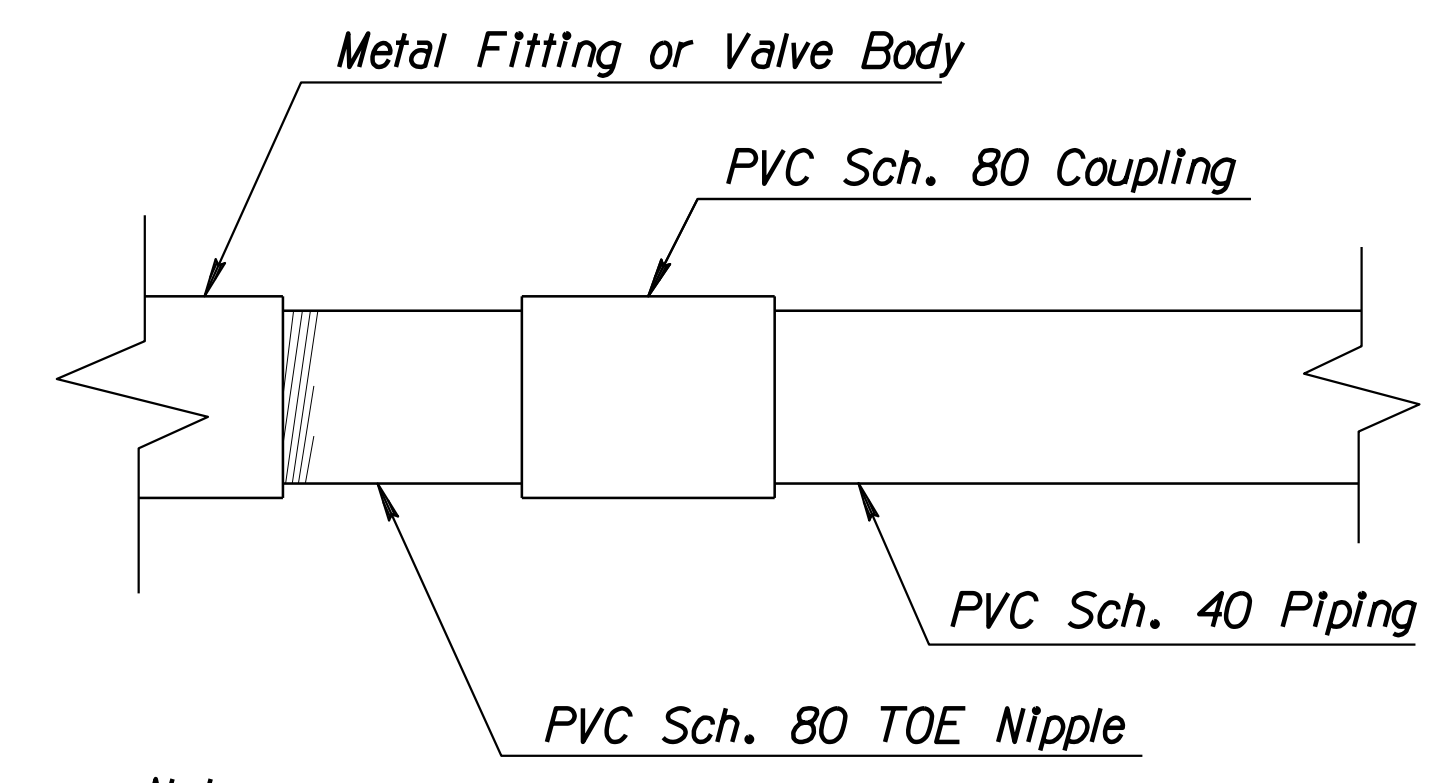


DETAIL 12 NTS
NEW WATER METER INSTALLATION



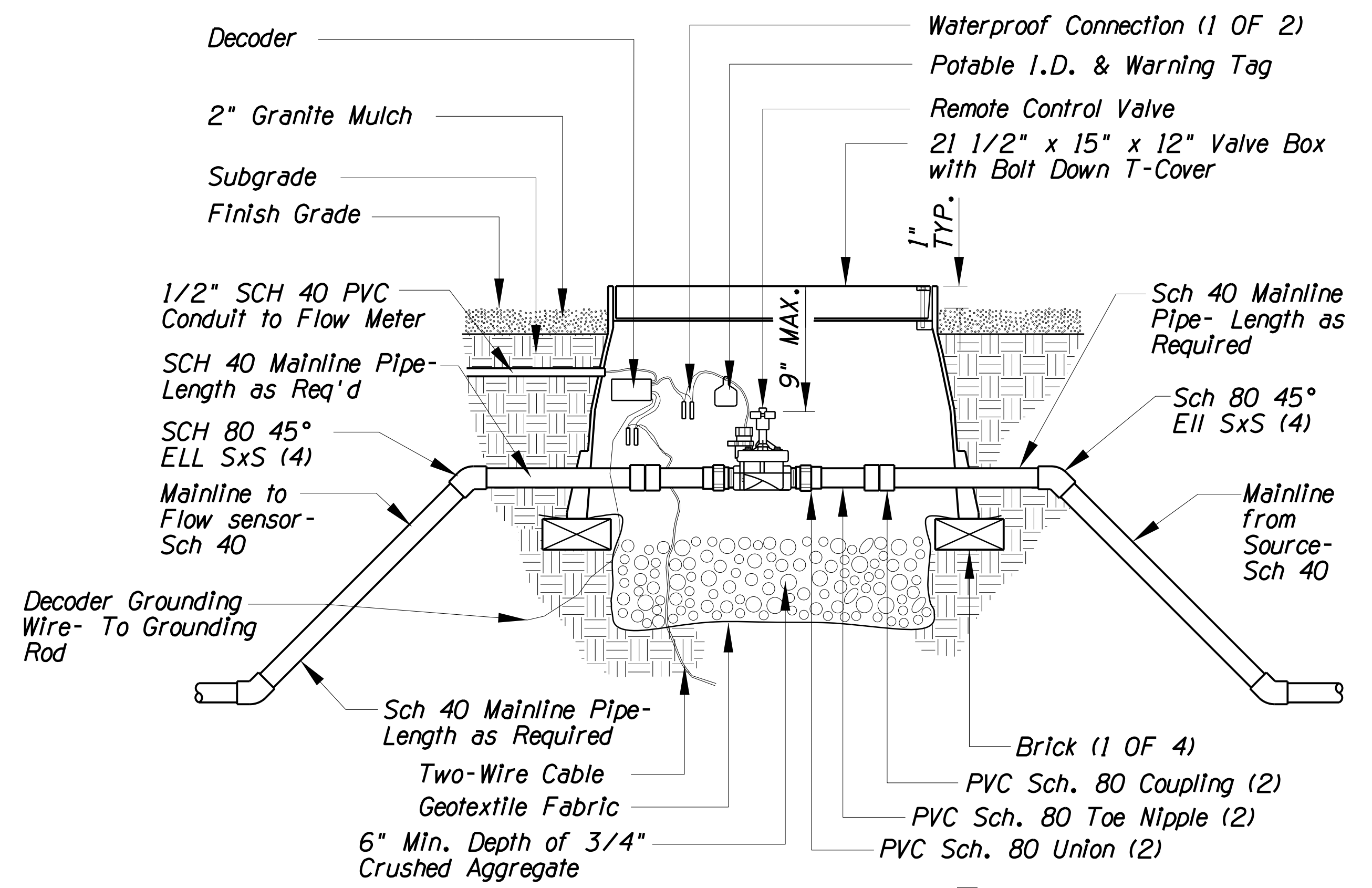
DETAIL 13 NTS
BACKFLOW PREVENTION ASSEMBLY

- Notes:
1. All pipe to be Type K copper.
 2. Test and certify prior to final acceptance.
 3. Install frost blanket over backflow preventer.
 4. Powder coat enclosure by manufacturer.
 5. See Irrigation Summary & Project Specifications for sizes, approved manufacturers, model numbers, & colors of all equipment.



Note:
This detail applies to all PVC-to-Metal connections throughout the project.

DETAIL 14 NTS
PVC TO METAL CONNECTION DETAIL

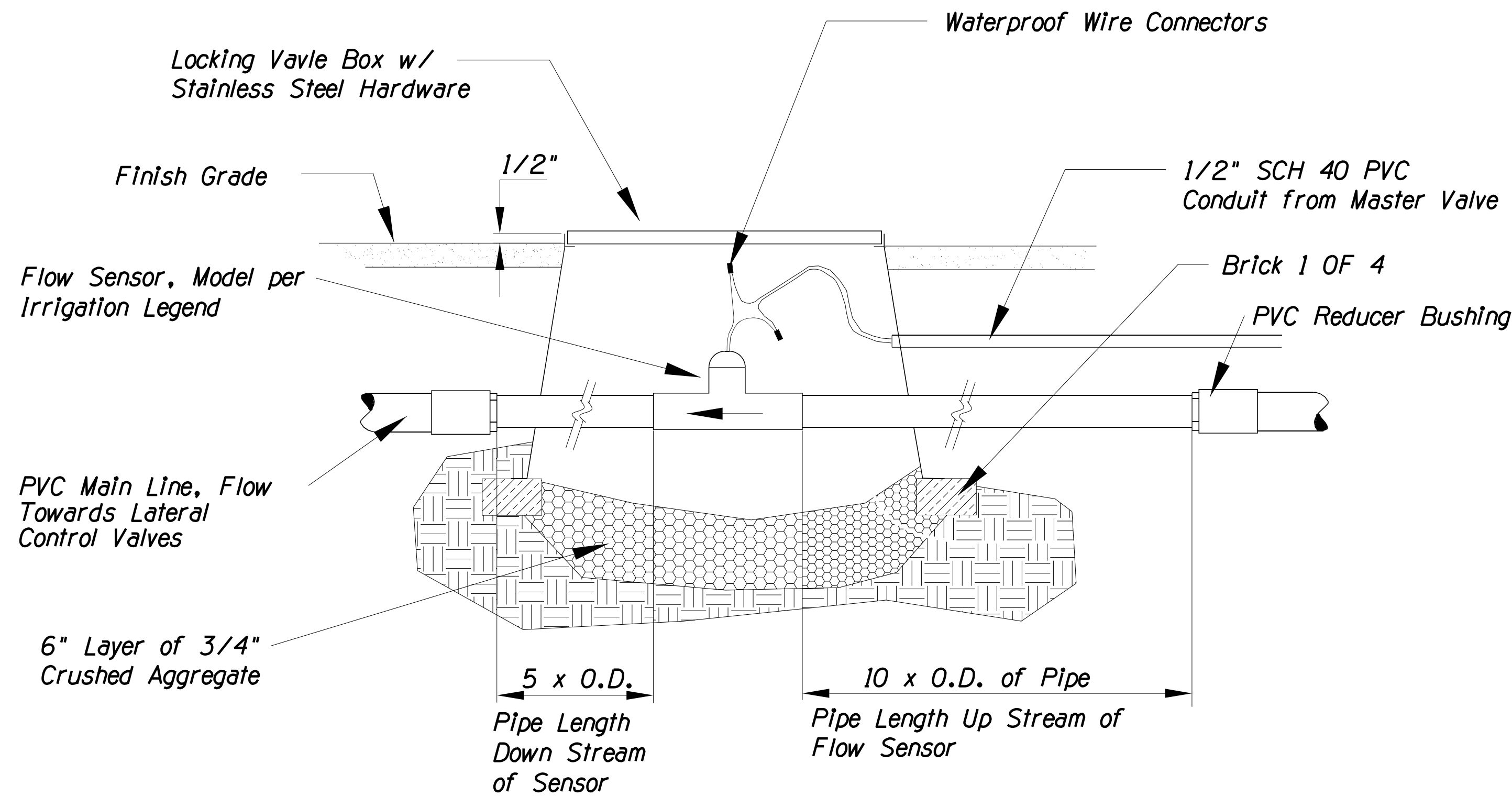


DETAIL 15 NTS
MASTER VALVE

DESIGN	SP	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	SP		03/18	
CHECKED	DD		03/18	
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com				
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	IRRIGATION DETAILS 12, 13, 14 & 15
TRACS NO. H8874 01C				DWG NO. R-2.03

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
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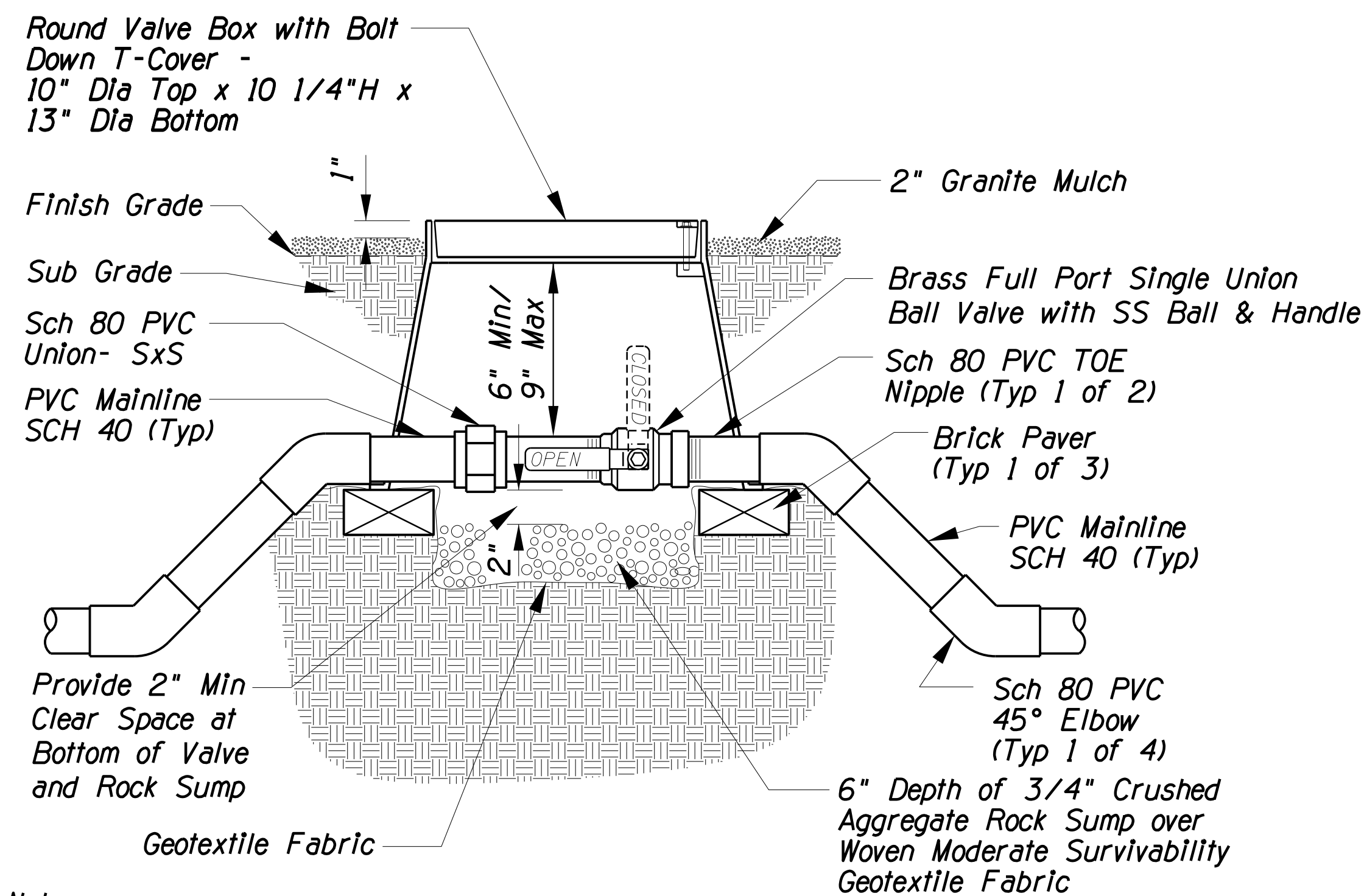
060 MA 144



DETAIL 16
FLOW METER

NTS

Note:
Provide unobstructed straight lengths of pipe, before and after flow sensor, as noted.

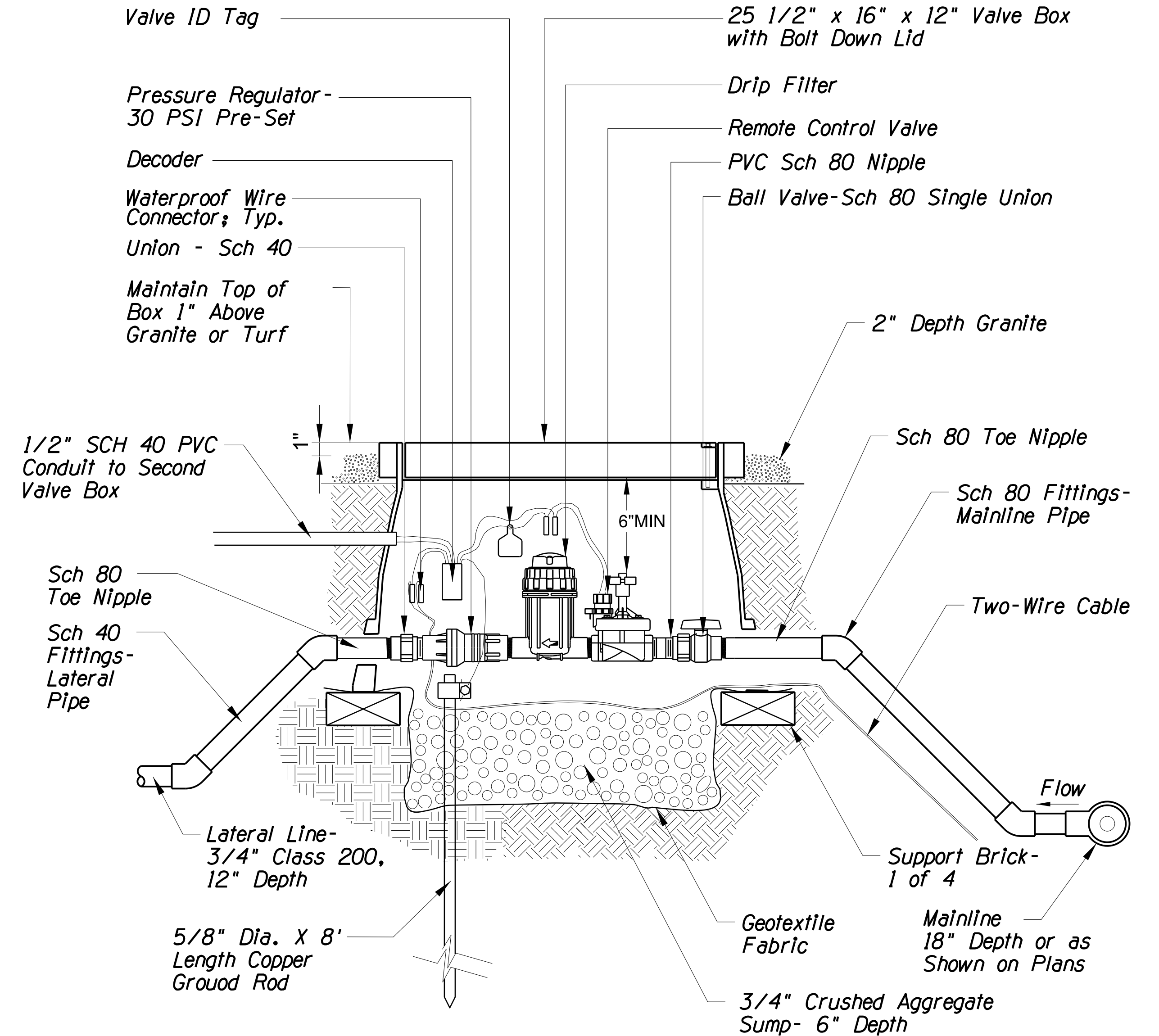


DETAIL 17

BALL VALVE ASSEMBLY - 1-1/2" & LARGER

NTS

- Notes:
- Nominal size of ball valve to match nominal mainline size.
 - Valve box to include stainless steel bolt and washer.
 - Emboss cover with "B.V." in 1-inch high Stencil Letters using Stylus Tip Torch.



DETAIL 18

DRIP VALVE ASSEMBLY WITH FILTER AND PRESSURE REGULATOR

NTS

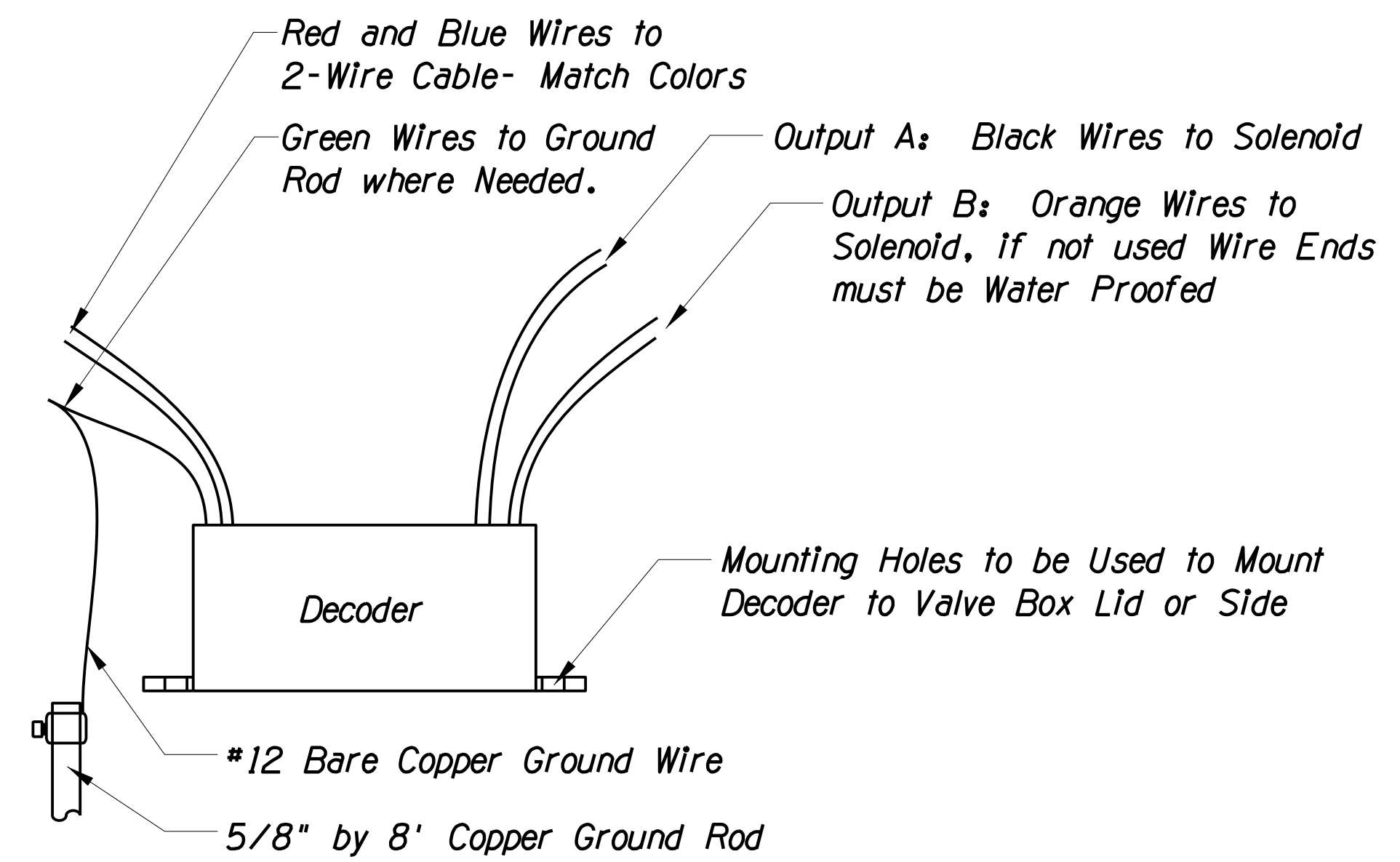
- Notes:
- Emboss cover of remote control valve box with 1" numbers of the controller letter and valve station with stylus tip torch using stencils.
 - Valve box to be tan.

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
SP		03/18	IRRIGATION DETAILS 16, 17, & 18
SP		03/18	
DD		03/18	
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2design.us			IRRIGATION DETAILS 16, 17, & 18 J. SETH PLACKO 34191 REGISTERED LANDSCAPE ARCHITECT ARIZONA
ROUTE	LOCATION	PIRES: 09/30/2020	DWG NO. R-2.04
US 60	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 OIC			OF

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	215	232	

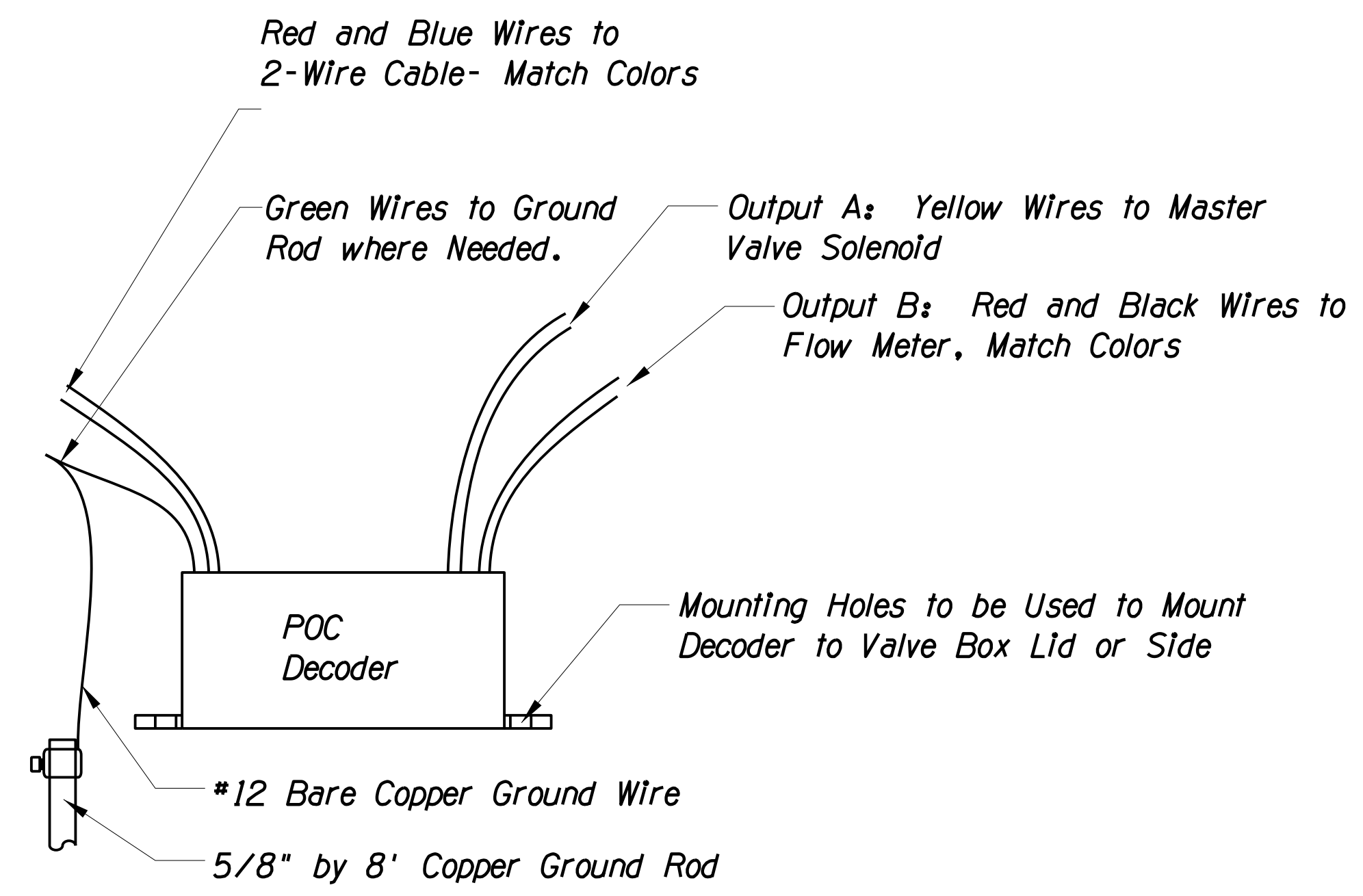
060 MA 144



- Notes:**
1. Location Grounding Rods at the Controller, 1 every 300 ft or the Next Closest Decoder and 1 at end of Each Two wire Cable.
 2. Maximum 100 ft of 14 Gauge Wire from Decoder to Solenoid.
 3. If Wires are not used, the Ends Must be Water Proofed.
 4. Use 3M Scotchcast #3570G-N Epoxy Packs for All Wire Splices.

DETAIL 19

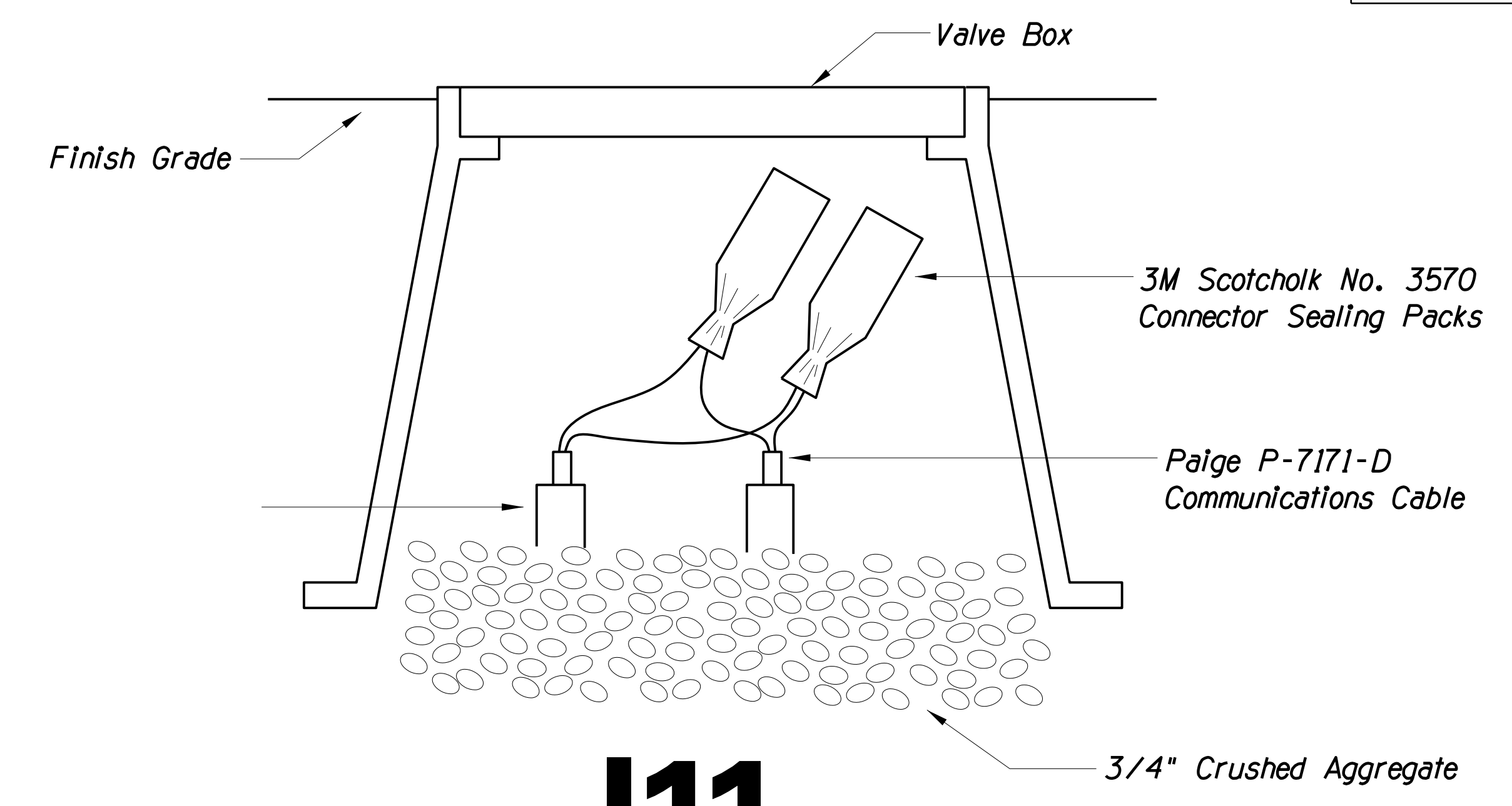
2 STATION DECODER INSTALLATION



- Notes:**
1. Location Grounding Rods at the Controller, 1 every 300 ft or the Next Closest Decoder and 1 at end of Each Two wire Cable.
 2. Maximum 100 ft of 14 Gauge Wire from Decoder to Solenoid.
 3. If Wires are not used, the Ends Must be Water Proofed.
 4. Use 3M Scotchcast #3570G-N Epoxy Packs for All Wire Splices.

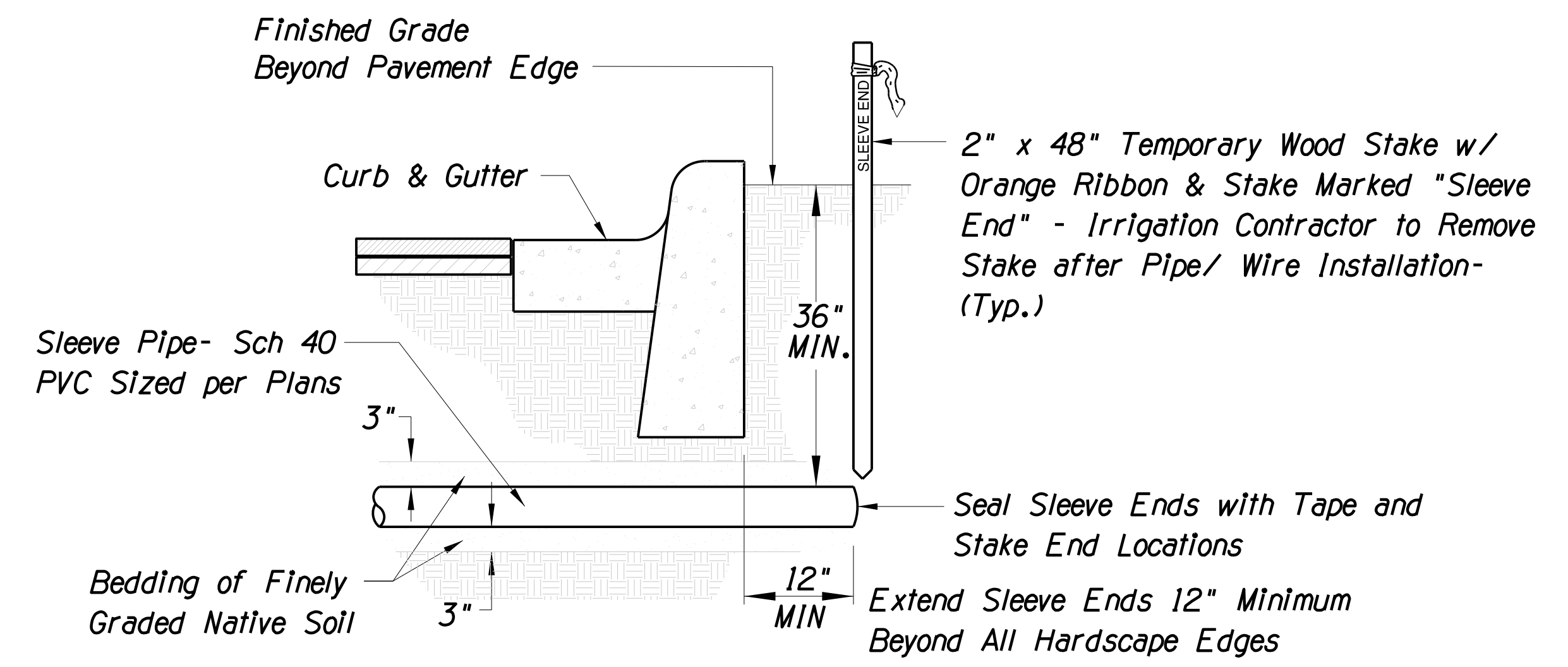
DETAIL 10

POC DECODER INSTALLATION



DETAIL 11

WIRE SPLICE DETAILS



- Notes:**
1. Backfill Trench with 3" of Finely Graded Bedding of Native Soil under Sleeve and 3" above Sleeve. Native Soil shall not have any Rocks Larger than 3/8" Dia.

DETAIL 12

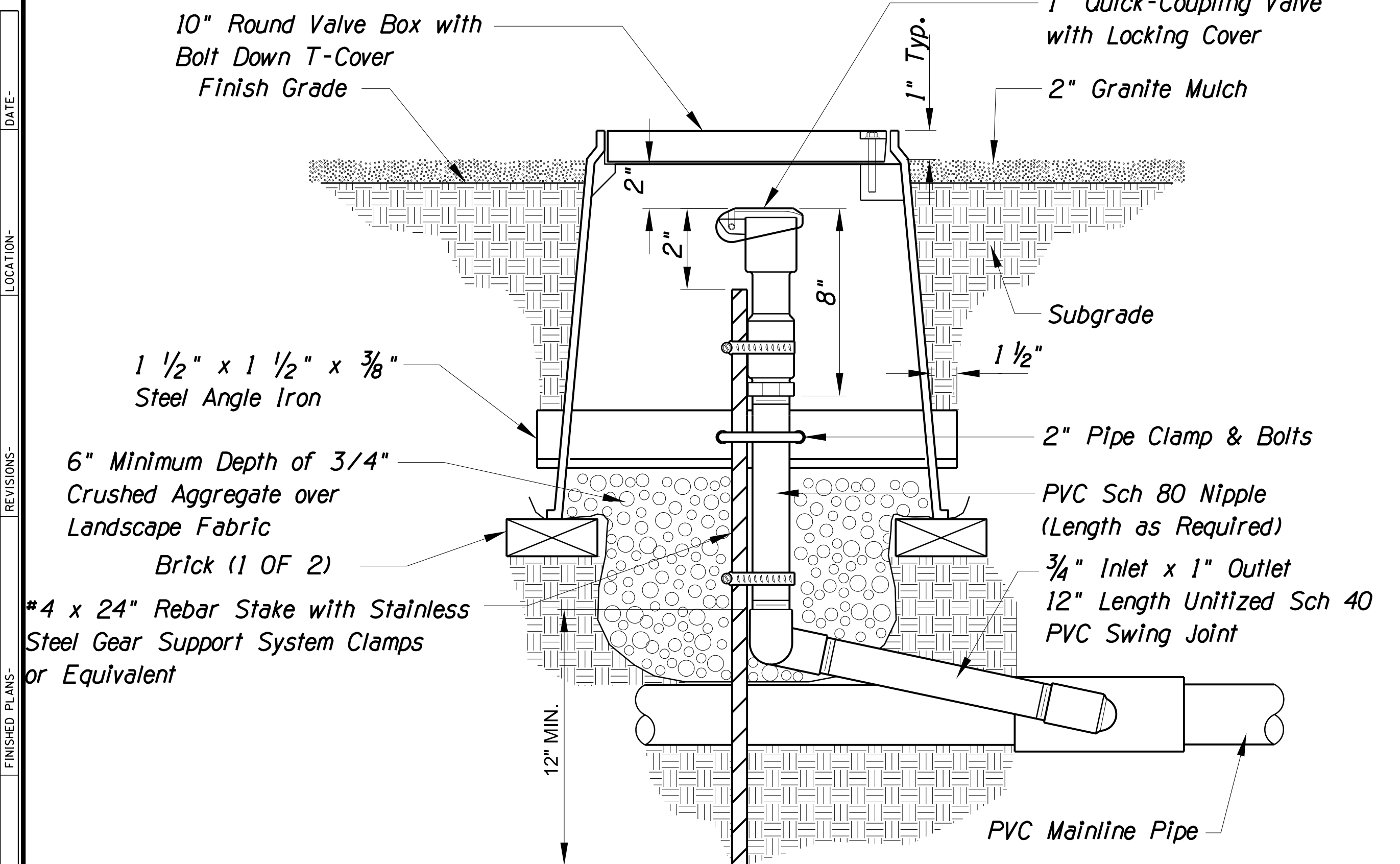
TYPICAL SLEEVING DETAILS

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
SP		03/18	
DRAWN	SP	03/18	
CHECKED	DD	03/18	
			IRRIGATION DETAILS 19, 110, 111 & 112
ROUTE	LOCATION		DWG NO. R-2.05 OF
US 60	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	216	232	

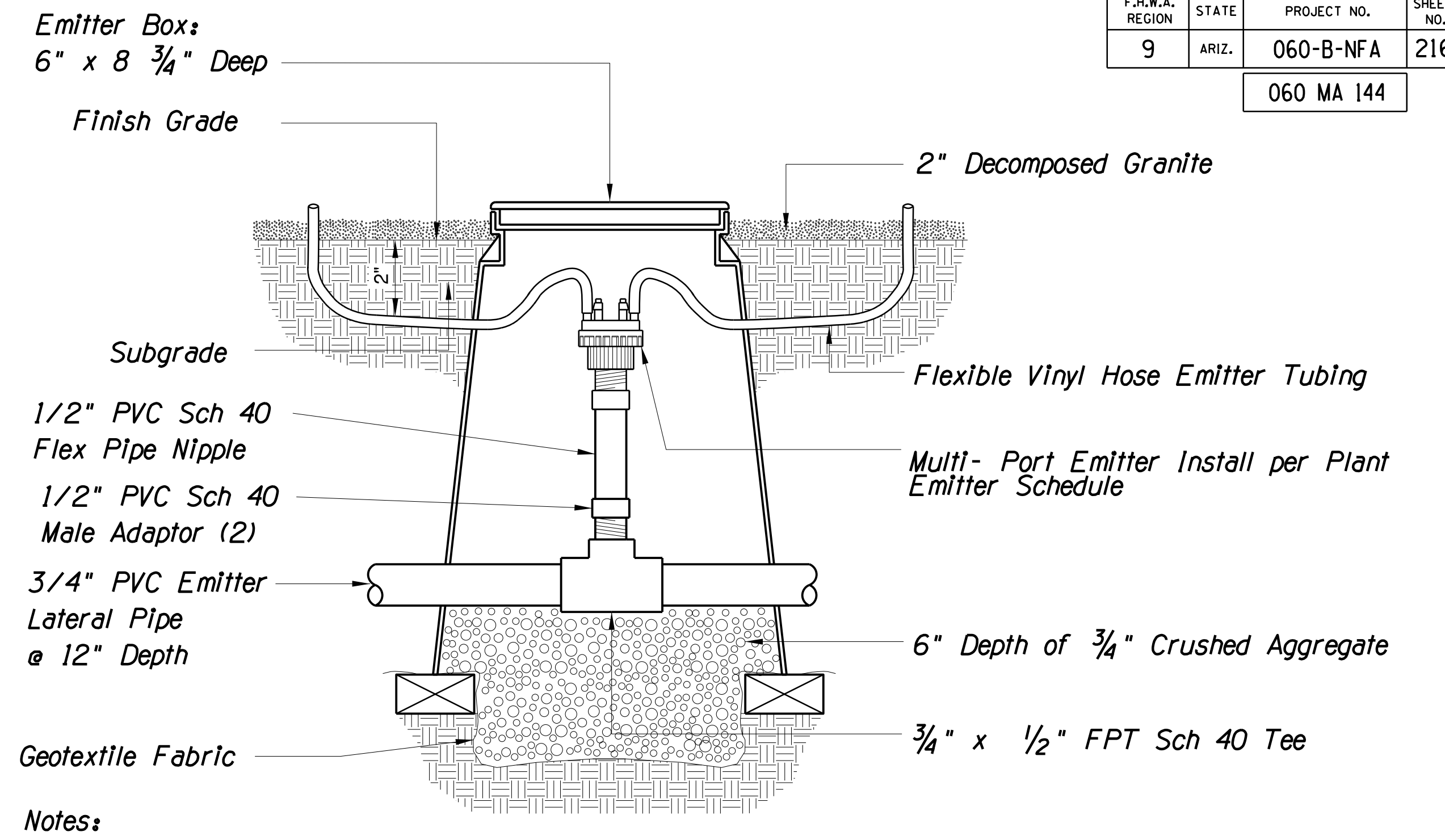
060 MA 144



- Notes:**
1. Provide two sets of valve key, swivel, & locking cover key to city.
 2. Emboss cover of remote control valve box with 1" numbers of the controller letter and valve station with stylus tip torch using stencils.
 3. Valve box to be tan.

DETAIL 13

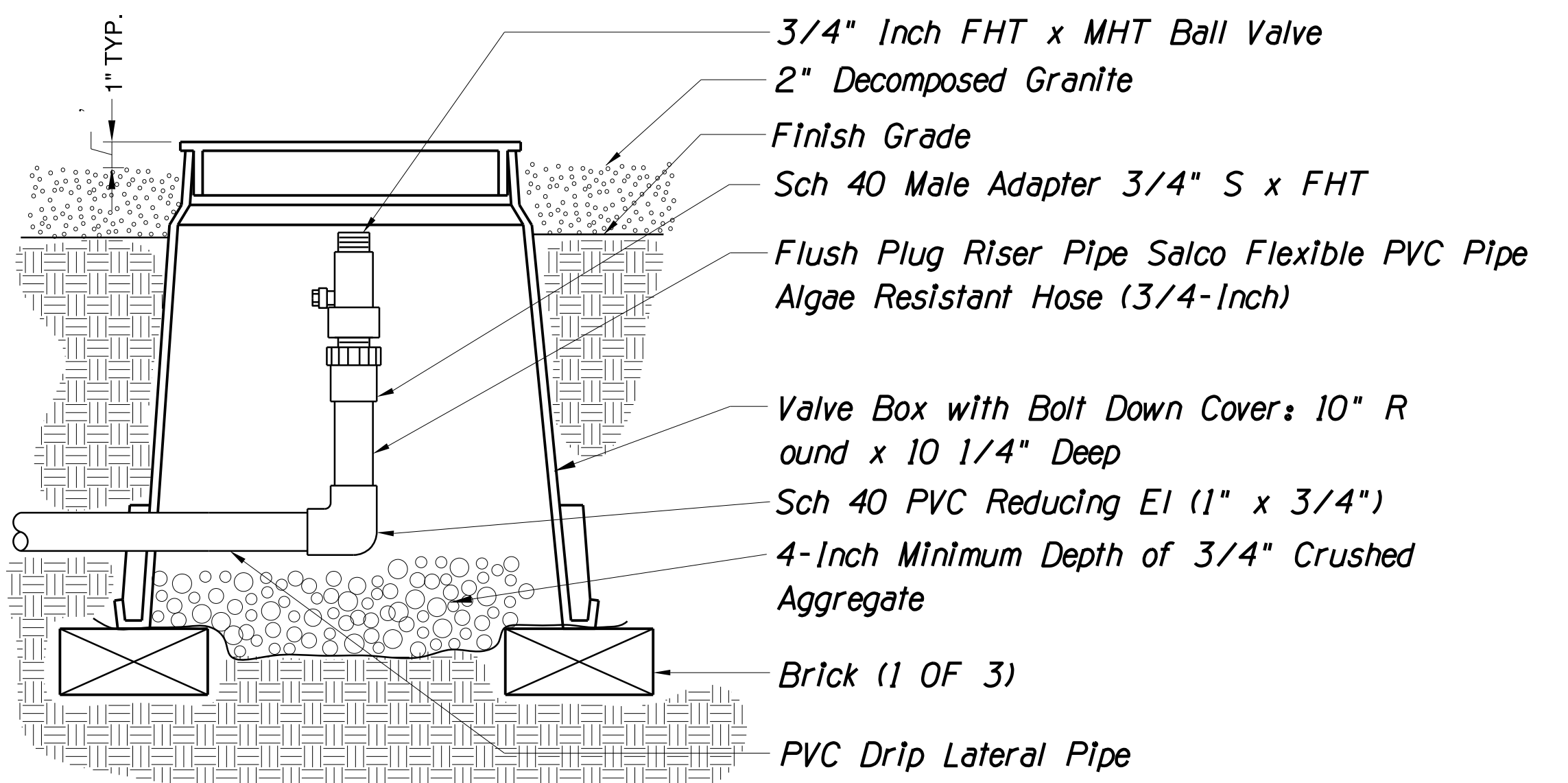
QUICK COUPLER



- Notes:**
1. See emitter legend for quantity of emitters, volume and number of emitter tubes for each tree.
 2. Bury all distribution tube 2" below subgrade prior to granite installation.

DETAIL 15

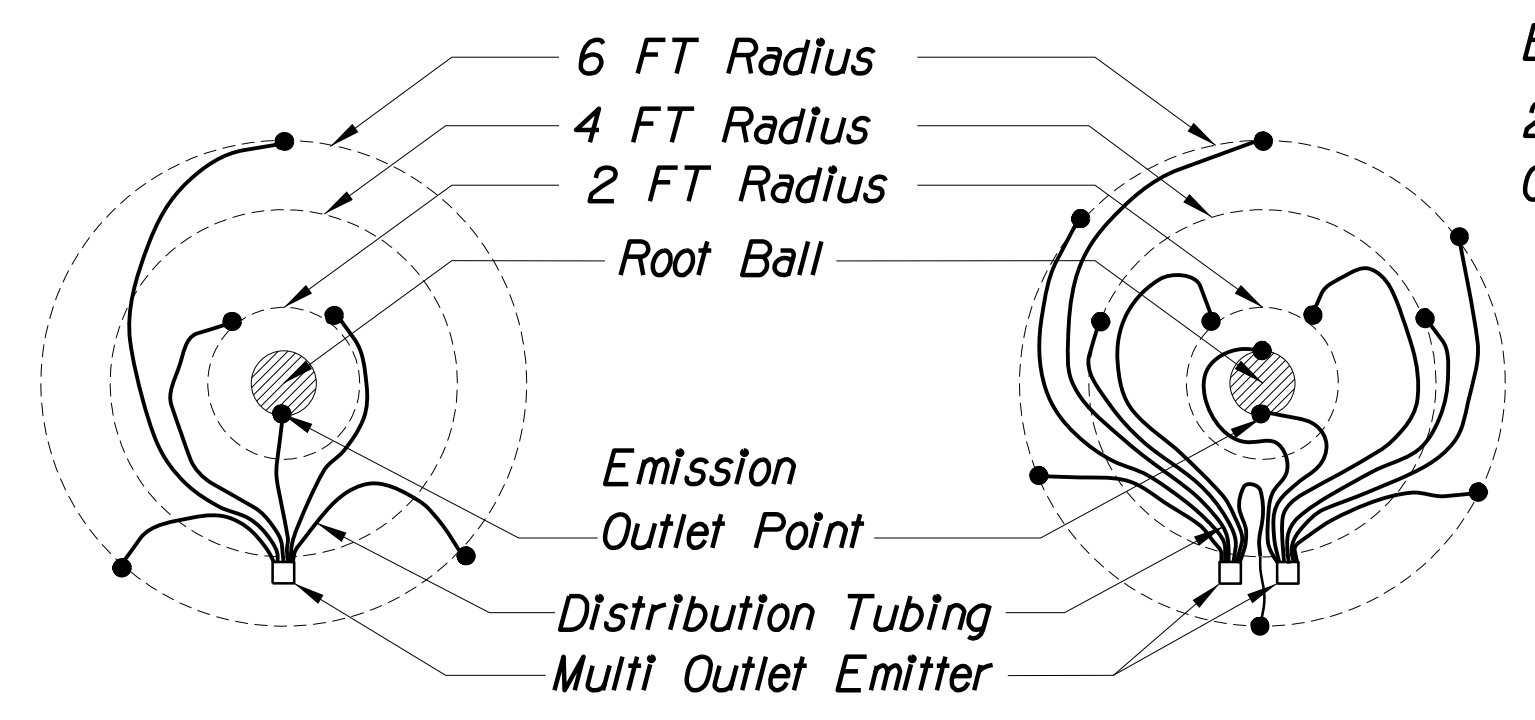
MULTI-OUTLET EMITTER ASSEMBLY



- Notes:**
1. Emboss Cover with 1" High "fv" Using Stencil and Permanent Paint.
 2. Box to be Tan in Granite, Green in Turf and Purple when used for Reclaimed Water.

DETAIL 14

DRIP FLUSH END CAP ASSEMBLY



Single Multi Outlet Emitter
3-6 Emission Points

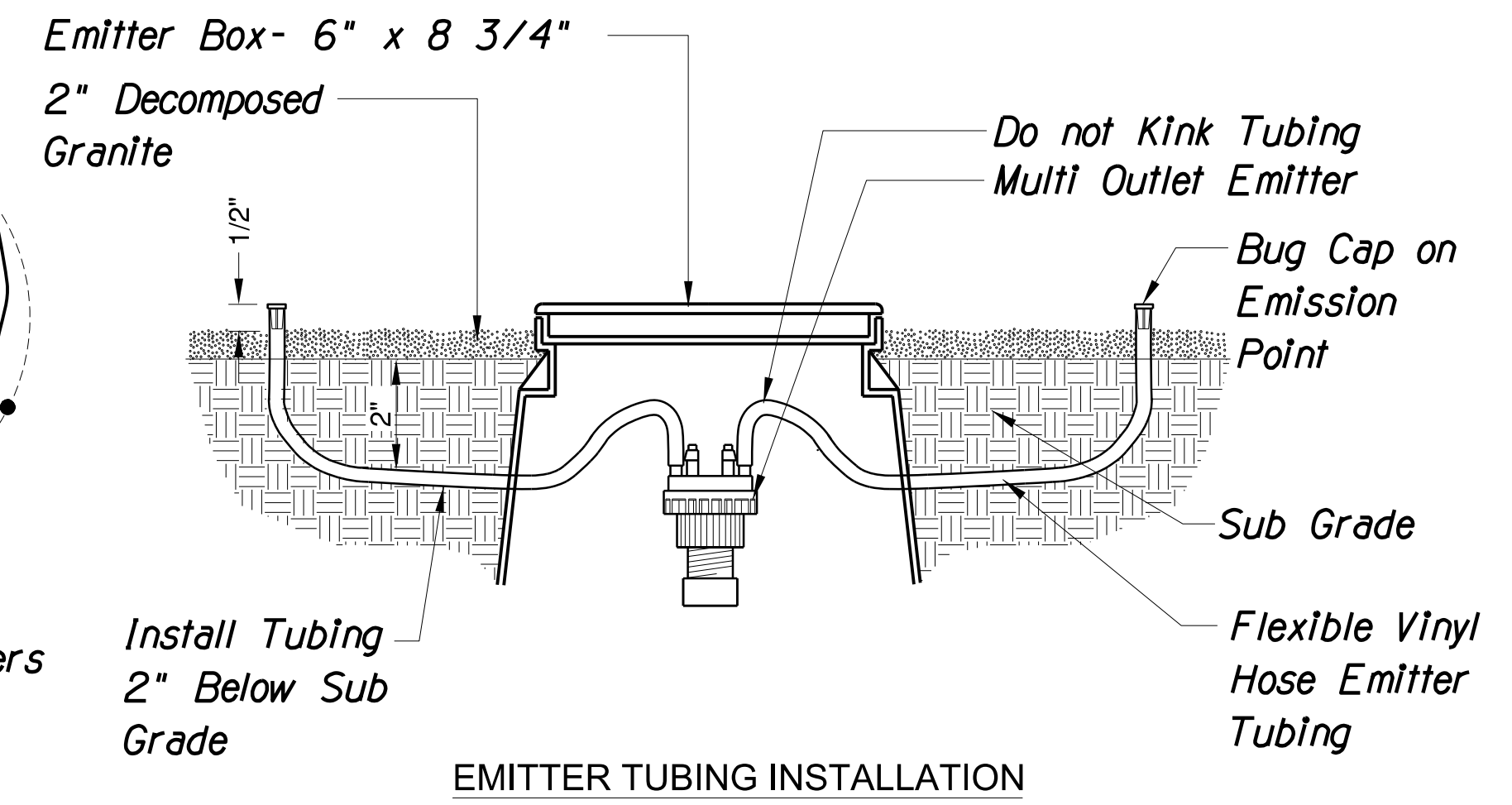
Dual Multi Outlet Emitters
7-12 Emission Points

EMISSION POINT LAYOUT PLAN VIEW

- Notes:**
1. Emitter tubing emission points shall be equally spaced and located to direct water flow per layout detail above.
 2. Number of openings and emitter tubes required is based on plant type. (see plant emitter schedule).
 3. Maximum emitter tubing length = 10'.
 4. Locate emission points uphill of plant rootball when on slopes.
 5. Bury all emitter tubing 2" below finish subgrade.

DETAIL 16

MULTI-OUTLET EMITTER- TREE LAYOUT



Install Tubing
2" Below Sub
Grade

EMITTER TUBING INSTALLATION

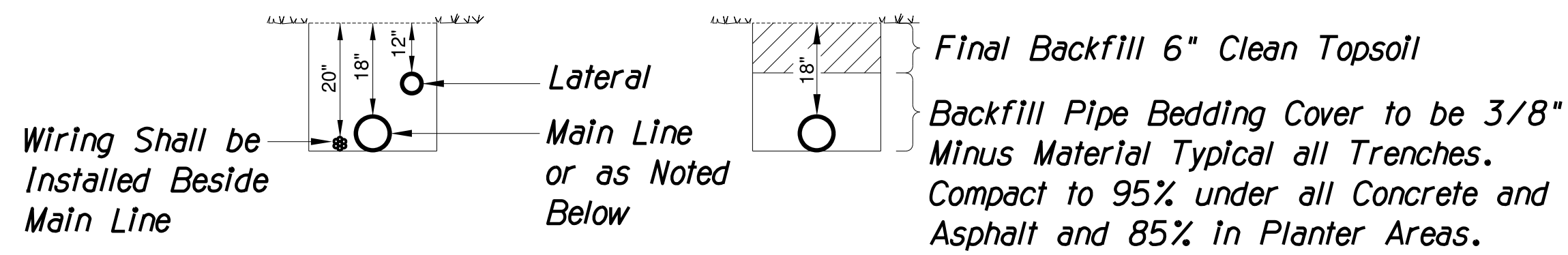
DESIGN	SP	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	SP		03/18	
CHECKED	DD		03/18	
IRRIGATION DETAILS 113, 114, 115 & 116				PIRES: 09/30/2020 DWG NO. R-2.06
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	
TRACS NO. H8874 OIC		OF		

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	217	232	

060 MA 144

**MAIN SUPPLY,
LATERAL AND WIRING**

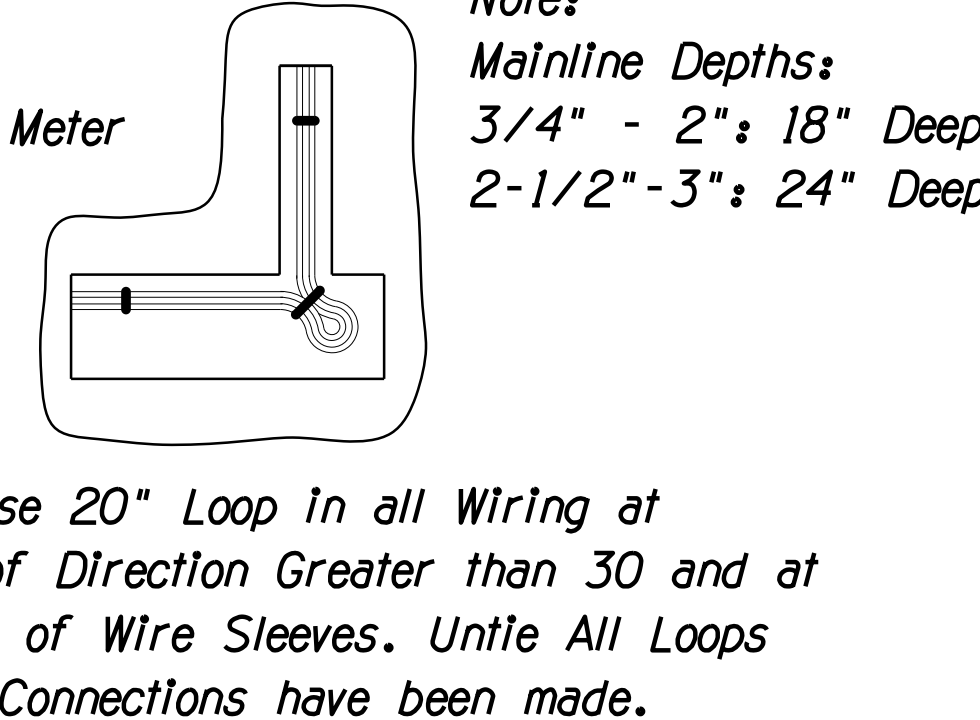
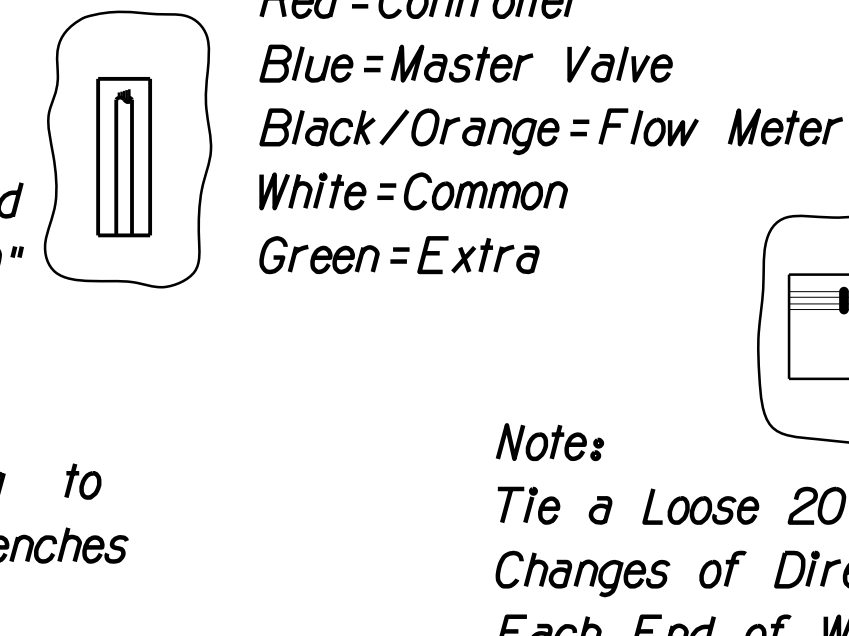
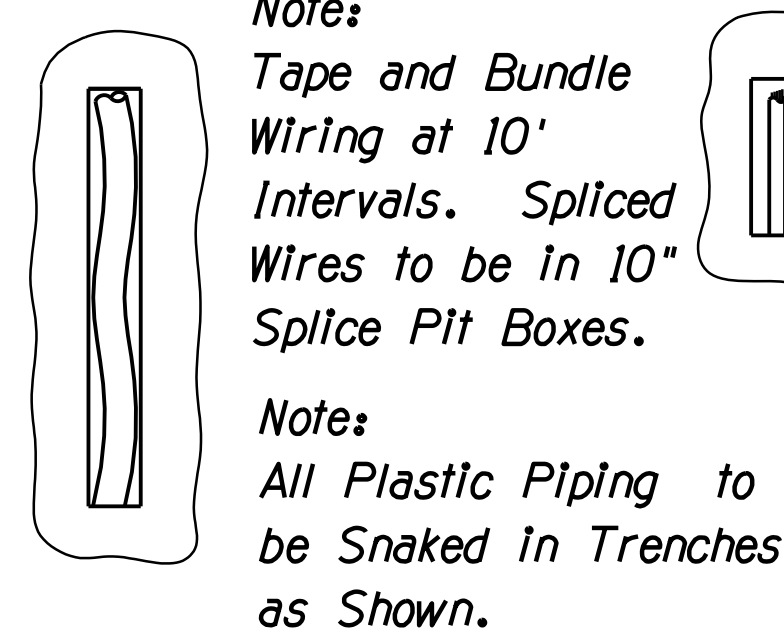
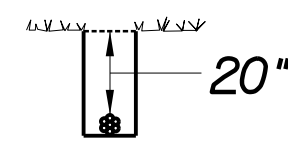
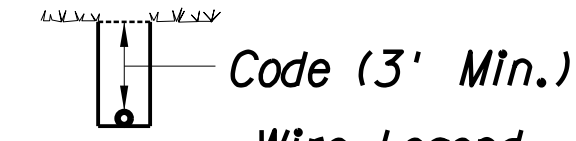
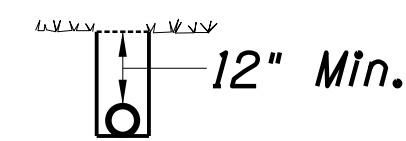
MAIN SUPPLY



LATERAL

120 VOLT

CONTROL WIRING



Wire Legend
 Red = Controller
 Blue = Master Valve
 Black/Orange = Flow Meter
 White = Common
 Green = Extra

Notes:
 Mainline Depths:
 3/4" - 2": 18" Deep
 2-1/2" - 3": 24" Deep

Note:
 Tie a Loose 20" Loop in all Wiring at Changes of Direction Greater than 30 and at Each End of Wire Sleeves. Untie All Loops after All Connections have been made.

Notes:

1. No trench to be closer than 18" to concrete sidewalk, curbs, electric poles, j-boxes, electric cabinets, street signals, signs, etc.
2. When multiple main or lateral lines run in the same trench maintain 3" horizontal clearance between pipes.
3. All 120 Volt Wiring in Conduit to be Installed in Accordance with Local Code.
4. Approved "Electrical Power Wires Below" Warning Tape Shall be Installed 12" Above all Power Wiring in Trenches.

DETAIL 117

TRENCHING DETAILS

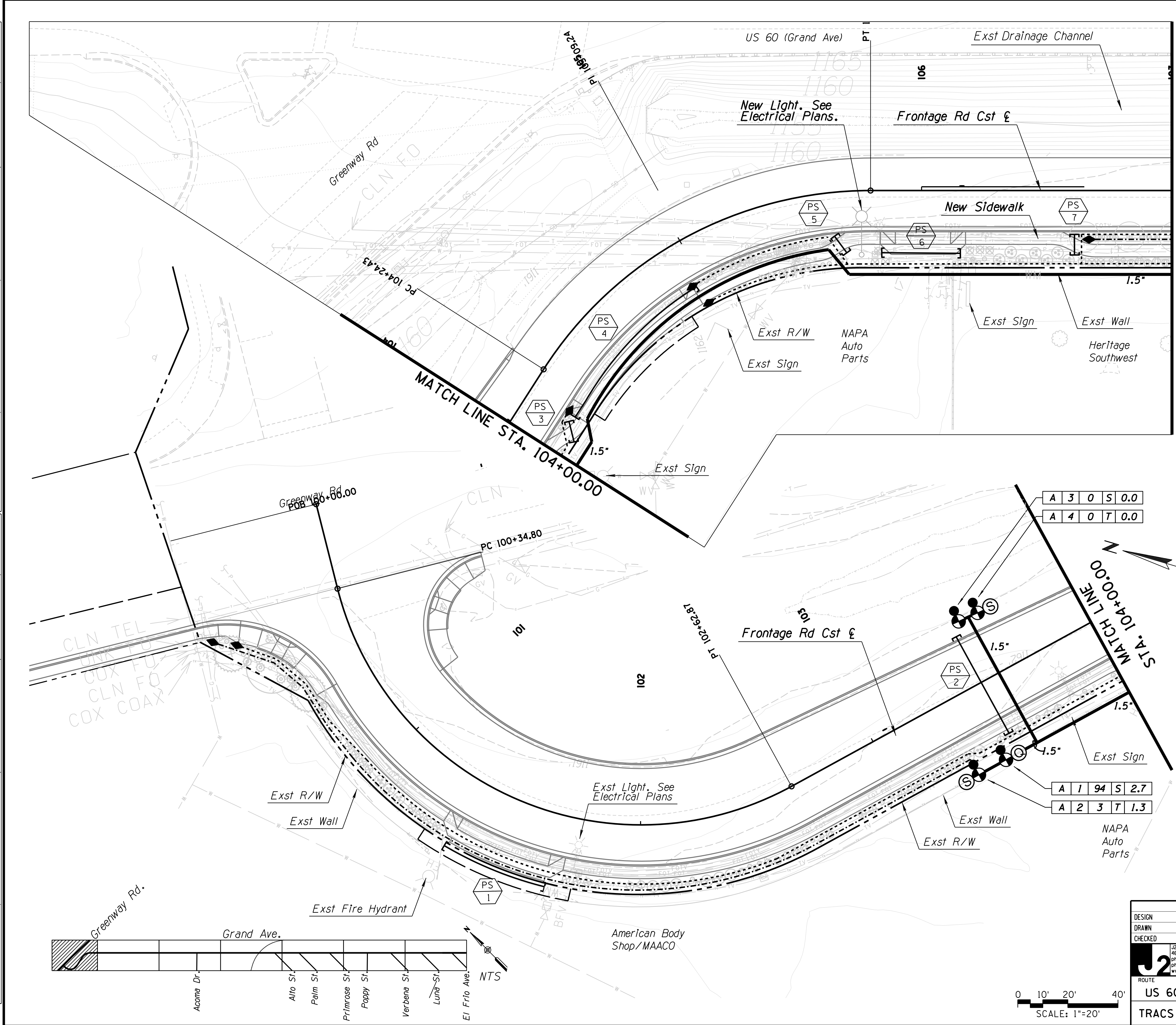
DATE - LOCATION - REVISIONS - FINISHED PLANS - SURVEY NO.

DESIGN	SP	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES	
DRAWN	SP	DATE	03/18		
CHECKED	DD	DATE	03/18		
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com				IRRIGATION DETAILS 117	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		DWG NO. R-2.07 OF
TRACS NO. H8874 01C					

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	218	232	

060 MA 144

IRRIGATION LEGEND	
SYM.	DESCRIPTION
	New Water Meter- 1"
	Existing Water Meter- To Remain
	New Backflow Preventer- 1"
	Existing Backflow Preventer- To Remain
	New Irrigation Controller
	Existing Irrigation Controller- To Remain
	Existing Electric Meter- To Remain
	New Master Valve- 1"
	Flow Meter- 1"
	Gate Valve- 1.5"
	Control Valve- 1"
	Pressure Regulator- 3/4"
	Surge Protector
	Quick Coupler- 1"
	Lateral End Cap- 3/4"
PIPES	
SYM.	DESCRIPTION
	Mainline Pipe: 1.5" Sch 40 PVC
	Tree Lateral Pipe: 3/4" Class 200 PVC
	Shrub Lateral Pipe: 3/4" Class 200 PVC
	3" Pipe Sleeves
	6" Pipe Sleeves
	12" Pipe Sleeves



DESIGN	SP	NAME		DATE	03/18
DRAWN	SP				03/18
CHECKED	DD				03/18

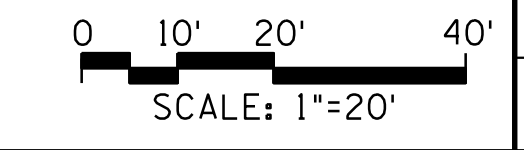
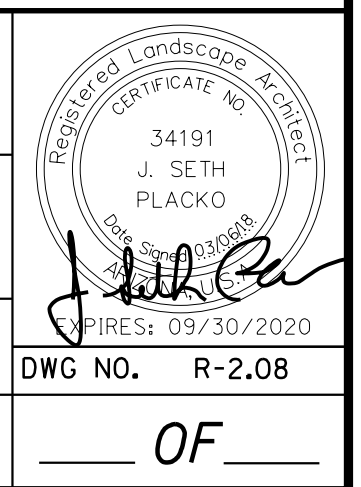
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4649 east cotton gin loop, suite B2
phoenix, arizona 85040
phone: 602.438.2221
www.j2design.us

ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD
TRACS NO.	H8874 01C		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

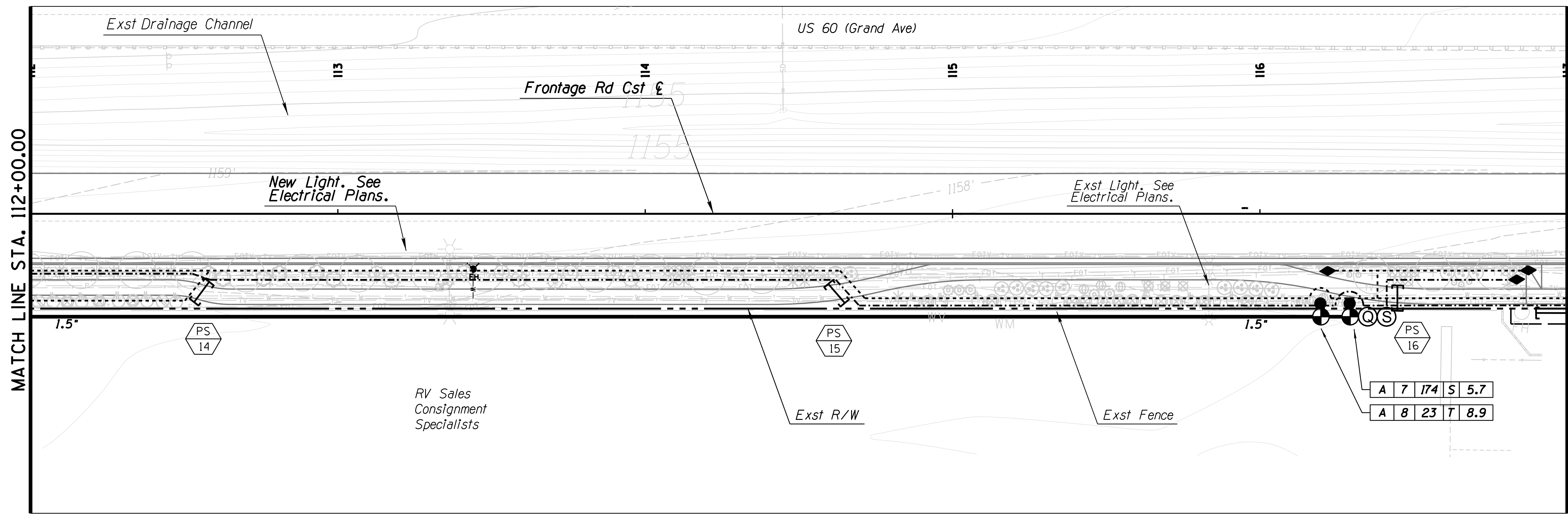
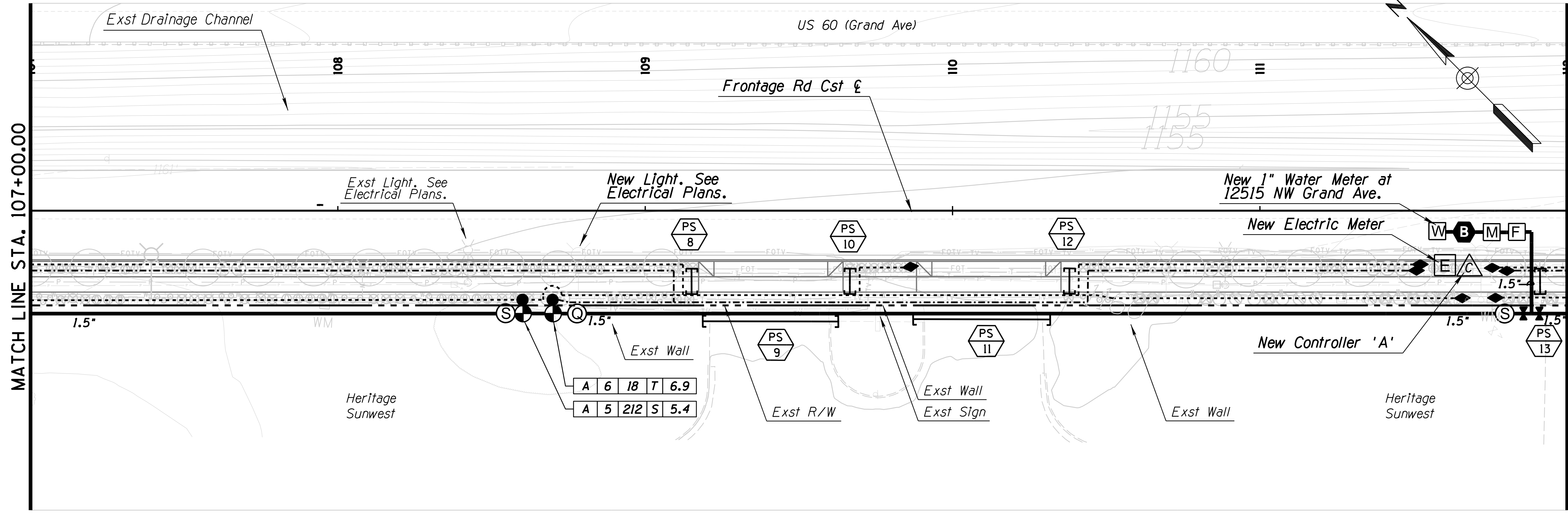
IRRIGATION PLAN SHEET
STA. 100+00 TO STA. 107+00

PIRES: 09/30/2020
DWG NO. R-2.08



SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO.

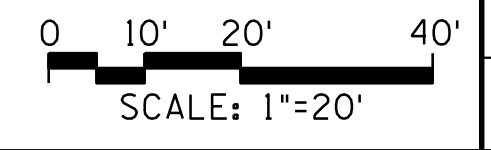
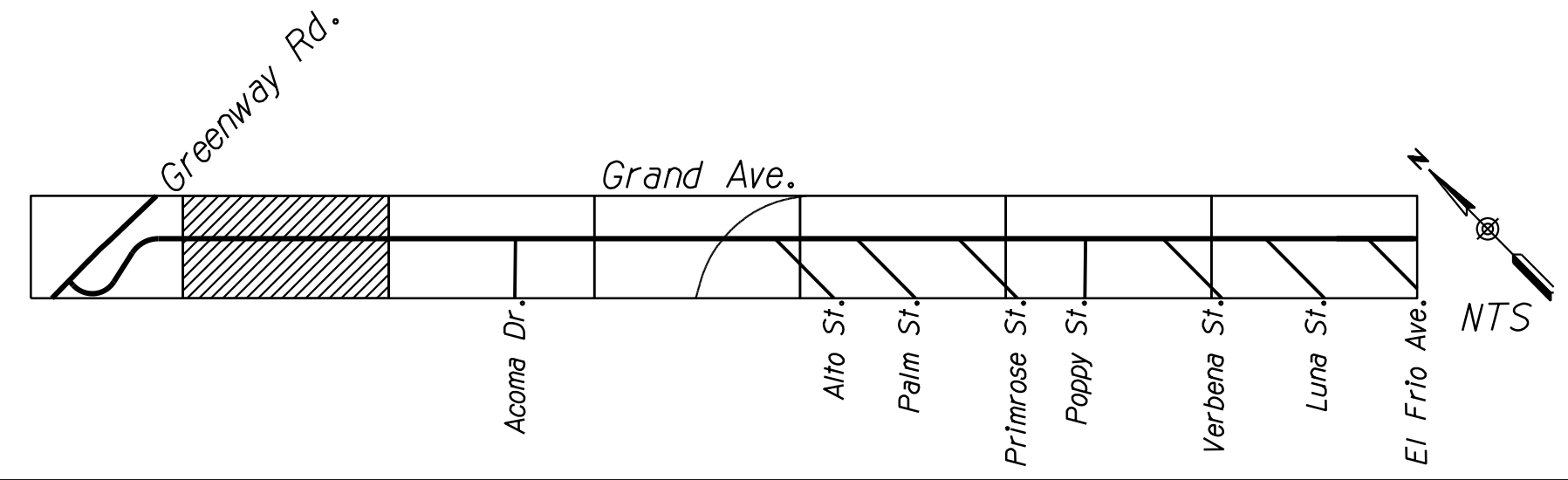
SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO.



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
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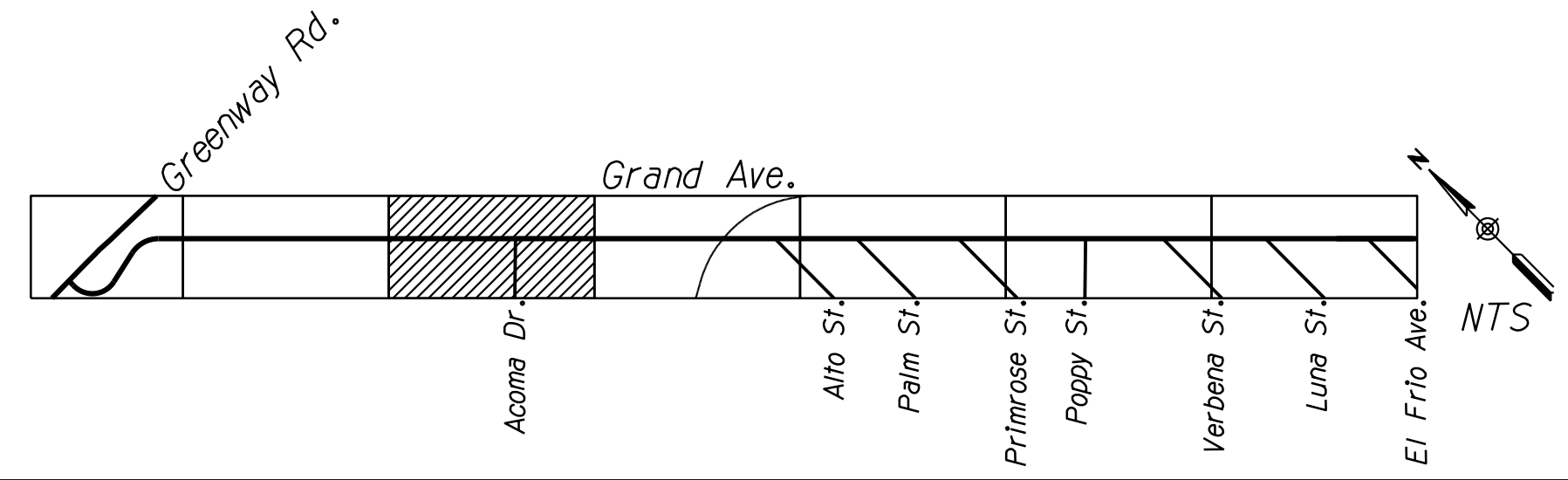
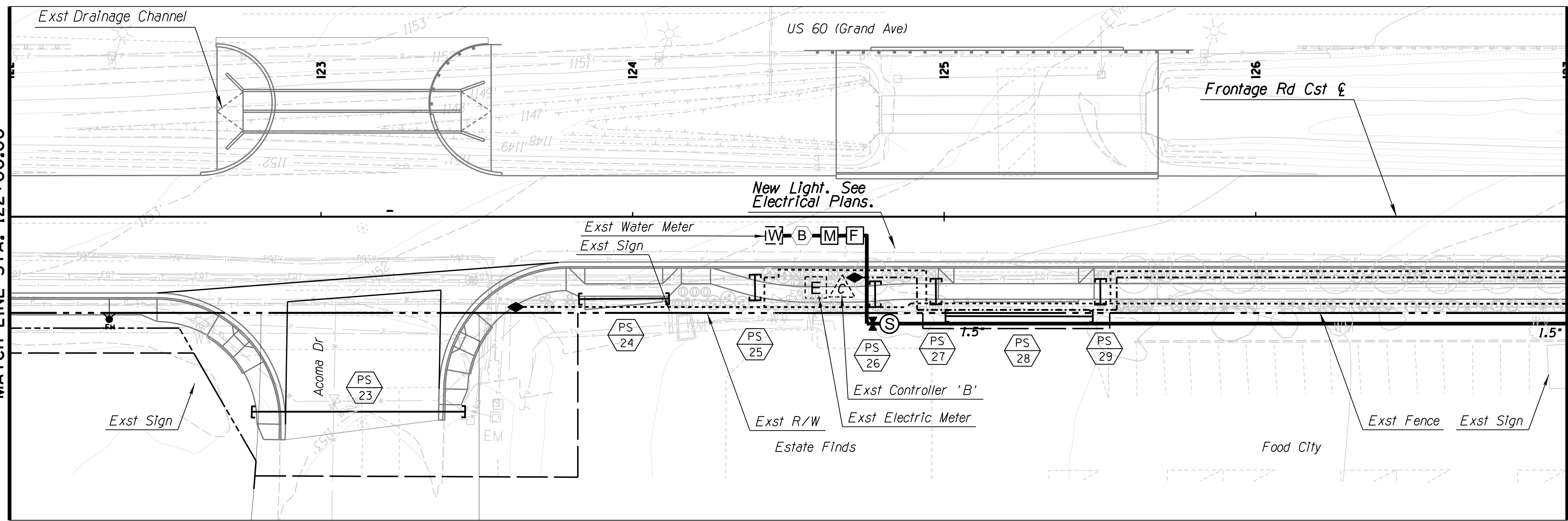
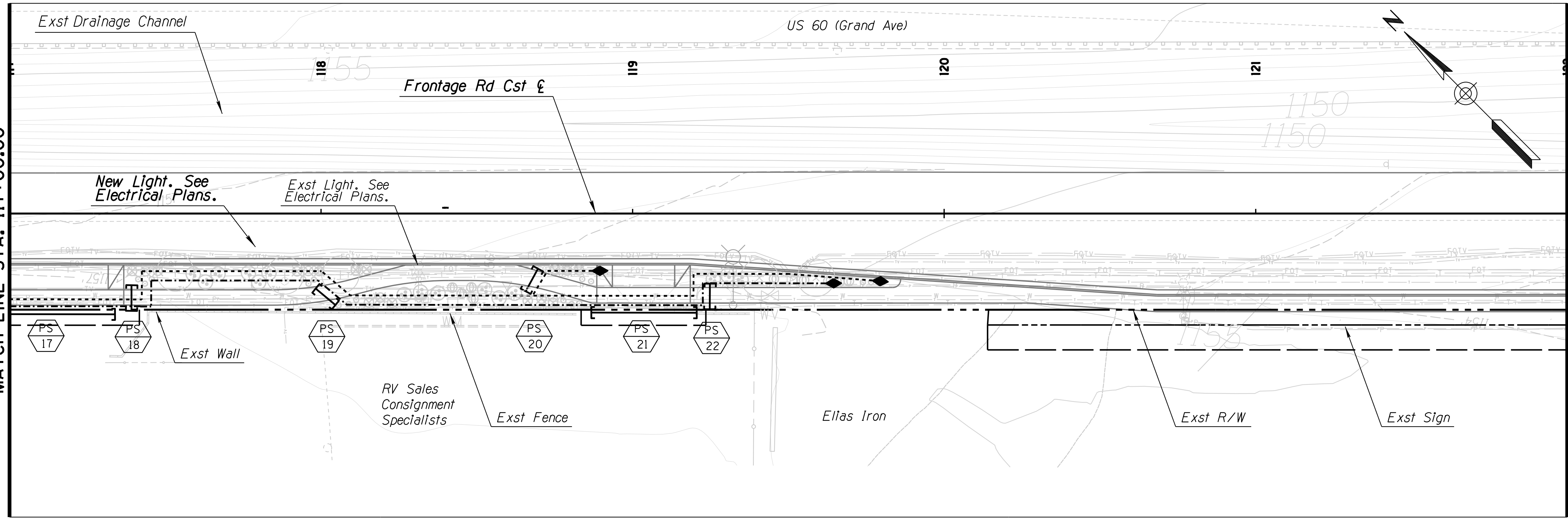
060 MA 144

IRRIGATION LEGEND	
SYM.	DESCRIPTION
W	New Water Meter - 1"
W	Existing Water Meter - To Remain
B	New Backflow Preventer - 1"
B	Existing Backflow Preventer - To Remain
C	New Irrigation Controller
C	Existing Irrigation Controller - To Remain
E	Existing Electric Meter - To Remain
M	New Master Valve - 1"
F	Flow Meter - 1"
GV	Gate Valve - 1.5"
CV	Control Valve - 1"
PR	Pressure Regulator - 3/4"
S	Surge Protector
Q	Quick Coupler - 1"
LEC	Lateral End Cap - 3/4"
PIPES	
1.5"	Mainline Pipe: 1.5" Sch 40 PVC
---	Tree Lateral Pipe: 3/4" Class 200 PVC
---	Shrub Lateral Pipe: 3/4" Class 200 PVC
3"S	3" Pipe Sleeves
6"S	6" Pipe Sleeves
12"S	12" Pipe Sleeves



DESIGN	SP	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	SP		03/18	
CHECKED	DD		03/18	
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com				IRRIGATION PLAN SHEET STA. 107+00 TO STA. 117+00 DWG NO. R-2.09
ROUTE	LOCATION	US 60 GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			OF	

SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE FINISHED PLANS REVISIONS



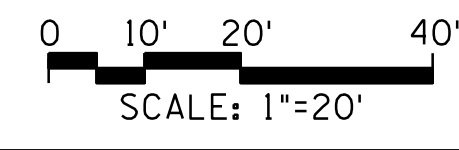
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	220	232	

060 MA 144

IRRIGATION LEGEND	
SYM.	DESCRIPTION
W	New Water Meter - 1"
W	Existing Water Meter - To Remain
B	New Backflow Preventer - 1"
B	Existing Backflow Preventer - To Remain
C	New Irrigation Controller
C	Existing Irrigation Controller - To Remain
E	Existing Electric Meter - To Remain
M	New Master Valve - 1"
F	Flow Meter - 1"
GV	Gate Valve - 1.5"
CV	Control Valve - 1"
PR	Pressure Regulator - 3/4"
SP	Surge Protector
QC	Quick Coupler - 1"
LEC	Lateral End Cap - 3/4"
PIPES	
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---	Tree Lateral Pipe: 3/4" Class 200 PVC
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3"S	3" Pipe Sleeves
6"S	6" Pipe Sleeves
12"S	12" Pipe Sleeves

DESIGN	NAME	DATE
SP		03/18
DRAWN	NAME	DATE
SP		03/18
CHECKED	NAME	DATE
DD		03/18

ARIZONA DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
 ROADSIDE DEVELOPMENT SERVICES
 IRRIGATION PLAN SHEET
 STA. 117+00 TO STA. 127+00
 ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD
 TRACS NO. H8874 01C



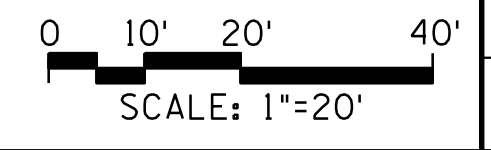
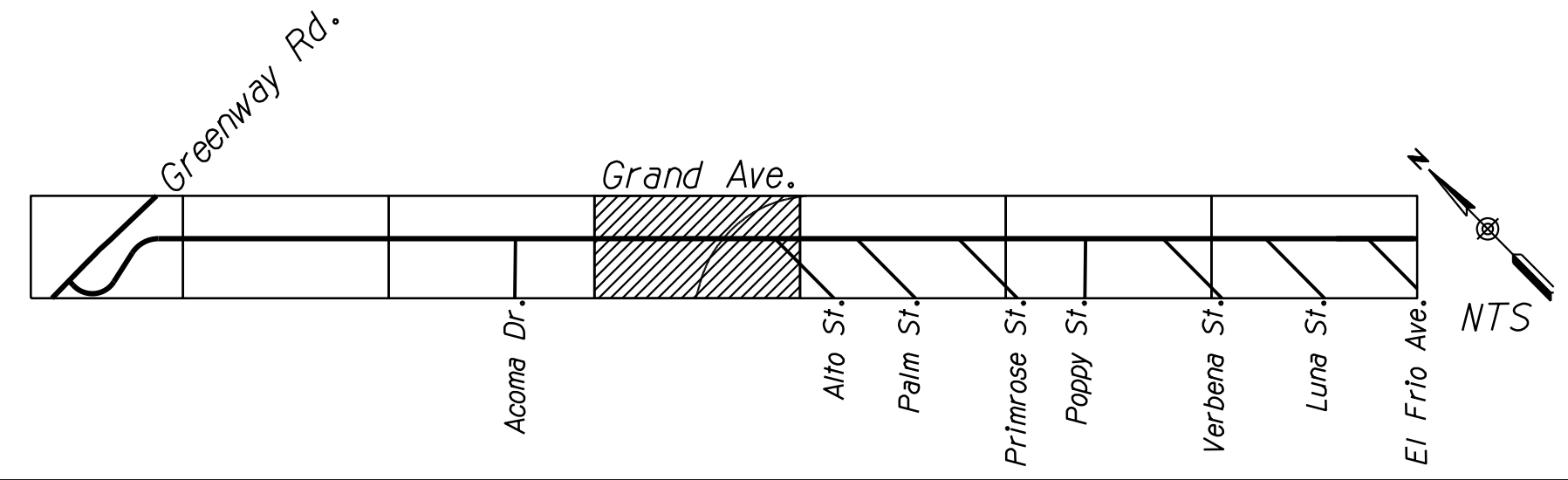
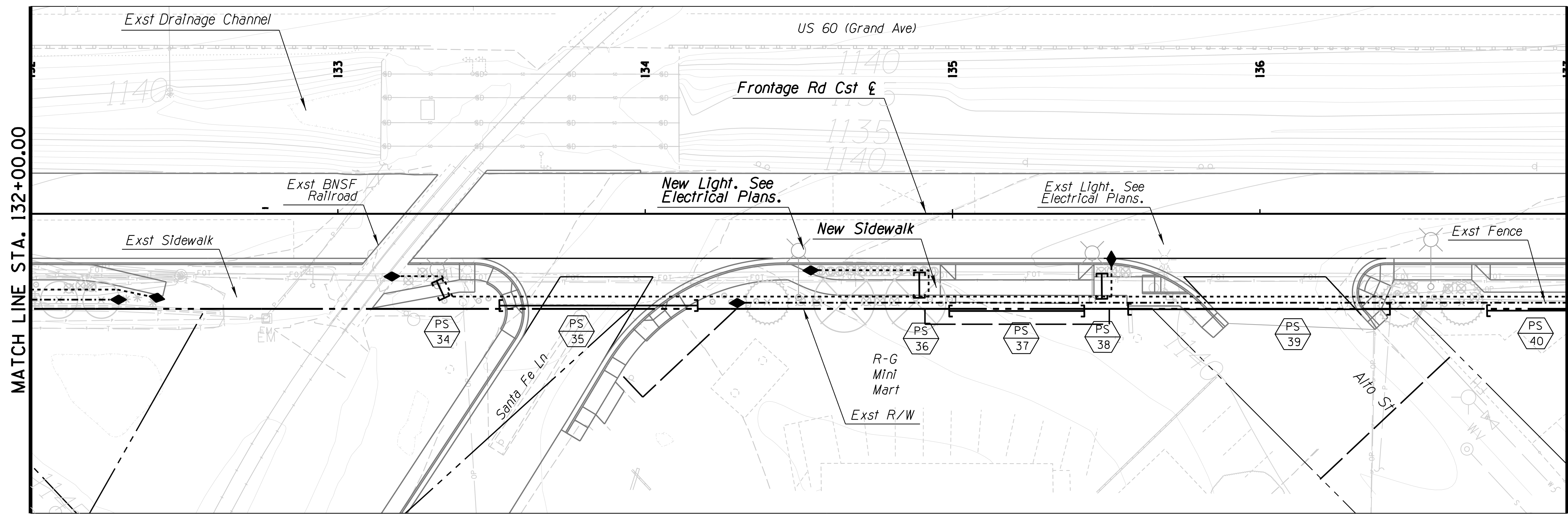
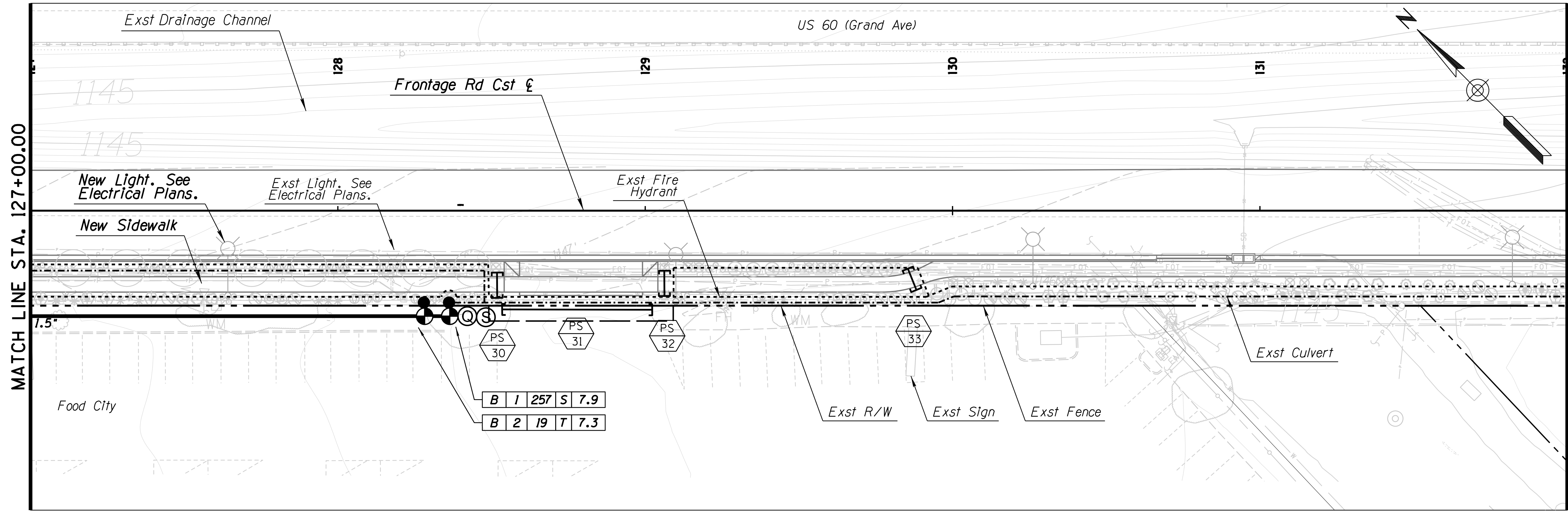
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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	221	232	

060 MA 144

IRRIGATION LEGEND	
SYM.	DESCRIPTION
	New Water Meter - 1"
	Existing Water Meter - To Remain
	New Backflow Preventer - 1"
	Existing Backflow Preventer - To Remain
	New Irrigation Controller
	Existing Irrigation Controller - To Remain
	Existing Electric Meter - To Remain
	New Master Valve - 1"
	Flow Meter - 1"
	Gate Valve - 1.5"
	Control Valve - 1"
	Pressure Regulator - 3/4"
	Surge Protector
	Quick Coupler - 1"
	Lateral End Cap - 3/4"

SYM.	PIPES
	Mainline Pipe: 1.5" Sch 40 PVC
	Tree Lateral Pipe: 3/4" Class 200 PVC
	Shrub Lateral Pipe: 3/4" Class 200 PVC
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	6" Pipe Sleeves
	12" Pipe Sleeves



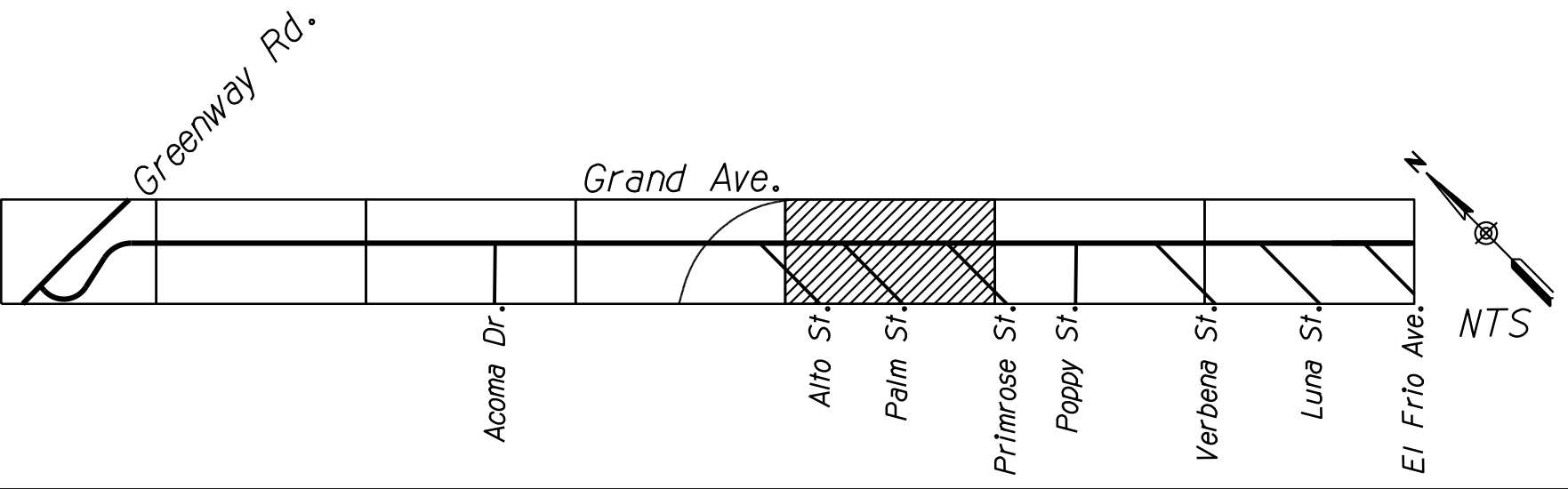
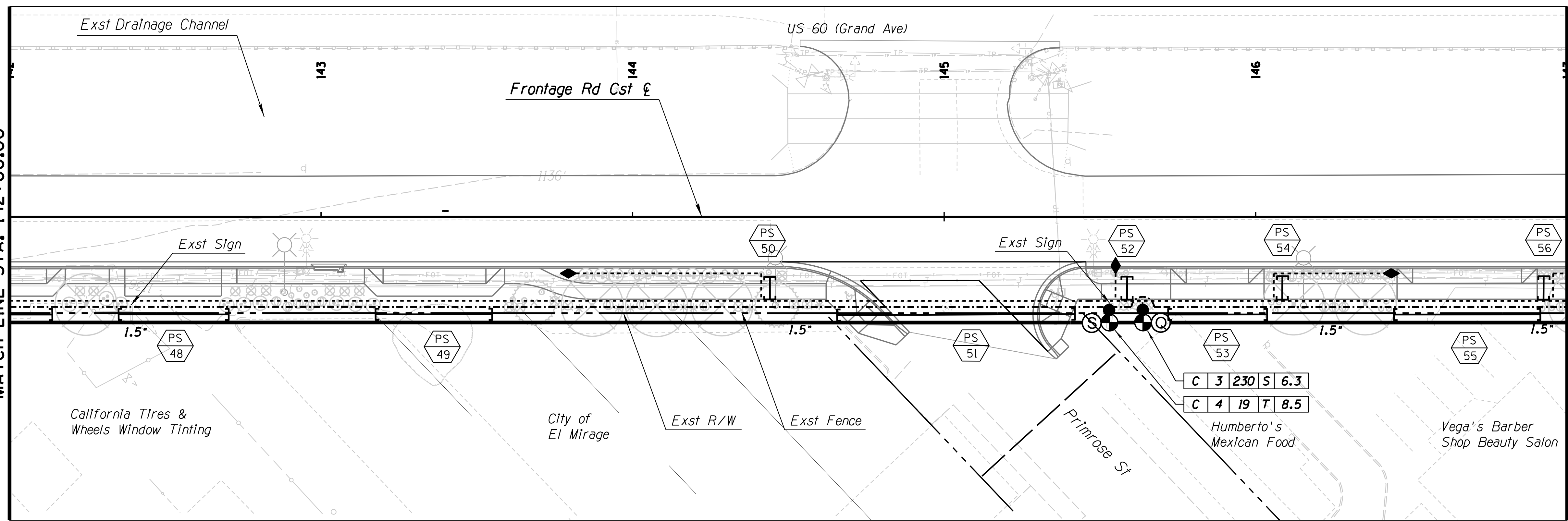
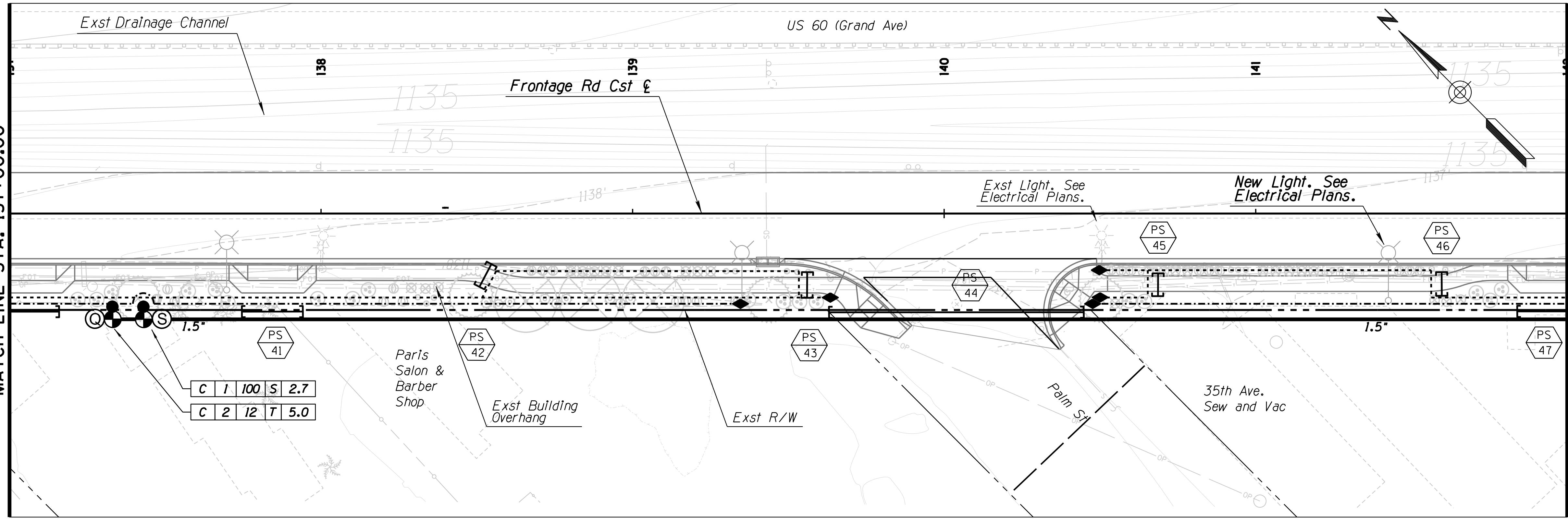
DESIGN	SP	NAME	DATE
DRAWN	SP		03/18
CHECKED	DD		03/18

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 www.j2designus.com

ARIZONA DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
 ROADSIDE DEVELOPMENT SERVICES
 IRRIGATION PLAN SHEET
 STA. 127+00 TO STA. 137+00
 US 60 GRAND AVENUE FRONTAGE ROAD
 TRACS NO. H8874 01C
 DWG NO. R-2.11



SURVEY NO. FINISHED PLANS DATE LOCATION REVISIONS FINISHED PLANS DATE SURVEY NO.



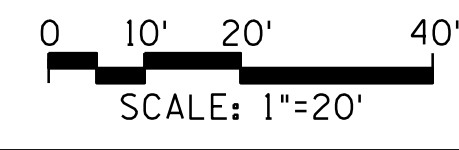
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
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060 MA 144

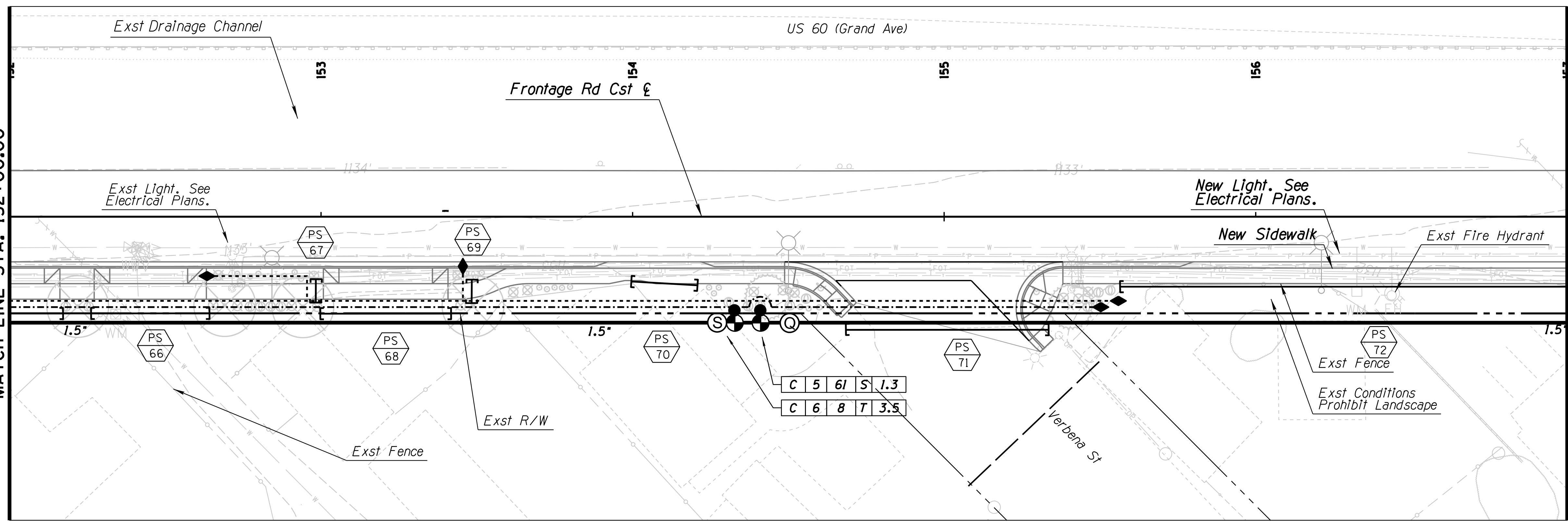
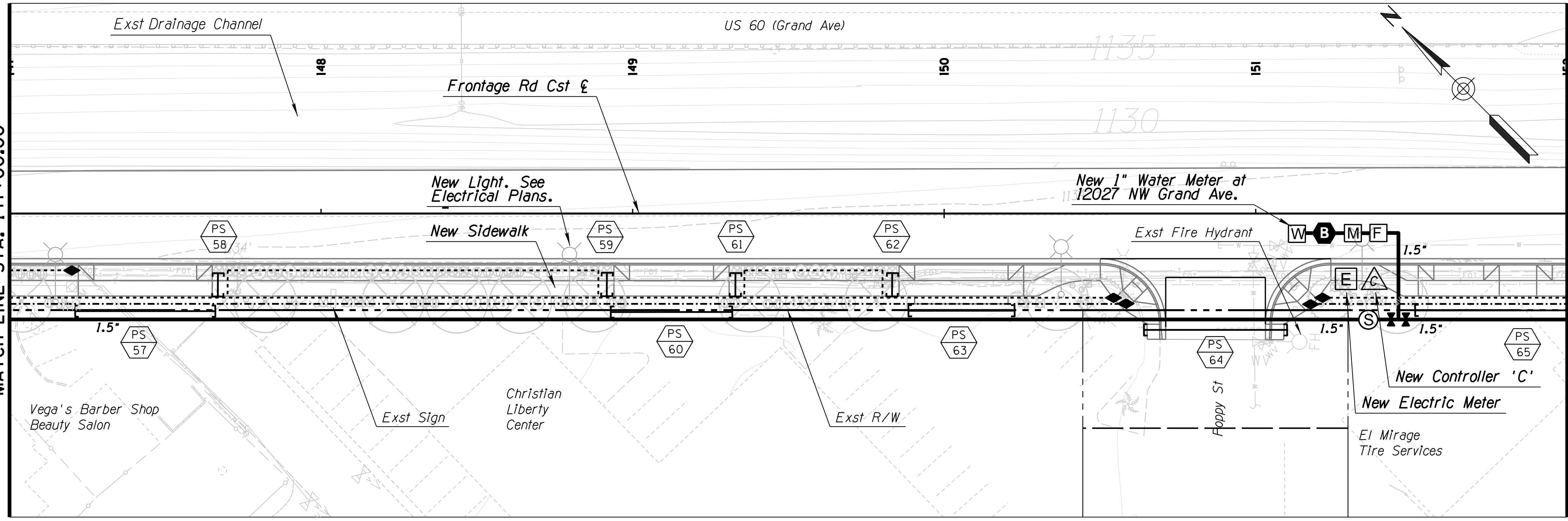
IRRIGATION LEGEND	
SYM.	DESCRIPTION
	New Water Meter - 1"
	Existing Water Meter - To Remain
	New Backflow Preventer - 1"
	Existing Backflow Preventer - To Remain
	New Irrigation Controller
	Existing Irrigation Controller - To Remain
	Existing Electric Meter - To Remain
	New Master Valve - 1"
	Flow Meter - 1"
	Gate Valve - 1.5"
	Control Valve - 1"
	Pressure Regulator - 3/4"
	Surge Protector
	Quick Coupler - 1"
	Lateral End Cap - 3/4"
PIPES	
	Mainline Pipe: 1.5" Sch 40 PVC
	Tree Lateral Pipe: 3/4" Class 200 PVC
	Shrub Lateral Pipe: 3/4" Class 200 PVC
	3" Pipe Sleeves
	6" Pipe Sleeves
	12" Pipe Sleeves

DESIGN	SP	NAME	DATE
DRAWN	SP		03/18
CHECKED	DD		03/18

ARIZONA DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
 ROADSIDE DEVELOPMENT SERVICES
 IRRIGATION PLAN SHEET
 STA. 137+00 TO STA. 147+00
 GRAND AVENUE FRONTAGE ROAD
 TRACS NO. H8874 01C



SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO.

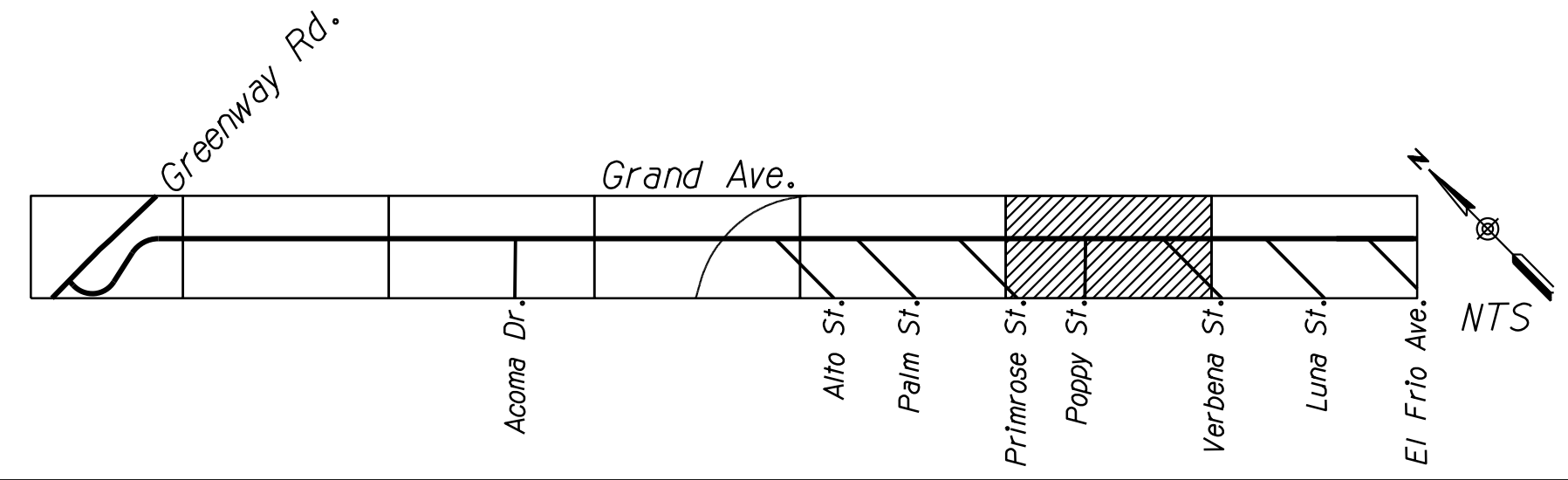


F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	223	232	

060 MA 144

IRRIGATION LEGEND	
SYM.	DESCRIPTION
W	New Water Meter- 1"
W	Existing Water Meter- To Remain
B	New Backflow Preventer- 1"
B	Existing Backflow Preventer- To Remain
C	New Irrigation Controller
C	Existing Irrigation Controller- To Remain
E	Existing Electric Meter- To Remain
M	New Master Valve- 1"
F	Flow Meter- 1"
GV	Gate Valve- 1.5"
CV	Control Valve- 1"
PR	Pressure Regulator- 3/4"
S	Surge Protector
Q	Quick Coupler- 1"
LEC	Lateral End Cap- 3/4"

SYM.	PIPES
1.5"	Mainline Pipe: 1.5" Sch 40 PVC
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3"S	3" Pipe Sleeves
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12"S	12" Pipe Sleeves



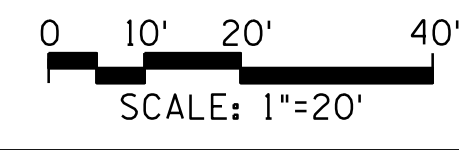
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DRAWN	SP		03/18
CHECKED	DD		03/18

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 4649 east cotton gin loop, suite B2
 phoenix, arizona 85040
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 www.j2designus.com

ARIZONA DEPARTMENT OF TRANSPORTATION
 INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
 ROADSIDE DEVELOPMENT SERVICES

IRRIGATION PLAN SHEET
 STA. 147+00 TO STA. 157+00

ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD
 TRACS NO. H8874 01C



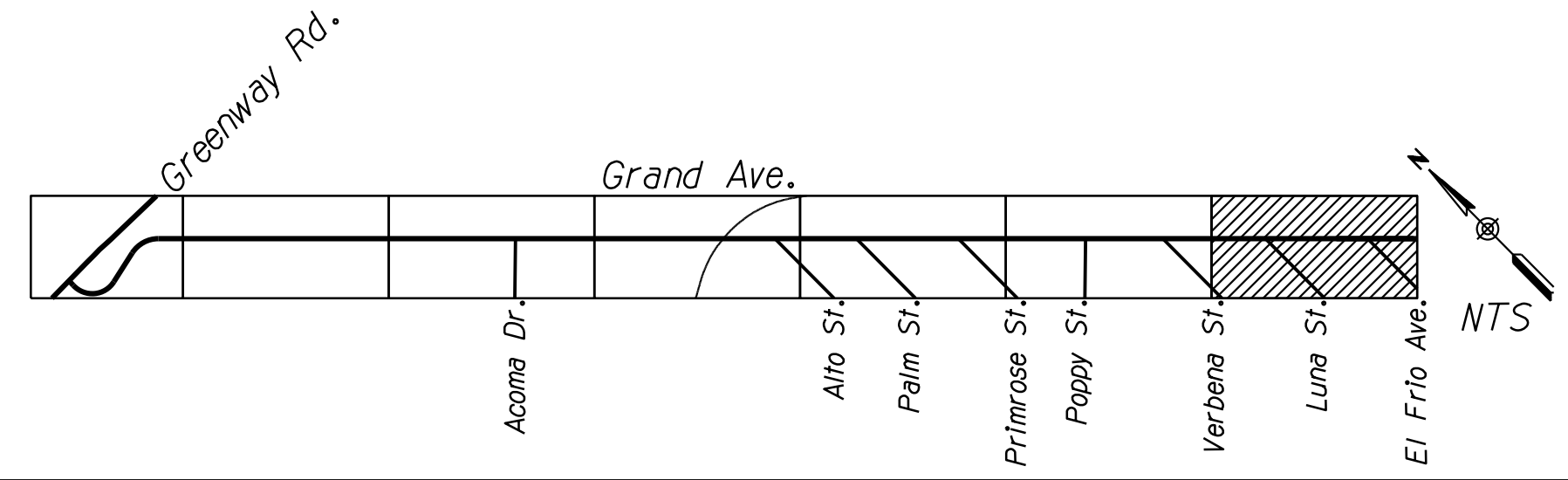
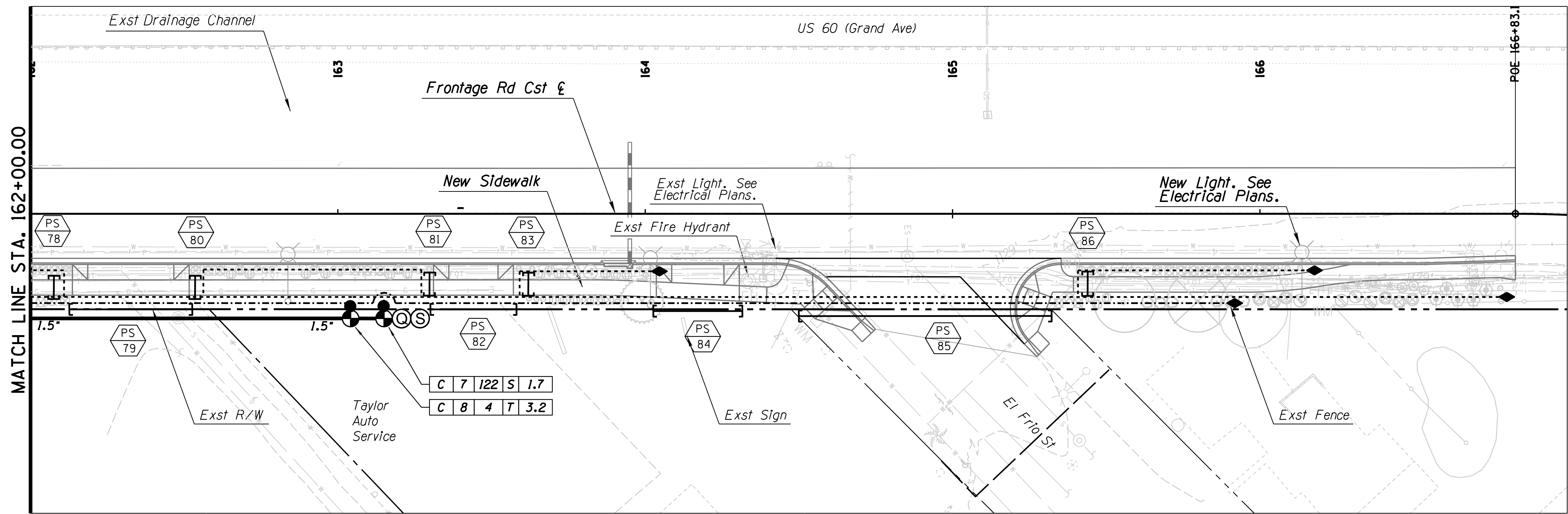
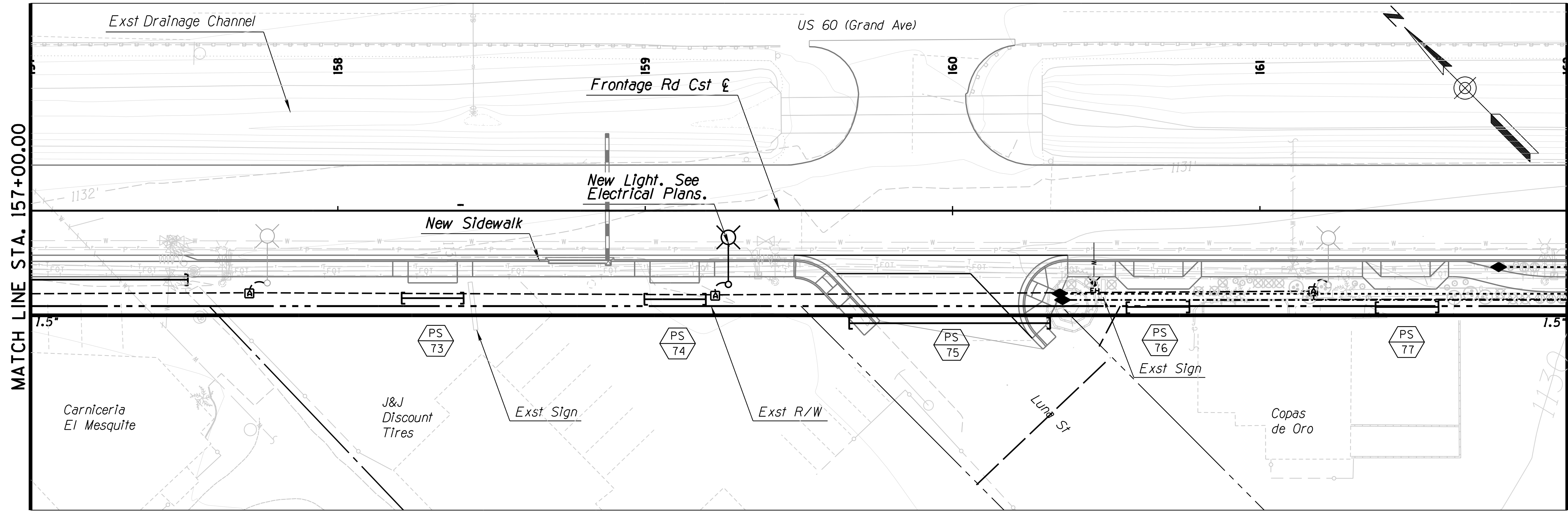
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 OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	224	232	

060 MA 144

IRRIGATION LEGEND	
SYM.	DESCRIPTION
	New Water Meter - 1"
	Existing Water Meter - To Remain
	New Backflow Preventer - 1"
	Existing Backflow Preventer - To Remain
	New Irrigation Controller
	Existing Irrigation Controller - To Remain
	Existing Electric Meter - To Remain
	New Master Valve - 1"
	Flow Meter - 1"
	Gate Valve - 1.5"
	Control Valve - 1"
	Pressure Regulator - 3/4"
	Surge Protector
	Quick Coupler - 1"
	Lateral End Cap - 3/4"

SYM.	PIPES
	Mainline Pipe: 1.5" Sch 40 PVC
	Tree Lateral Pipe: 3/4" Class 200 PVC
	Shrub Lateral Pipe: 3/4" Class 200 PVC
	3" Pipe Sleeves
	6" Pipe Sleeves
	12" Pipe Sleeves



DESIGN	SP	NAME	DATE
DRAWN	SP		03/18
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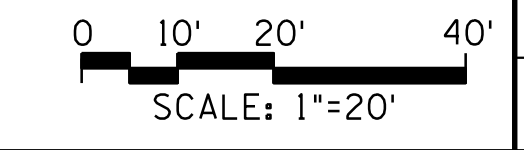
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www.j2design.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

IRRIGATION PLAN SHEET
STA. 157+00 TO STA. 167+00

ROUTE US 60 LOCATION GRAND AVENUE FRONTAGE ROAD

TRACS NO. H8874 01C



SURVEY NO. LOCATION DATE FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE SURVEY NO.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	225	232	

060 MA 144

PART 2 - To be completed by ADOT & CONTRACTOR

http://www.azdot.gov/Inside_adot/OES/Water_Quality/Stormwater/Docs/swppp_construction_template.dot

PART 1 - To be completed by the Landscape Architect or Design Engineer

I. PROJECT DESCRIPTION

A. Owner Name and Address:
 Arizona Department of Transportation
 205 South 17th Avenue
 Phoenix, Arizona 85007-3213

B. Project TRACS Number: H 8874 OIL

C. Project Location: US60
 City: El Mirage County: Maricopa
 Beginning Latitude (NAD 83): 33° 27' 24"
 Beginning Longitude (NAD 83): 112° 19' 56"
 Ending Latitude (NAD 83): 33° 36' 40"
 Ending Longitude (NAD 83): 112° 18' 55"
 To obtain the project latitude/longitude data, refer to the Flash Earth web link below (Bing Maps with labels): <http://www.flashearth.com/>

D. Project Description: Roadway, Driveways & Landscape

II. HYDROLOGIC INFORMATION

A. Project Size:
 Length (Mi.) 1.3
 Area (Ac.) 8.5 AC

B. Area to be Graded (Ac.): 8 AC

C. Percentage of the site that is impervious before and after construction:
 Percentage before Construction: 85%
 Percentage after Construction: 85%

D. Receiving Water(s), refer to the Arizona Department of Water Resources Web Link below (USGS Topo): <https://glsweb.azwater.gov/WellRegistry/Default.aspx>
Gila River

III. PRESERVATION OF EXISTING VEGETATION

A. In accordance with the specifications, existing vegetation will be preserved. Clearing limits shall be confined to areas that require grading. Existing vegetation outside the boundaries of the cleared area shall be protected from damage by construction activities. Existing trees within the area to be cleared shall be preserved and protected, wherever possible.

IV. SOIL STABILIZATION MEASURES

A. All disturbed soil, which will not be paved, riprapped or otherwise covered to prevent erosion, will be revegetated and/or landscaped in accordance with the project plans and specifications.

B. Scheduling of the revegetation effort can be found on PART 2 of this sheet under SCHEDULE OF MAJOR ACTIVITIES.

V. MEASURES TO CONTROL EROSION AND SEDIMENT

A. Temporary Erosion and Sediment Controls: (Refer to the Following SWPPP Site Plan and Specifications)

Erosion Control Mattings
 Temporary Diversion Dikes
 Check Dams
 Rock Inlet/Outlet Protection
 Sediment Control Berms
 Silt Fences
 Wattles (Excelsior/Straw)
 Excelsior Logs / Sediment Logs
 Seeding (Class II with mulch)
 Others Describe: _____

Curb Inlet Protection

B. Permanent Erosion and Sediment Controls and Post-construction Storm Water Management Measures: (Refer to SWPPP Site Plan and Specifications)

Crown Ditch/Dike
 Rock Protection
 Rock Riprap Channel Lining
 Sediment Basin
 Embankment Curb
 Spillways and Downdrains
 Minibenching
 Seeding established as a perennial vegetative cover with a density of 70% of the native background vegetative cover.
 Others Describe: _____

Decomposed Granite

VI. MAINTENANCE AND INSPECTIONS

A. Frequency of Inspections:
 At least once every 7 calendar days, OR
 Every 14 calendar days and within 24 hours after a rainfall of 0.5 inches (12.7 mm) or more.

NOTE: RAINFALL GAUGE TO BE KEPT ON-SITE TO DETERMINE DEPTH OF RAINFALL

B. Inspection Procedure:
 ADOT's Contractor's Inspection Log and Compliance Evaluation Report (CER) will be completed by the contractor or his representative and will be kept on file for 3 years. A signed copy of the CER will be sent to the ADOT resident engineer. If repairs are necessary, they shall be initiated within 24 hours of the inspection report.

I. SCHEDULE OF MAJOR ACTIVITIES

A. Project Schedule: _____
 Start Date: _____
 End Date: _____

B. Construction Sequencing Schedule: (Attach Additional Sheets) Construction Activities _____

II. INVENTORY OF POLLUTANTS

A. The materials or substances checked below are expected to be onsite during construction:

Concrete Asphalt
 Paints Fertilizer
 Herbicides Wood
 Fuel Oil
 Others, List: _____

III. POLLUTION CONTROL MEASURES

A. Other Best Management Practices:
 Wind Erosion and Dust Control
 Solid Waste Management
 Equipment Maintenance Procedures
 Designated Washout Areas
 Stabilized Construction Entrance
 Protected Chemical and Material Storage Area
 Other, Describe: _____

IV. SPILL PREVENTION AND RESPONSE

A. Spill Prevention:
 The procedures outlined in the Best Management Practices listed under Pollution Control Measures will be followed to prevent and contain spills of hazardous material. These preventative action include BMP's on equipment maintenance and proper handling, storage and disposal of chemicals and materials. All manufacturer's recommendations for usage, clean-up and disposal shall be followed.

B. Spill Response:
 In the event of any accidental spill of chemicals or hazardous materials, contact the ADOT Traffic Operations Center at 800-379-3701. If a reportable quantity is discharged into the storm water, ADOT shall contact the National Response Center and document the spill to the EPA. ADOT's Hazardous Materials Specialist shall provide instructions.

V. CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

A. This Storm Water Pollution Prevention Plan (SWPPP) has been prepared in accordance with the latest updated version of ADOT's EROSION AND POLLUTION CONTROL MANUAL FOR HIGHWAY DESIGN AND CONSTRUCTION, published by ADOT Intermodal Transportation Division.

SWPPP is in compliance with other Federal, State Laws, or Local Regulations.

VI. POLLUTION PREVENTION PLAN CERTIFICATION

A. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Applies to VI. B., C., and D)

B. The operator/contractor as defined in AZPDES should sign the SWPPP in accordance with CGP Part VII. K, and retain the SWPPP on-site at the construction site or other location easily accessible during normal business hours.

Signature: (operator/contractor) _____
 Date: _____
 Name: _____
 Title: _____
 Company: _____

C. ADOT Resident Engineer
 Signature: (owner) _____
 Date: _____
 Name: _____
 Title: _____
 ADOT District: _____

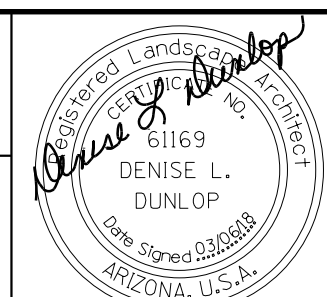

D. MUNICIPALITY for Municipal Separate Storm Sewer System (MS4)
 Signature: _____
 Date: _____
 Name: _____
 Title: _____
 MS4 Name: _____

VII. OTHER REQUIREMENTS

A. A copy of the General Permit and NOI are attached in accordance to AZPDES General Permit for Storm Water Discharges From Construction Activities To The Water Of The United States.

B. Projects that are within 1/4 mile of impaired or unique waters require the SWPPP to be sent to ADEQ in combination with the NOI. Refer to the Arizona Outstanding, Impaired and Not-Attaining Waters *.PDF Maps by County web link: http://www.azdot.gov/Inside_adot/OES/Water_Quality/Stormwater/outstanding-unique-waters-maps-by-county.asp

C. For further requirements, check the ADEQ's Smart NOI Web Page: <https://az.gov/webapp/noi/smartnoi/menu.do>

DESIGN	SP	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES	
DRAWN	SP	DATE	03/18		
CHECKED	DD	DATE	03/18		
 J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com				SWPPP STANDARD SHEET	
ROUTE	LOCATION		Expires: 12/31/2018		
US 60	GRAND AVENUE FRONTAGE ROAD		DWG NO.	R-03.01	
TRACS NO. H8874 OIC			OF		

DATE: _____ LOCATION: _____ REVISIONS: _____ FINISHED PLANS: _____ SURVEY NO.: _____ DATE: _____ LOCATION: _____ REVISIONS: _____ FINISHED PLANS: _____ SURVEY NO.: _____

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	226	232	

060 MA 144

EROSION CONTROL TYPE INSTALLATION & QUANTITY

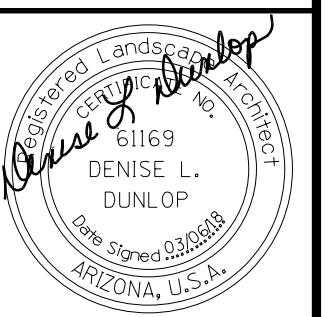
LOCATION	EROSION CONTROL TYPE INSTALLATION										QUANTITIES					REMARKS	
	20" Sediment Wattle Slope Protection (LF)		12" Sediment Wattle (LF)		Storm Drain Protection		Rock Mulch (Gradation 'C') (CY)		Inlet Protection (LF)		Construction Entrance (CY)		20" Sediment Wattle Slope Protection (LF)	Storm Drain Protection (12" Sediment Wattle) (LF)	Storm Drain Protection (Gradation 'C') (CY)		Inlet Protection (LF)
	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right	Left	Right					
US60 Frontage Rd Cst &																	
Sta 100+00 to 124+50 (EC-3.01)	499	2,346	50	0	3	0	0	0	0	0	250		2,845	50	3	0	250
Sta 124+50 to 149+50 (EC-3.02)	0	1,524	0	0	0	0	0	0	63	0	0		1,524	0	0	63	0
Sta 149+50 to 167+00 (EC-3.03)	0	980	0	0	0	0	0	0	42	0	250		980	0	0	42	250
Total:													5,349	50	3	105	500

SW-20" = 20" Sediment Wattle Slope Protection
SD = Storm Drain Protection
IP = Inlet Protection
CE = Construction Entrance

SD Reference letters 'SD' correspond to the type of installation. 'E2' corresponds to the plan detail number.

- NOTES:**
- The placement of all Erosion Control Devices listed above may be subject to change and may be adjusted by the Engineer.
 - Engineer is responsible to verify the Contractor has sufficient protective measures in place to contain all storm water runoff sediment within project limits and protect all disturbed slopes from erosion.
 - The Contractor shall monitor/maintain all "Control Measures" during any shutdown period.

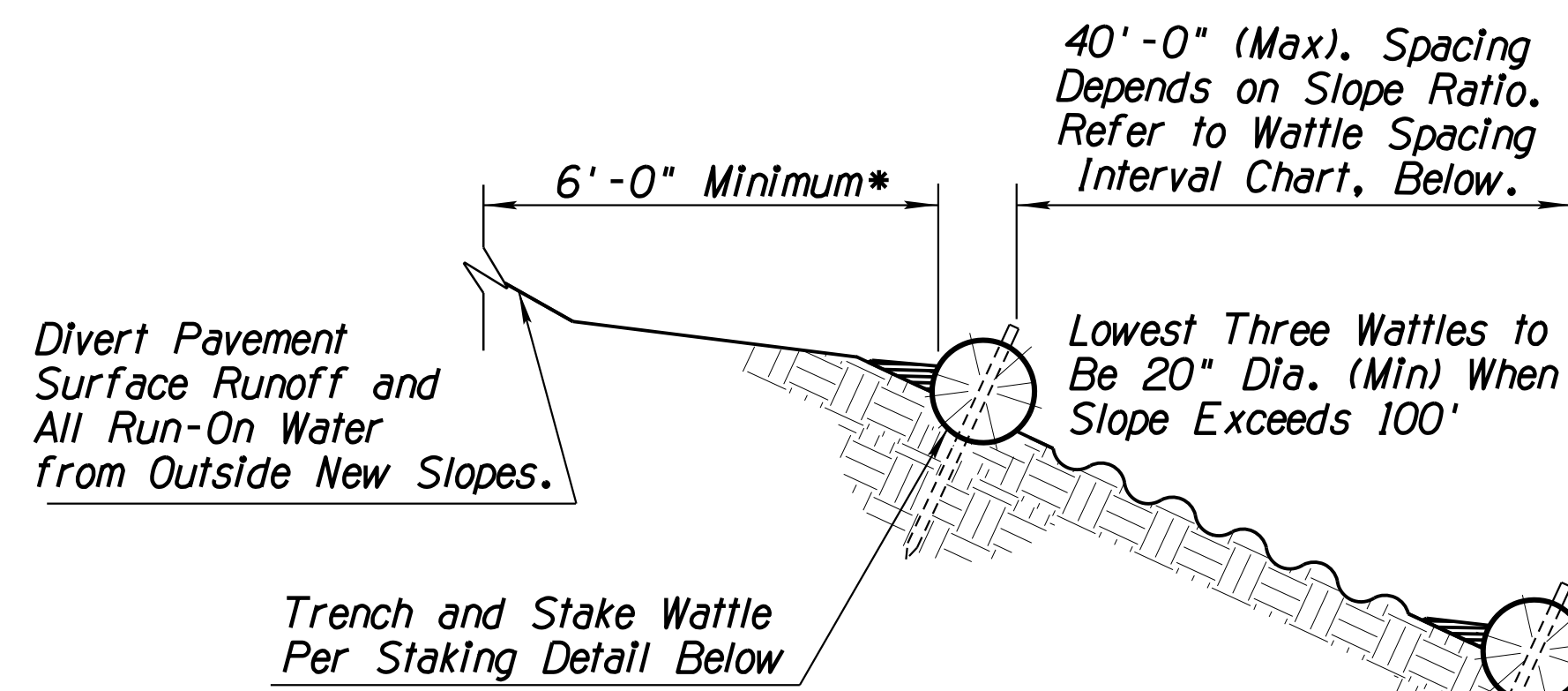
DESIGN	SP	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
DRAWN	SP	03/18		
CHECKED	DD	03/18		
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com				EROSION CONTROL SUMMARY
ROUTE		LOCATION		Expires: 12/31/2018
US 60		GRAND AVENUE FRONTAGE ROAD		DWG NO. R-03.02
TRACS NO. H8874 01C				OF



REVISIONS - LOCATION - DATE -
 FINISHED PLANS - SURVEY NO. - DATE -
 REVISIONS - LOCATION - DATE -
 FINISHED PLANS - SURVEY NO. - DATE -

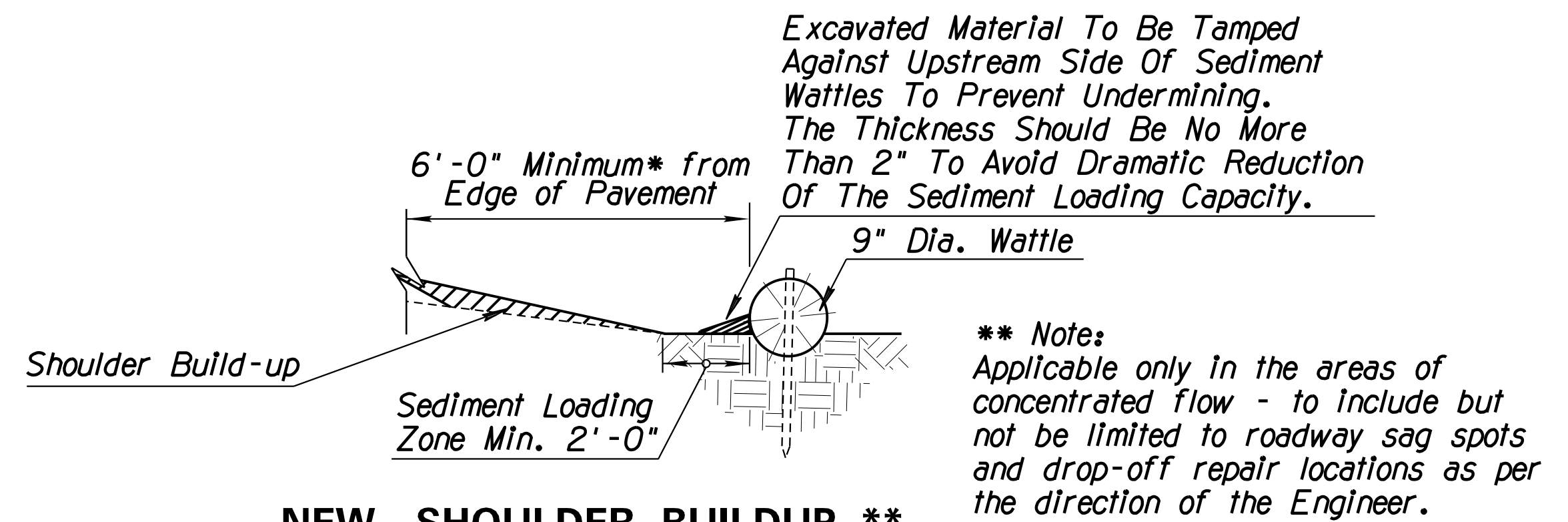
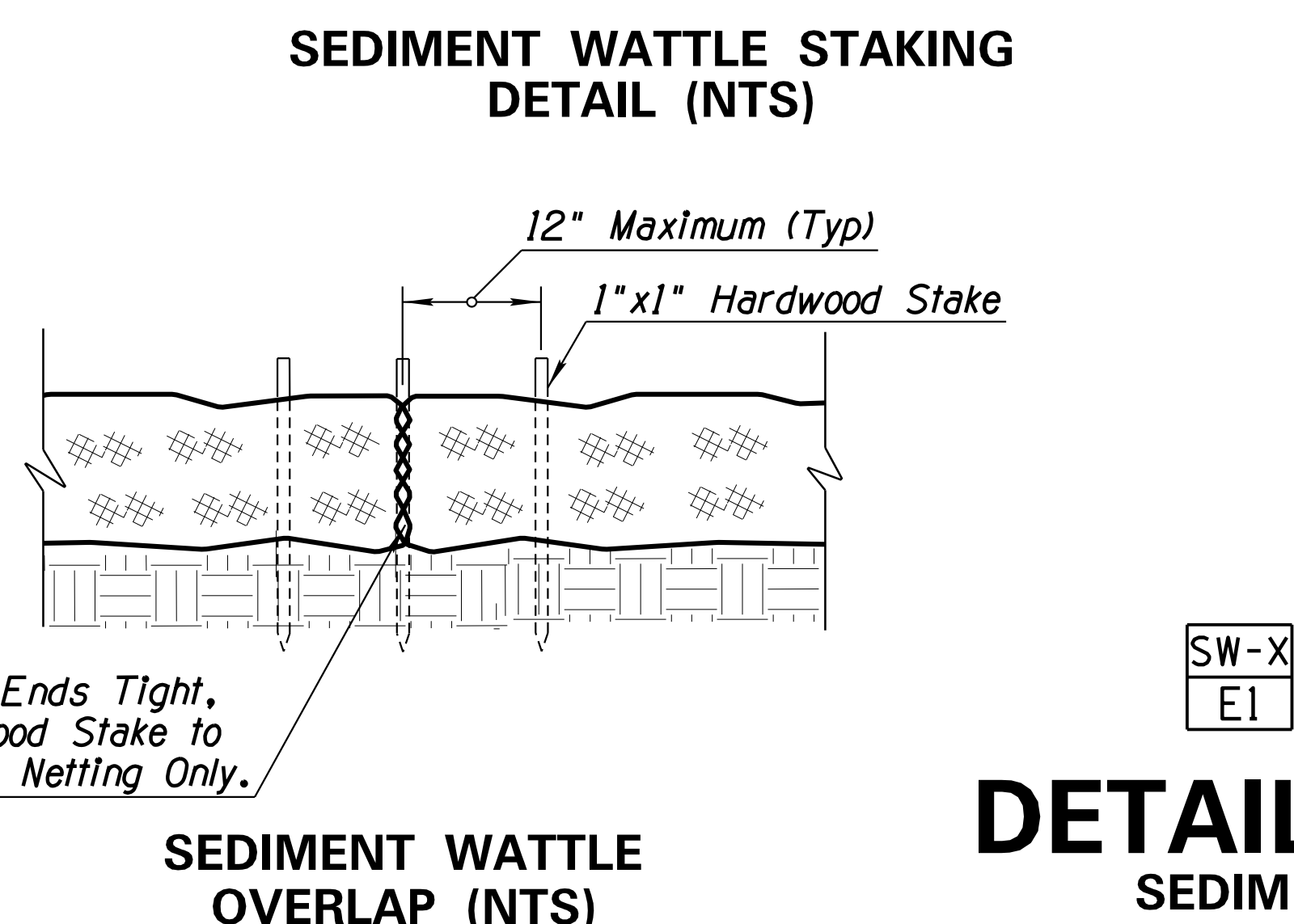
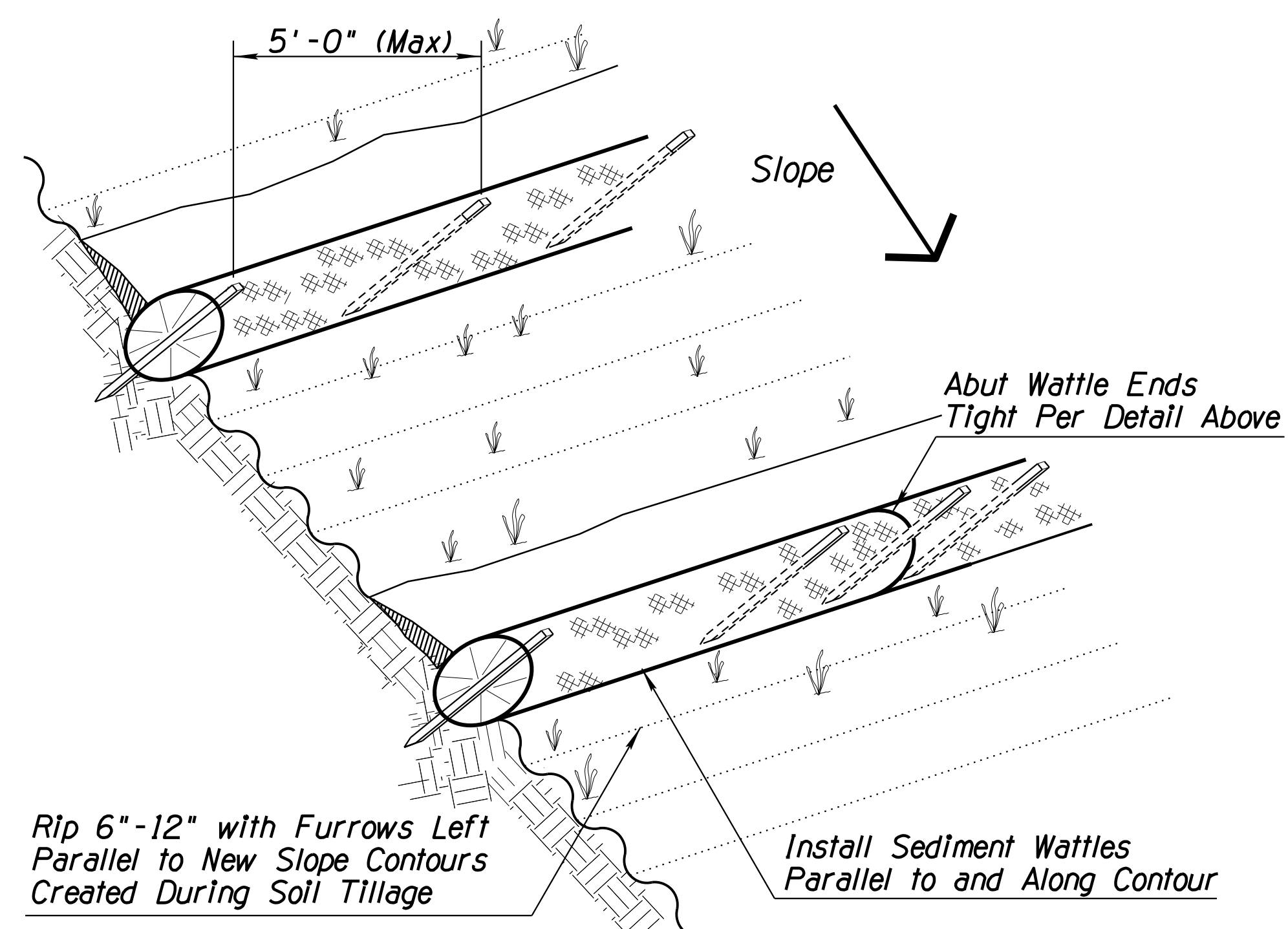
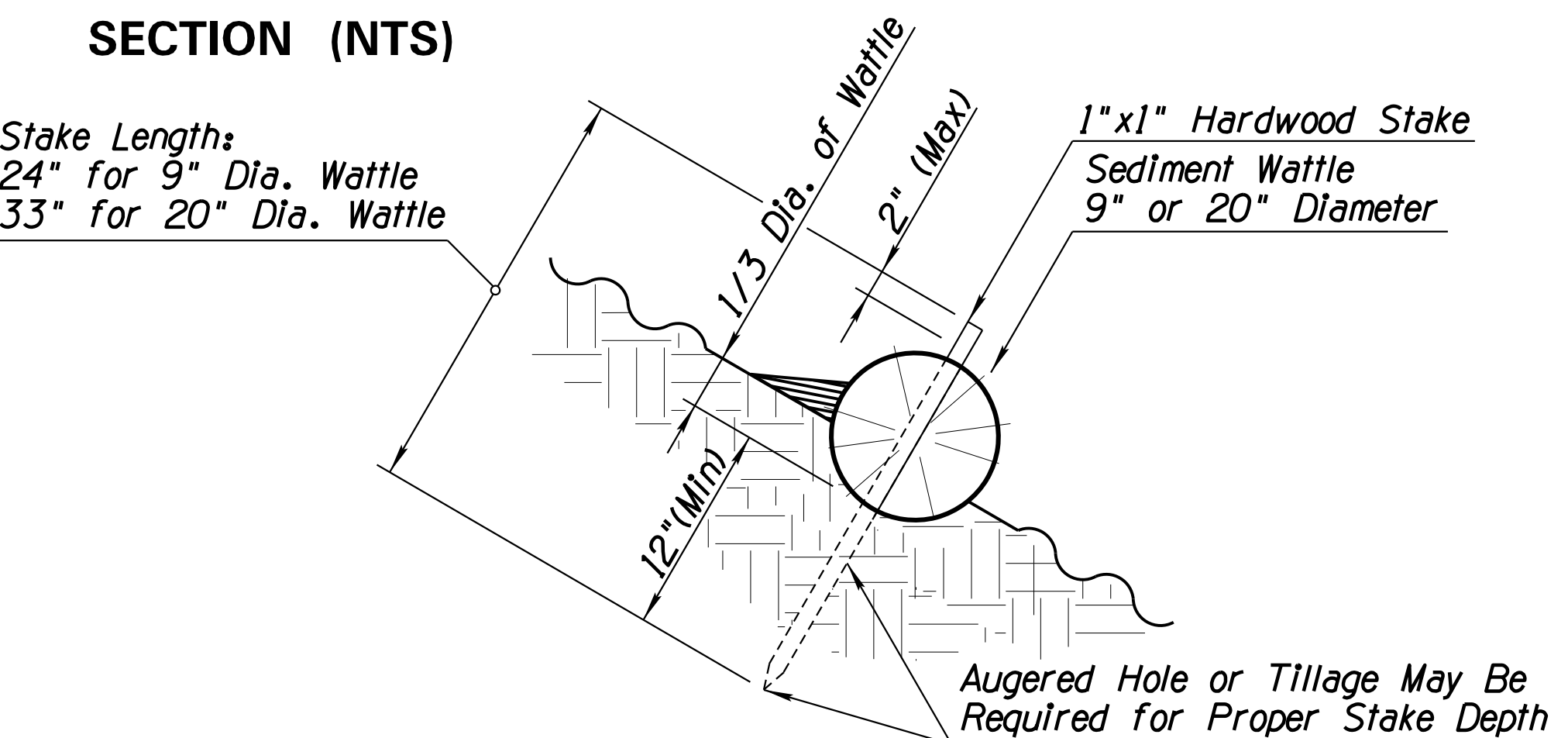
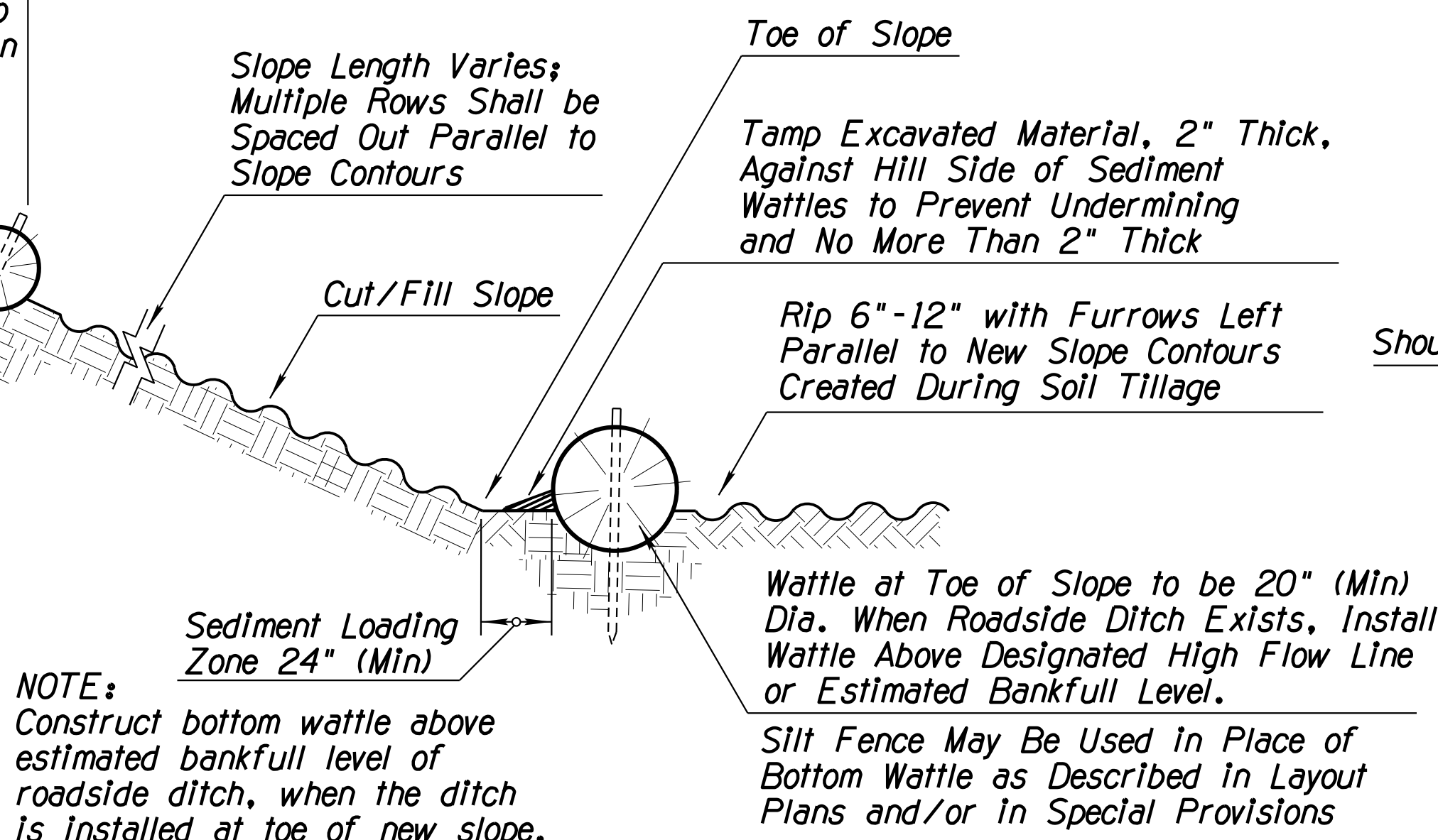
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	227	232	

060 MA 144



Slope Ratio (H:V)	Maximum Spacing Interval
2:1	10'
3:1	20'
4:1	30'
5:1	40'
6:1	40'

- * Notes:
- 1) Top Row Shall Not be Placed within 6'-0" of Edge of Pavement and 9'-0" from Outside Surface of Barrier.
 - 2) For erosive soils, place rows of wattles closer together.
 - 3) For soils with low erosive potential, place rows of wattles further apart.



- NOTES:
1. Install Sediment Wattles as slopes are constructed to grade or as directed by the Engineer. Select, install and maintain in conformance with manufacturers' specifications to meet site conditions for slope protection and in accordance with good engineering practices. No Sediment Wattles shall be installed in urban freeway medians, nor where cable barrier systems are employed.
 2. Sediment Wattles shall be in continuous contact with trench bottom and sides. Do not overlap wattle ends on top of each other. A 20" Dia. wattle may be made from 2-3 rolled excelsior or straw blankets.
 3. Butt adjoining wattles tightly against each other. Drive the first end stake of the second wattle at an angle toward the first wattle to help abut them tightly.
 4. Repair any rills or gullies promptly. Make field adjustments and corrections of Wattle BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
 5. Loosening surface soil is not required where Minibenches are used. For seeded areas, tillage shall be performed to form minor ridges and furrows parallel to new slope contours and as specified in Section 805 of the Standard Specifications and these special provisions.
 6. Divert and direct run-on water from outside of the slopes to the spillways and/or rock riprap/rock mulch. Diversion dikes and/or ditches are necessary on natural undisturbed slopes beyond the top limits of new slopes to divert run-on water.
 7. Installation and maintenance of Sediment Wattle BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities.
 8. Install and maintain Sediment Wattle BMPs to carry the stormwater of at least 2-year, 24-hour events.
 9. The Sediment Wattle BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, maintenance, all necessary repairs, final removal, and disposal of this temporary BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
 10. Refer to Standard Specification Section 810-2.06(C) for Sediment Wattle material specifications.
 11. Make field adjustments and corrections to ensure NO sensitive biological resources (native species / habitats) will be adversely impacted.

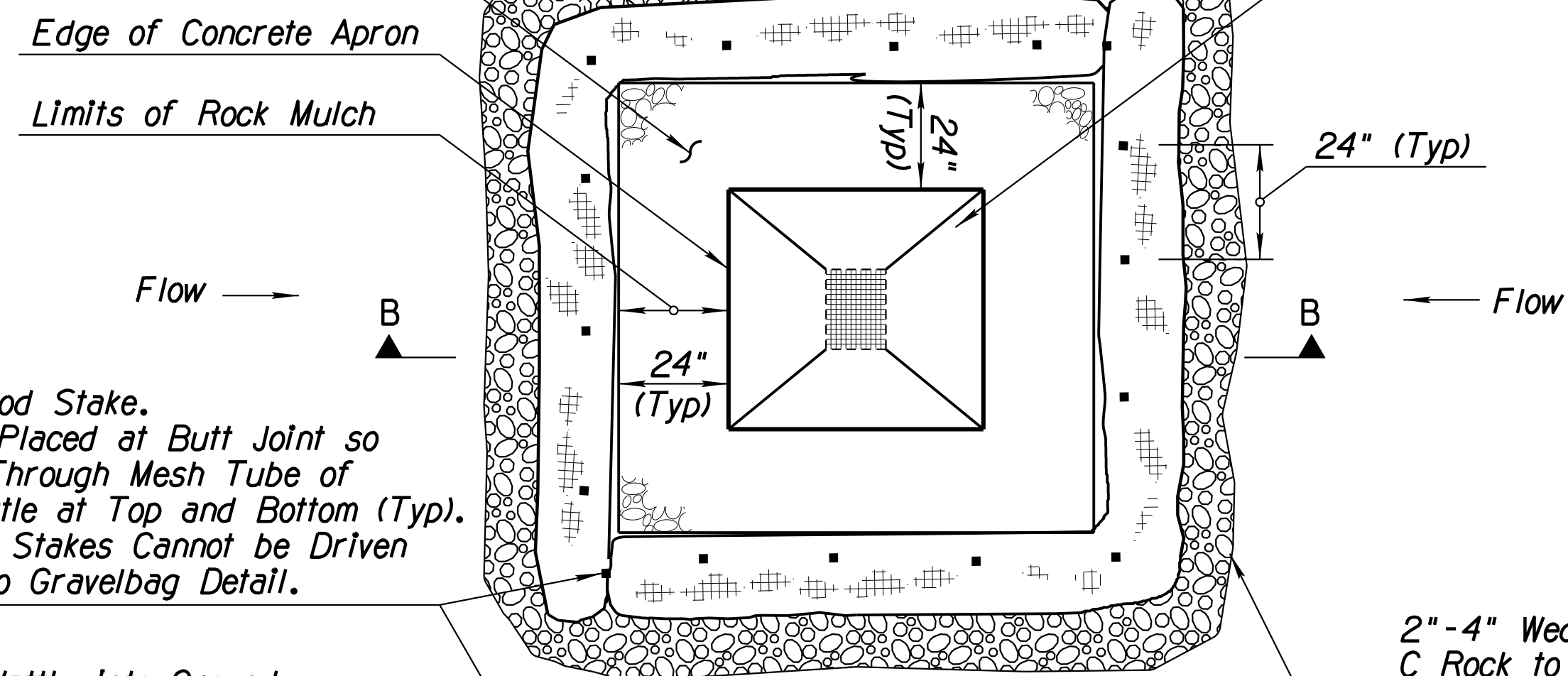
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DRAWN	SP	DATE	03/18		
CHECKED	DD	DATE	03/18		
J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com				EROSION CONTROL DETAIL DETAIL E1	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 OIC				Expires: 12/31/2018 DWG NO. R-03.03 OF	

SW-X
E1
DETAIL E1
SEDIMENT WATTLE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	228	232	

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Sediment Wattle
 Gradation C Rock Mulch, Unless Specified Otherwise in Plans
 Edge of Concrete Apron
 Limits of Rock Mulch
 Storm Drain Inlet. Refer to Roadway Plan Sheets for Locations

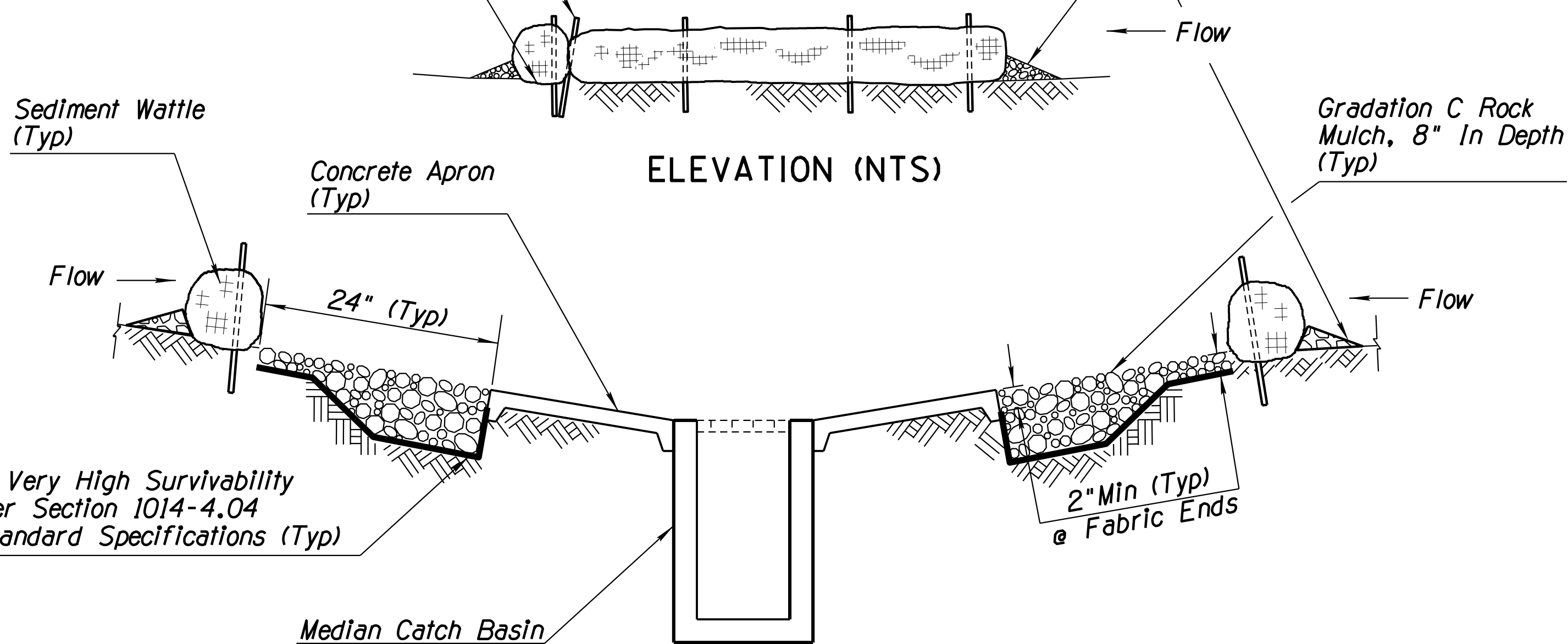


1"x1"x46" Hardwood Stake.
 One Stake To Be Placed at Butt Joint so That Stake Goes Through Mesh Tube of Both Sediment Wattle at Top and Bottom (Typ). Use Gravelbags if Stakes Cannot be Driven Into Soil. Refer to Gravelbag Detail.

Recess Sediment Wattle Into Ground Refer to Notes This Sheet

2"-4" Wedge of Gradation C Rock to be Built Against Upstream Side of Sediment Wattle to Prevent Undermining (Typ)

PLAN (NTS)



Nonwoven Very High Survivability Fabric per Section 1014-4.04 of the Standard Specifications (Typ)

Median Catch Basin

SECTION B-B (NTS)

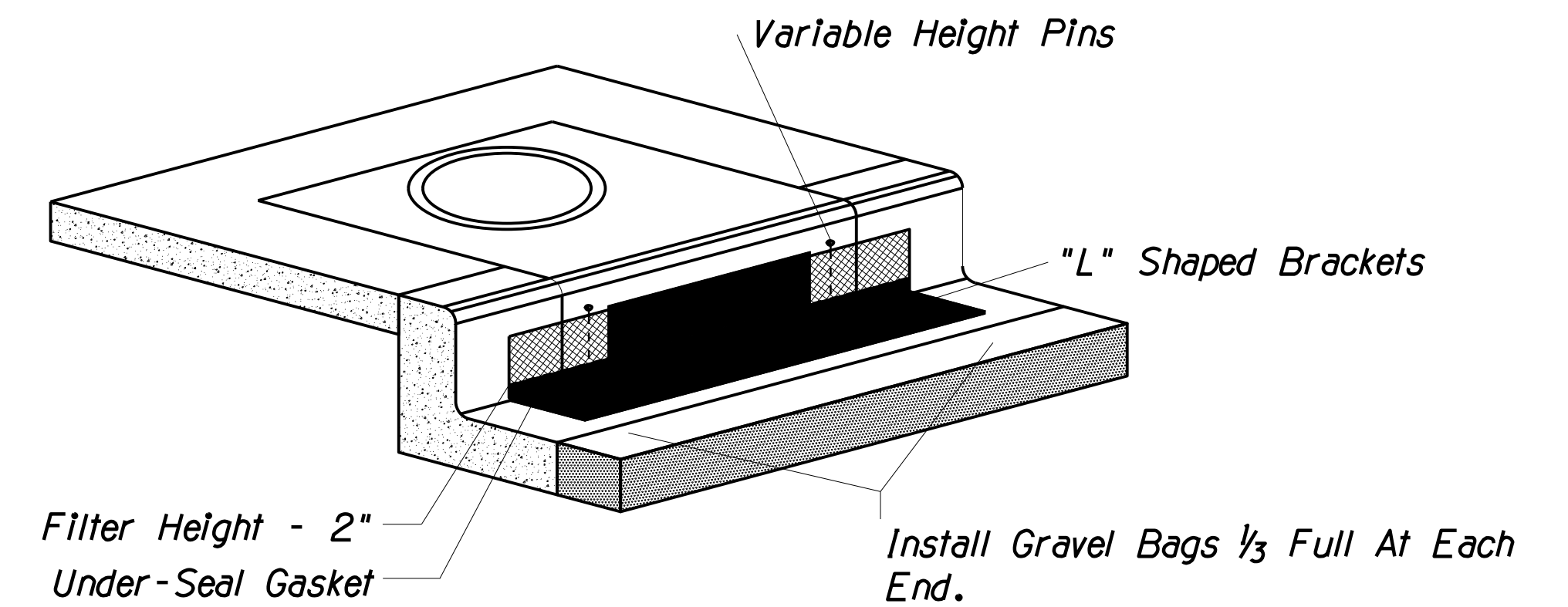
SD
E2

DETAIL E2^{NTS}

12" SEDIMENT WATTLE STORM DRAIN PROTECTION

NOTES:

- Sediment wattles shall be located as indicated on plans or as directed by the Engineer. They shall be selected, installed, and maintained per manufacturer's specifications and good engineering practices. Wattle shall be installed perpendicular to the flow of water. Continuous contact between the bottom of the wattle and the ground is mandatory.
- Stake wattle with 1"x1"x46" Min. hardwood stakes 24" on center. The stake shall be placed through the downstream side only. It is necessary for the stakes to grab one or two inches of netting. Do not drive stake through center of wattle. The stakes must be driven into the ground 24". Stakes at corners shall be placed in an "X" pattern.
- Make sure no gaps exist between subgrade and sediment wattle. Runoff must not pass under sediment wattle. May require subgrade preparation as directed by Engineer.
- Repair any rills or gullies promptly.
- Remove sediment wattle and stakes once construction activities are complete. Dispose of sediment wattles and trapped sediment material and fill trench created by sediment wattle.
- Refer to Roadway and Drainage Plans and Details for Locations of Inlets and Catch Basins.
- Field adjust and correct Inlet Protection BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
- No separate measurement or payment will be made for the filter fabric, the cost being considered included in the cost of contract items.



Construction Details

- * Minimum 2 Integrated "L" Brackets
- * Minimum 2 Variable-Height Pins For Curb
- * Filter Height = 2 Inches
- * Uv Resistant Hdpe Outer Jacket
- * Under-Seal Gasket To Prevent Underflow
- * Cig Height = 8 Inches (Min)
- * Cig Length = 6.25 Feet

Inlet Size	# of CIG Segments
5'	1
10'	2
15'	3
20'	4
25'	5
30'	6

Installation Details

- * Placement: Place Cig Tightly Against Drain Opening With Metal Variable Height Pins At Top.
- * Change Height For High Openings: Extend Variable Height Pins Upward If Necessary.
- * Interconnecting For Long Curb Openings: Overlap Segments So The Bottom Gasket Provides A Continuous Seal (One Side Has A Cut-Out). Each 6.25" Segment Fits A 5 Foot Opening Or Smaller. Use 2 Segments For 8 To 10 Feet. Use 3 Segments For 15 Feet, Etc.
- * Anchoring: Install Gravel Bags At Each End And At Overlaps. Use 1/3 Full Gravel Bags For Low Profile And Best Traffic Avoidance. Use Clean Gravel At Drain Inlets - Not Sand. Select Bags With Long Term Uv Exposure And Toughness For Resistance To Traffic. Where Not Possible To Install Gravel Bags Due To Traffic Proximity, It Is Acceptable To Anchor With Concrete Anchors, Or Masonry Nails - One At Each End. Anchor Curb Inlet Guard So That Water Cannot Flow Behind It. Use 1" Washers.

IP
E3

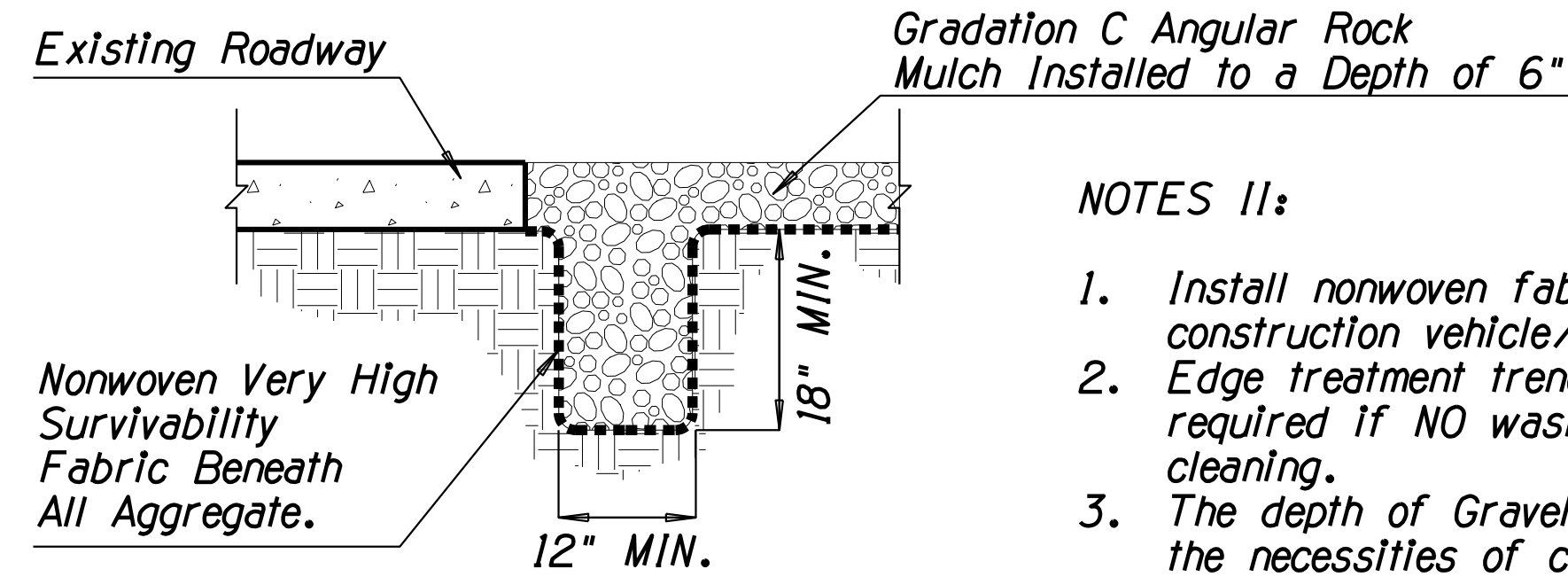
DETAIL E3^{NTS}

CURB INLET PROTECTION

DESIGN	SP	DATE	03/18	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES	
DRAWN	SP	DATE	03/18		
CHECKED	DD	DATE	03/18		
				EROSION CONTROL DETAIL DETAIL E2	
ROUTE	US 60	LOCATION	GRAND AVENUE FRONTAGE ROAD	Expires: 12/31/2018 DWG NO. R-03.04	
TRACS NO. H8874 OIC				OF	

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	229	232	

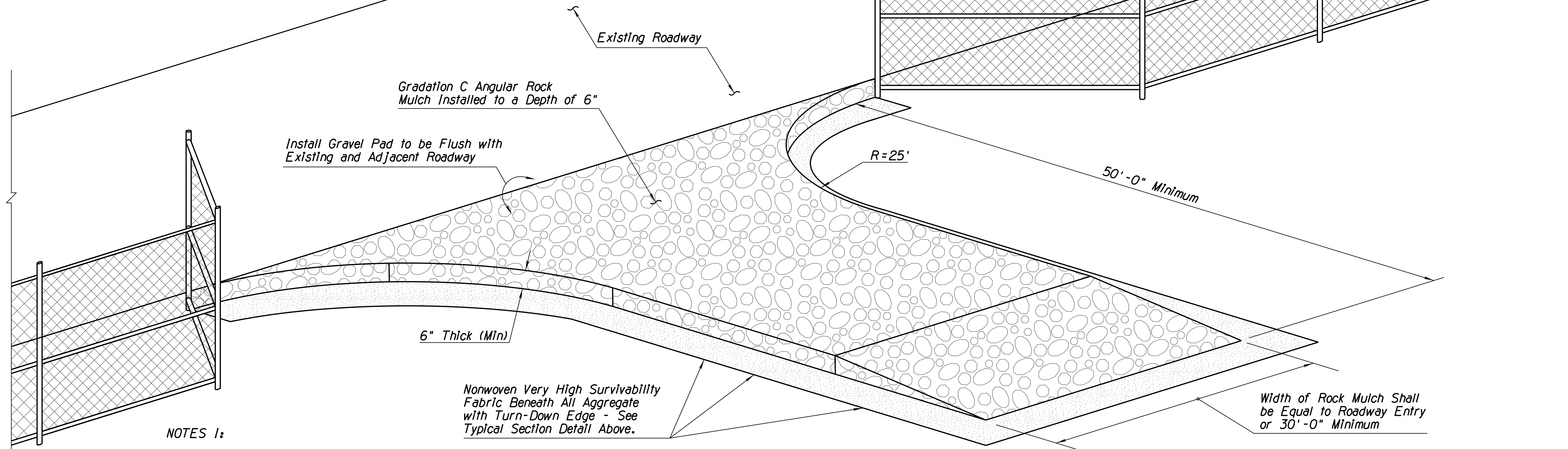
060 MA 144



EDGE TREATMENT TRENCHING TYPICAL SECTION (NTS)

NOTES II:

1. Install nonwoven fabric when water is applied for construction vehicle/equipment cleaning on Gravel Pad.
2. Edge treatment trenching and nonwoven fabric shall not be required if NO wash water is used for vehicle/equipment cleaning.
3. The depth of Gravel Pad varies from 6" to 12" based on the necessities of construction vehicle/equipment as per the approval of the Engineer.



BIRD'S EYE VIEW (NTS)

NOTES I:

1. Install Stabilized Construction Entrance/Exit Gravel Pad BMP for traffic entering or exiting a construction site where sedimentation, clay, silt or other pollutants can be tracked onto public roads and/or adjacent water bodies, as approved by the Engineer. It may also be applied for construction entrance/exit wind erosion/dust control, as approved by the Engineer.
2. Locate new Construction Entrance(s)/Exit(s) at appropriate project entrance/exit points as determined in field with the approval of the Engineer. Relocate Stabilized Construction Entrance/Exit Gravel Pad BMP as needed as project progresses. Replace Rock Mulch materials in drive paths when dirt or mud accumulates.
3. Nonwoven Very High Survivability Fabric shall conform to the standards of Sub-section 1014-4.04 of the Standard Specifications.
4. Rock Mulch materials shall be fractured/crushed rocks in angular shape and as defined in the Sub-section 810-2.03 of the Standard Specifications. Natural river-run materials, especially rounded natural river rocks are not acceptable.
5. Make field adjustments and corrections of Construction Entrance/Exit Gravel Pad BMP immediately if it is causing flooding and/or affecting roadway safety.
6. When paid separately, the Stabilized Construction Entrance/Exit Gravel Pad BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, final removal, and disposal of this temporary BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
7. * Fence/barricade pay/bid item shall not be included as a component of the Stabilized Construction Entrance/Exit Gravel Pad BMP pay/bid item.
8. Make field adjustments and corrections to ensure NO sensitive biological resources (native species / habitats) will be adversely impacted.

CE
E4

DETAIL E4 NTS

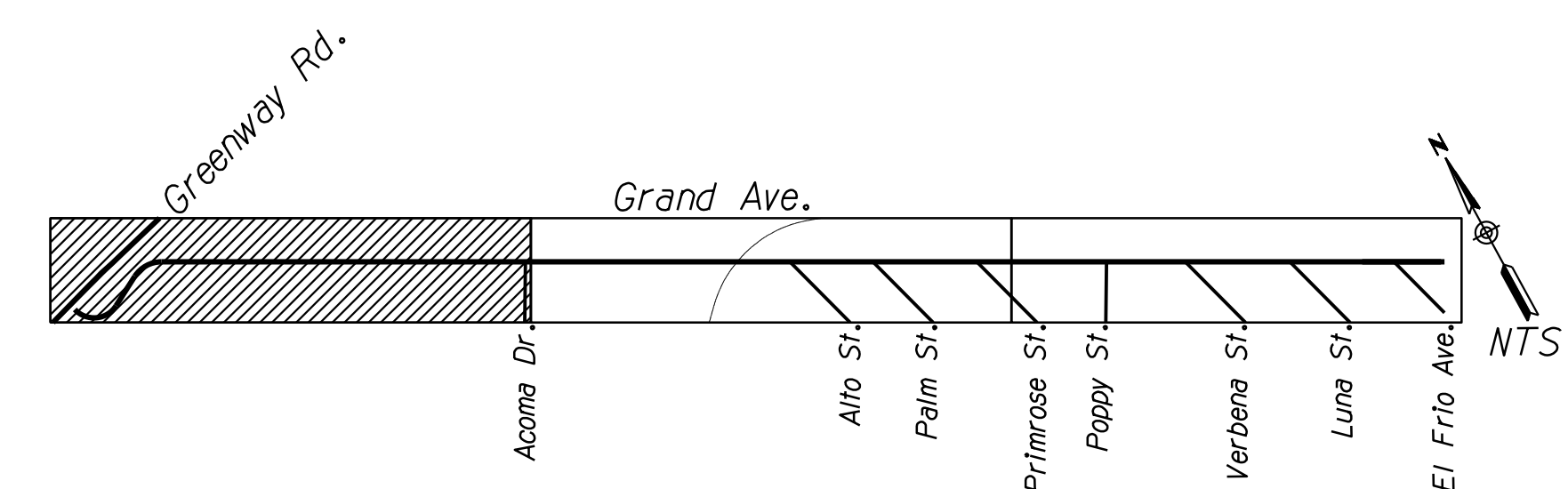
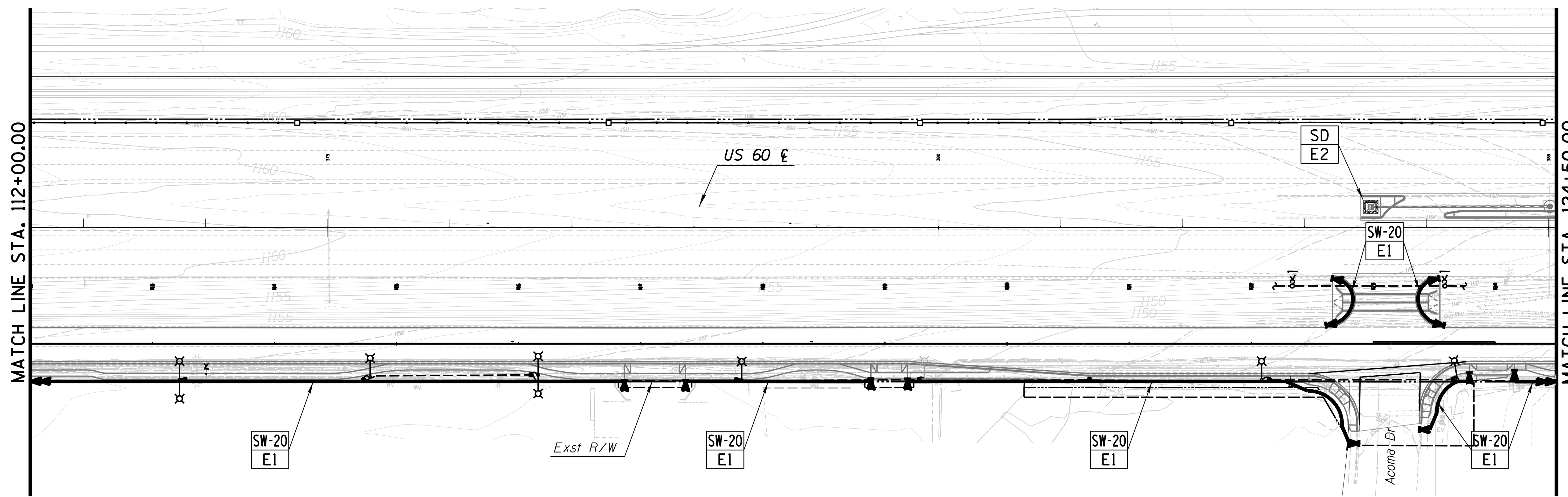
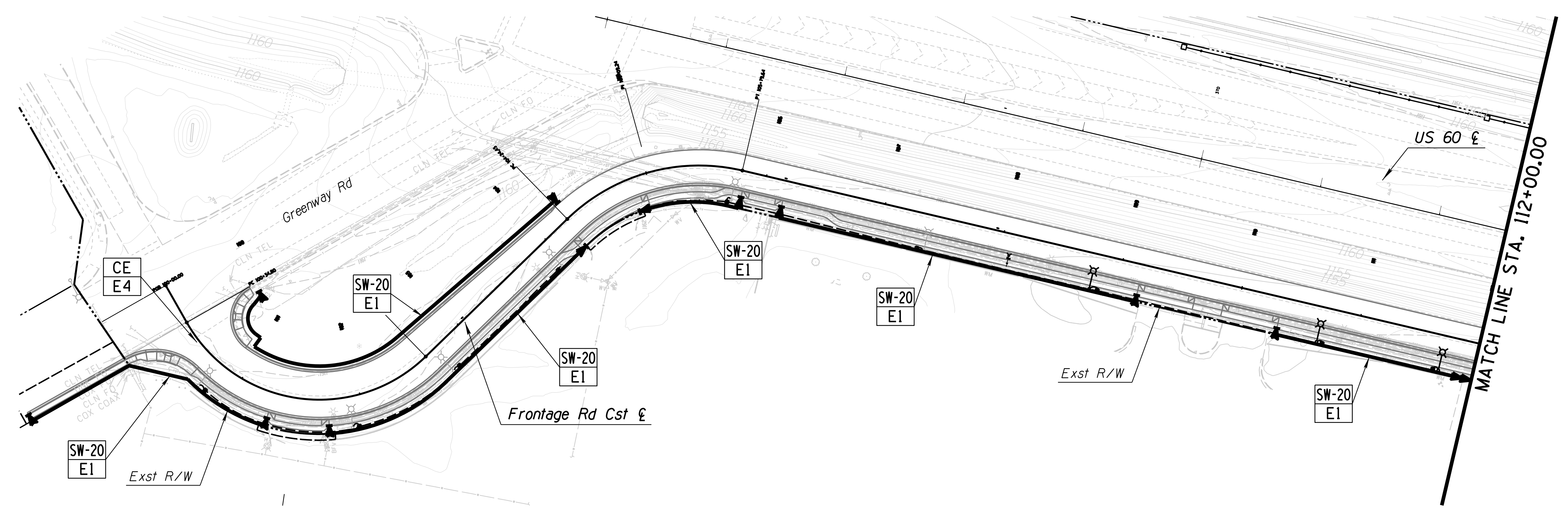
STABILIZED CONSTRUCTION ENTRANCE/EXIT GRAVEL PAD

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES
SP		03/18	
DRAWN	SP	03/18	
CHECKED	DD	03/18	
			EROSION CONTROL DETAIL DETAIL E4
ROUTE	LOCATION	Expires: 12/31/2018	DWG NO. R-03.05
US 60	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			OF

SURVEY NO. FINISHED PLANS DATE REVISIONS LOCATION DATE FINISHED PLANS SURVEY NO. REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	230	232	

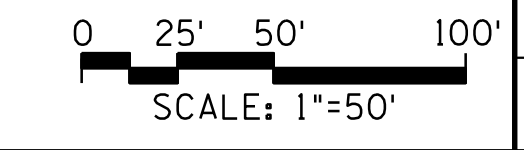
060 MA 144



Erosion Control Method

SW-20 = Sediment Wattles- 20"
SD = Storm Drain Protection
IP = Inlet Protection
CE = Construction Entrance

Detail Number Reference



DESIGN	BR	NAME	DATE
DRAWN	BR		03/18
CHECKED	DD		03/18
		J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com	
ROUTE	LOCATION		
US 60	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			

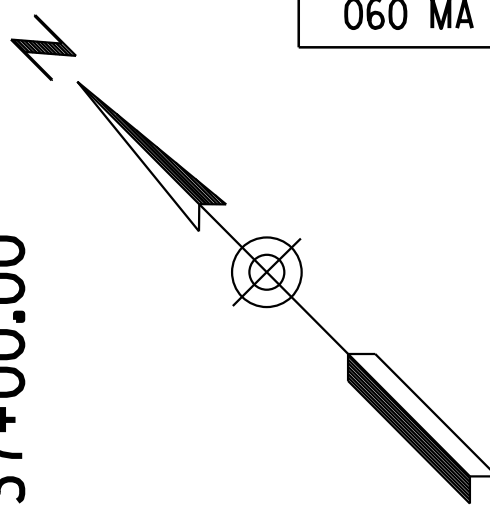
ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

EROSION CONTROL PLAN SHEET
STA. 100+00 TO STA. 124+50

SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE
 SURVEY NO. FINISHED PLANS REVISIONS LOCATION DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	231	232	

060 MA 144

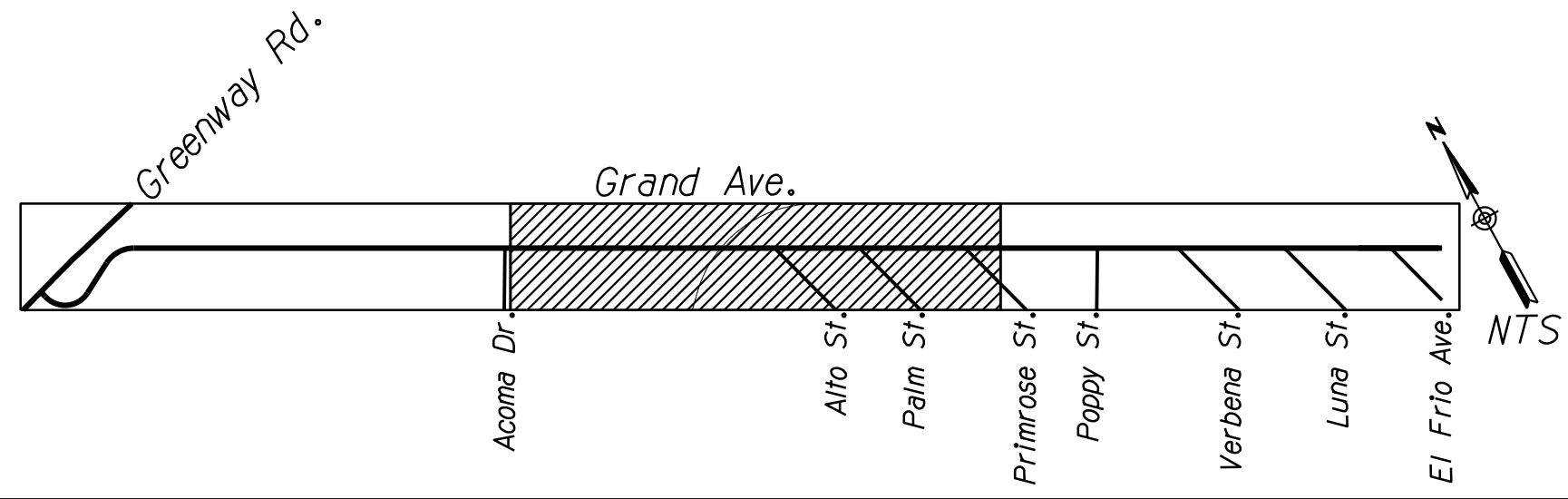
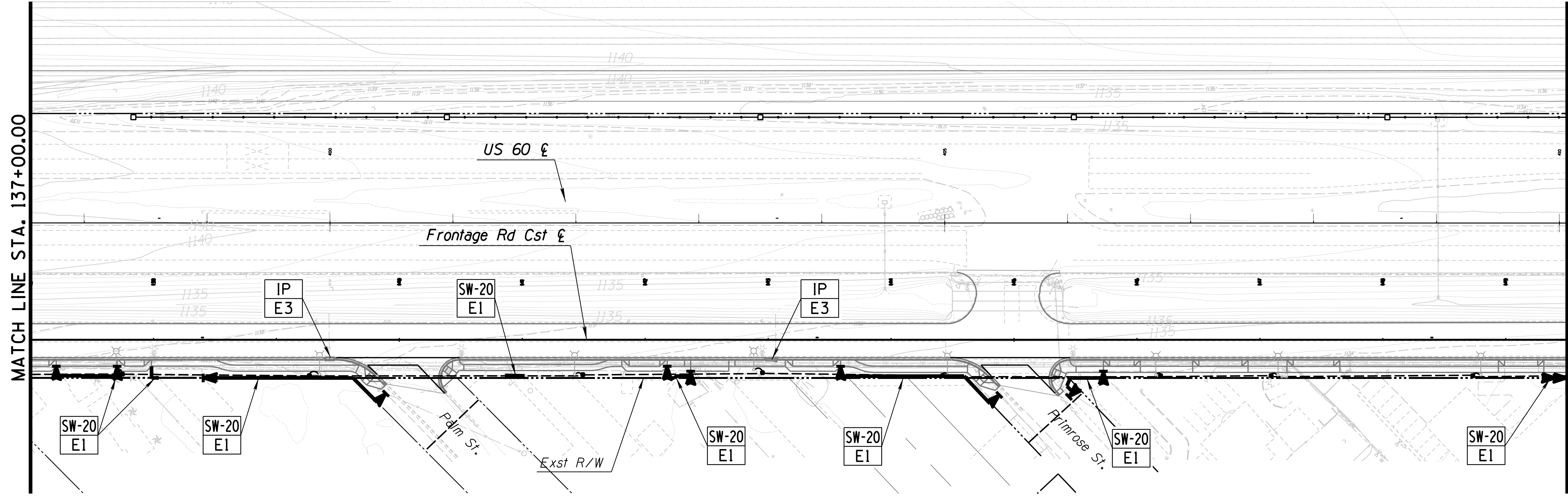
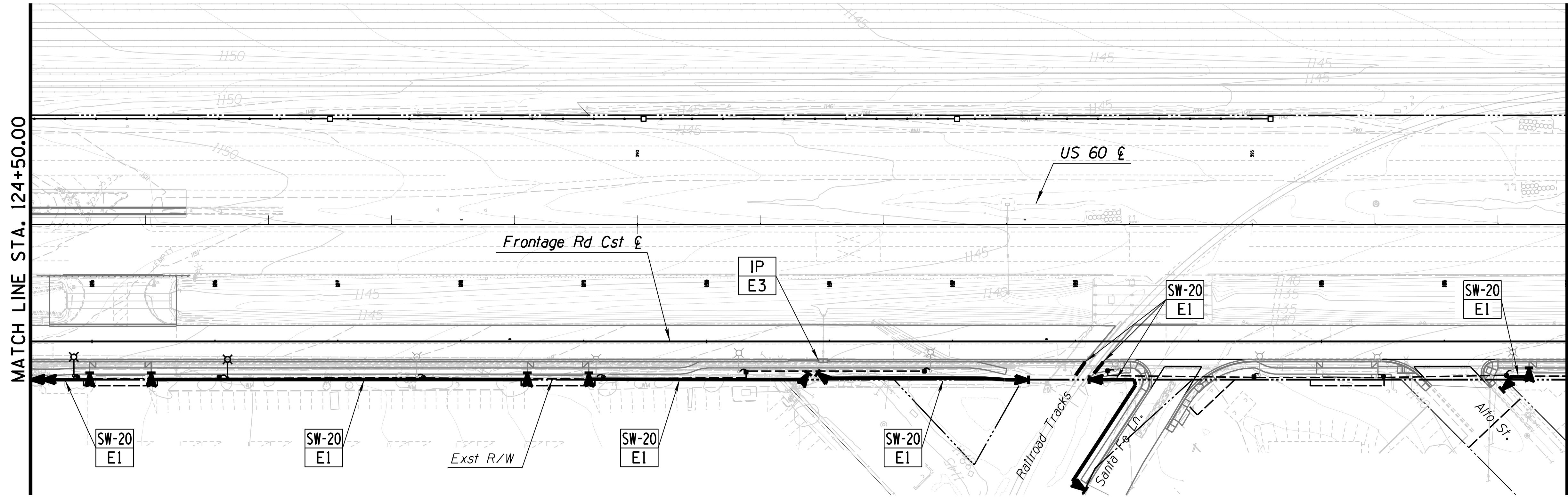


MATCH LINE STA. 124+50.00

MATCH LINE STA. 137+00.00

MATCH LINE STA. 137+00.00

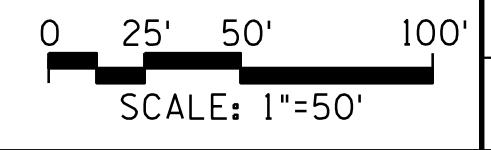
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Erosion Control Method

SW-20 = Sediment Wattles- 20"
SD = Storm Drain Protection
IP = Inlet Protection
CE = Construction Entrance

Detail Number Reference



DESIGN	BR	NAME	DATE
DRAWN	BR		03/18
CHECKED	DD		03/18
		J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com	
ROUTE	LOCATION		
US 60	GRAND AVENUE FRONTAGE ROAD		
TRACS NO. H8874 01C			

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATION DIVISION
ROADSIDE DEVELOPMENT SERVICES

EROSION CONTROL PLAN SHEET
STA. 124+50 TO STA. 149+50

Expires: 12/31/2018
DWG NO. R-03.07
OF

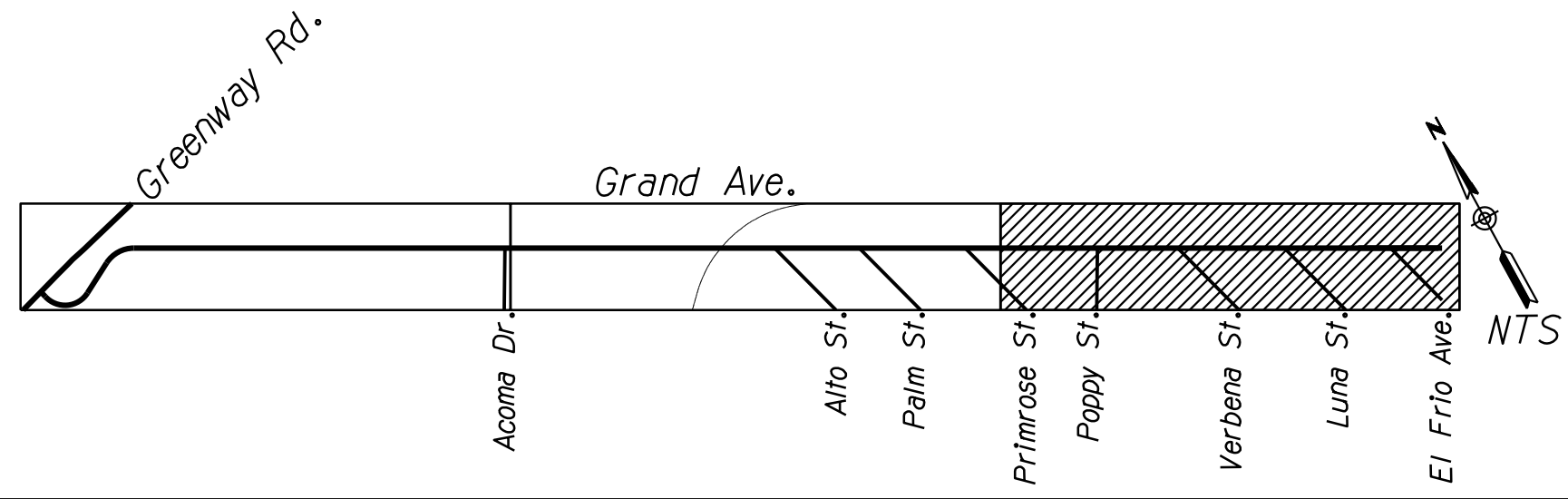
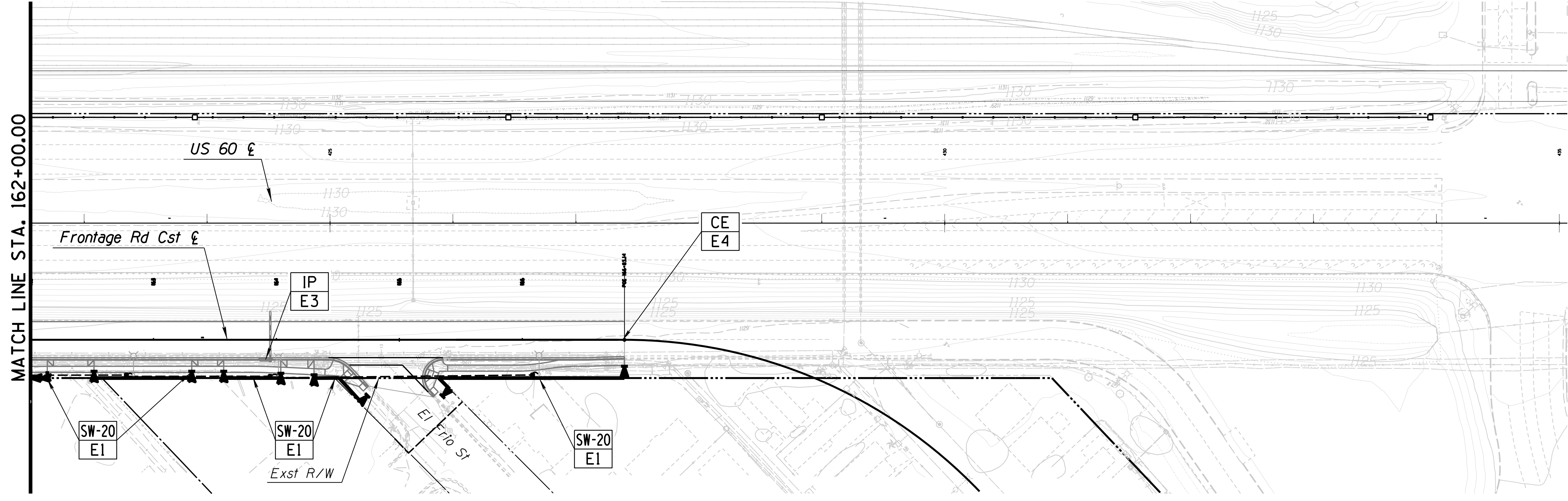
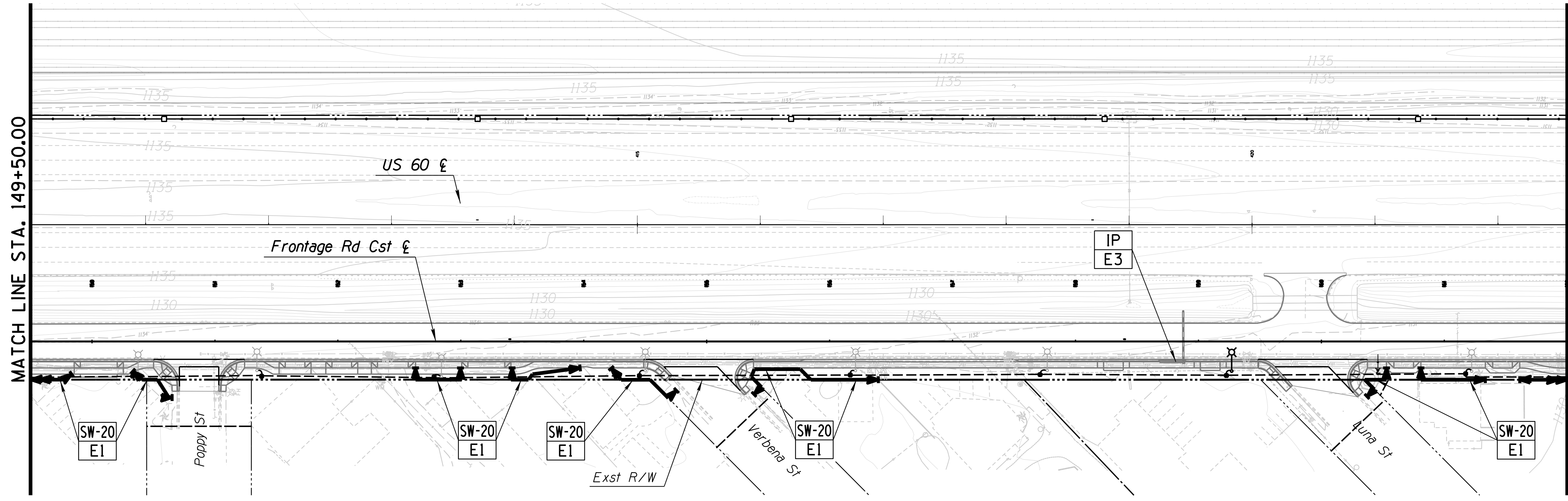
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	060-B-NFA	232	232	

060 MA 144

MATCH LINE STA. 149+50.00

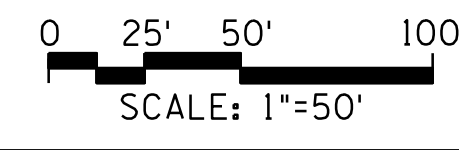
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MATCH LINE STA. 162+00.00



Erosion Control Method

SD = Storm Drain Protection
E2 = Detail Number Reference
SW-20 = Sediment Wattles- 20"
IP = Inlet Protection
CE = Construction Entrance



DESIGN	BR	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATION DIVISION ROADSIDE DEVELOPMENT SERVICES EROSION CONTROL PLAN SHEET STA. 149+50 TO STA. 166+00	 Expires: 12/31/2018 DWG NO. R-03.08
DRAWN	BR				
CHECKED	DD				
 J2 engineering and environmental design 4649 east cotton gin loop, suite B2 phoenix, arizona 85040 phone: 602.438.2221 www.j2designus.com		ROUTE: US 60 LOCATION: GRAND AVENUE FRONTAGE ROAD		TRACS NO. H8874 01C OF	