

ADOT STANDARD DRAWINGS

CONSTRUCTION STANDARDS
EFFECTIVE MARCH 2025

DATE	STANDARD	SUBJECT TITLE
5/12	C-01.10 SH 1	SYMBOL LEGEND
5/12	C-01.10 SH 2	SYMBOL LEGEND
5/12	C-01.10 SH 3	SYMBOL LEGEND
5/12	C-01.10 SH 4	SYMBOL LEGEND
12/17	C-01.30 SH 1	GENERAL ABBREVIATIONS
5/12	C-01.30 SH 2	GENERAL ABBREVIATIONS
5/12	C-01.30 SH 3	GENERAL ABBREVIATIONS
5/12	C-02.10	SLOPES, RURAL DIVIDED HIGHWAYS
5/12	C-02.20	SLOPES, RURAL UNDIVIDED AND FRINGE-URBAN HIGHWAYS
5/12	C-02.30	SLOPES, MISCELLANEOUS ROADWAYS
5/12	C-03.10 SH 1	DITCHES, CHANNELS, DIKES AND BERMS, DITCHES AND CHANNELS
5/12	C-03.10 SH 2	DITCHES, CHANNELS, DIKES AND BERMS, DIKES
5/12	C-03.10 SH 3	DITCHES, CHANNELS, DIKES AND BERMS, DITCH DIKE
5/12	C-03.10 SH 4	DITCHES, CHANNELS, DIKES AND BERMS, PIPE BERMS
5/12	C-03.10 SH 5	DITCHES, CHANNELS, DIKES AND BERMS, HEADWALL BERMS
12/17	C-04.10 SH 1	SPILLWAY, EMBANKMENT SINGLE INLET
12/17	C-04.10 SH 2	SPILLWAY, EMBANKMENT DOUBLE INLET
12/17	C-04.20 SH 1	DOWNDRAIN, EMBANKMENT SINGLE INLET
12/17	C-04.20 SH 2	DOWNDRAIN, EMBANKMENT DOUBLE INLET
12/17	C-04.30	SPILLWAY LENGTH TABLE
12/17	C-04.40	DOWNDRAIN LENGTH TABLE
5/12	C-04.50	DOWNDRAIN ENERGY DISSIPATOR
5/12	C-05.10	CURB & GUTTER, CURB, GUTTER
5/12	C-05.12 SH 1	CURB & GUTTER TRANSITIONS
5/12	C-05.12 SH 2	CURB & GUTTER TRANSITIONS
5/12	C-05.12 SH 3	CURB AND GUTTER TRANSITIONS
5/12	C-05.20 SH 1	CONCRETE DRIVEWAYS & SIDEWALKS, DRIVEWAYS
5/12	C-05.20 SH 2	CONCRETE DRIVEWAYS & SIDEWALKS, SIDEWALKS
5/12	C-05.30 SH 1	SIDEWALK RAMP, TYPE A
5/12	C-05.30 SH 2	SIDEWALK RAMP, TYPE B
5/12	C-05.30 SH 3	SIDEWALK RAMP, TYPE C
5/12	C-05.30 SH 4	SIDEWALK RAMP, TYPE D
5/12	C-05.30 SH 5	SIDEWALK RAMP, TYPE E
5/12	C-05.30 SH 6	SIDEWALK RAMP, TYPE F
5/12	C-05.30 SH 7	SIDEWALK RAMP, DETECTABLE WARNING STRIP
5/12	C-05.40	MEDIAN PAVING AND NOSE TAPER
5/12	C-05.50	CONCRETE BUS BAY
5/12	C-06.10 SH 1	DRIVEWAY & TURNOUT LAYOUTS
5/12	C-06.10 SH 2	DRIVEWAY & TURNOUT LAYOUTS
5/12	C-07.01 SH 1	PCCP JOINTS
5/12	C-07.01 SH 2	PCCP JOINTS
5/12	C-07.02	LOAD TRANSFER DOWEL ASSEMBLY
5/12	C-07.03 SH 1	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03 SH 2	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03 SH 3	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03 SH 4	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03 SH 5	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.03 SH 6	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.03 SH 7	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.03 SH 8	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.04 SH 1	PCCP JOINT LOCATIONS, PARALLEL-TYPE ENTRANCE RAMP WITH AUXILIARY LANE
5/12	C-07.04 SH 2	PCCP JOINT LOCATIONS, PARALLEL-TYPE EXIT RAMP WITH AUXILIARY LANE
5/12	C-07.04 SH 3	PCCP JOINT LOCATIONS, TAPER-TYPE ENTRANCE RAMP
5/12	C-07.04 SH 4	PCCP JOINT LOCATIONS, TAPER-TYPE EXIT RAMP
5/12	C-07.04 SH 5	PCCP JOINT LOCATIONS, CROSSROAD AND RAMP TERMINI
8/21	C-07.06	TRENCH BACKFILL AND PAVEMENT REPLACEMENT
5/12	C-08.20	PAVED GORE AREA
12/17	C-10.00	GUARDRAIL MEASUREMENT LIMITS
12/17	C-10.01	GUARDRAIL INSTALLATION
12/17	C-10.03	W-BEAM GUARDRAIL, MGS BLOCKED-OUT TIMBER POST
12/17	C-10.04	W-BEAM GUARDRAIL, MGS BLOCKED-OUT STEEL POST
12/17	C-10.05 SH 1	W-BEAM GUARDRAIL (MODIFIED) WITH FREEWAY CURB AND GUTTER
12/17	C-10.05 SH 2	W-BEAM GUARDRAIL (MODIFIED) WITH FREEWAY CURB AND GUTTER
12/17	C-10.06	W-BEAM GUARDRAIL LONG-SPAN
12/17	C-10.07 SH 1	W-BEAM GUARDRAIL, BOX CULVERT GUARDRAIL POST
12/17	C-10.07 SH 2	W-BEAM GUARDRAIL, BOX CULVERT GUARDRAIL POST
12/17	C-10.08 SH 1	W-BEAM GUARDRAIL, END ANCHOR
12/17	C-10.08 SH 2	W-BEAM GUARDRAIL, END ANCHOR
12/17	C-10.09	GUARDRAIL POST ROCK INSTALLATION
4/19	C-10.20 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP
4/19	C-10.20 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP
4/19	C-10.21 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT
4/19	C-10.21 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT
4/19	C-10.22 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MAX-TENSION
4/19	C-10.22 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MAX-TENSION
4/21	C-10.23 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR SGET
4/21	C-10.23 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR SGET
3/25	C-10.24 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR NGT
3/25	C-10.24 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR NGT
11/19	C-10.26 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MFLEAT
11/19	C-10.26 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MFLEAT
12/17	C-10.30 SH 1	GUARDRAIL TRANSITION TO CONCRETE BARRIER, TIMBER POST
12/17	C-10.30 SH 2	GUARDRAIL TRANSITION TO CONCRETE BARRIER, TIMBER POST
12/17	C-10.31 SH 1	GUARDRAIL TRANSITION TO CONCRETE BARRIER, STEEL POST
12/17	C-10.31 SH 2	GUARDRAIL TRANSITION TO CONCRETE BARRIER, STEEL POST
12/17	C-10.38 SH 1	GUARDRAIL TAPER G4 TO MGS W-BEAM WITH STAGGERED POST
12/17	C-10.38 SH 2	GUARDRAIL TAPER G4 TO MGS W-BEAM WITH OFFSET RAIL
12/17	C-10.40	CONCRETE MEDIAN BARRIER, 32" TYPE 'F', CAST-IN-PLACE
12/17	C-10.41	CONCRETE MEDIAN BARRIER, 42" TYPE 'F', CAST-IN-PLACE
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

DATE	STANDARD	SUBJECT TITLE
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
12/17	C-10.54 SH 1	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, CAST-IN-PLACE
12/17	C-10.54 SH 2	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, PRECAST
12/17	C-10.54 SH 3	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, LAYOUT
12/17	C-10.55 SH 1	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, CAST-IN-PLACE
12/17	C-10.55 SH 2	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, PRECAST
12/17	C-10.55 SH 3	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, LAYOUT
12/17	C-10.70 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
12/17	C-10.70 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
12/17	C-10.70 SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
12/17	C-10.71 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER
12/17	C-10.71 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER
12/17	C-10.72 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
12/17	C-10.72 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
12/17	C-10.72 SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
12/17	C-10.73 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER
12/17	C-10.73 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER
12/17	C-10.74	CONCRETE HALF-BARRIER TRANSITION, 42" TO 32" TYPE 'F'
12/17	C-10.75 SH 1	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' TANGENT DEPARTURE TYPE 1
12/17	C-10.75 SH 2	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' TANGENT DEPARTURE TYPE 2
12/17	C-10.76	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' AT RADIUS, 32" TO 0"
4/19	C-10.77	CONCRETE BARRIER TRANSITION TO GUARDRAIL END TERMINAL LAYOUT WITH CURB
12/17	C-10.78	CONCRETE HALF-BARRIER TRANSITION, 32" TYPE 'F' LOW SPEED APPROACH
12/17	C-10.79	CONCRETE HALF-BARRIER TRANSITION, 42" TYPE 'F' TANGENT DEPARTURE
5/12	C-11.10 SH 1	ROADWAY CATTLE GUARD
5/12	C-11.10 SH 2	ROADWAY CATTLE GUARD
5/12	C-11.10 SH 3	ROADWAY CATTLE GUARD
5/12	C-11.10 SH 4	ROADWAY CATTLE GUARD
5/12	C-11.20	CATTLE GUARD, DRAINAGE
5/12	C-12.10 SH 1	FENCE, WOVEN WIRE
5/12	C-12.10 SH 2	FENCE, BARBED WIRE
5/12	C-12.10 SH 3	FENCE, TYPE 1 AND 2 GATES, FLOOD GATE
5/12	C-12.10 SH 4	FENCE, FLOOD GATE INSTALLATION
5/12	C-12.10 SH 5	FENCE, MISCELLANEOUS DETAILS
5/12	C-12.20 SH 1	FENCE, CHAIN LINK, TYPE 1
5/12	C-12.20 SH 2	FENCE, CHAIN LINK, TYPE 2
5/12	C-12.20 SH 3	FENCE, CHAIN LINK, GATES
5/12	C-12.30 SH 1	FENCE, CHAIN LINK CABLE BARRIER
5/12	C-12.30 SH 2	FENCE, CHAIN LINK CABLE BARRIER
5/12	C-12.30 SH 3	FENCE, CHAIN LINK CABLE BARRIER
5/12	C-13.10 SH 1	PIPE CULVERT INSTALLATION
5/12	C-13.10 SH 2	PIPE CULVERT INSTALLATION
8/23	C-13.15	TYPICAL PIPE INSTALLATION
5/12	C-13.20	PIPE, REINFORCED CONCRETE END SECTION
5/12	C-13.25	PIPE, CORRUGATED METAL END SECTION
5/12	C-13.30	PIPE AND PIPE ARCH, CORRUGATED METAL, CONCRETE INVERT PAVING
5/12	C-13.55	PIPE, CATTLE-VEHICLE PASS, MITERED END TREATMENT
5/12	C-13.60	SLOTTED DRAIN DETAILS
5/12	C-13.65	SLOTTED DRAIN INSTALLATION DETAILS
5/12	C-13.70	STORM DRAIN CONNECTION DETAILS
5/12	C-13.75	STORM DRAIN OUTLET BARRIER GATE
5/12	C-13.76	STORM DRAIN OUTLET AND STORM DRAIN PLUG
5/12	C-13.80	PIPE COLLAR DETAILS
5/12	C-15.10	CATCH BASIN, TYPE 1
5/12	C-15.20 SH 1	CATCH BASIN, TYPE 3
5/12	C-15.20 SH 2	CATCH BASIN, TYPE 3
5/12	C-15.20 SH 3	CATCH BASIN, ACCESS FRAME AND COVER DETAILS
5/12	C-15.30	CATCH BASIN, TYPE 4
5/12	C-15.40 SH 1	CATCH BASIN, TYPE 5
5/12	C-15.40 SH 2	CATCH BASIN, TYPE 5
5/12	C-15.50	CATCH BASIN, FRAME AND GRATE
5/12	C-15.70 SH 1	CATCH BASIN, MISCELLANEOUS DETAILS
5/12	C-15.70 SH 2	CATCH BASIN, MISCELLANEOUS DETAILS
5/12	C-15.75	CATCH BASIN, DROP INLET
5/12	C-15.80	CATCH BASIN, FLUSH
5/12	C-15.81	CATCH BASIN, SIDE SLOPE
5/12	C-15.90	CATCH BASIN, MEDIAN DIKE, PRECAST
5/12	C-15.91 SH 1	FREEWAY CATCH BASIN DETAILS
5/12	C-15.91 SH 2	FREEWAY CATCH BASIN DETAILS
5/12	C-15.92 SH 1	CATCH BASIN WITH TYPE 'F' CONCRETE HALF BARRIER
5/12	C-15.92 SH 2	CATCH BASIN WITH TYPE 'F' CONCRETE HALF BARRIER
5/12	C-16.40	IRRIGATION SLEEVES
5/12	C-17.10	RAIL BANK PROTECTION FOR DRAINAGEWAYS, TYPES 1, 2 & 3
5/12	C-17.15	RAIL BANK PROTECTION AT ABUTMENTS, TYPES 4, 5 & 6
5/12	C-17.20	RAIL BANK PROTECTION FOR DRAINAGEWAYS, TYPES 7, 8 & 9
5/12	C-18.10 SH 1	MANHOLE, RISER DETAILS
5/12	C-18.10 SH 2	MANHOLE, BASE DETAILS, NORMAL INSTALLATION
5/12	C-18.10 SH 3	MANHOLE, FRAME AND COVER DETAILS
5/12	C-19.10 SH 1	FORD, CONCRETE WALLS
5/12	C-19.10 SH 2	FORD, TYPES 1 AND 2
5/12	C-21.10	SURVEY MONUMENT FRAME AND COVER
5/12	C-21.20	SURVEY MARKER

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW			
CONSTRUCTION STANDARDS		NAME	DATE
PROJECT NO.		E. EGGEN	3/2026
085 MA 004 F0833 01C		1A	OF 30
RECORD DRAWING DATA	FEDERAL ID NO. 085-A(210)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

TRAFFIC SIGNING & MARKING STANDARDS

(SHEET 1 OF 2)

EFFECTIVE MAY 2025

REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND MARKING DETAILS
6/14	M-1	CURB MARKINGS FOR RAISED MEDIAN AND ISLANDS
1/20	M-2 SHT 1	INTERSECTION STRIPING
5/15	M-2 SHT 2	INTERSECTION STRIPING (TWO-LANE RURAL)
6/14	M-2 SHT 3	CENTERLINE AND 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
5/25	M-10 SHT 3	PAVEMENT MARKING SYMBOLS
6/14	M-11	TURN LANE PAVEMENT MARKINGS
6/14	M-12	WRONG-WAY ARROWS
1/19	M-13	PREFERENTIAL LANE PAVEMENT MARKINGS
6/14	M-14	STRIPING AND DELINEATION FOR TRUCK ESCAPE RAMPS
8/20	M-15 SHT 1	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - TAPERED ACCELERATION LANE
8/20	M-15 SHT 2	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - PARALLEL ACCELERATION LANE
8/20	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
8/20	M-16 SHT 1	PAVEMENT MARKING FOR FREEWAY EXIT RAMPS - TAPERED DECELERATION LANE
8/20	M-16 SHT 2	PAVEMENT MARKING FOR FREEWAY EXIT RAMP - PARALLEL DECELERATION LANE
8/20	M-17	FREEWAY LANE DROP PAVEMENT MARKINGS
11/24	M-19 SHT 1	RAISED PAVEMENT MARKER PLAN LEGEND
6/14	M-19 SHT 2	NON-REFLECTIVE RAISED PAVEMENT MARKER DETAILS
11/24	M-19 SHT 3	RETROREFLECTIVE RAISED PAVEMENT MARKER DETAILS
11/24	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
8/20	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
8/20	M-19 SHT 9	PAVEMENT MARKING CROSS-SECTION DETAILS FOR HIGHWAYS AND FREEWAYS
6/24	M-19 SHT 10	CONTRAST LANE LINE FOR FREEWAY AND DIVIDED HIGHWAY
10/23	M-19 SHT 11	LEAD-LAG CONTRAST PAVEMENT MARKINGS FOR CONCRETE PAVEMENT

REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND 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
9/21	M-22 SHT 1	LONGITUDINAL RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
9/21	M-22 SHT 2	LONGITUDINAL RUMBLE STRIP EXCEPTION DETAILS
9/21	M-22 SHT 3	ENTRANCE AND EXIT RAMPS RUMBLE STRIP INSTALLATION DETAILS
3/22	M-22 SHT 4	CENTERLINE RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
6/14	M-23	OBJECT MARKER DETAILS
6/14	M-24	OBJECT MARKER PLACEMENT DETAILS
2/21	M-26 SHT 1	DELINEATOR PLACEMENT AND SPACING
2/21	M-26 SHT 2	DELINEATOR PLACEMENT AND SPACING
2/21	M-26 SHT 3	FLEXIBLE DELINEATOR ASSEMBLIES
2/21	M-26 SHT 4	SQUARE STEEL POST DELINEATOR
2/21	M-26 SHT 5	DELINEATOR FOUNDATION DETAILS
2/21	M-27 SHT 1	DELINEATION DETAILS FOR MEDIAN CROSSEOVERS
2/21	M-27 SHT 2	DELINEATION DETAILS FOR MEDIAN CROSSEOVERS
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 AND 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

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW			
SIGNING & MARKING STANDARDS		NAME	DATE
PROJECT NO.		Talal Kamal	March, 2026
085 MA 004 F0833 01C		1B-1	OF 30
RECORD DRAWING DATA	FEDERAL ID NO. 085-A(210)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

TRAFFIC SIGNING & MARKING STANDARDS

(SHEET 2 OF 2)

EFFECTIVE MAY 2025

REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND MARKING DETAILS
4/19	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
6/22	S-5	W SHAPE BREAKAWAY POST DETAILS
6/22	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
8/22	S-9 SHT 1	SIGN INSTALLATION ON POLE
8/22	S-9 SHT 2	SIGNS (BACK TO BACK) INSTALLATION ON POLE
8/22	S-9 SHT 3	SIGN INSTALLATION ON SIGNAL POLE
8/22	S-9 SHT 4	SIGN INSTALLATION ON POLE BAND-TYPE CLAMP
6/14	S-10	MILEPOST AND REFERENCE LOCATION SIGNS
11/22	S-11 SHT 1	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM
4/19	S-11 SHT 2	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM POST AND BEAM DETAILS

REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND 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
4/19	S-16 SHT 1	TEMPORARY WOOD POSTS
4/19	S-16 SHT 2	TEMPORARY WOOD POSTS SELECTION CHART
6/14	S-17	END OF ROAD BARRICADE
7/19	S-18 SHT 1	ALUMINUM GRAFFITI SHIELD EXIT AND GUIDE SIGN ASSEMBLY
7/19	S-18 SHT 2	ALUMINUM GRAFFITI SHIELD RIGHT RIDER SIDE PANEL
7/19	S-18 SHT 3	ALUMINUM GRAFFITI SHIELD LEFT RIDER SIDE PANEL
7/19	S-18 SHT 4	ALUMINUM GRAFFITI SHIELD CORNER
7/19	S-18 SHT 5	ALUMINUM GRAFFITI SHIELD SPLICE PLATE
7/19	S-18 SHT 6	ALUMINUM GRAFFITI SHIELD FIN
7/19	S-18 SHT 7	ALUMINUM GRAFFITI SHIELD TOP PANEL
7/19	S-18 SHT 8	ALUMINUM GRAFFITI SHIELD SIDE PANEL
7/19	S-18 SHT 9	ALUMINUM GRAFFITI SHIELD RIGHT TRANSITION FROM RIDER
7/19	S-18 SHT 10	ALUMINUM GRAFFITI SHIELD LEFT TRANSITION FROM RIDER
7/19	S-18 SHT 11	ALUMINUM GRAFFITI SHIELD SPLICE PLATE FOR FIN
12/18	C-1	SAND BARREL CRASH CUSHION
12/18	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

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW			
SIGNING & MARKING STANDARDS		NAME Talal Kamal	DATE March, 2026
PROJECT NO. 085 MA 004 F0833 01C		1B-2	OF 30
RECORD DRAWING DATA	FEDERAL ID NO. 085-A(210)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

TRAFFIC SIGNAL AND LIGHTING STANDARDS
(SHEET 1 OF 2)
EFFECTIVE NOVEMBER 2024

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
11/22	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-SL. 4	POLES AND POSTS
11/22	4.01	TYPE A POLE
11/22	4.02	TYPE S POLE
11/22	4.03	TYPE T POLE
11/22	4.04	TYPE S AND TYPE T STEEL TWIN LUMINAIRE MOUNTING BRACKET AND EXTENSIONS
11/22	4.05	ALUMINUM TYPE S POLE
11/22	4.06	ALUMINUM TYPE T POLE
11/22	4.07	TYPE G POLE
11/22	4.08	ALUMINUM TYPE G POLE
11/22	4.09	ALUMINUM TYPE H POLE
11/22	4.10	ALUMINUM TYPE I POLE
11/22	4.11	GENERAL NOTES FOR TRAFFIC SIGNALS AND LIGHTING POLES WITH MAXIMUM LOADING CASE
04/19	4.12	TYPE J POLES (25-J, 30-J, 35-J, AND 40-J) WITH 25 FT TO 40 FT MAST ARM SPAN LENGTH
04/19	4.13	TYPE Q POLES (25-QL, 30-QL, 35-QL, AND 40-QL) WITH 25 FT TO 40 FT MAST ARM SPAN LENGTH WITH LUMINAIRES
04/19	4.14	TYPE K POLES (45-K, 50-K, AND 55-K) WITH 45 FT TO 55 FT MAST ARM SPAN LENGTH
04/19	4.15	TYPE R POLES (45-RL, 50-RL, AND 55-RL) WITH 45 FT TO 55 FT MAST ARM SPAN LENGTH WITH LUMINAIRES
11/22	4.16	TYPE V POLES (60-V AND 65-V) WITH 60 FT TO 65 FT MAST ARM SPAN LENGTH
11/22	4.17	TYPE W POLES (60-WL AND 65-WL) WITH 60 FT TO 65 FT MAST ARM SPAN LENGTH WITH LUMINAIRES
11/22	4.18	POLE HAND HOLE DETAILS
11/22	4.19	TYPE U POLE (ELLIPTICAL BASE) DETAILS
11/22	4.20	TYPE U POLE (ROUND POLE WITH SQUARE BASE) NOTES
04/19	4.21	TYPE U POLE (ROUND POLE WITH SQUARE BASE) FOUNDATION DETAILS
04/19	4.22	TYPE U POLE (ROUND POLE WITH SQUARE BASE) DEATILS 1
04/19	4.23	TYPE U POLE (ROUND POLE WITH SQUARE BASE) DEATILS 2
04/19	4.24	TYPE U POLE (ROUND POLE WITH SQUARE BASE) PIPE TENON DETAILS
04/19	4.25	TYPE U POLE (ROUND POLE WITH SQUARE BASE) TWIN LUMINAIRE BRACKET DETAILS
04/19	4.26	EQUIPMENT MOUNTING HEIGHT DETAILS
04/19	4.27	PEDESTRIAN PUSH BUTTON POST "TYPE PB POLE"
11/22	4.28	POLE FOUNDATION ANCHOR BOLTS
04/19	4.29	STEEL MAST ARM DETAILS LUMINAIRE AND SIGNAL ARMS TO 20'
04/19	4.30	ALUMINUM TRUSS MAST ARM DETAILS FOR TYPE G, H, AND I POLES
04/19	4.31	SIGNAL MAST ARM TENON DETAIL
04/19	4.32	TYPICAL HIGHWAY LIGHTING OFFSETS IN CUT AND FILL SECTIONS
11/22	4.33	STEEL ADAPTER PLATE FOR 30 FT ALUMINUM TYPE "G" OR TYPE "S" LIGHT POLES
	T.S. 5	POLE BASES - SPECIAL
11/24	5-0	TYPE 2 AND 3 CAST ALUMINUM BREAK-AWAY BASES
04/19	5-1	TYPE 2 CAST ALUMINUM BREAK-AWAY BASE
04/19	5-2	TYPE 3 CAST ALUMINUM BREAK-AWAY BASE
05/21	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			
		NAME	DATE
TRAFFIC SIGNAL & LIGHTING STANDARDS		Talal Kamal	March, 2026
PROJECT NO.		085 MA 004 F0833 01C	1C-1 OF 30
RECORD DRAWING DATA	FEDERAL ID NO. 085-A(210)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

TRAFFIC SIGNAL AND LIGHTING STANDARDS
(SHEET 2 OF 2)
EFFECTIVE NOVEMBER 2024

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
12/23	8-0	TRAFFIC SIGNAL VEHICLE FACE ASSEMBLY REQUIREMENTS AND DETAILS
12/23	8-1	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
12/23	8-2	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
	15-0 SHT 1	GENERAL NOTES
04/19	15-0 SHT 2	GENERAL NOTES
04/19	15-0 SHT 3	GENERAL NOTES
04/19	15-1 SHT 1	STEEL POLE TYPICAL DETAILS
04/19	15-1 SHT 2	STEEL POLE FOUNDATION DETAILS
04/19	15-1 SHT 3	STEEL POLE ATTACHMENT DETAILS
04/19	15-1 SHT 4	WOOD POLE TYPICAL DETAILS
04/19	15-1 SHT 5	WOOD POLE TYPICAL DETAILS
04/19	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			
		NAME	DATE
TRAFFIC SIGNAL AND LIGHTING STANDARDS		TALAL KAMAL	March, 2026
PROJECT NO. 085 MA 004 F0833 01C		1C-2	OF 30
RECORD DRAWING DATA	FEDERAL ID NO. 085-A(210)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

STRUCTURE DETAIL DRAWINGS
EFFECTIVE NOVEMBER 2024

DATE	STANDARD	SUBJECT TITLE
RAILINGS		
09/24	SD 1.10 (1 OF 2)	38" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
09/24	SD 1.10 (2 OF 2)	38" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
10/24	SD 1.11 (1 OF 1)	42" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
10/24	SD 1.11 (2 OF 2)	42" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
06/23	SD 1.12	COMBINATION PEDESTIAN-TRAFFIC BRIDGE RAILING
01/20	SD 1.13	PEDESTRIAN FENCE FOR BRIDGE RAILING SD1.12
01/20	SD 1.20	32' TYPE F ROADWAY BARRIER TRANSITION TO 38' SINGLE SLOPE BARRIER
01/20	SD 1.21	32' TYPE F ROADWAY BARRIER TRANSITION TO 42' SINGLE SLOPE BARRIER
01/20	SD 1.22	42' TYPE F ROADWAY BARRIER TRANSITION TO 42' SINGLE SLOPE BARRIER
01/20	SD 1.30	BARRIER JUNCTION BOX
APPROACHES		
08/23	SD 2.01	APPROACH SLAB DETAILS
08/23	SD 2.02	TYPE 1 ANCHOR SLAB DETAILS
08/23	SD 2.03	TYPE 2 ANCHOR SLAB DETAILS
08/23	SD 2.04	SLOPE PAVING DETAILS
DECK JOINTS		
02/20	SD 3.01	DECK JOINT ASSEMBLY - COMPRESSION SEAL
02/20	SD 3.02	DECK JOINT ASSEMBLY - STRIP SEAL
02/20	SD 3.03 (1 OF 2)	DECK JOINT ASSEMBLY - FLANGELESS STRIP SEAL
02/20	SD 3.03 (2 OF 2)	DECK JOINT ASSEMBLY - FLANGELESS STRIP SEAL
SUBSTRUCTURE		
11/12	SD 5.01	STRUCTURAL EXCAVATION - PAYMENT LIMITS
11/12	SD 5.02	STRUCTURE BACKFILL - PAYMENT LIMITS
DRAINAGE STRUCTURES		
05/15	SD 6.01 (1 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS
02/12	SD 6.01 (2 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS
02/12	SD 6.01 (3 OF 5)	REINFORCED CONCRETE BOX CULVERTS - EXTENSION DETAILS
02/12	SD 6.01 (4 OF 5)	REINFORCED CONCRETE BOX CULVERTS - STRUCTURAL EXCAVATION & STRUCTURE BACKFILL
05/15	SD 6.01 (5 OF 5)	REINFORCED CONCRETE BOX CULVERTS - SINGLE BARREL (0'-30' FILLS)
05/15	SD 6.02 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (0'-15' FILLS)
05/15	SD 6.02 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (15'-30' FILLS)
05/15	SD 6.03 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (0'-15' FILLS)
05/15	SD 6.03 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (15'-30' FILLS)
05/15	SD 6.04 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (0'-15' FILLS)
05/15	SD 6.04 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (15'-30' FILLS)
05/15	SD 6.05 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (0'-15' FILLS)
05/15	SD 6.05 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (15'-30' FILLS)
05/15	SD 6.06 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (0'-15' FILLS)
05/15	SD 6.06 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (15'-30' FILLS)
02/12	SD 6.07	REINFORCED CONCRETE BOX CULVERTS - 16'x 14' EQUIPMENT PASS (0'-20' FILLS)
05/15	SD 6.08 (1 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (2 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.08 (3 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (4 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.08 (5 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (6 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.08 (7 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (8 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.09 (1 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 2 :1 SLOPE
05/15	SD 6.09 (2 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 4 :1 SLOPE
05/15	SD 6.09 (3 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 6 :1 SLOPE
05/15	SD 6.10 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 3'to 7'
02/12	SD 6.10 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 8'to 12'
02/12	SD 6.11 (1 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON DETAILS
05/15	SD 6.11 (2 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (2 :1 SLOPE)
05/15	SD 6.11 (3 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (4 :1 SLOPE)
05/15	SD 6.11 (4 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (6 :1 SLOPE)
10/24	SD 6.20 (1 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - SINGLE BARREL NOTES & DIMENSIONS
10/24	SD 6.20 (2 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 1
10/24	SD 6.20 (3 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - END SECTION & CONNECTION DETAILS
10/24	SD 6.20 (4 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 2
10/24	SD 6.20 (5 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 3
07/12	SD 6.30 (1 OF 5)	PIPE CULVERT HEADWALLS - MISCELLANEOUS DETAILS
07/12	SD 6.30 (2 OF 5)	PIPE CULVERT HEADWALLS - INLET AND OUTLET - 18" to 42" PIPES
07/12	SD 6.30 (3 OF 5)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET AND OUTLET - 48" to 84" PIPES
07/12	SD 6.30 (4 OF 5)	PIPE CULVERT HEADWALLS - SKEWED INLET AND OUTLET - 48" to 84" PIPES
07/12	SD 6.30 (5 OF 5)	PIPE CULVERT HEADWALLS - MULTI-PIPE - 48" to 84" PIPES
07/12	SD 6.31 (1 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET
07/12	SD 6.31 (2 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 2 :1 SLOPE
07/12	SD 6.31 (3 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 4 :1 SLOPE
07/12	SD 6.31 (4 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 6 :1 SLOPE
07/12	SD 6.31 (5 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET
07/12	SD 6.31 (6 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 2 :1 SLOPE
07/12	SD 6.31 (7 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 4 :1 SLOPE
07/12	SD 6.31 (8 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 6 :1 SLOPE
07/12	SD 6.32 (1 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET
07/12	SD 6.32 (2 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 2 :1 SLOPE
07/12	SD 6.32 (3 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 4 :1 SLOPE
07/12	SD 6.32 (4 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 6 :1 SLOPE
07/12	SD 6.32 (5 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET
07/12	SD 6.32 (6 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 2 :1 SLOPE
07/12	SD 6.32 (7 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 4 :1 SLOPE
07/12	SD 6.32 (8 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 6 :1 SLOPE

DATE	STANDARD	SUBJECT TITLE
DRAINAGE STRUCTURES (Continued)		
07/12	SD 6.33 (1 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET
07/12	SD 6.33 (2 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 2 :1 SLOPE
07/12	SD 6.33 (3 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 4 :1 SLOPE
07/12	SD 6.33 (4 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 6 :1 SLOPE
07/12	SD 6.33 (5 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET
07/12	SD 6.33 (6 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 2 :1 SLOPE
07/12	SD 6.33 (7 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 4 :1 SLOPE
07/12	SD 6.33 (8 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 6 :1 SLOPE
07/12	SD 6.34 (1 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET
07/12	SD 6.34 (2 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 2 :1 SLOPE
07/12	SD 6.34 (3 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 4 :1 SLOPE
07/12	SD 6.34 (4 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 6 :1 SLOPE
07/12	SD 6.34 (5 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET
07/12	SD 6.34 (6 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 2 :1 SLOPE
07/12	SD 6.34 (7 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 4 :1 SLOPE
07/12	SD 6.34 (8 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 6 :1 SLOPE
07/12	SD 6.35 (1 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITHOUT APRON
07/12	SD 6.35 (2 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITH OUTLET APRON
07/12	SD 6.36 (1 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRONS
07/12	SD 6.36 (2 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 2 :1 SLOPE
07/12	SD 6.36 (3 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 4 :1 SLOPE
07/12	SD 6.36 (4 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 6 :1 SLOPE
RETAINING WALLS		
10/24	SD 7.01 (1 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (2 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (3 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (4 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (5 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.02 (1 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
12/21	SD 7.02 (2 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
SOUND BARRIER WALLS		
06/22	SD 8.01	SOUND BARRIER WALL (CONCRETE)
06/22	SD 8.02 (1 OF 2)	SOUND BARRIER WALL (MASONRY)
06/22	SD 8.02 (2 OF 2)	SOUND BARRIER WALL (MASONRY)
TRAFFIC STRUCTURES		
04/19	SD 9.01 (1 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - ELEVATION & NOTES
03/22	SD 9.01 (2 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - FOUNDATION DETAILS
04/19	SD 9.01 (3 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE A SIGN MOUNT ASSEMBLY
04/19	SD 9.01 (4 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE B SIGN MOUNT ASSEMBLY
04/19	SD 9.01 (5 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - LIGHT SUPPORT AND MISC. DETAILS
04/19	SD 9.02 (1 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - ELEVATION & NOTES
03/22	SD 9.02 (2 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - FOUNDATION DETAILS
04/19	SD 9.02 (3 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE A SIGN MOUNT ASSEMBLY
04/19	SD 9.02 (4 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE B SIGN MOUNT ASSEMBLY
04/19	SD 9.02 (5 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - LIGHT SUPPORT AND MISC. DETAILS
04/19	SD 9.10 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - GENERAL PLAN
09/23	SD 9.10 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - FOUNDATION DETAILS
04/19	SD 9.10 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - POST AND MAST ARM DETAILS
04/19	SD 9.10 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - SIGN SUPPORT DETAILS
09/23	SD 9.10 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - LIGHT SUPPORT DETAILS
04/19	SD 9.20 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - GENERAL PLAN
09/23	SD 9.20 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - FOUNDATION DETAILS
04/19	SD 9.20 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - POST AND MAST ARM DETAILS
04/19	SD 9.20 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - SIGN SUPPORT DETAILS
09/23	SD 9.20 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - LIGHT SUPPORT AND MISC. DETAILS
04/19	SD 9.50 (1 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
04/19	SD 9.50 (2 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.50 (3 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING & SIGN BRACKET DETAILS
04/19	SD 9.50 (4 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
04/19	SD 9.50 (5 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
04/19	SD 9.51	DUAL VARIABLE MESSAGE SIGN - TUBULAR FRAME
04/19	SD 9.52 (1 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
04/19	SD 9.52 (2 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.52 (3 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.52 (4 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
04/19	SD 9.52 (5 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
04/19	SD 9.53 (1 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - PLAN & ELEVATION
04/19	SD 9.53 (2 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.53 (3 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.53 (4 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - HANDRAIL DETAILS
04/19	SD 9.53 (5 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - MISCELLANEOUS DETAILS
05/22	SD 9.60 (1 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - GENERAL PLAN AND ELEVATION
05/22	SD 9.60 (2 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - FOUNDATION DETAILS
05/22	SD 9.60 (3 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - DMS MONOTUBE ASSEMBLY
05/22	SD 9.60 (4 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - DMS MAST ARM DETAILS
05/22	SD 9.60 (5 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - MISCELLANEOUS DETAIL
05/22	SD 9.60 (6 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - CATWALK ASSEMBLY AND HANDRAIL
05/22	SD 9.60 (7 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - CATWALK DETAILS

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW				
STRUCTURES STANDARDS		NAME	DATE	
PROJECT NO.		L. O'Rourke	4/26	
085 MA 004 F0833 01C			1D	OF 30
RECORD DRAWING DATA	FEDERAL ID NO. 085-A(210)T	REC. DWG. DATE	OF	

1. **SPILL PREVENTION, CONTROL, AND COUNTERMEASURES – CWA SECTION 311**

If total above-ground storage capacity, including mobile re-fuelers stationed on-site, is greater than 1,320 gallons of oil (oils, greases, fuel, asphalt, and asphalt derivatives), where a spill has the potential to reach Waters of the US, the Contractor shall prepare a SPCC plan per contract specifications in Section 104.16 (C) of the Standard Specifications.

2. **SURFACE WATER POLLUTION PREVENTION – CWA SECTION 402**

☒ Arizona Pollutant Discharge Elimination System (AZPDES) CGP coverage applies (104SWDEQ needed)

3. **WORK IN WATERS OF THE UNITED STATES – CWA SECTION 404/401**

☒ No Permit Required; Refer to Section 104.16 (D) of the Standard Specifications for General Requirements

4. **BIOLOGY PROGRAM – ESA SECTION 7; MBTA, ARIZONA REVISED STATUTES TITLE 17**

BIO-1: Environmental Awareness, Monitoring and Avoidance ☒ N/A

BIO-2: Migratory Bird Treaty Act (MBTA) ☐ N/A

The contractor shall avoid nests with relocation directions.

BIO-2A: General Seasonal Restrictions for MBTA, refer to seasonal dates in EPIC and general requirements in 104.16(E) of the Standard Specifications.

If construction occurs during the migratory bird breeding season: March 1 to August 31 refer to Section 104.16 BIO-2 of the specifications for direction.

BIO-2D: MBTA – Active Cliff Swallow Nests ☒ N/A

BIO-3: Burrowing Owls ☒ N/A

BIO-4: Bats ☒ N/A

BIO-5: Sonoran Desert Tortoise ☒ No ☐ Yes

5. **VEGETATION PROTECTION PROGRAM – CWA SECTION 402, EO 13122**

General (applies to all projects); The contractor shall comply with the requirements specified in Section 104.16 (F) of the Special Provisions and Section 104.16 (B) of the Standard Specifications.

☒ Noxious Species Control Plan (NSCP) required

6. **CULTURAL RESOURCES PROGRAM**

☒ No Cultural Resources Program Action Required; See Std. Spec. 107.05 and 107.06 for General Requirements

7. **HAZARDOUS MATERIALS PROGRAM**

General (applies to all projects); See Std. Spec. 107.07 for General Requirements.

☐ No Hazardous Materials Program Action Required

Is Asbestos present? ☒ No ☐ Yes

Is a NESHAP notice required? ☐ No ☒ Yes

If yes, coordination with the ADOT Hazardous Materials Specialist is required and the NESHAP notification shall be submitted at least ten (10) business days prior to initiation of construction activities to:

Is Lead-based paint present? ☒ No ☐ Yes

8. **NOISE PROGRAM**

☒ No Noise Program Specific Project Action Required; See Std. Spec. 104.08 for General Requirements

9. **AIR QUALITY PROGRAM**

☒ No Air Quality Program Action Required; See Std. Spec. 104.08 for General Requirements

10. **OTHER ENVIRONMENTAL ISSUES**

Project Specific Environmental Commitments: ☐ N/A

- The contractor shall complete a National Standards for Hazardous Air Pollutants (NESHAP) notification for the work associated with the repair and extension of concrete box culverts within the project limits and submit to the Engineer, who shall submit it to the Arizona Department of Transportation environmental planning hazardous material coordinator (602.920.3702 or 602.712.7767) for a five (5) working day review and approval. Upon approval, the contractor shall file the notification with Arizona Department of Environmental Quality – Air Quality Division at least ten (10) working days prior to the commencement of work.

Arizona Department of Transportation Environmental Planning Standard Template			
Environmental, Permits, Issues, And Commitments (EPIC) Sheet			
Environmental Planner Name	Dena Whitaker	R.E. Name	
Environmental Planning Date of Completion	12/24/2025	R.E. Signature	
FEDERAL ID NO.	085-A(210)T		
PROJECT NO.	085 MA 004 F0833 01C		
REC DWG DATE:		With the above signature, the R.E. attests that all EPIC work for this project has been satisfactorily completed.	
		1F OF 30	Sheet 1F

MIDPOINT OF PROJECT DESIGN DATA

Central Zone
State Plane Coordinates
X=243740
Y=686348

2024 AADT = 1686
2042 AADT = 1911

REFERENCES

F0507
LS1442
S-222(15)

LENGTH OF PROJECT

SR 85 Survey CL
MP 4.39 to 6.02

Sta 1892+20 to 1892+53 = 33' (Box Culvert 1 & Paving)
Sta 1892+53 to 1929+25 = 3672' (Exception)
Sta 1929+25 to 1930+27 = 102' (Box Culvert 2 & Paving)
Sta 1930+27 to 1943+96 = 1369' (Exception)
Sta 1943+96 to 1944+36 = 40' (Box Culvert 3 & Paving)
Sta 1944+36 to 1960+60 = 1624' (Exception)
Sta 1960+60 to 1960+74 = 14' (Box Culvert 4 & Paving)
Sta 1960+74 to 1976+51 = 1577' (Exception)
Sta 1976+51 to 1976+85 = 34' (Box Culvert 5 & Paving)

Gross Length = 8465'
Net Length = 223'

INDEX OF SHEETS

Sheet No.	Sheet Type
1	Face Sheet
1A, 1B-1 & 2, 1C-1 & 2, 1D	ADOT Standard Drawings
1F	EPIC Sheet
2	Design Sheet
3	Box Culvert Summary Sheet
4	Guardrail Summary Sheet
5-13	Detail Sheets
14	Key Map
15-25	Traffic Sheet
26-27	Bridge Sheets
28-30	Roadside Development

GENERAL NOTES

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

For R/W information not shown, see Right-of-Way project No. S-222 (22).

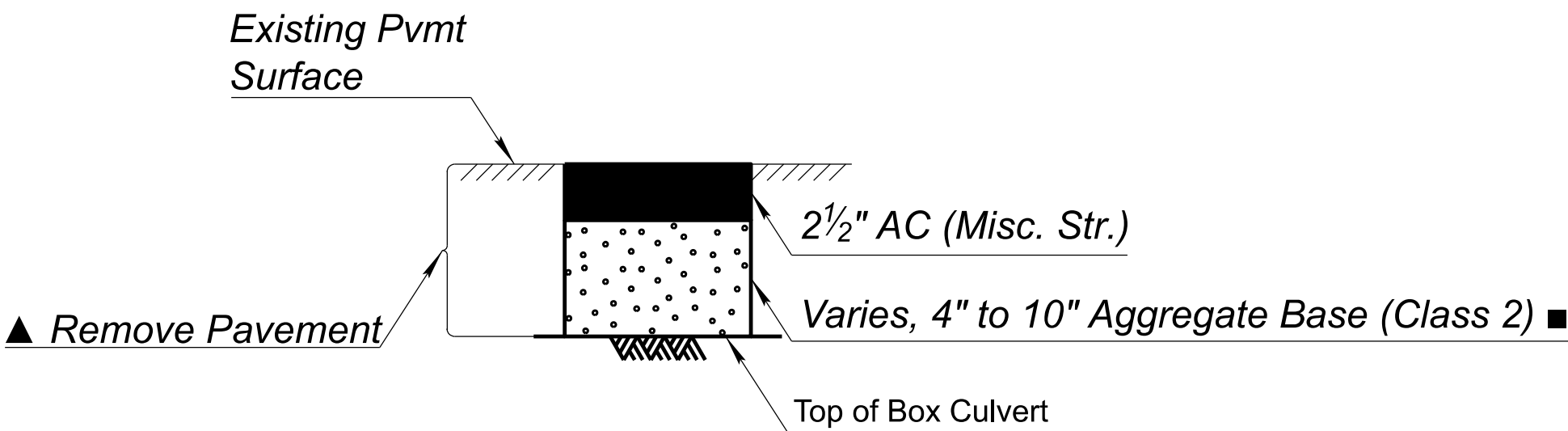
The average project elevation is 900'.

New Right of Way and easements are not required.

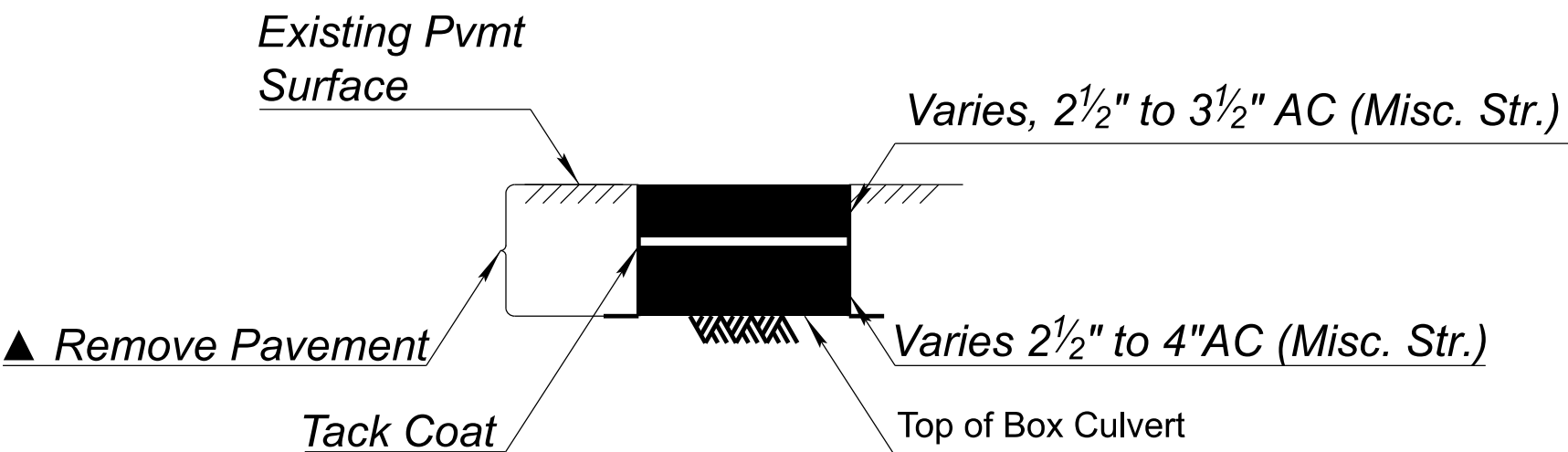
Project Plans have been developed utilizing alignment and survey control from survey LS1442.

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 Arizona 811 and Section 107.15 of the specifications.

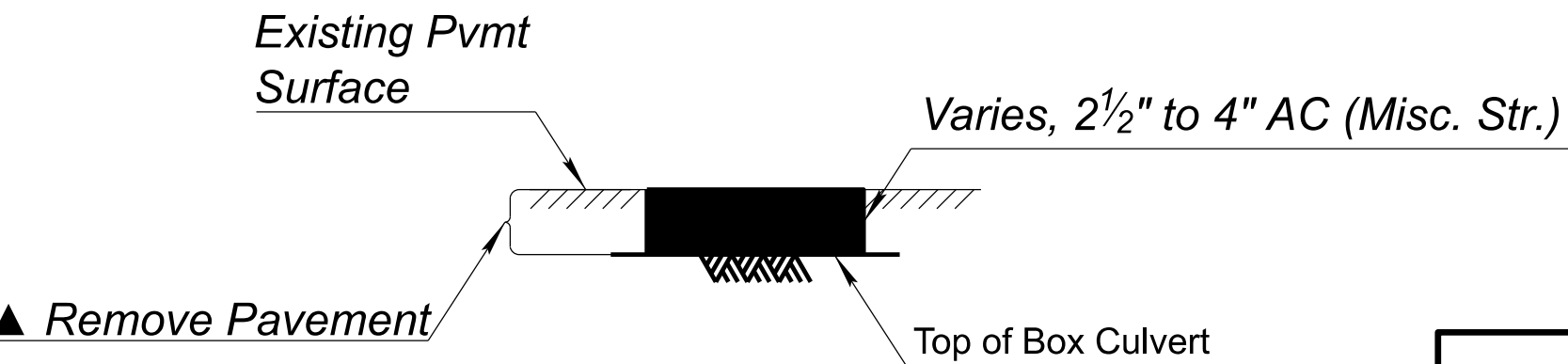
The project roadway shall be striped by the contractor in accordance with the current edition of the Signing and Marking Standard Drawings (M&S-Series).



Total Thickness = Varies
SECTION NO. 1
RCBC Removal Areas



Total Thickness = Varies
SECTION NO. 2
RCBC Removal Areas



Total Thickness = Varies
SECTION NO. 3
RCBC Removal Areas

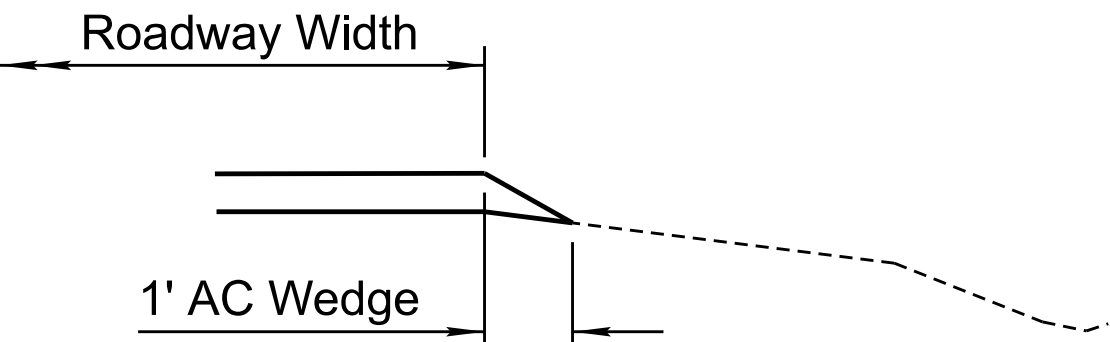
EARTHWORK QUANTITIES

Drainage Excavation	104 CY
Structural Excavation	553 CY
Rip Rap Excavation	1221 CY
No Shrink or Swell Applied	
Berm Embankment*	1323 CY
Structure Backfill**	512 CY
Waste	555 CY

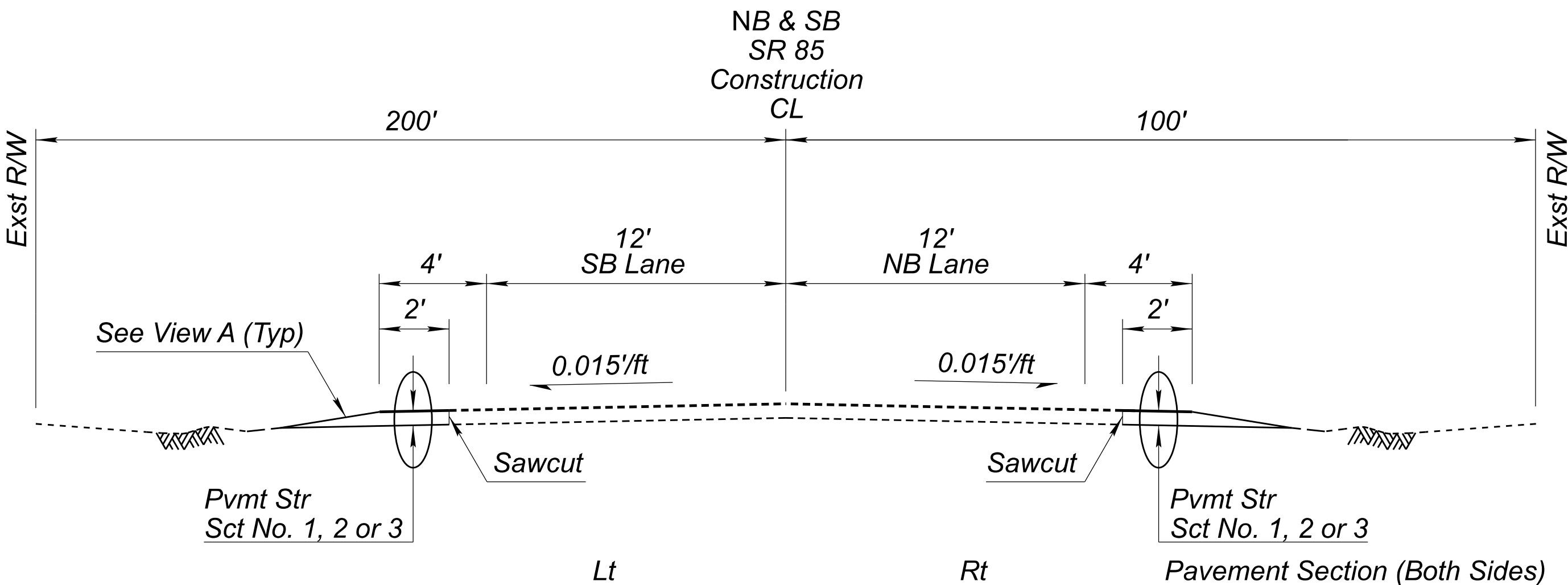
* Berm is constructed after excavation activities using stockpiled materials.
** Structural Backfill is assumed to be imported material.

▲ Removal of base material, compaction and grading shall be considered in the cost of Item 2020029 Removal of Asphaltic Concrete Pavement.

■ The aggregate base depth is assumed for the purposes of bid quantities. The contractor shall replace material to the top of the box culvert.



VIEW A



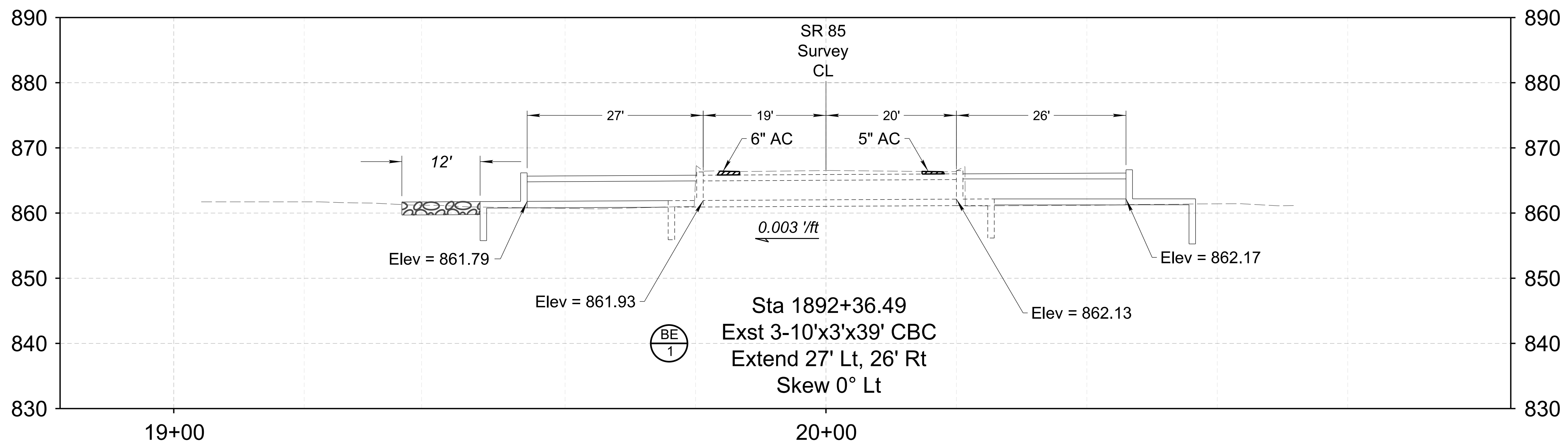
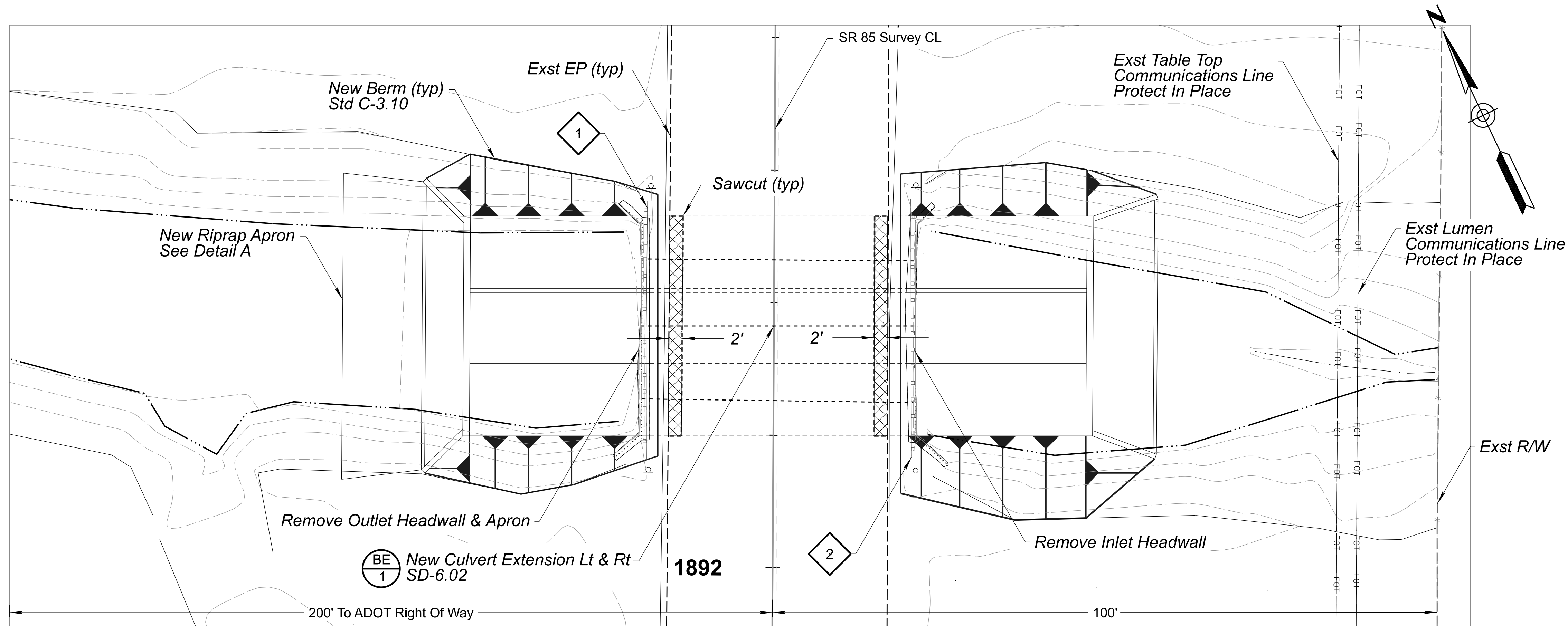
Sta 1892+20 to 1892+53	Sta 1892+20 to 1892+53	PSS 2
Sta 1929+40 to 1930+27	Sta 1929+25 to 1930+12	PSS 1
Sta 1944+12 to 1944+36	Sta 1943+96 to 1944+22	PSS 2
Sta 1960+60 to 1960+74	Sta 1960+60 to 1960+74	PSS 3
Sta 1976+67 to 1976+85	Sta 1976+51 to 1976+69	PSS 1

ABOVE BOX CULVERT EXTENSIONS
TYPICAL SECTION (N.T.S.)

	DESIGN	J SPRADLEY	4/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SECTION	ROUTE	SR 85	F.H.W.A. Arizona Division	STATE	ARIZ.	PROJECT NO.	085 MA 004	FEDERAL ID NO.	085-A(210)T	SHEET NO.	2	TOTAL SHEETS	30	RECORD DRAWING	
	DRAWN	M STEINER	4/26		MILEPOST														
	CHECKED	E EGGEN	4/26		STRUCTURE NO.														
	TEAM LEADER	E. EGGEN	4/26																
					DESIGN SHEET			QILOTOSA WASH - W THAYER RD								SHEET 1 OF 1			
								TRACS NO. F0833 01C								OF			

[illegible]

ROUTE SR 85	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST		ARIZ.	085 MA 004	085-A(210)T	4	30	
	LOCATION QILOTOSA WASH - W THAYER RD						SHEET 1 OF 1
STRUCTURE NO.	TRACS NO. F0833 01C		____ OF ____				



DETAIL D01



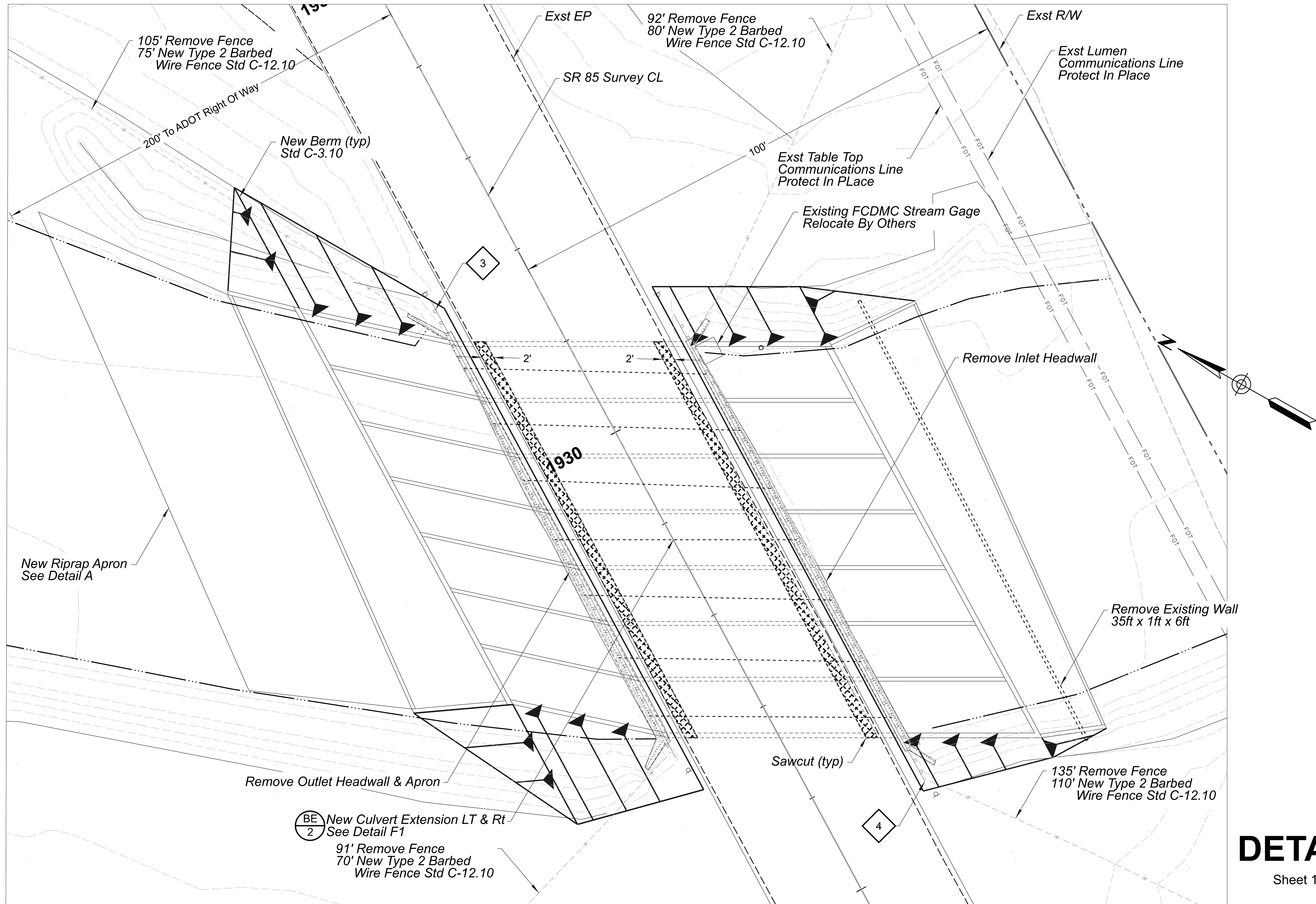
	NAME	DATE
DESIGN	J SPRADLEY	8/26
DRAWN	M STEINER	8/26
CHECKED	E EGGEN	8/26
TEAM LEADER	E. EGGEN	8/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

DETAIL D01

ROUTE
SR 85
MILEPOST
STRUCTURE NO.

F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 5	TOTAL SHEETS 30	RECORD DRAWING
LOCATION QILOTOSA WASH - W THAYER RD						SHEET 1 OF 1
TRACS NO. F0833 01C						___ OF ___



DETAIL D02

Sheet 1 of 2



	NAME	DATE
DESIGN	J SPRADLEY	4/26
DRAWN	M STEINER	4/26
CHECKED	E EGGEN	4/26
TEAM LEADER	E. EGGEN	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

DETAIL D02

ROUTE
SR 85

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

STATE

ARIZ.

PROJECT NO.

085 MA 004

FEDERAL ID NO.

085-A(210)T

SHEET NO.

6

TOTAL SHEETS

30

RECORD DRAWING

LOCATION
QILOTOSA WASH - W THAYER RD

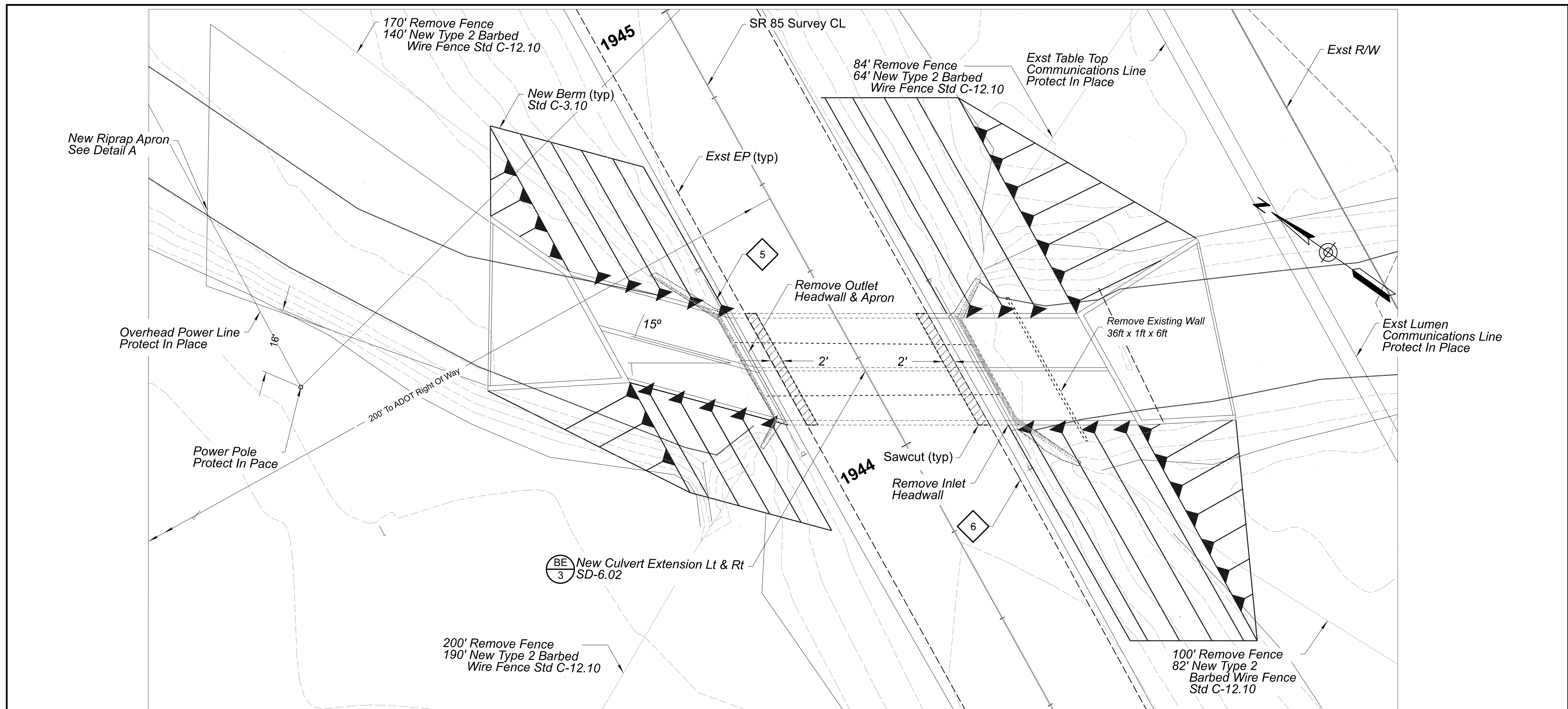
TRACS NO. F0833 01C

SHEET 1 OF 2

OF



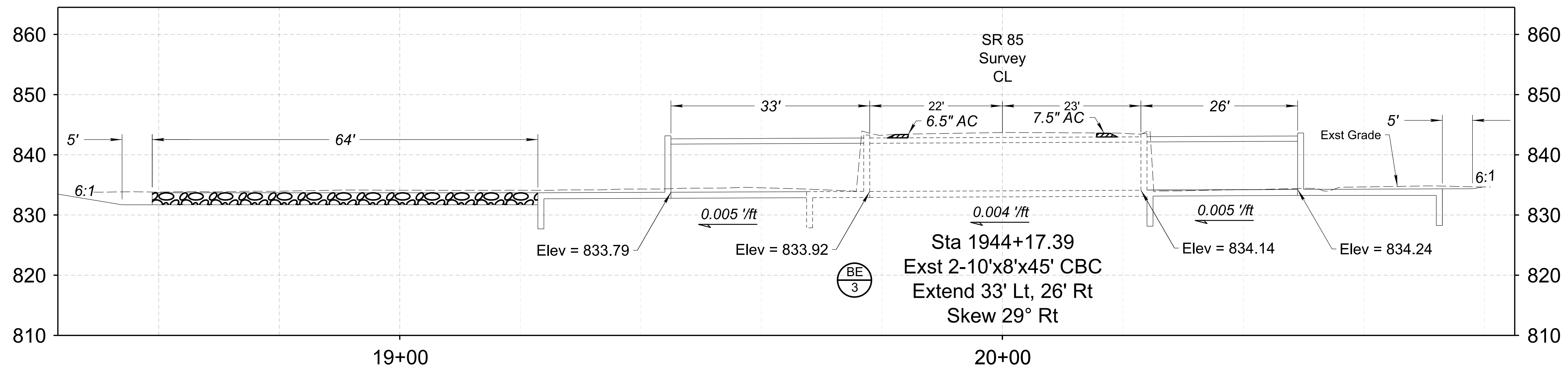
	NAME		DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SECTION	ROUTE	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	DESIGN	J SPRADLEY	4/26		SR 85			085 MA 004	085-A(210)T	7	30	
	DRAWN	M STEINER	4/26		MILEPOST	LOCATION QILOTOSA WASH - W THAYER RD						
	CHECKED	E EGGEN	4/26		STRUCTURE NO.							TRACS NO. F0833 01C
	TEAM LEADER	E. EGGEN	4/26		DETAIL D02			OF				
								OF				



DETAIL D03

Sheet 1 of 2

	NAME		DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SECTION	ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	DESIGN	J SPRADLEY	8/26		SR 85		ARIZ.	085 MA 004	085-A(210)T	8	30	
	DRAWN	M STEINER	8/26		MILEPOST	LOCATION						
	CHECKED	E EGGEN	8/26		STRUCTURE NO.	QILOTOSA WASH - W THAYER RD						
	TEAM LEADER	E. EGGEN	8/26			SHEET 1 OF 2						
				DETAIL D03	TRACS NO. F0833 01C					___ OF ___		



DETAIL D03

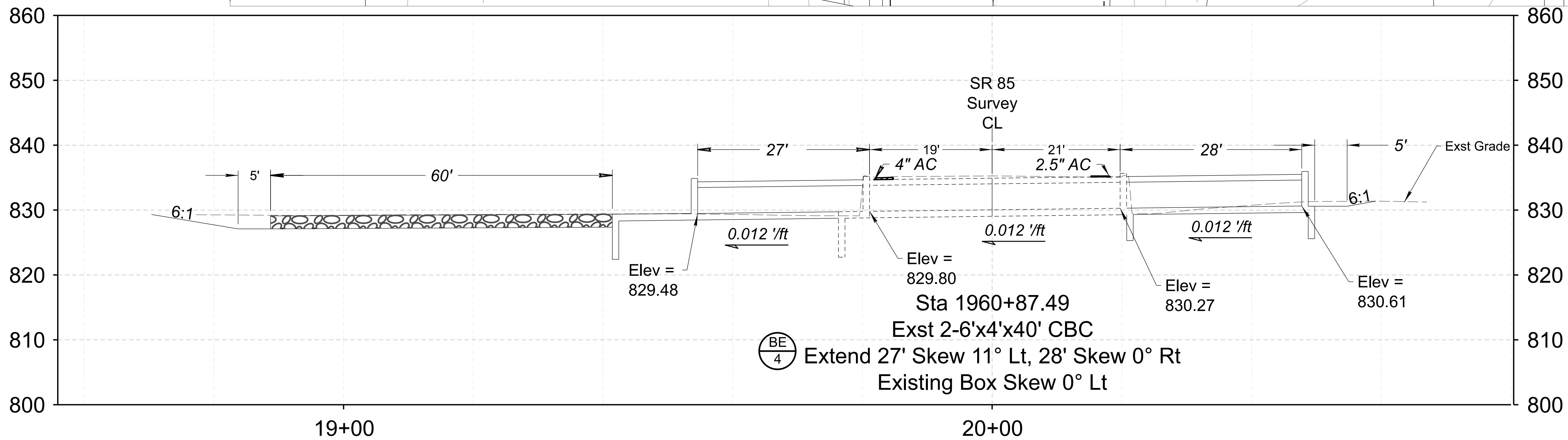
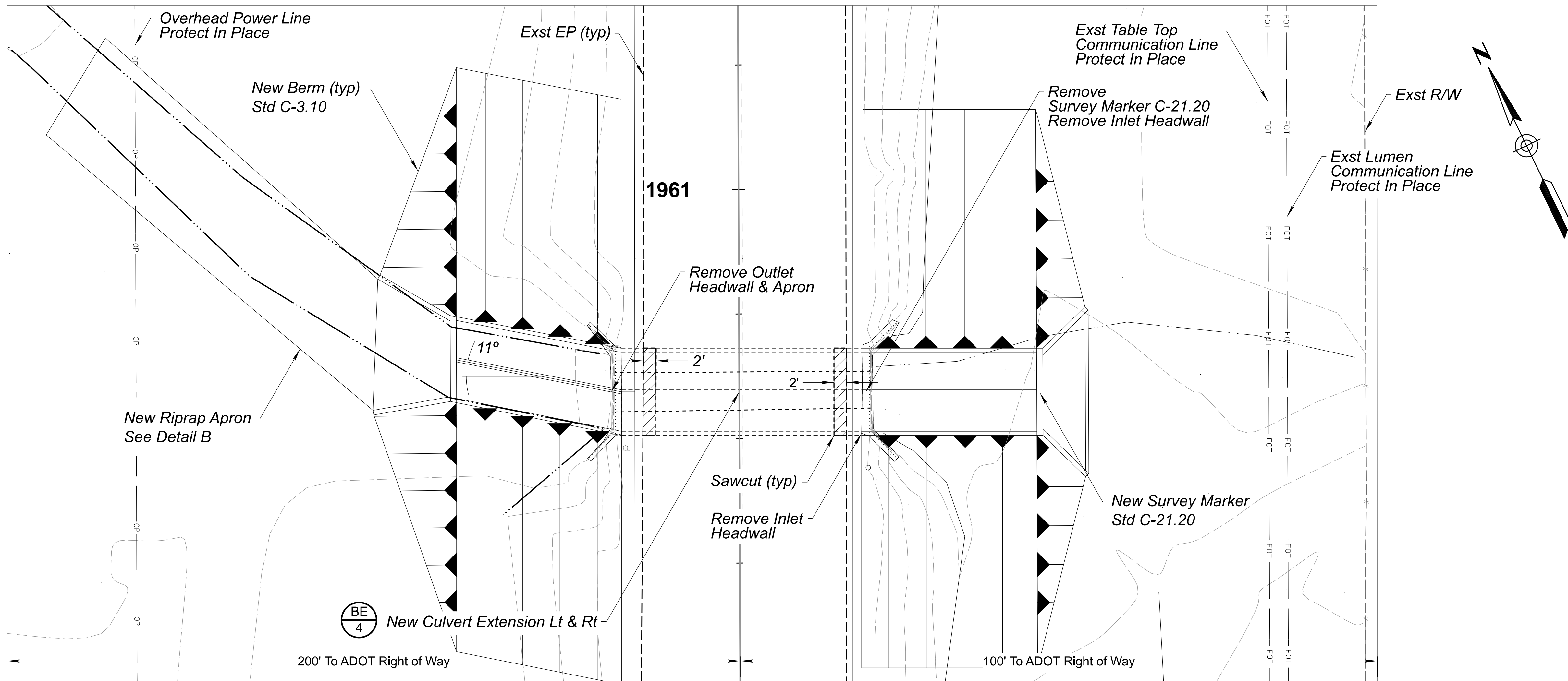
Sheet 2 of 2



	NAME	DATE
DESIGN	J SPRADLEY	4/26
DRAWN	M STEINER	4/26
CHECKED	E EGGEN	4/26
TEAM LEADER	E. EGGEN	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SECTION	ROUTE SR 85
DETAIL D03	MILEPOST
	STRUCTURE NO.

F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 9	TOTAL SHEETS 30	RECORD DRAWING
LOCATION QILOTOSA WASH - W THAYER RD						SHEET 2 OF 2
TRACS NO. F0833 01C						___ OF ___



DETAIL D04



	NAME	DATE
DESIGN	J SPRADLEY	4/26
DRAWN	M STEINER	4/26
CHECKED	E EGGEN	4/26
TEAM LEADER	E. EGGEN	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

DETAIL D04

ROUTE
SR 85

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

LOCATION

TRACS NO. F0833 01C

STATE
ARIZ.

PROJECT NO.
085 MA 004

FEDERAL ID NO.
085-A(210)T

SHEET NO.
10

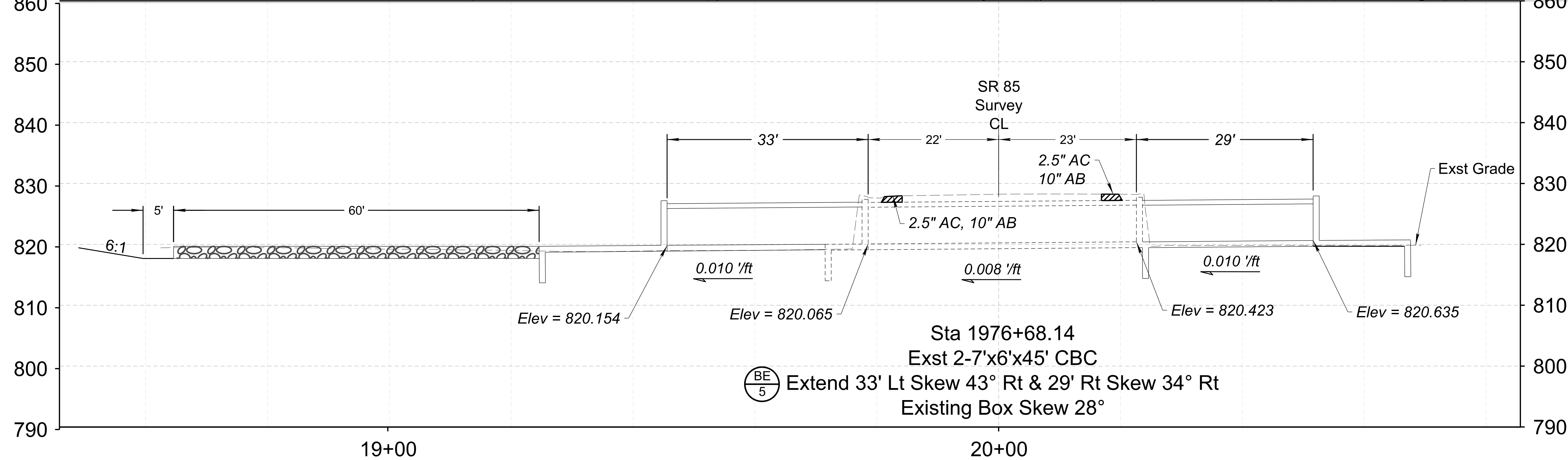
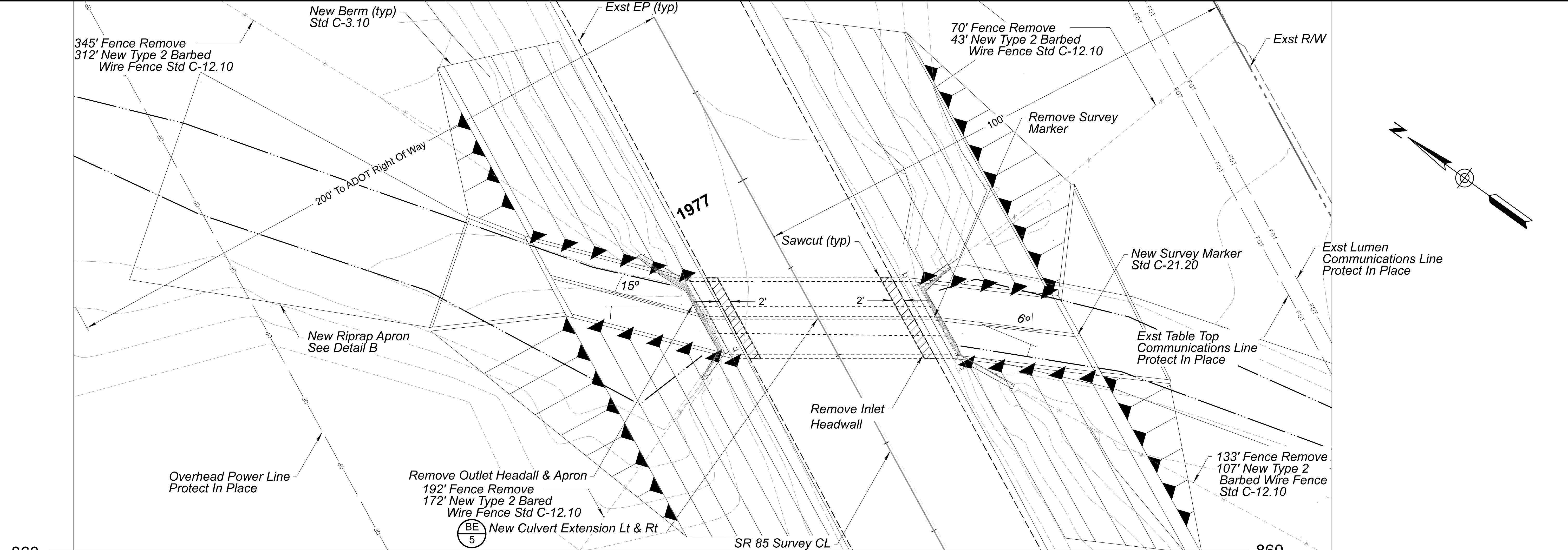
TOTAL SHEETS
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RECORD DRAWING

QILOTOSA WASH - W THAYER RD

SHEET 1 OF 1

OF



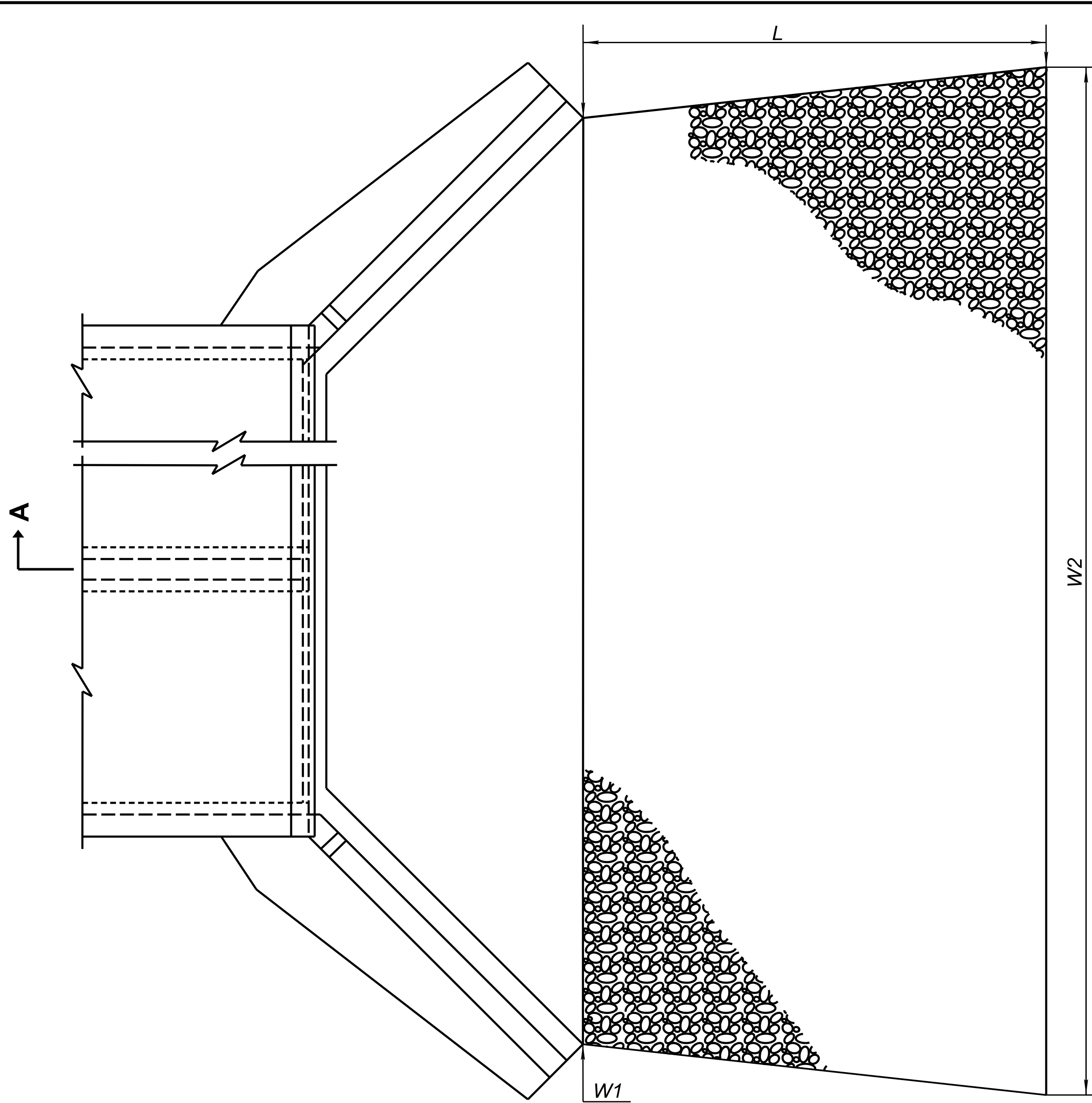
DETAIL D05



	NAME	DATE
DESIGN	J SPRADLEY	4/26
DRAWN	M STEINER	4/26
CHECKED	E EGGEN	4/26
TEAM LEADER	E. EGGEN	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SECTION
DETAIL D05

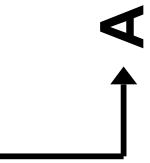
ROUTE SR 85	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
		ARIZ.	085 MA 004	085-A(210)T	11	30	
MILEPOST	LOCATION QILOTOSA WASH - W THAYER RD						SHEET 1 OF 1
STRUCTURE NO.	TRACS NO. F0833 01C						___ OF ___



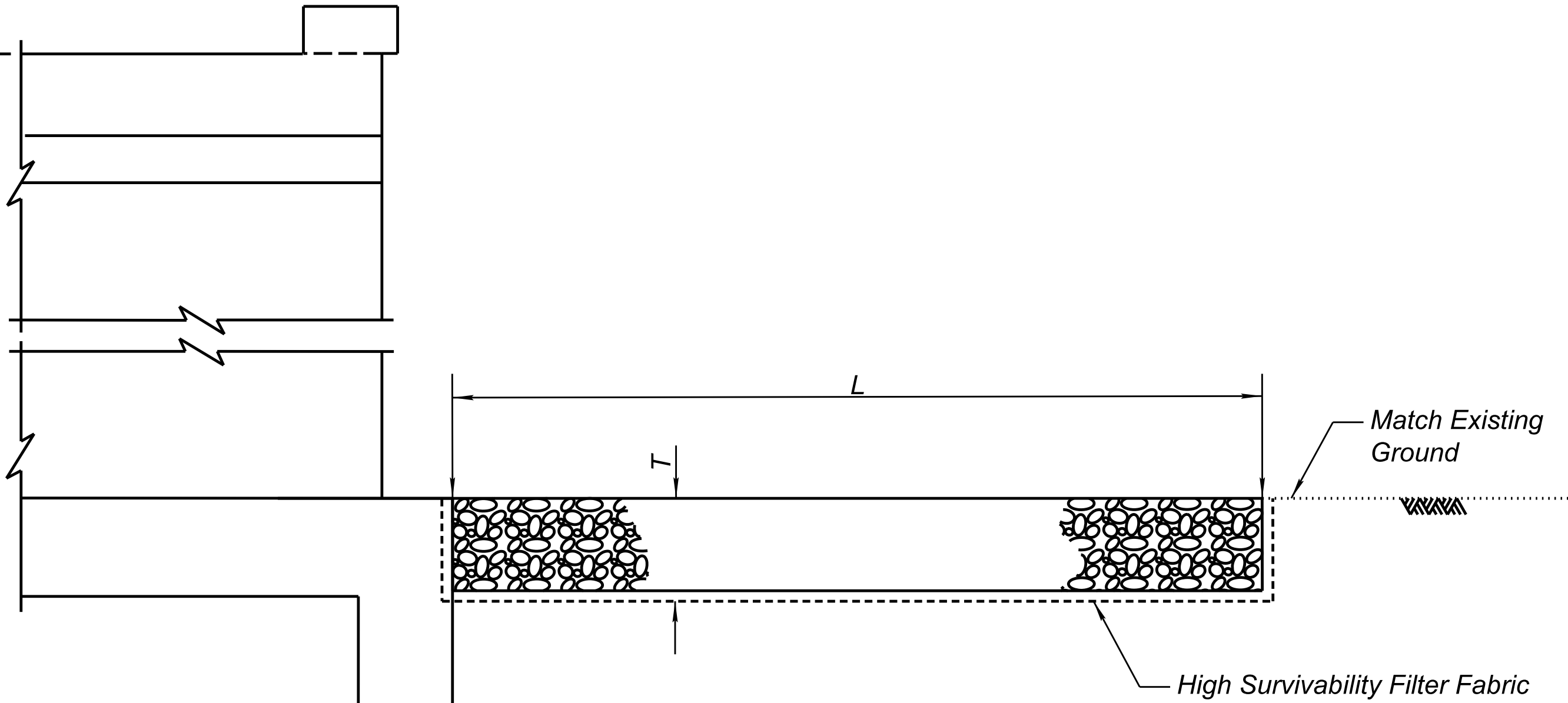
PLAN VIEW

RIPRAP GRADATIONS	
	D50=6"
% Passing	Sieve Size (in)
100-90	12
85-70	9
50-30	6
15-5	4
5-0	2

RIPRAP GRADATIONS	
	D50=24"
% Passing	Sieve Size (in)
100-90	48
85-70	36
50-30	24
15-5	16
5-0	8



See SD 6.01-6.11



SECTION A-A

DUMPED RIPRAP APRON DIMENSIONS & LOCATIONS

CULVERT REFERENCE No.	LOCATION	L ft	W1 ft	W2 ft	T ft	D50 SIZE in	RIPRAP TYPE	RIPRAP EXCAVATION CY	RIPRAP DUMPED CY
1	1892+36	12	44	47	1.5	6"	Dumped	30	30
2	1929+76	40	88	100	4	24"	Dumped	557	557
3	1944+17	64	33	48	4	24"	Dumped	384	384
TOTAL								971	971

DETAIL A
RIPRAP APRON

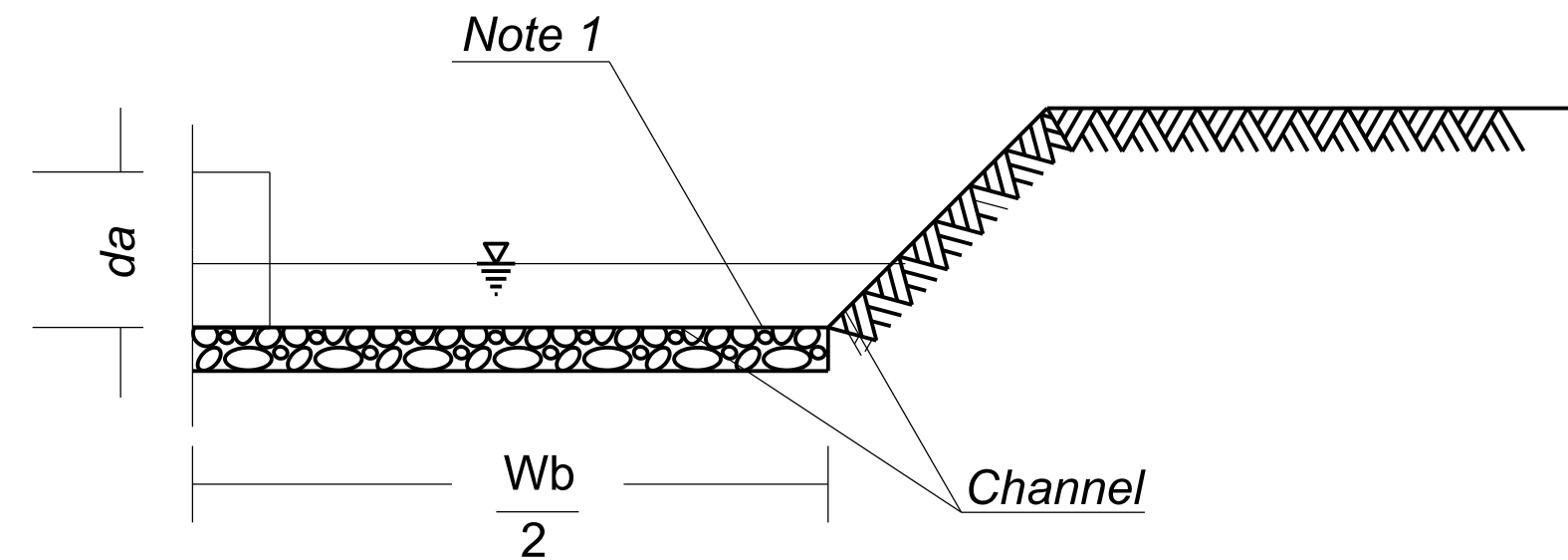
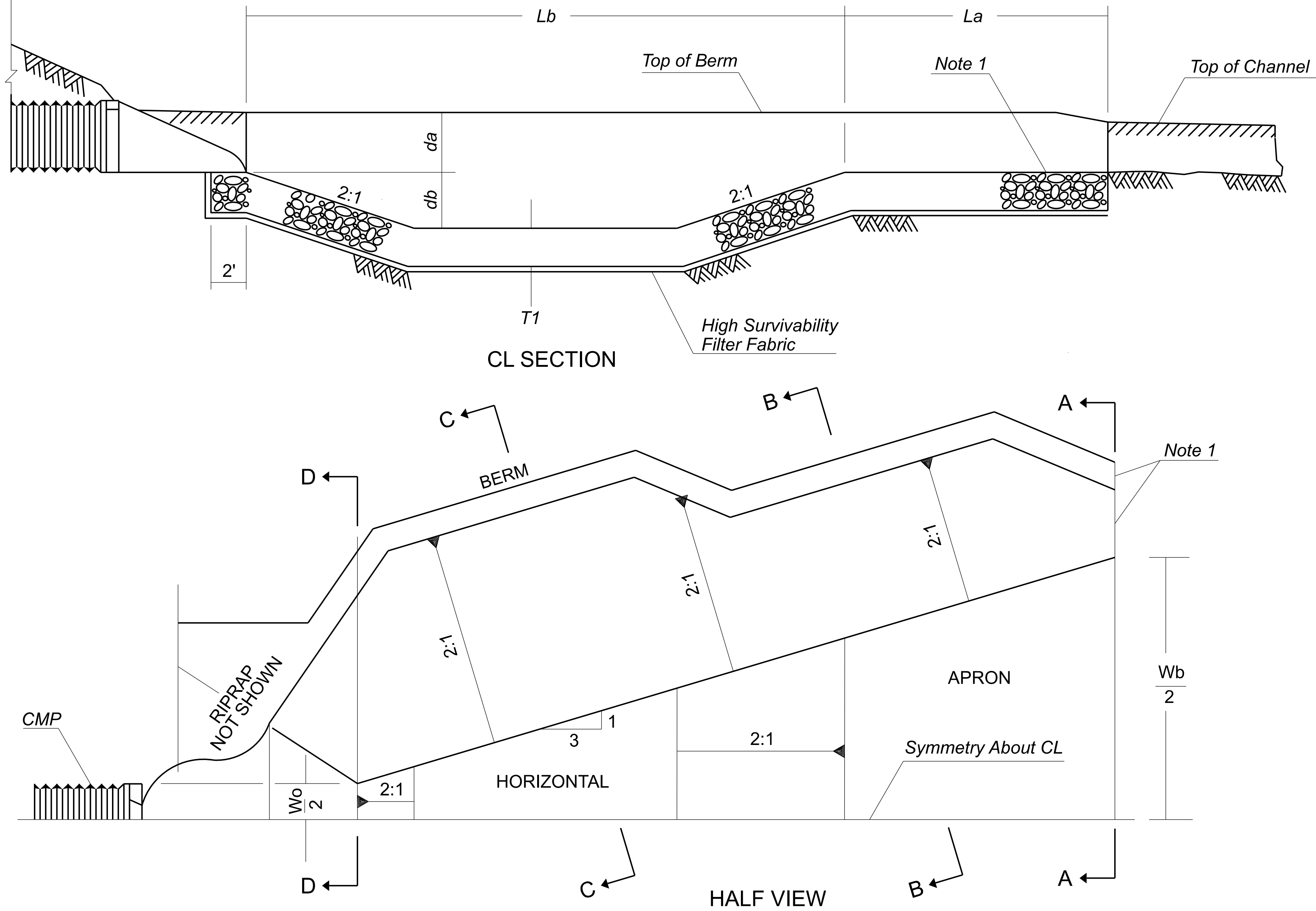


	NAME	DATE
DESIGN	J SPRADLEY	4/26
DRAWN	M STEINER	4/26
CHECKED	E EGGEN	4/26
TEAM LEADER	E. EGGEN	4/26

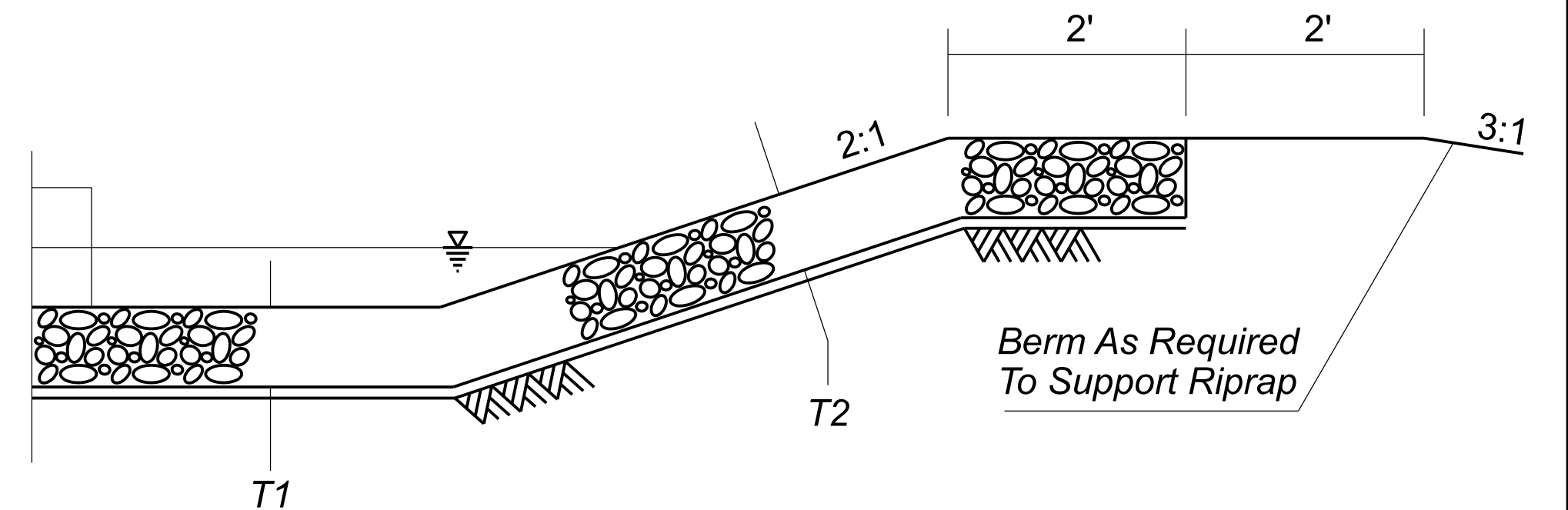
ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SECTION	ROUTE SR 85
	MILEPOST
	STRUCTURE NO.
DETAIL A	

ROUTE SR 85		F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST			ARIZ.	085 MA 004	085-A(210)T	12	30	
			LOCATION QILOTOSA WASH - W THAYER RD					
STRUCTURE NO.		TRACS NO. F0833 01C						___ OF ___

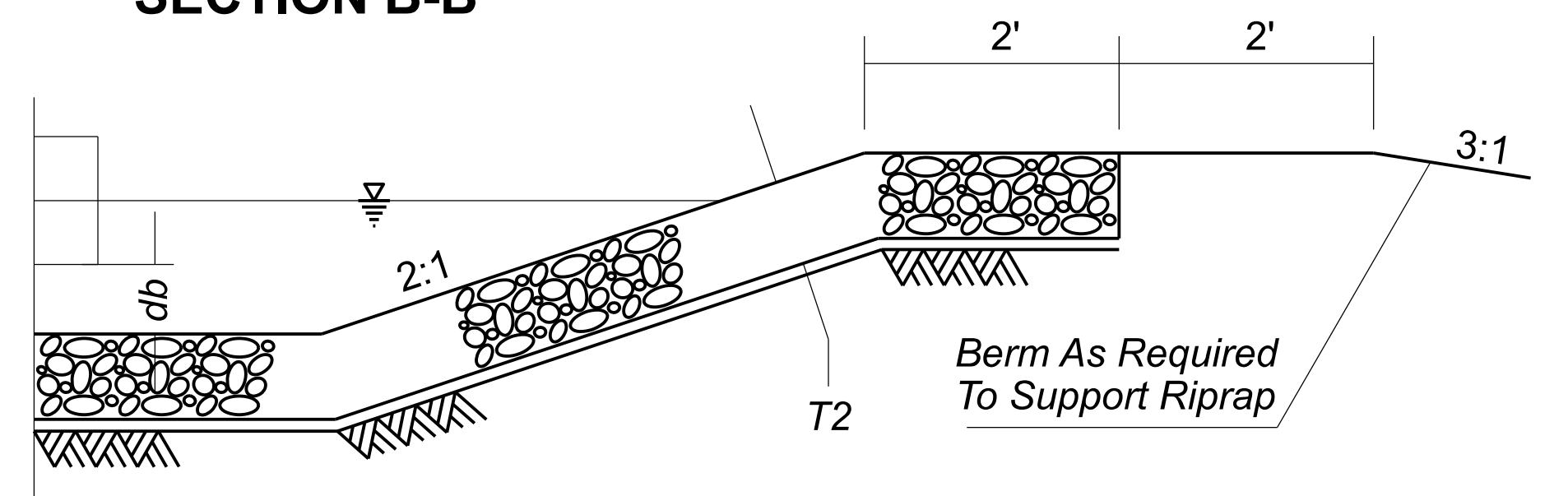
NOTES
1. Warp basin to conform to channel. Top of Riprap in floor of basin shall be at the same elevation or lower than channel bottom at Section A-A



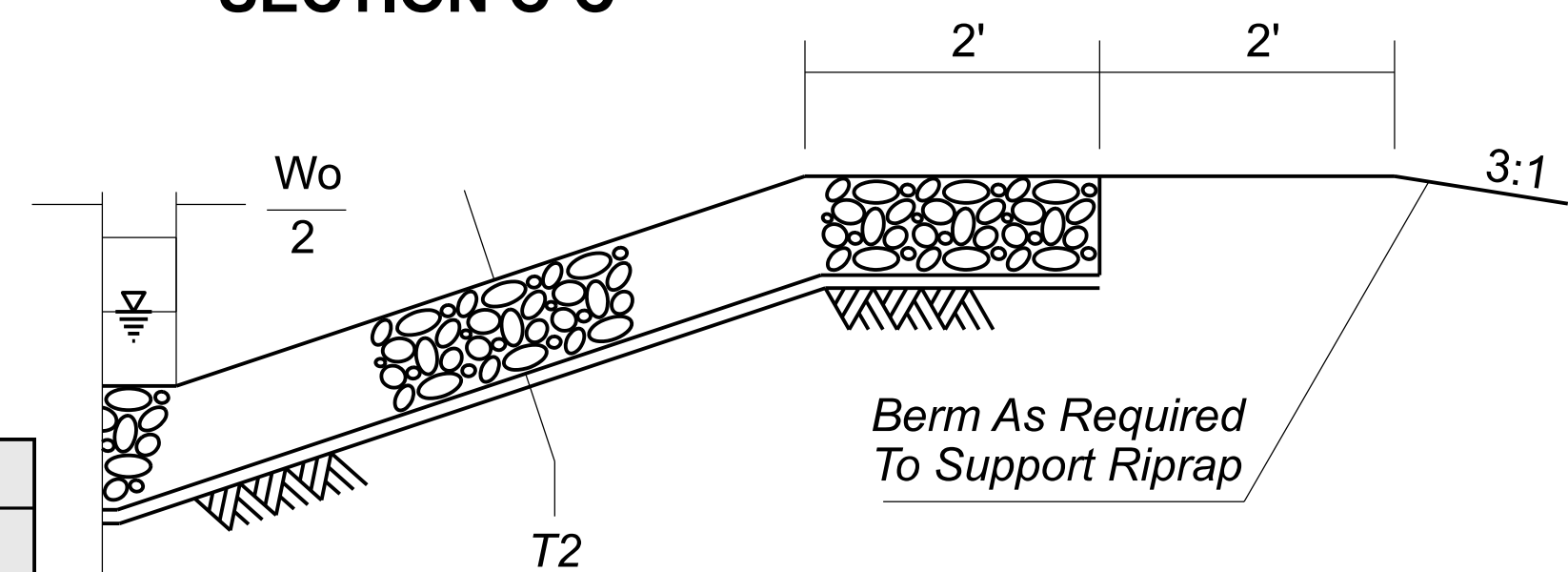
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

DETAIL B
RIPRAP BASIN

RIPRAP BASIN DIMENSIONS & LOCATIONS

CULVERT REFERENCE No.	LOCATION	La ft	Lb ft	Wo ft	Wb ft	t (ft)	da (ft)	db (ft)	D50 (in)	RIPRAP TYPE	RIPRAP EXCAVATION CY	RIPRAP DUMPED CY
4	1960+87	12	48	12	44	2	2	2	12"	Dumped	125	125
5	1976+68	12	48	12	44	2	2	2	12"	Dumped	125	125
TOTAL											250	250

RIPRAP GRADATIONS	
% Passing	D50=12" Sieve Size (in)
100-90	24
85-70	18
50-30	12
15-5	8
5-0	4

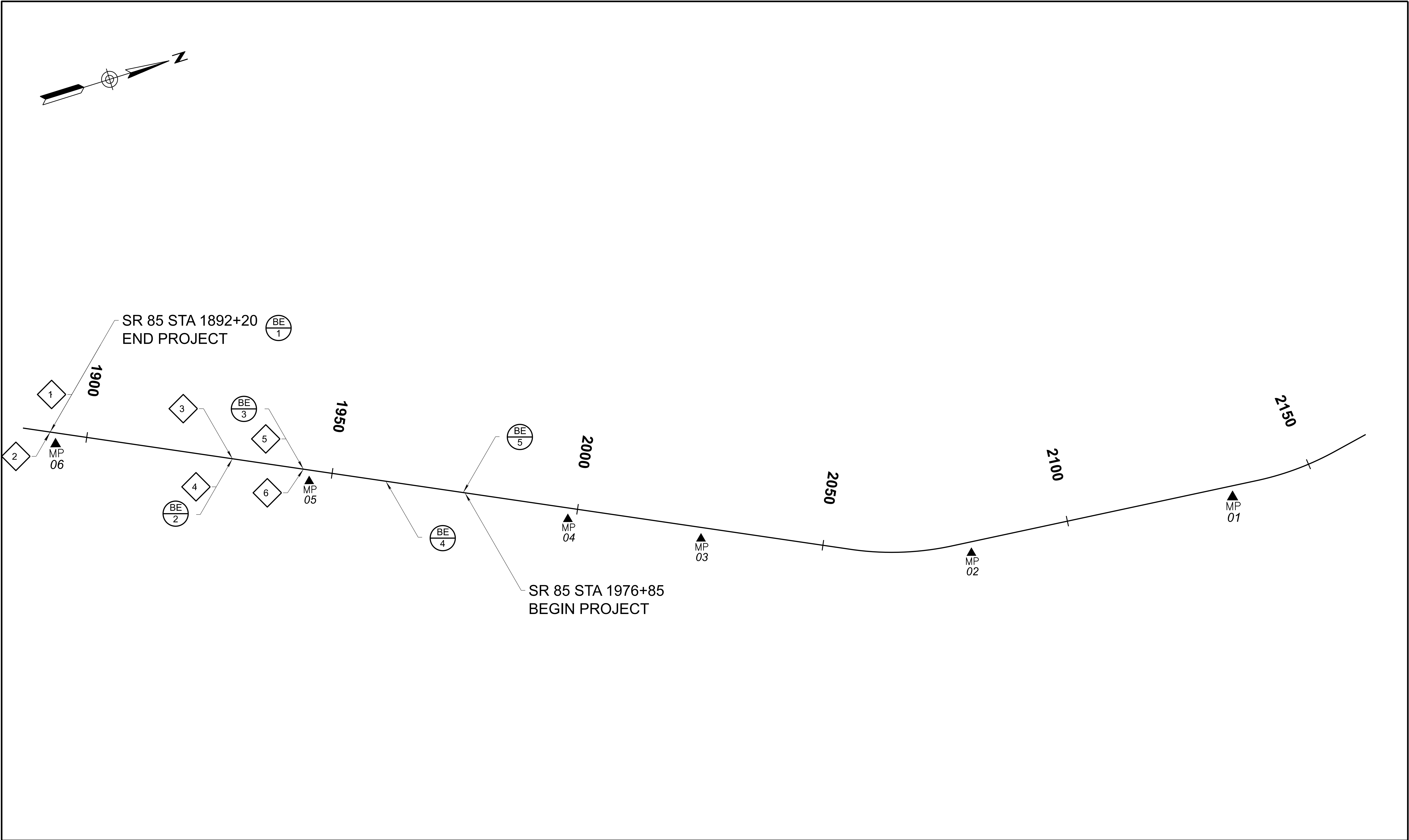


	NAME	DATE
DESIGN	J SPRADLEY	4/26
DRAWN	M STEINER	4/26
CHECKED	E EGGEN	4/26
TEAM LEADER	E. EGGEN	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

DETAIL B

ROUTE SR 85	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 13	TOTAL SHEETS 30	RECORD DRAWING
MILEPOST	LOCATION QILOTOSA WASH - W THAYER RD						SHEET 1 OF 1
STRUCTURE NO.	TRACS NO. F0833 01C						OF

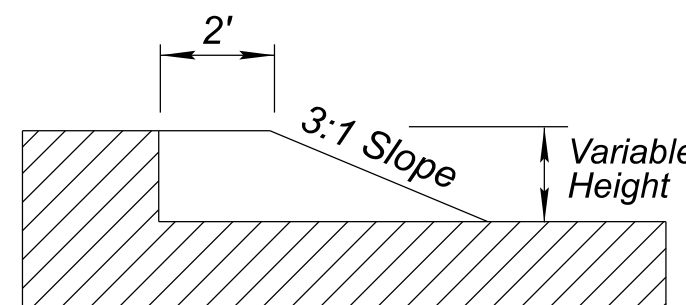


	DESIGN	J SPRADLEY	4/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADWAY DESIGN SECTION	ROUTE	SR 85	F.H.W.A. Arizona Division	STATE	ARIZ.	PROJECT NO.	085 MA 004	FEDERAL ID NO.	085-A(210)T	SHEET NO.	14	TOTAL SHEETS	30	RECORD DRAWING										
	DRAWN	M STEINER	4/26		MILEPOST			LOCATION QILOTOSA WASH - W THAYER RD									SHEET 1 OF 1											
	CHECKED	E EGGEN	4/26		STRUCTURE NO.		TRACS NO. F0833 01C																					
	TEAM LEADER	E. EGGEN	4/26				_____ OF _____																					
						KEYMAP																						

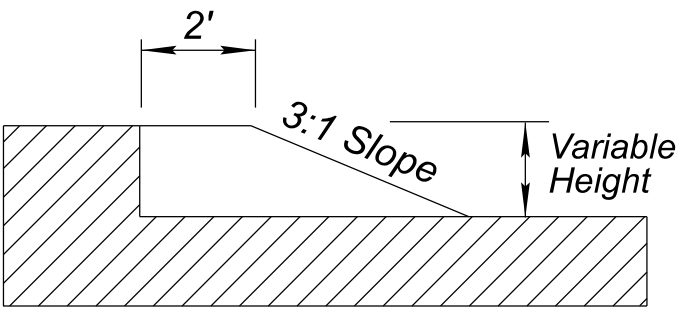
TRAFFIC CONTROL NOTES:

- | | | |
|---|---|--|
| 1. The traffic control plans represent a suggested method for traffic control during construction. The contractor may prepare and submit an alternate traffic control plans for each work activity in this project, to the Engineer for review and approval, two weeks prior to the start of any construction activities (or at the Preconstruction Conference). The alternate traffic control plans submitted by the contractor shall be sealed by a professional civil Engineer registered in the State of Arizona. The traffic control plans shall be in accordance with the requirements of Section 701 of the ADOT Standard Specifications for Road and Bridge Construction, 2021, the requirements of Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD) 2009, the Temporary ADOT Traffic Control Design Guidelines, 2025, the Arizona Supplement to the MUTCD, 2023 and to Subsection 104.04 of the special provisions. No measurement or direct payment will be made for developing the traffic control plans, the cost will be considered as included in the price of the contract bid items. | 13. Type "C" steady-burning yellow lights shall be mounted on all channelization devices during night time construction activities. | 28. The contractor shall place changeable message boards (CMB) one week prior to the start of construction activities, and for the duration of the construction to alert traffic of the upcoming road restrictions. The message to be displayed shall be appropriate for each activity and shall be as approved by the Engineer. The CMB should be visible from 1/2 mile under both day and night conditions. The message should be designed to be legible from a minimum distance of 600 feet for nighttime conditions and 800 feet for normal daylight conditions. CMB shall be offset to a minimum of 8 feet from the nearest traffic lane, or 6 feet if located behind temporary concrete barriers. For each CMB used on the project but not located behind guardrail in a protected location, the contractor shall position ten barricades Type 2 around the CMB. Each barricade shall be with an affixed Type C steady-burning light. No more than two message displays should be used within any message cycle. Each message should convey a single thought and should be as brief as possible. The flash rate should allow the entire message cycle to be read at least twice at the posted speed limit. Message display shall consist of no more than three lines of text and no more than eight characters per line. CMB shall conform to the requirements of Section 2L.01 of the MUTCD, 2023, and to ADOT Temporary Traffic Control Design Guidelines, 2025. |
| 2. Adjustments to the details of these traffic control plans and requirements may be necessary due to construction activities, as approved by the Engineer. | 14. The contractor shall utilize vertical panels or barricades Type 2 for channelization devices. | 29. The contractor shall install signing for Double Fines in work zones. Double Fines signs placement shall conform to Figure SA-12 of the ADOT Traffic Control Design Guidelines, 2025. Such signing shall only be in place during working periods when workers are present, in accordance with the signing guidelines for double fines in work zones. |
| 3. All existing signs in conflict with the construction signs shall be removed, relocated, or covered in place, as directed by the Engineer, at the contractor's expense. The contractor shall store and reinstall items which have been removed or relocated in a manner approved by the Engineer at no additional cost to the Department. The contractor shall replace any signing damaged by his operation at his expense. | 15. Channelization devices vertical panels or barricades Type 2 shall be placed 20 feet on center on tapers and 40 feet on center on tangents. | 30. Temporary portable traffic control signals shall be in accordance with the requirements of Sections 4D.11 and 6L.01 of the Manual on Uniform Traffic Control Devices, 2023. |
| 4. All construction signs shall have black letters on fluorescent orange background, except as otherwise indicated. | 16. Temporary concrete barrier and temporary concrete barrier markers shall be in accordance with the requirements of Standard Drawings M-32 and M-33 of the current ADOT Signing and Marking Standard Drawings. The contractor may install the barrier markers Type BM-1 (white) or BM-2 (yellow) either consistently on the sides or consistently on the top of the barrier and shall be installed at 20 feet spacing. The cost for the barriers markers will be considered as included in the price of the temporary concrete barrier contract bid item. | 31. Before installation, the contractor shall prepare and submit proposed timing for portable temporary traffic signals to the Engineer for approval. |
| 5. The retroreflective sheeting on all construction signs and delineation for impact attenuators shall meet the criteria established for Type VIII, IX, or XI sheeting in accordance Section 1007 "RETROREFLECTIVE SHEETING" of the ADOT Standard Specifications for road and bridge construction, 2021, and as specified in Section 380 "Sign Materials" of the current ADOT Traffic Engineering Guidelines and Processes. All orange signs shall have fluorescent sheeting. | 17. For temporary concrete barrier setups off the roadway, the contractor shall ensure the earthen material or aggregate base under the temporary concrete barrier and between the barrier and the roadway is 10:1 or flatter. There shall be no measurement or payment for the placement, maintenance, and removal of earthen material or aggregate base in connection with these setups. | 32. Portable temporary traffic signals shall control the flow of traffic in one direction at a time. Adequate all-red time shall be provided to allow traffic from one end to traverse and clear the opposing end prior to displaying an opposing green. |
| 6. All advance warning signs that are to remain for the duration of the project shall be mounted on embedded posts, light poles or existing utility poles. For signs installed on embedded posts, sign mounting height is a minimum of 7 feet as measured from the bottom of the sign to the near edge of the pavement. All other short-term advance warning signs used for individual activities may be installed on portable sign stands (Spring Type or rigid) at least 5 foot above the pavement except as otherwise approved by the sign manufacturer to meet the requirement of MASH (AASHTO Manual for Assessing Safety Hardware). | 18. In-Line Attenuator shall meet the Special Provisions requirements of the Temporary Impact Attenuation Device (Energy Absorbing Terminal) and shall meet the requirements NCHRP 350 Test Level 3 for a speed 62 miles per hour. | 33. Where no closure is necessary but where there is construction alongside the roadway on SR 85 SB and NB, the contractor shall place 36 inch x 36 inch "ROAD WORK AHEAD" and "SHOULDER WORK AHEAD" signing as approved by the Engineer to alert the public to the construction activities. |
| 7. The nearest edge or corner of a sign shall be approximately 12 feet from the nearest edge of pavement or 6 feet behind guardrail, or 2 feet behind a concrete barrier for all signs mounted on embedded posts. | 19. If warranted, temporary pavement marking shall be Waterborne Type I Pavement Marking (Painted) a minimum of 15 mill wet (0.015 inch). When no longer required, temporary pavement marking shall be removed. | 34. The contractor shall abide by the traffic control requirements contained in Subsection 104.04 - Maintenance of Traffic and the requirements of the Special Provisions. |
| 8. All temporary construction signs shall not be displayed to traffic more than 24 hours prior to the actual start of construction work activities and removed during the one-hour period immediately following the completion of the work construction activities, unless otherwise as approved by the Engineer. These signs may be installed sooner but they must be covered or turned away from traffic. The cost for covering or turning the signs will be considered as part of the signs installation cost. | 20. Stripe obliteration if necessary, it shall be accomplished by approved methods. Painting over striping, removal of pavement, and overlaying pavement does not constitute stripe obliteration. | 35. The contractor shall perform work in the most safe, efficient and expeditious manner consistent with the traffic plans, the Special Provisions and as approved by the Engineer. |
| 9. Any adjustment to the warning signs spacing deemed necessary due to construction site geometric condition, shall be approved by the Engineer. | 21. 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 or permanent pavement markings. The roadway surface shall be dry. | 36. All drawings are schematic only and not to scale. |
| 10. When traffic control items are not in use, the contractor shall remove these items to a location at least 30 feet from the edge of the paved roadway. This includes all supports without sign panels. Any sign which are not in use but which cannot be moved at least 30 feet from the edge of the roadway shall be covered, so the public cannot read the legend. | 22. At all times, the contractor shall maintain at least one lane of traffic open on SR 85 roadway, and shall maintain traffic on paved surfaces. No holidays, night or weekend work are allowed unless approved by the Engineer. | |
| 11. Speed limit signing is preliminary and is subject to review and change by the Engineer as dictated by field conditions. | 23. The contractor shall provide uniformed officer with vehicle during the following work activities: installation and removal of advance warning signs, temporary concrete barrier, and during all other construction activities as approved by the Engineer. | |
| 12. Type "A" low-intensity flashing warning lights shall be required on all construction signs except the "End Road Work Thank you" sign. Flags shall be mounted on top of all construction signs except the "End Road Work Thank You" sign. | 24. Temporary Traffic Control signs shall not block or obstruct driveways or turnouts, sight distance or line of sight. | |
| | 25. The contractor shall position a high level flag tree at each flagger station on SR 85 where a flagger stops traffic. Also, the contractor shall position five cones along the yellow centerline striping preceding each flagger station. | |
| | 26. Flaggers shall use STOP/SLOW paddles with flashing lights on the STOP and SLOW faces per Sections 6D.04 and 6D.05 of the Manual on Uniform Traffic Control Devices, 2023. There will be no measurement or payment for the STOP/SLOW paddles with flashing lights, the cost of will be considered as included in the price of the contract bid Item 7016075. | |
| | 27. The contractor shall conduct construction activities during daytime hours, unless otherwise approved by the Engineer. If the Engineer approves night work, the contractor shall provide adequate portable lighting to perform any nighttime operations. No measurement or direct payment will be made for furnishing the portable lighting, the cost will be considered as included in the price of the contract bid items. | |
- Traffic Note:

This variable depth fillet detail shall be used, when the height of the drop-off alongside the pavement is greater than 2 inches and the condition is present during non-working hours. The material used to build a fillet should be earthen material and/or aggregate base as approved by the Engineer. No measurement or direct payment will be made for constructing and removing the fillet, the cost will be considered as included in the price of the contract bid items.



Traffic Note:
This variable depth fillet detail shall be used, when the height of the drop-off alongside the pavement is greater than 2 inches and the condition is present during non-working hours. The material used to build a fillet should be earthen material and/or aggregate base as approved by the Engineer. No measurement or direct payment will be made for constructing and removing the fillet, the cost will be considered as included in the price of the contract bid items.



VARIABLE DEPTH FILLET DETAIL

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING	
	DESIGN	T. KAMAL	4/26		SR 85		ARIZ.	085 MA 004	085-A(210)T	15	30		
	DRAWN	T. KAMAL	4/26		TRAFFIC CONTROL GENERAL NOTES	MILEPOST	LOCATION QIOTOSA WASH - W THAYER RD						SHEET 1 OF 11
	CHECKED	S. VONG	4/26			STRUCTURE NO.	TRACS NO. F0833 01C						___ OF ___
	TEAM LEADER	R. GLUSCEVIC	4/26										

Activity No.	MAINTENANCE AND PROTECTION OF TRAFFIC		
	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	COMMENTS
1	Install advance warning traffic control signs, and changeable message boards to alert traffic of the upcoming road restriction.	Traffic control for placing advance construction warning traffic control signs shall conform to the requirements of Detail "A" of this project and in compliance to the requirements of Figure TA-1 of the Manual on Uniform Traffic Control Devices, 2023. All changeable message boards placement detail shall conform to the requirements of Figure SA-15 of the ADOT Temporary Traffic Control Design Guidelines, 2025.	Advance warning signs for long duration shall be mounted on embedded posts and shall remain for the duration of the project. Other advance warning signs for other activities for short duration, shall be mounted on spring or rigid posts. Changeable message boards shall be displayed one week prior to start of construction. The contractor shall coordinate the messages for each work activity with the Engineer. Provide uniformed officer with vehicle and a truck mounted attenuator during installation and removal of the traffic control devices as approved by the Engineer.
2	Place temporary concrete barriers. Extend existing concrete box culverts. Remove existing guardrail. (See project plans for locations).	Traffic control plans to extend existing concrete box culverts, and remove existing guard rail shall conform to the requirements of Details "B1" and "B2" of this project and in compliance with the requirements of Figure TA-10 of the Manual on Uniform Traffic Control Devices, 2023. Traffic control plans for place and remove temporary concrete barriers shall conform to the requirements of Figure SA-3 of the ADOT Temporary Traffic Control Design Guidelines, 2025.	Provide uniformed officer with vehicle and a truck mounted attenuator during placement and removal of the temporary concrete barriers and other traffic control devices as approved by the Engineer. Reduce speed limit to 45 mph. Channelization devices shall be barricades Type 2.
3	Place temporary concrete barriers. Extend existing concrete box culverts. Remove existing guardrail. (See project plans for locations).	Traffic control plans to extend existing concrete box culverts, and remove existing guard rail shall conform to the requirements of Details "C1" and "C2" of this project and in compliance with the requirements of Figure TA-12 of the Manual on Uniform Traffic Control Devices, 2023. Traffic control plans for place and remove temporary concrete barriers shall conform to the requirements of Figure SA-3 of the ADOT Temporary Traffic Control Design Guidelines, 2025.	Provide temporary traffic signals, as approved by the Engineer. Provide uniformed officer with vehicle and a truck mounted attenuator during placement and removal of the temporary concrete barriers and other traffic control devices as approved by the Engineer. Reduce speed limit to 25 mph.
4	Construct roadway berm embankment at the new box culverts' extensions.	Traffic control plans for construct roadway berm embankment shall conform to the requirements of Details "B1" and "B2" of this project and in compliance with the requirements of Figure TA-10 of the Manual on Uniform Traffic Control Devices, 2023. Traffic control plans to remove the temporary concrete barriers after the roadway berm embankment work has been completed, shall conform to the requirements of Figure SA-3 of the ADOT Temporary Traffic Control Design Guidelines, 2025.	The contractor shall construct the roadway berm embankment immediately after the completion of each existing box culvert extension. The contractor shall not remove the temporary concrete barriers until the roadway berm embankment work has been completed. Provide uniformed officer with vehicle and a truck mounted attenuator during removal of the temporary concrete barriers and other traffic control devices as approved by the Engineer. Reduce speed limit to 45 mph. Channelization devices shall be barricades Type 2.
5	Remove and replace asphaltic concrete.	Traffic control plans for remove and replace asphaltic concrete shall conform to the requirements of Details "D1" and "D2" of this project and in compliance with the requirements of Figure SA-3 of the ADOT Temporary Traffic Control Design Guidelines, 2025.	Channelization devices shall be vertical panels. Provide uniformed officer with vehicle and a truck mounted attenuator during removal and replacement of asphaltic concrete work, as approved by the Engineer. Reduce speed limit to 25 mph.
6	Place temporary and final pavement marking. Place ground - In Rumble Strips. Seeding.	Traffic control plans for placing pavement marking and rumble strips shall conform to the requirements of Figure SA-19A of the ADOT Temporary Traffic Control Design Guidelines, 2025. Traffic control plans for seeding operation shall conform to the requirements of Figure TA-4 of the Manual on Uniform Traffic Control Devices, 2023	Final thermoplastic pavement marking shall be placed 30 days after application of the temporary waterborne Type 1 pavement marking (Paint). Provide changeable message boards during pavement markings placement work. Provide uniformed officer with vehicle to control speed during working hours as approved by the Engineer. Provide Truck Mounted Attenuator in advance of the work zone during pavement markings placement work, as approved by the Engineer. Reduce speed limit to 25 mph.

TRAFFIC CONTROL NOTES:

1. The order of construction activities does not constitute a sequence of construction.
2. Any modification to the traffic control plans shall require review and approval of the Engineer.
3. The contractor shall perform work in the most safe, efficient and expeditious manner consistent with the project plans, special provisions and the Engineer's approval.



	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

MAINTENANCE OF TRAFFIC
CONSTRUCTION PHASING ACTIVITIES

ROUTE SR 85	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST		ARIZ.	085 MA 004	085-A(210)T	16	30	
LOCATION QIOTOSA WASH - W THAYER RD							SHEET 2 OF 11
STRUCTURE NO.	TRACS NO. F0833 01C						___ OF ___

ACTIVITY 1

INSTALL CHANGEABLE MESSAGE BOARDS
AND ADVANCE EMBEDDED WARNING SIGNS

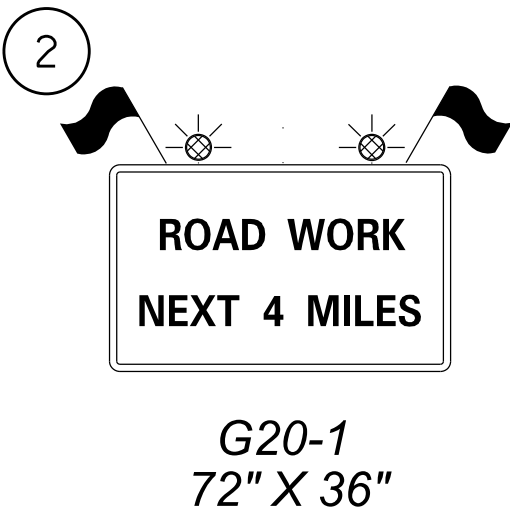
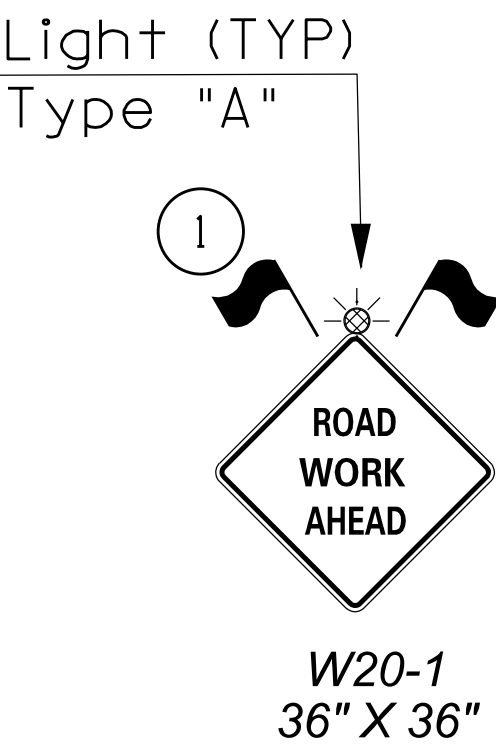
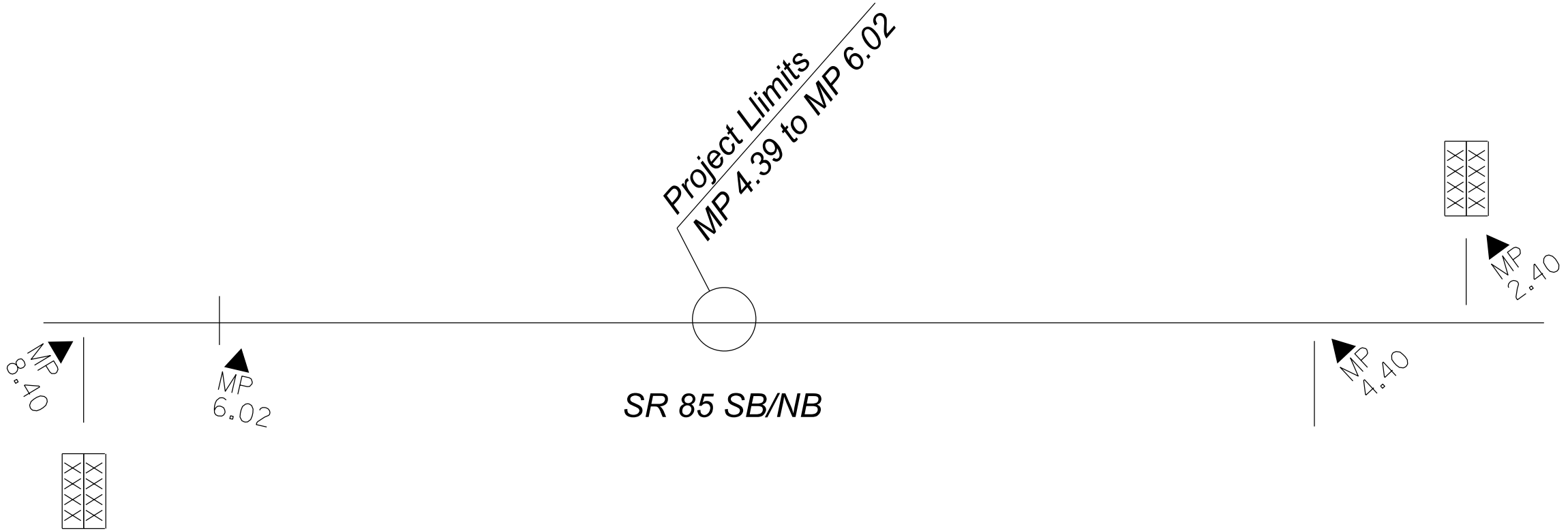
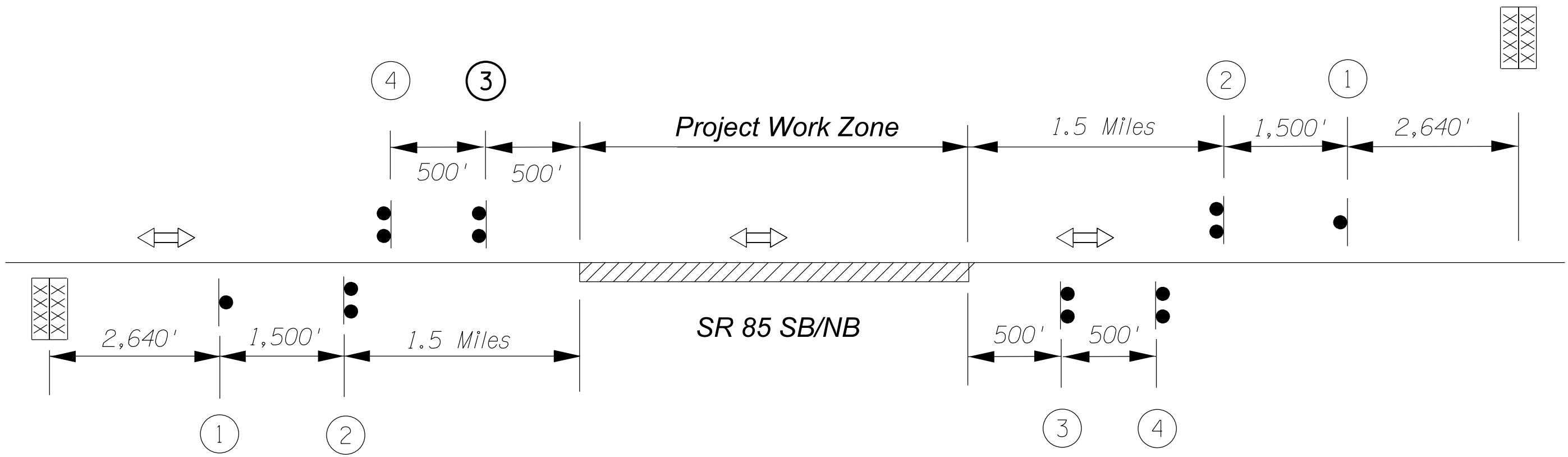
7 Days before closure

ROAD WORK AHEAD	DATE TO DATE
-----------------------	--------------------

Through project duration

ROAD WORK AHEAD	LANE CLOSED AHEAD
-----------------------	-------------------------

Changeable Message Board



Traffic Notes:

1. All turnouts within the work zones shall have a W20-1 "Road Work Ahead" sign (36"x36").
2. Changeable message boards shall be displayed on SR 85 SB/NB at the locations shown in Detail "A" for one week duration prior to start of construction. Changeable message boards shall be displayed for the durations of all construction activities numbers 2, 3, 4, and 5.
3. Changeable message board's message may be modified as approved by the Engineer.
4. Embedded advanced warning signs shall be in place for the duration of the project construction activities.

SIGN LEGEND:

- Sign on ine embedded post
- Sign on two embedded posts
- Changeable message board
Coordinate message with the Engineer
- Type A Flashing Warning Light

DETAIL A

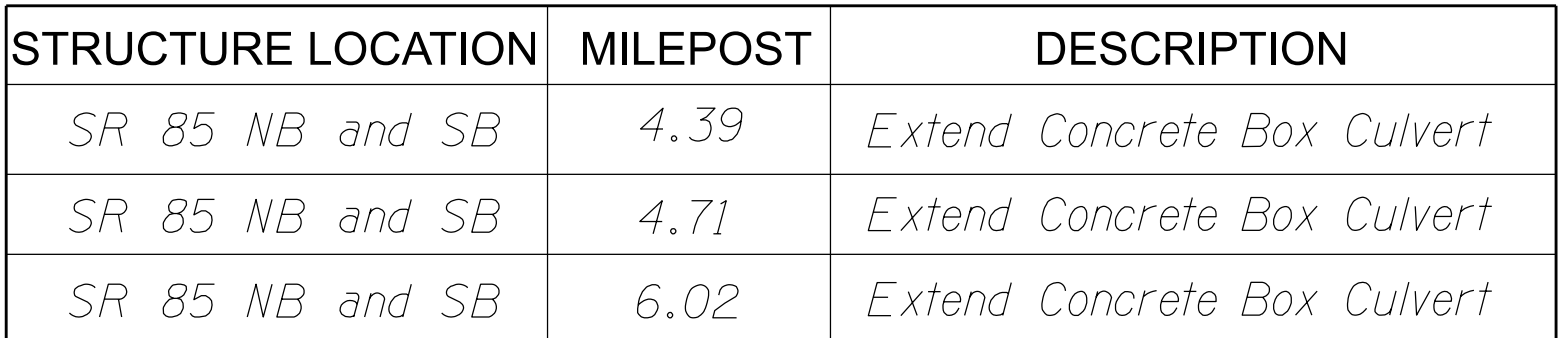
ADVANCE EMBEDDED WARNING SIGNS



	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION
TRAFFIC CONTROL
EMBEDDED ADVANCE WARNING SIGNS

ROUTE SR 85	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 17	TOTAL SHEETS 30	RECORD DRAWING
MILEPOST	LOCATION QIOTOSA WASH - W THAYER RD						SHEET 3 OF 11
STRUCTURE NO.	TRACS NO. F0833 01C						OF



Extend Existing Concrete Box Culverts, and Construct Roadway Berm Embankment, NB/SB

1. *The contractor shall construct the roadway berm embankment immediately after the completion of each existing box culvert extension and prior to removal of the temporary concrete barriers.*
2. *The Above lane closure layout is typical for northbound lane closures. For southbound lane closures, the above lane closure layout shall be mirrored with appropriate lane closure signage and traffic control devices.*
3. *Changeable message board's messages may be modified as directed by the Engineer.*

Lane Closure To Extend Concrete Box Culverts, and Construct Roadway Berm Embankment

	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL DETAIL

ROUTE
SR 85

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

STATE

ARIZ.

PROJECT NO. _____

083 MAR 004

FEDERAL ID NO. _____

00J-A(210)1

SHEET NO.	TOTAL SHEETS

18	30
----	----

RECOR

--	--

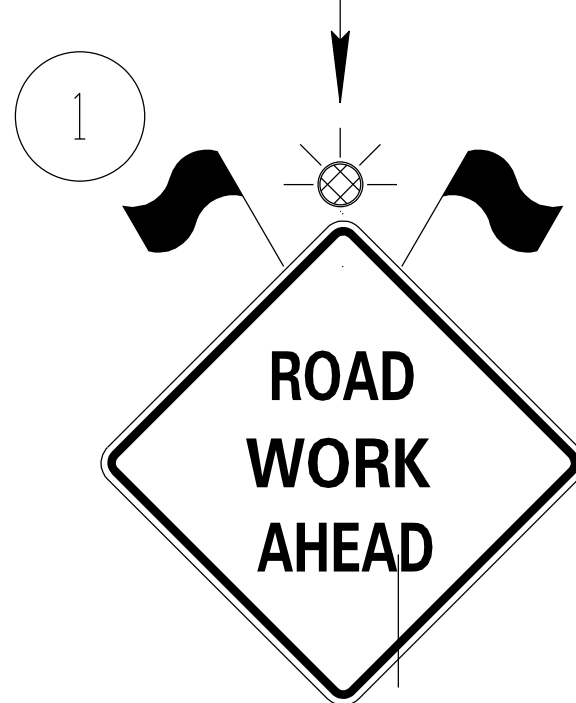
DRAWING

SHEET 4 OF 11

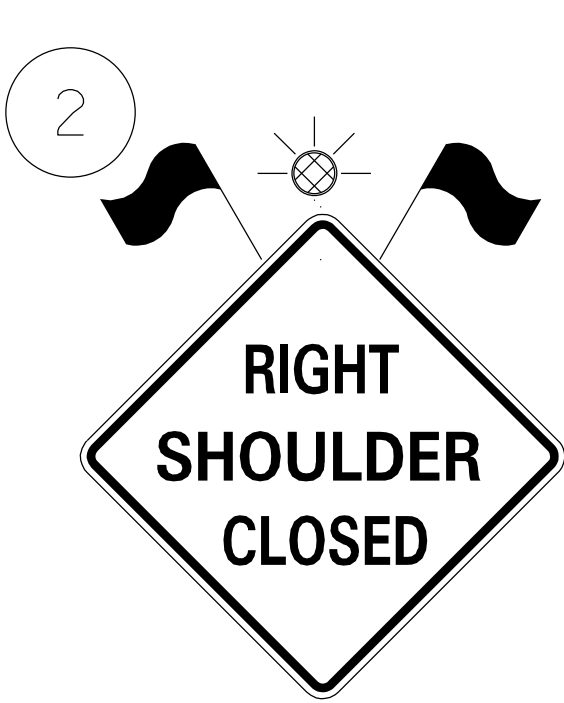
TRACS NO. F0833 01C

OF

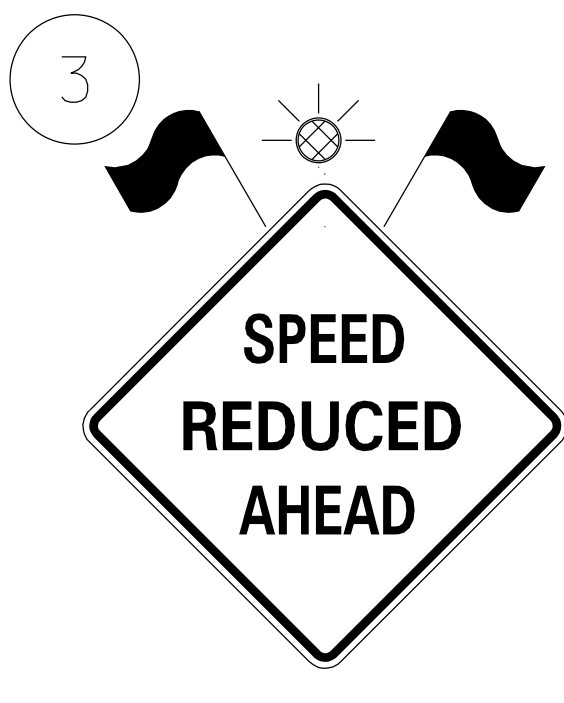
Light (TYP)
Type "A"



W20-1
36"x36"



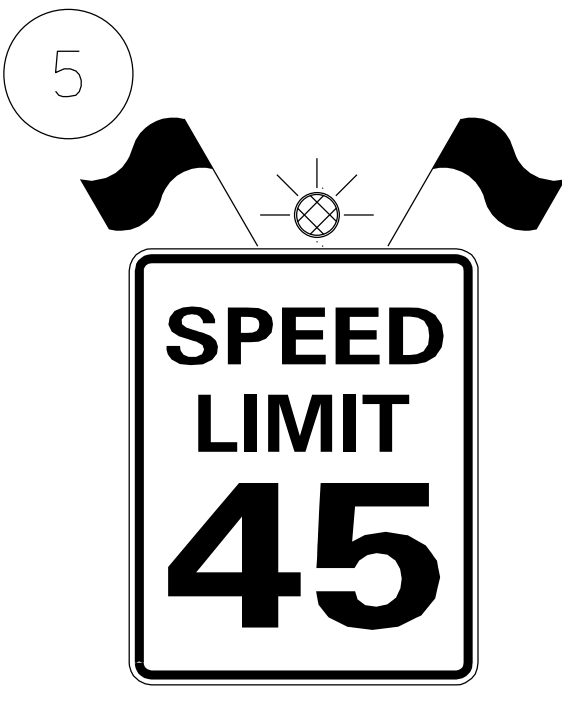
W21-5aR
36"x36"



W3-5aAZ
36"x36"



R2-1 (55)
36"x48"
Black on White



R2-1 (45)
36"x48"
Black on White



G20-2AZ
48"x36"



R2-1 (65)
36"x48"
Black on White

DETAIL B2

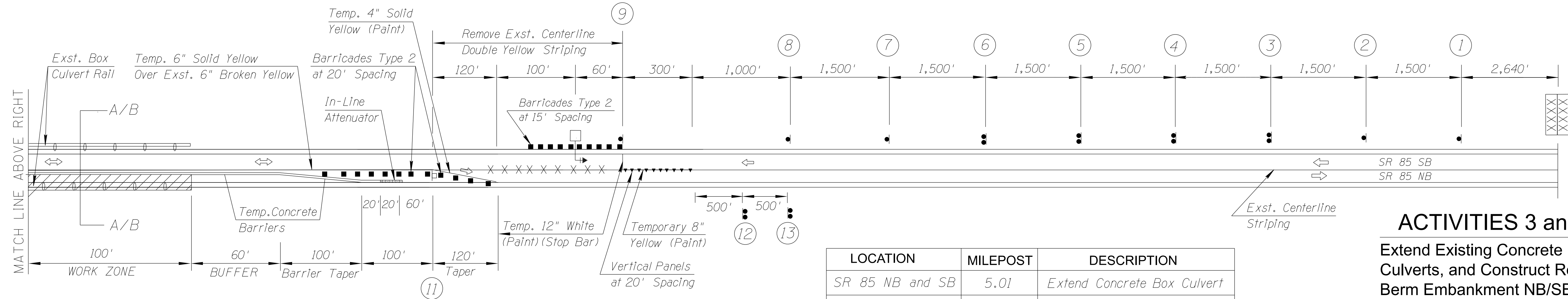
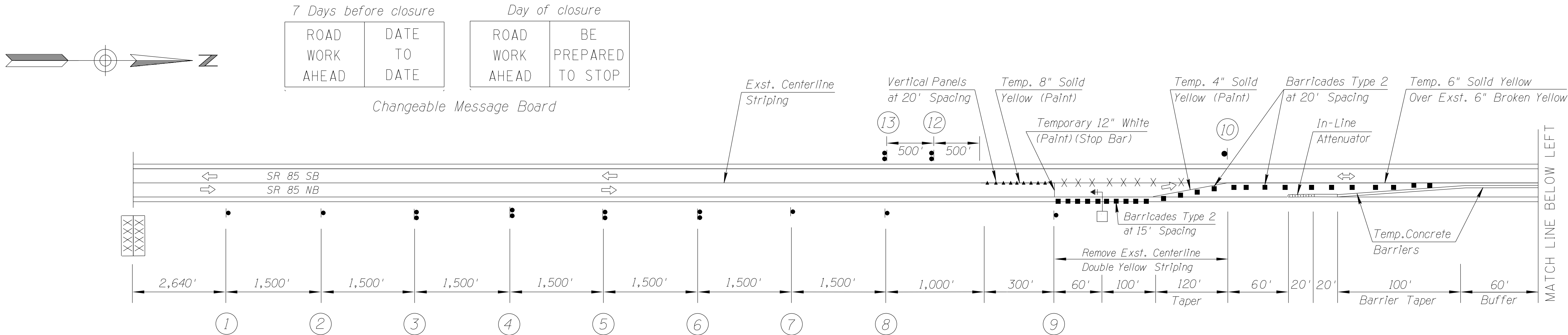


	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL DETAIL

ROUTE SR 85	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST		ARIZ.	085 MA 004	085-A(210)T	19	30	
LOCATION QIOTOSA WASH - W THAYER RD							SHEET 5 OF 11
STRUCTURE NO.	TRACS NO. F0833 01C						___ OF ___



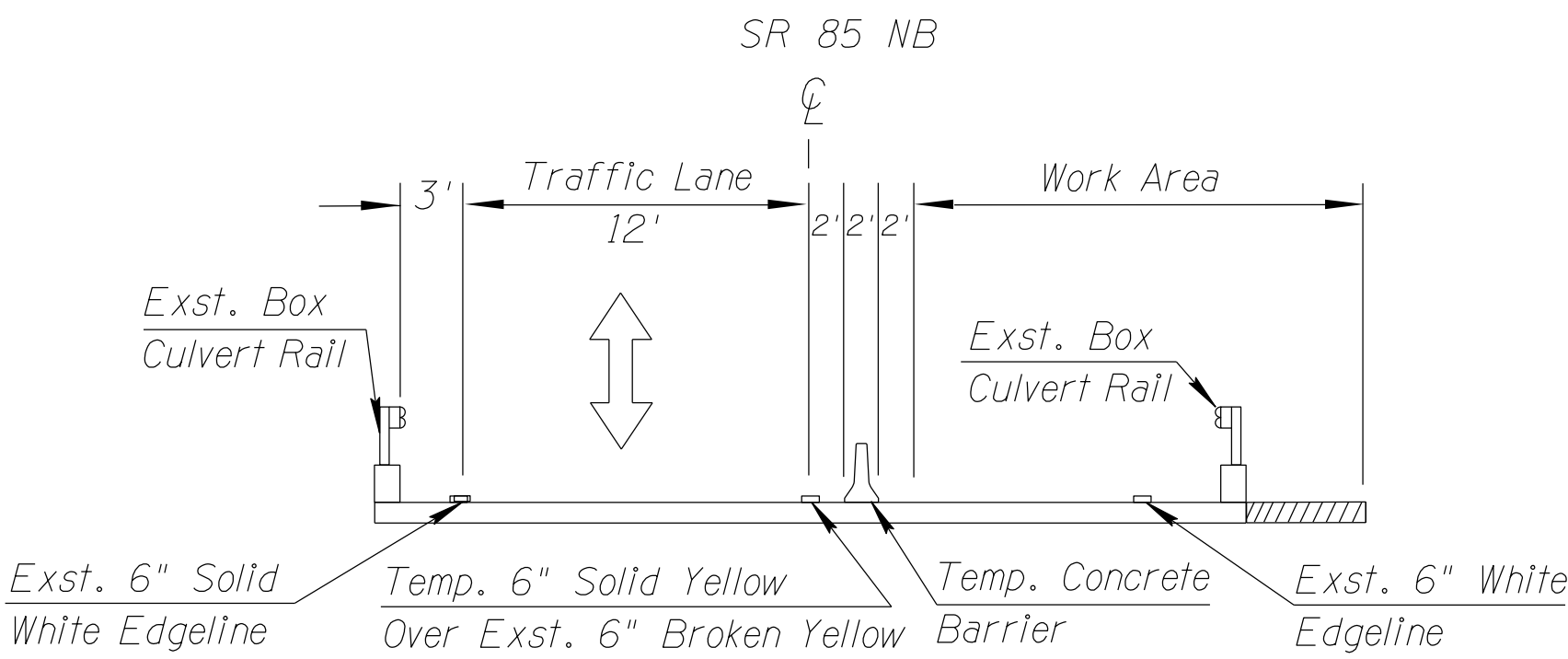
LOCATION	MILEPOST	DESCRIPTION
SR 85 NB and SB	5.01	Extend Concrete Box Culvert
SR 85 NB and SB	5.30	Extend Concrete Box Culvert

ACTIVITIES 3 and 4

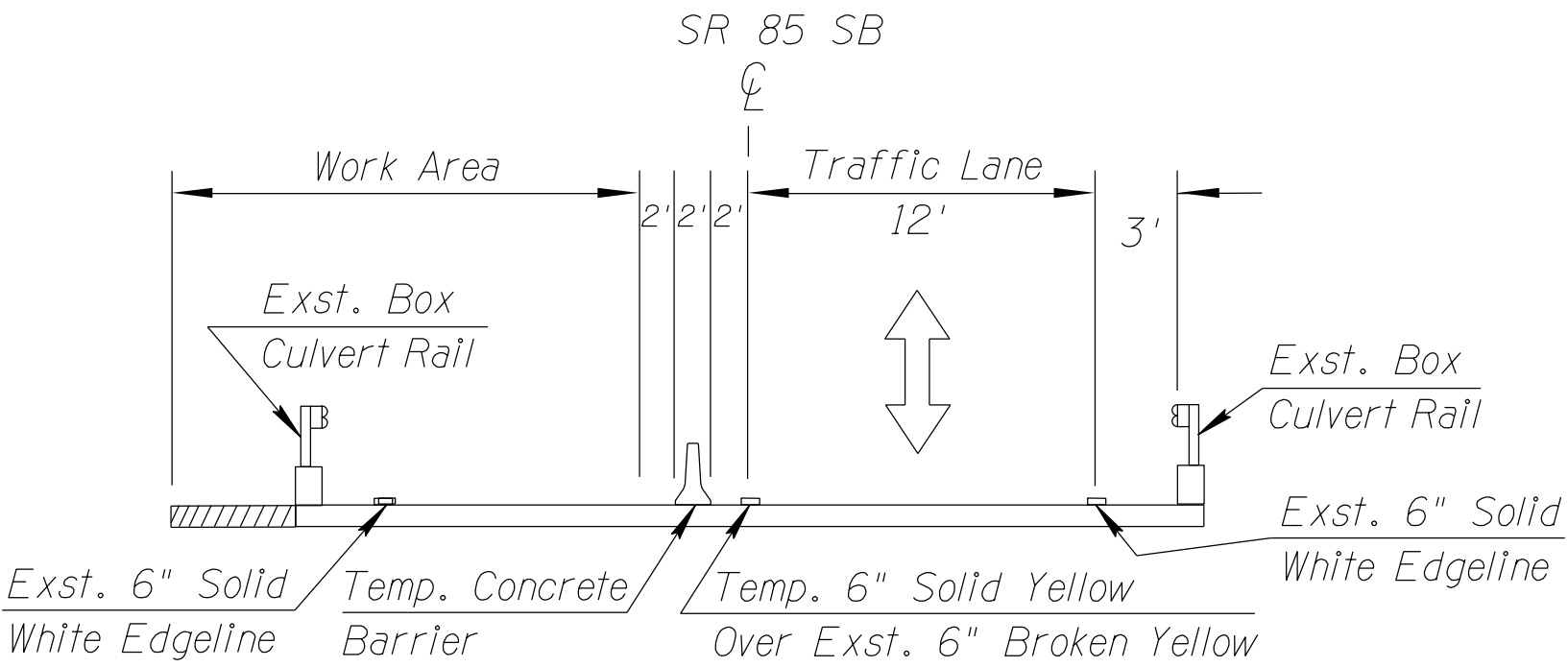
Extend Existing Concrete Box Culverts, and Construct Roadway Berm Embankment NB/SB

SYMBOL LEGEND:

	Sign on one Embedded Post (with warning light Type "A")
	Sign on Two Embedded Posts (with warning light Type "A")
	Sign in a Rigid Stand
	Barricade Type 2
	Direction of Travel
	Temporary Concrete Barrier See Std dwg C-3, M-32 & M-33
	In-Line Attenuator
	Changeable Message Board
	Work Area
	Temporary Traffic Signal
	Stripe Obliteration



SECTION A-A



SECTION B-B

TRAFFIC NOTES:

- The contractor shall construct the roadway berm embankment immediately after the completion of each existing box culvert extension, and prior to removal of the temporary concrete barriers.
- The Above lane closure layout is typical for northbound lane closures. For southbound lane closures, the above lane closure layout shall be mirrored with appropriate lane closure signage and traffic control devices.
- Changeable message board's messages may be modified as approved by the Engineer.

DETAIL C1

Lane Closure To Extend Concrete Box Culverts



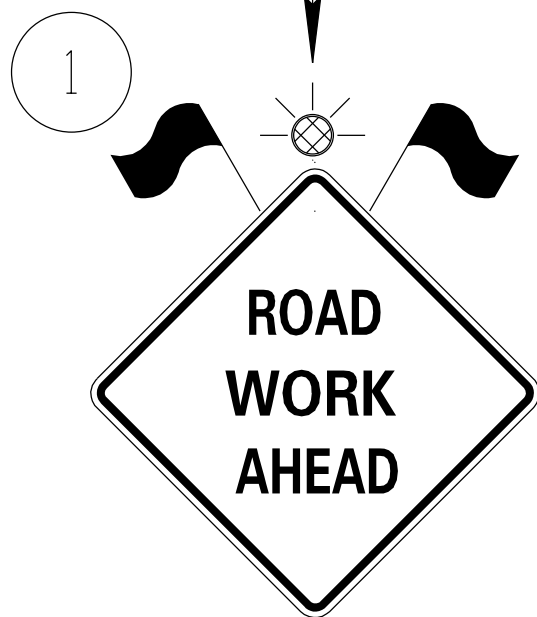
	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

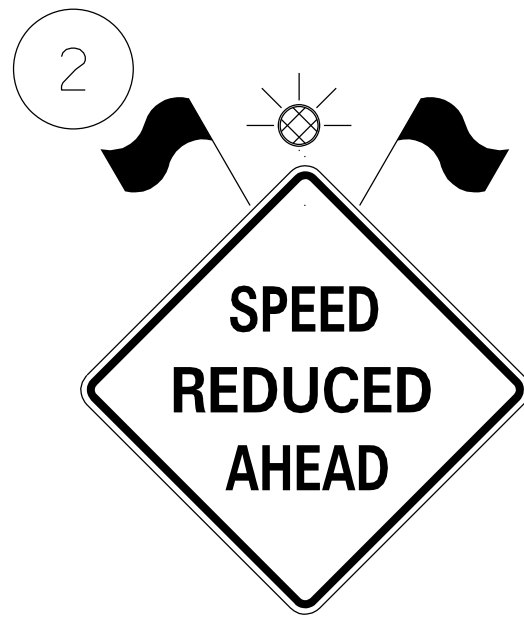
TRAFFIC CONTROL DETAIL

ROUTE SR 85	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 20	TOTAL SHEETS 30	RECORD DRAWING March, 2026
MILEPOST	LOCATION QIOTOSA WASH - W THAYER RD						SHEET 6 OF 11
STRUCTURE NO.	TRACS NO. F0833 01C						OF

Light (TYP)
Type "A"



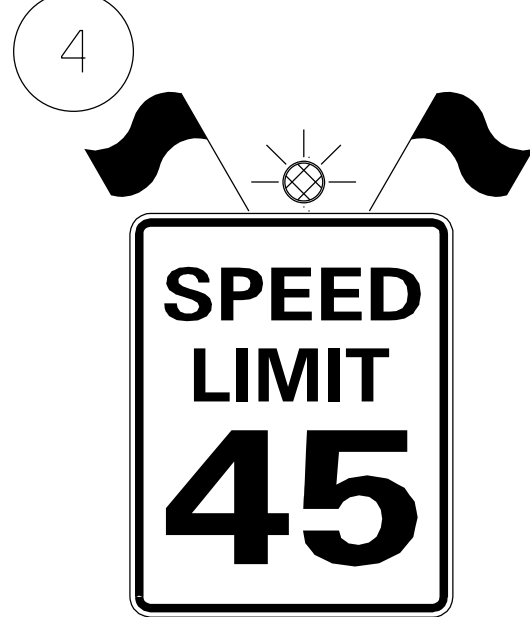
W20-1
36"x36"



W3-5aAZ
36"x36"



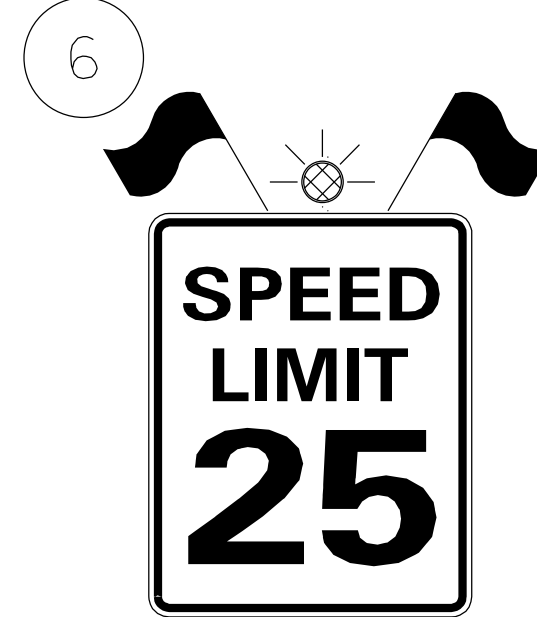
R2-1 (55)
36"x48"
Black on White



R2-1 (45)
36"x48"
Black on White



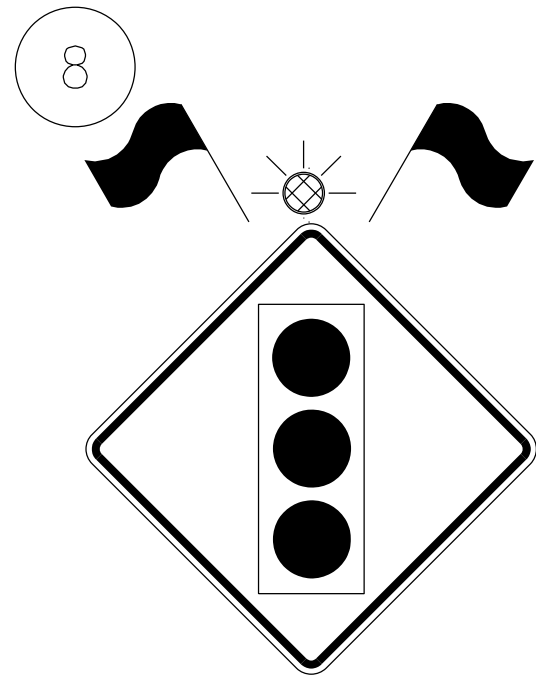
R2-1 (35)
36"x48"
Black on White



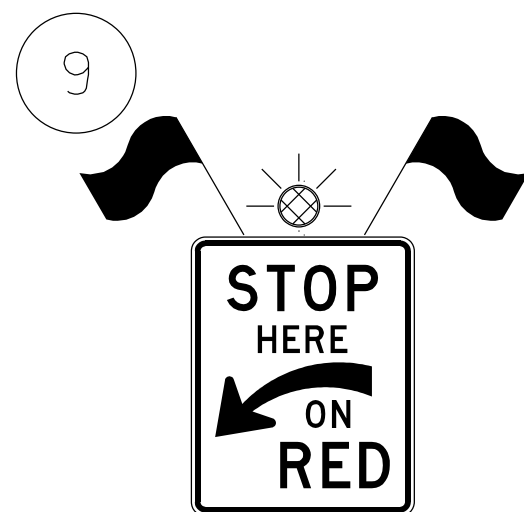
R2-1 (25)
36"x48"
Black on White



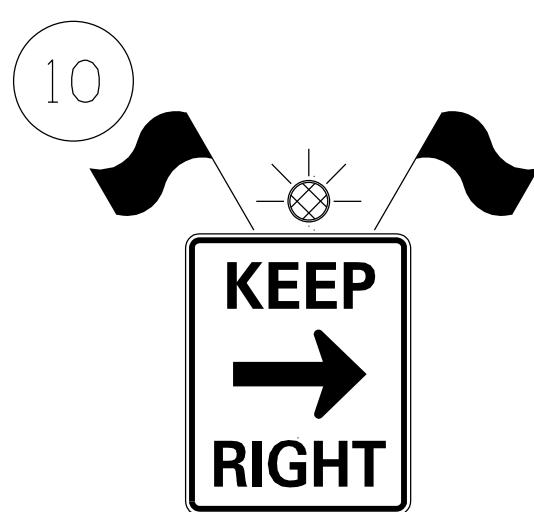
W20-1
36"x36"



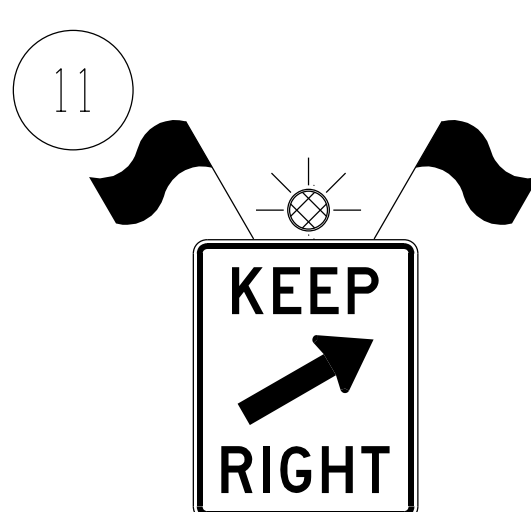
W3-3
36"x36"



R10-6a
24"x36"
Black on White



R4-7a
24"x30"
Black on White



R4-7b
24"x30"
Black on White

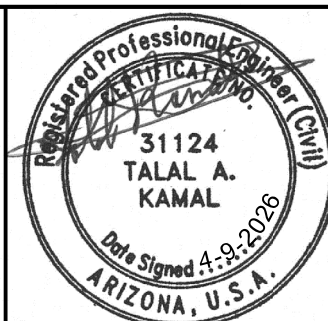


G20-2AZ
48"x36"



R2-1 (65)
36"x48"
Black on White

DETAIL C2

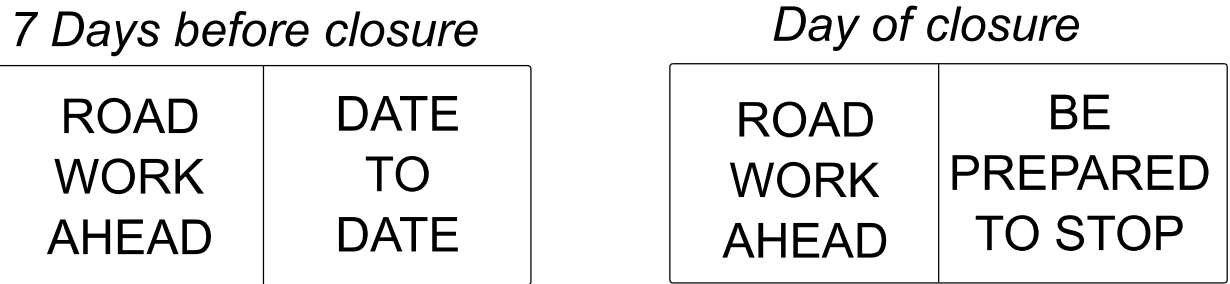


	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL DETAIL

ROUTE SR 85	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
		ARIZ.	085 MA 004	085-A(210)T	21	30	
MILEPOST	LOCATION QIOTOSA WASH - W THAYER RD						SHEET 7 OF 11
STRUCTURE NO.	TRACS NO. F0833 01C					___ OF ___	

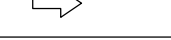


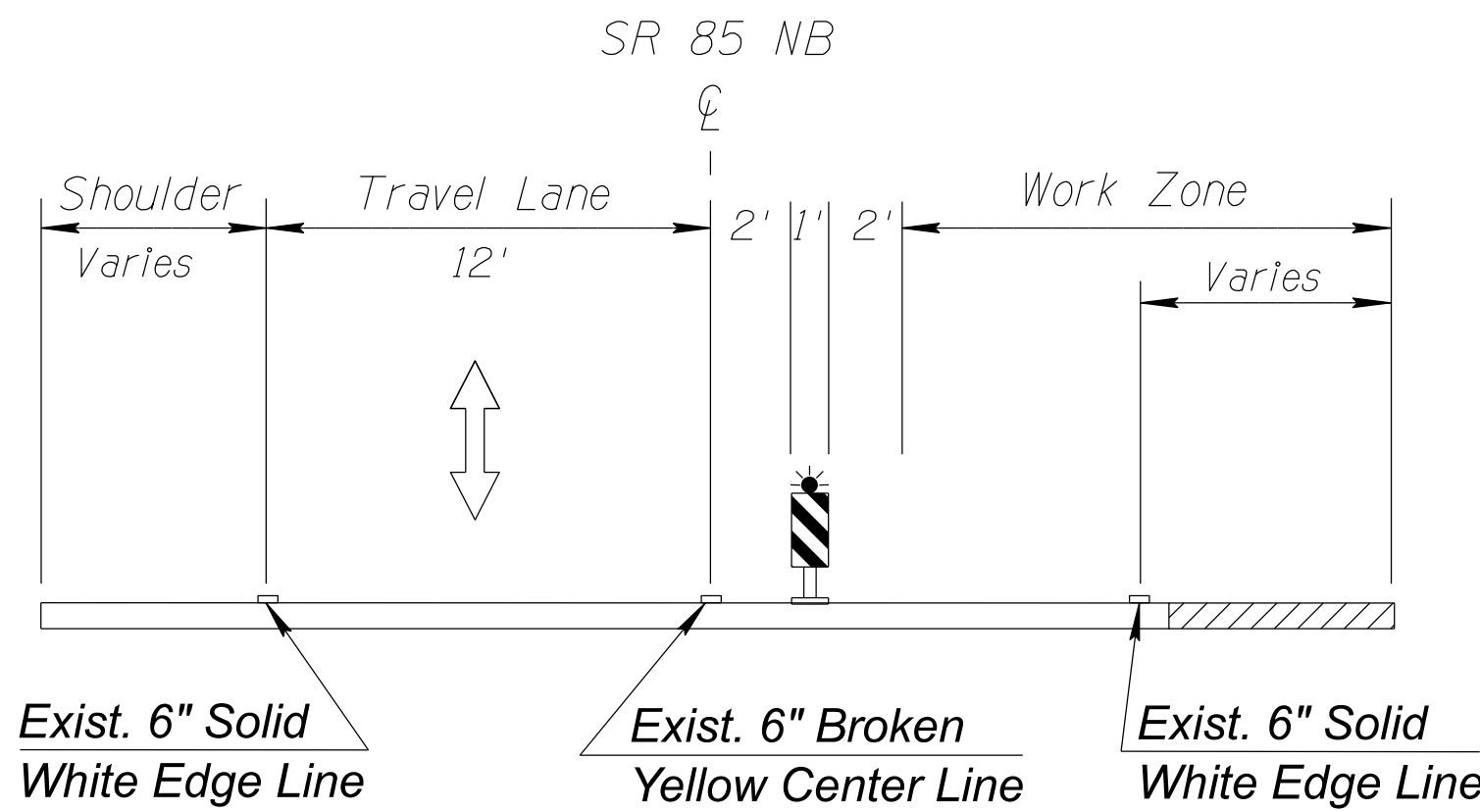
Remove and Replace Asphaltic Concrete

1. All turnout within the work zones shall have a W20-1 "Road Work Ahead" sign (36"x36") during paving operations.
2. Above layout is typical for northbound lane closures. For southbound lane closures the above lane closure layout shall be mirrored with appropriate lane closure signage.
3. Changeable message board's message may be modified as directed by the Engineer.

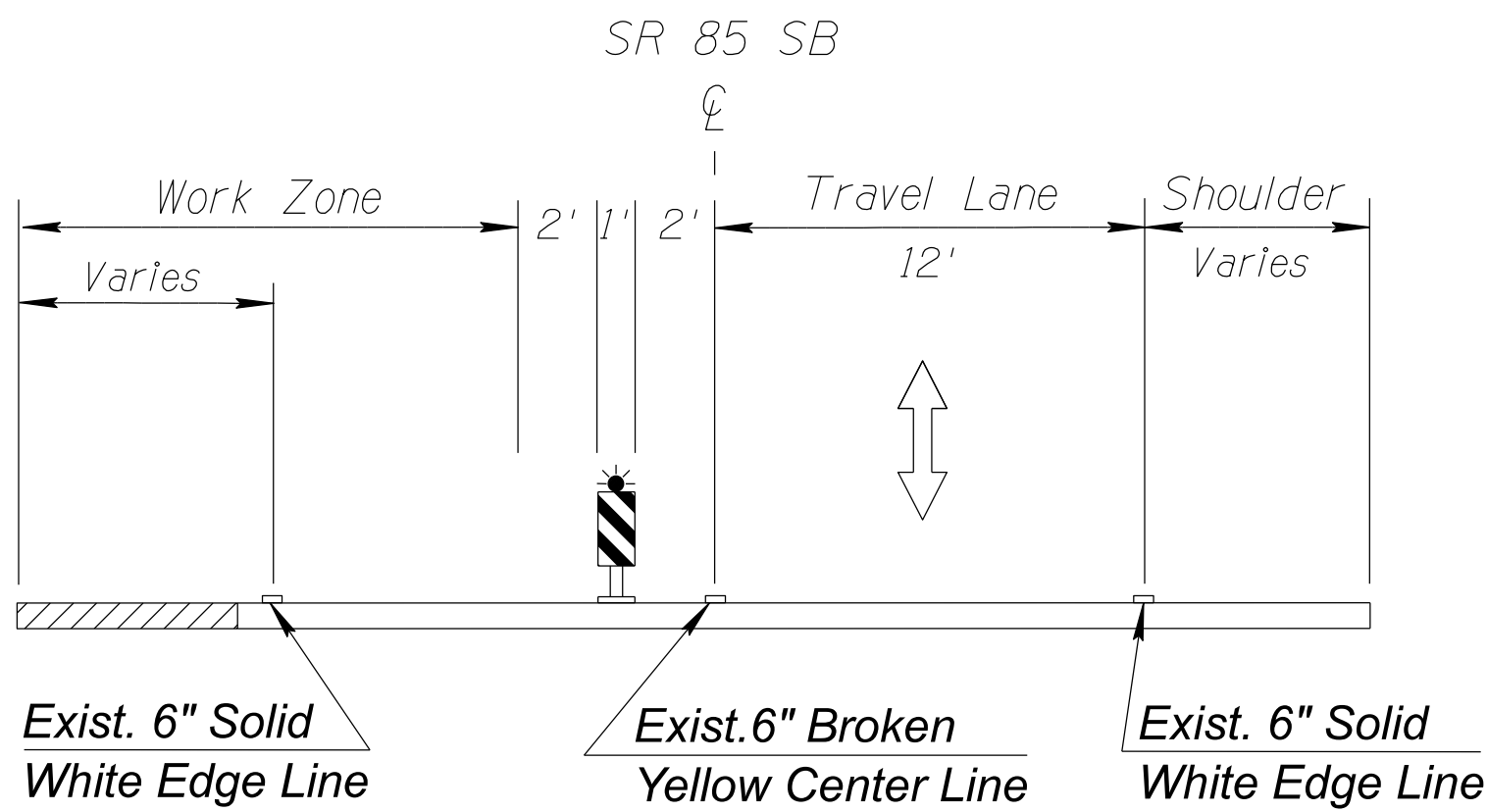
Lane Closures for AC Removal and Replacement

SYMBOL LEGEND:

	Vertical Panel
	Sign on Rigid Stand
	Sign on Spring Stand
	Cone (Plan/Elevation)
	Direction of Travel
	Work Area
	Flagger
	Changeable Message Sign
	Pilot Car
	Truck Mounted Attenuator



SECTION A-A



SECTION B-B

Registered Professional Engineer (Civl)
 31124
 TALAL A.
 KAMAL
 Date Signed 4-9-2026
 ARIZONA, U.S.A.

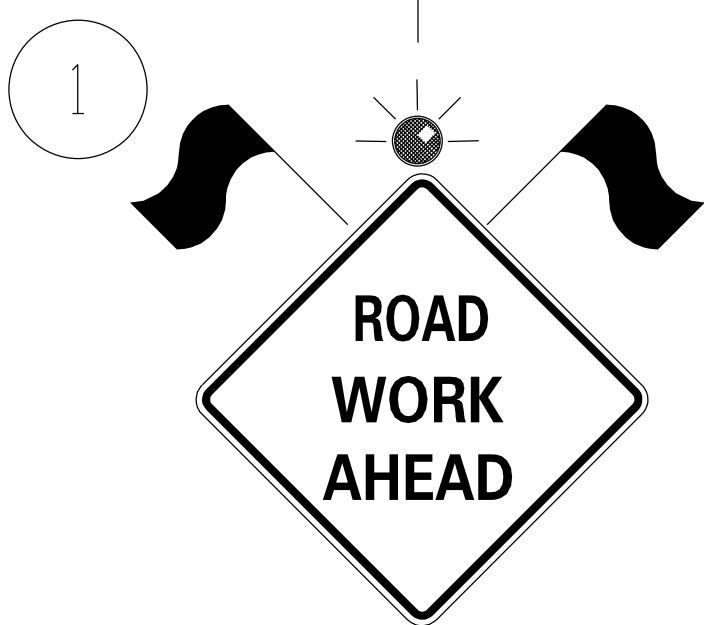
	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

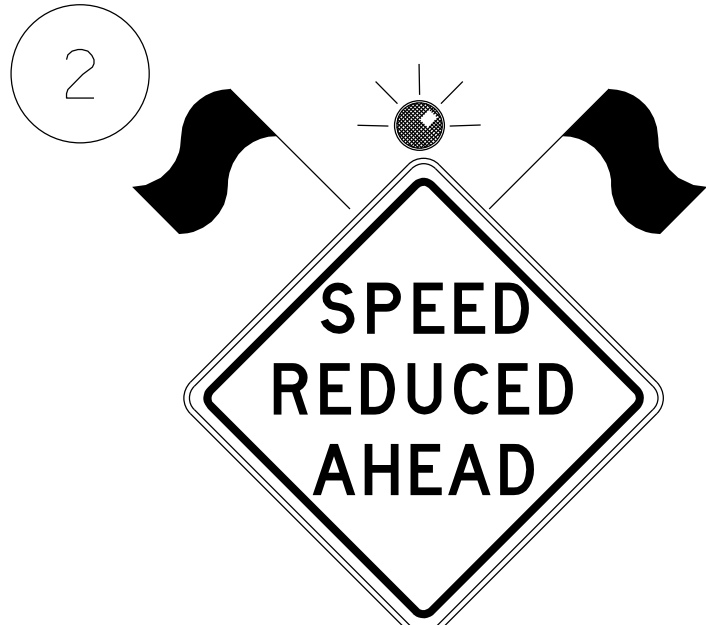
TRAFFIC CONTROL DETAIL

ROUTE SR 85	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST		ARIZ.	085 MA 004	085-A(210)T	22	30	
	LOCATION QIOTOSA WASH - W THAYER RD						SHEET 8 OF 11
STRUCTURE NO.	TRACS NO. F0833 01C						___ OF ___

Light (TYP)
Type "A"



W20-1
36"x36"



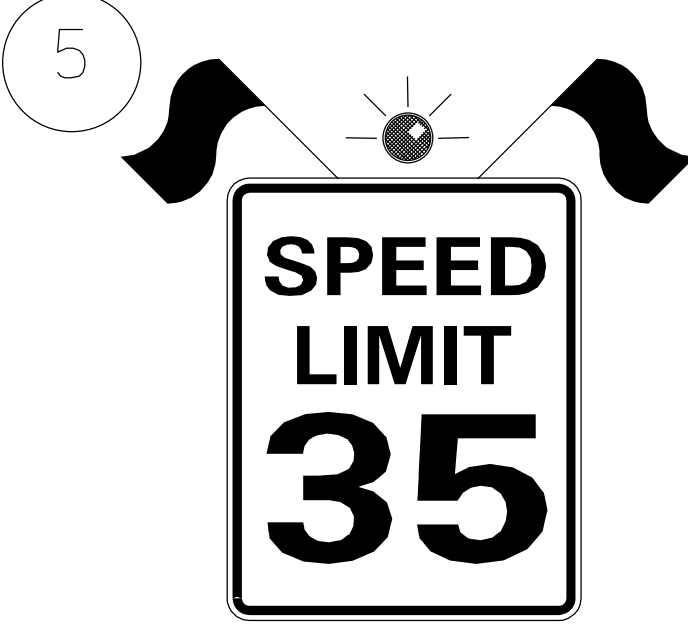
W3-5aAZ
36"x36"



R2-1 (55)
36"x48"
Black on White



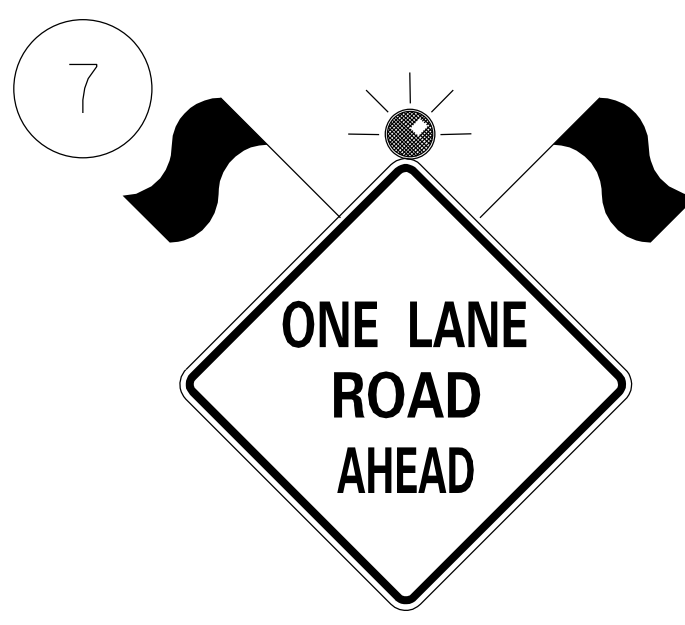
R2-1 (45)
36"x48"
Black on White



R2-1 (35)
36"x48"
Black on White



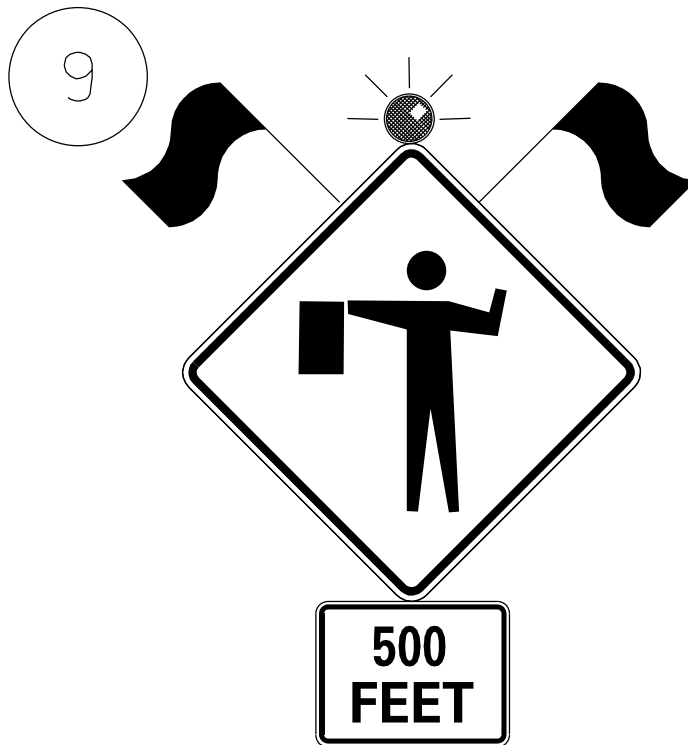
R2-1 (25)
36"x48"
Black on White



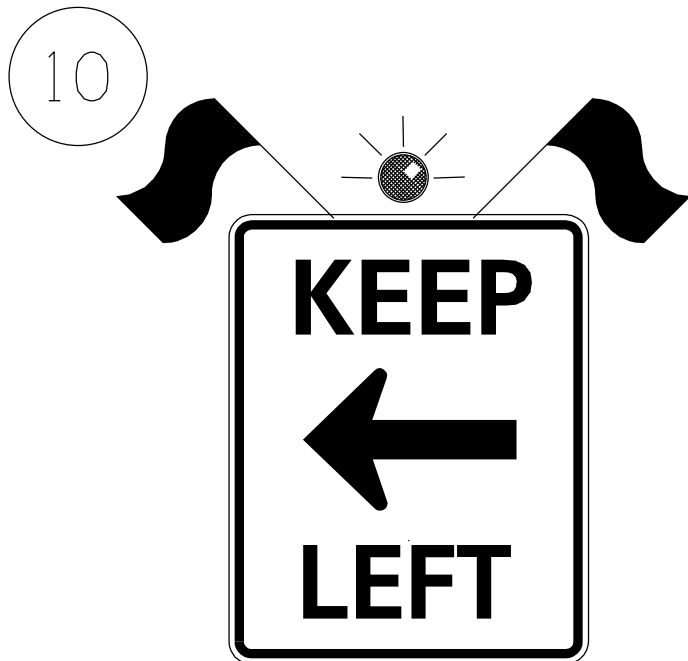
W20-4
36"x36"



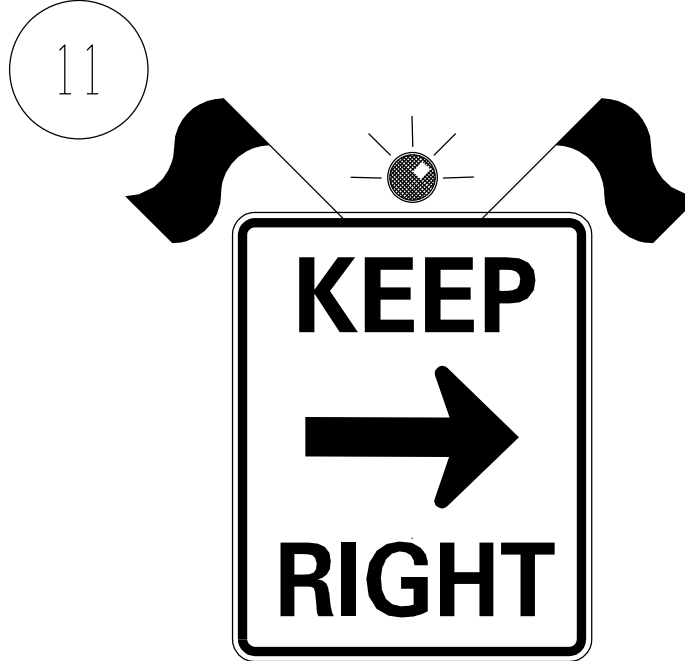
W3-4
36"x36"



W20-7
36"x36"
W16-2 (Mod)
24"x18"



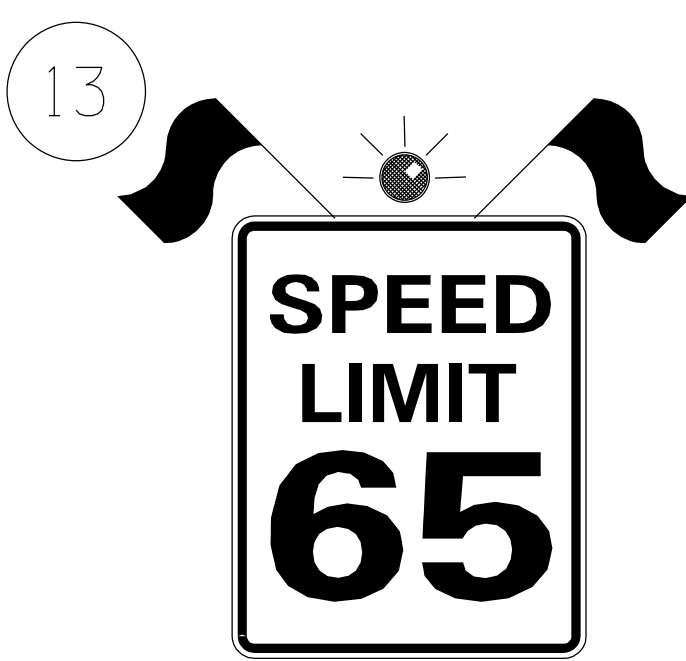
R4-7aL
24"x30"



R4-7aR
24"x30"



G20-2AZ
48"x36"



R2-1 (65)
36"x48"
Black on White

DETAIL D2



	NAME	DATE
DESIGN	T. KAMAL	4/26
DRAWN	T. KAMAL	4/26
CHECKED	S. VONG	4/26
TEAM LEADER	R. GLUSCEVIC	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL DETAIL

ROUTE SR 85	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 23	TOTAL SHEETS 30	RECORD DRAWING
MILEPOST	LOCATION QIOTOSA WASH - W THAYER RD					SHEET 9 OF 11	
STRUCTURE NO.	TRACS NO. F0833 01C					____ OF ____	

APPROXIMATE TRAFFIC CONTROL QUANTITIES									
Bid Item Number	Element Of Work	Unit	Install Advance Warning Signs and CMB Det. "A"	Extend Existing Concrete Box Culverts On SR 85 SB & NB Details "B1" and "B2"	Extend Existing Concrete Box Culverts On SR 85 SB & NB Details "C1" and "C2"	Construct Roadway Berm on SR 85 SB and NB Details, "B1" and "B2"	Remove and Replace Asphaltic Concrete on SR 85 SB and NB, Details "D1" and "D2"	Place Pavement Marking, Rumble Strips and Seeding	Total Quantities
			Activity 1	Activity 2	Activity 3	Activity 4	Activity 5	Activity 6	
	Estimated Duration (Working Days)		231 *	90	60	35	5	5	
7010025	Temporary Impact Attenuation Device (In-Line Energy Abs. Term.)	Each	-	12	8	-	-	-	20
7010026	Temporary Impact Attenuation Device (In-Line Energy Abs. Term.) (In-Use)	Each/Day	-	504	336	196	-	-	1,036
7015010	Temporary Concrete Barrier (Installation and Removal)	L.Ft.	-	3,000	1,200	-	-	-	4,200
7015052	Obliterate Pavement Marking (Stripe)	L.Ft.	-	-	2,550	2,250	-	-	4,800
7016020	Temporary Concrete Barrier (In Use)	L.Ft./Day	-	75,600	50,400	29,394	-	-	155,394
7016030	Barricade (Type 2, Vertical Panel, Tubular Marker)	Each/Day	140	4,740	2,160	1,843	3,875	200	12,958
7016032	Portable Sign Stands (Rigid)	Each/Day	-	-	-	-	50	-	50
7016033	Portable Sign Stands (Spring Type)	Each/Day	-	-	-	-	100	60	160
7016035	Warning Lights (Type A)	Each/Day	1,848	2,124	1,414	826	150	60	6,422
7016037	Warning Lights (Type C)	Each/Day	140	4,740	2,160	1,843	3,875	200	12,958
7016038	Traffic Cone (28 Inches)	Each/Day	-	-	-	-	50	-	50
7016039	Embedded Sign Post	Each/Day	3,234	2,940	2,646	1,144	-	-	9,964
7016050	Truck Mounted Attenuator	Each/Day	2	44	36	18	10	15	125
7016051	Temporary Sign (Less than 10 Sq. Ft.)	Each/Day	462	972	648	378	90	-	2,550
7016052	Temporary Sign (10 Sq. Ft. or more)	Each/Day	1,386	1,152	768	448	60	60	3,874
7016067	Changeable Message Board (Contractor Furnished)	Each/Day	14	252	168	98	10	20	562
7016071	Pilot Vehicle With Driver	Hour	-	-	-	-	40	-	40
7016075	Flagging Services (Civilian)	Hour	16	96	64	40	40	32	288
7016081	Flagging Services (DPS)	Hour	10	60	40	24	20	40	194
7016082	Flagging Services (Local Enforcement Officer) (with Vehicle)	Hour	10	60	40	24	10	10	154
7017020	Temporary and Portable Traffic Control Signal (Install and Remove)	L. Sum	-	-	1	-	-	-	1
7017025	Temporary and Portable Traffic Control Signal (In Use)	Each/Day	-	-	168	-	-	-	168
7080201	Waterborne - Type I Pavement Marking (Painted) (White)	L.Ft.	-	1,800	7,200	-	-	-	9,000
7080202	Waterborne - Type I Pavement Marking (Painted) (Yellow)	L.Ft.	-	450	750	-	-	-	1,200

* Calendar Day

	DESIGN	T. KAMAL	4/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	ROUTE	SR 85	F.H.W.A. Arizona Division	STATE	ARIZ.	PROJECT NO.	085 MA 004	FEDERAL ID NO.	085-A(210)T	SHEET NO.	24	TOTAL SHEETS	30	RECORD DRAWING
	DRAWN	T. KAMAL	4/26		MILEPOST	QIOTOSA WASH - W THAYER RD							SHEET 10 OF 11 ____ OF ____					
	CHECKED	S. VONG	4/26		STRUCTURE NO.	TRACS NO. F0833 01C												
	TEAM LEADER	R. GLUSCEVIC	4/26			TOTAL TRAFFIC CONTROL QUANTITIES												

PAVEMENT MARKING NOTES:

1. There will be no pavement marking plans for this project. The replacement of all the existing pavement markings shall be the responsibility of the contractor. The contractor shall prepare and develop an "As-Built Drawings" pavement marking plans for the existing pavement markings on the roadway within the project limits. "As-Built" plans shall be based on a field survey which has measured the locations of all existing center lines and edge lines. The developed "As-Built" plans shall provide adequate information and detail so that the new pavement markings can be installed per the applicable existing conditions and any modifications required by the current ADOT Signing and Marking Standard Drawings. The contractor shall follow these "As-Built" plans when placing pavement markings on the final pavement surface. The "As-Built" plans shall be submitted electronically in the PDF format to the Engineer no less than 14 days prior to the start of the construction activities for his review and approval. Full compensation for developing the existing pavement marking "As-Built Drawings" pavement marking plans will be considered as included in the price of the contract bid item 9250001.
2. "As-Built Drawings" pavement marking plans shall be on scale 1"=40'. Pavement marking typical details shall be developed to show all striping on portions of the roadway with identical striping. Separate sections shall be developed for all significant changes in dimensions (e.g. greater than two feet) or striping configuration (e.g. centerline stripe). These details shall show the typical section limits by milepost intersected road or station call outs.
3. The contractor shall not obliterate, cover or alter, existing pavement markings, until the Engineer approves the "As-Built" Drawings pavement markings plans.
4. All center lines and lane lines shall be noted by type, width and color. All dimensions and details as shown on the "As-Built Drawings pavement marking plans shall be to the center of the striping or in the case of double striping, to the center of the double stripe.
5. The contractor shall conduct all pavement marking work activities according to the requirements and in compliance with ADOT Standard Specifications, Special Provisions, and the current ADOT Signing and Marking Standard Drawings.
6. It is the contractor's responsibility to ensure that the final surface course is placed so that the striping is offset one foot clear of the construction joint, unless otherwise approved by the Engineer.
7. The contractor shall be responsible for the layout and installation of permanent pavement markings on the final surface course following the points that have been set no more than 50 feet apart along the alignment to be striped.
8. At the completion of the final pavement surface course each day, center lines, lane lines, and edge lines shall be striped with one application of Waterborne-Type I Pavement Marking (Painted) (White and Yellow). The paint shall have a minimum thickness of 15 mils (0.015 inch). Painted striping shall be 4" wide for 6" wide lines, 8" wide for 12" wide lines.

9. The final striping shall be a minimum thickness of 90 mils (0.090 inch) thick Alkyd Extruded thermoplastic reflectorized pavement markings. The pavement marking shall be installed on the broken and solid yellow centerline striping and on the solid white edgeline striping. Pavement marking shall be placed over the initial striping a minimum of 30 calendar days after the completion of the final pavement surface course and the application of the pavement marking (painted), as approved by the Engineer. All other pavement markings shall be applied at the same time.
10. 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 pavement markings. The roadway surface shall be dry and the air and pavement temperatures shall not be less than 55° F for the placement of the thermoplastic pavement markings.
11. The contractor shall conduct all pavement marking work activities according to the requirements and in compliance with ADOT Standard Specifications, Special Provisions, and the current ADOT Signing and Marking Standard Drawings.
12. The contractor shall remove and replace existing pavement markers with new ones in conjunction with the construction operations. New raised pavement markers shall be in compliance with the requirements of Standard Drawing M-19 of the current ADOT Signing and Marking Standard Drawings. New raised pavement markers shall be installed so that the reflective face of each marker is facing traffic and is perpendicular to the direction of traffic flow. Also shall have an abrasion-resistant coating on the face of the prismatic reflectors and shall be installed with a bituminous adhesive listed in the ADOT Approved Products List. No measurement or payment shall be made for removing any existing raised pavement markers, the cost will be considered as included in the price of the contract bid items. New raised pavement markers will be paid under the contract bid item 7060015.
13. The contractor shall install ground-in rumble strips in accordance with Standard Drawing M-22 of the current ADOT Signing and Marking Standard Drawings.
14. For broken striping, the raised pavement markers shall be placed to align with the broken striping.

APPROXIMATE PAVEMENT MARKING QUANTITIES			
Item No.	Description	Unit	Quantities
7040005	Permanent Pavement (White Extruded Thermoplastic (0.090"))	L. Ft.	4,500
7040006	Permanent Pavement (Yellow Extruded Thermoplastic (0.090"))	L. Ft.	1,800
7060015	Pavement Marker, Raised, Type "D"	Each	40
7080201	Waterborne-Type I Pavement Marking (Painted) (White)	L. Ft.	3,000
7080202	Waterborne-Type I Pavement Marking (Painted) (Yellow)	L. Ft.	1,200
9280034	Ground-In Rumble Strip (6 Inch)	L. Ft.	3,000
9280036	Ground-In Rumble Strip (8 Inch)	L. Ft.	6,000

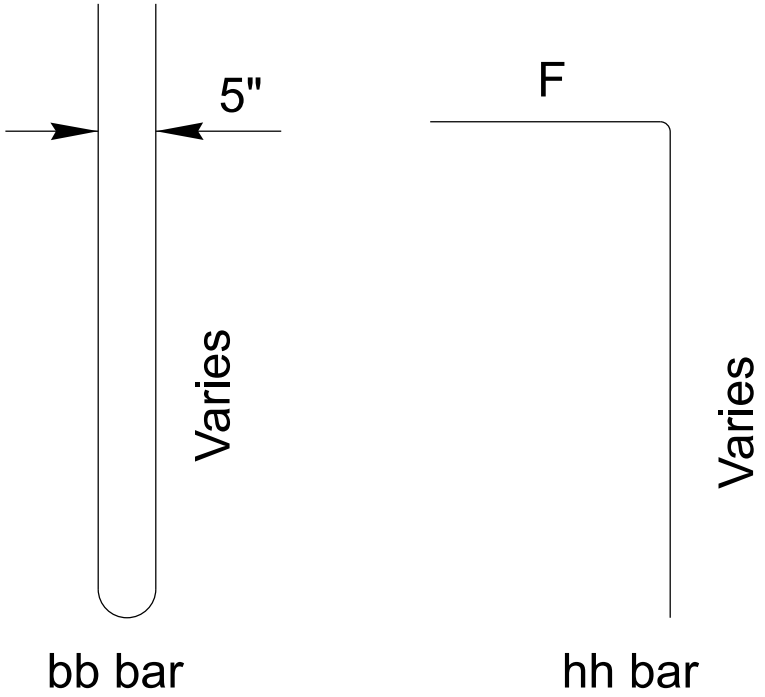
TRAFFIC NOTE:

Permanent Pavement quantities are based on a 4 inches wide equivalent.

	DESIGN	T. KAMAL	4/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	ROUTE	SR 85	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	085 MA 004	FEDERAL ID NO.	085-A(210)T	SHEET NO.	25	TOTAL SHEETS	30	RECORD DRAWING				
	DRAWN	T. KAMAL	4/26		MILEPOST																
	CHECKED	S. VONG	4/26		PAVEMENT MARKINGS					LOCATION			QIOTOSA WASH - W THAYER RD			SHEET 11 OF 11					
	TEAM LEADER	R. GLUSCEVIC	4/26		GENERAL NOTES					TRACS NO. F0833 01C			___ OF ___								
					STRUCTURE NO.																

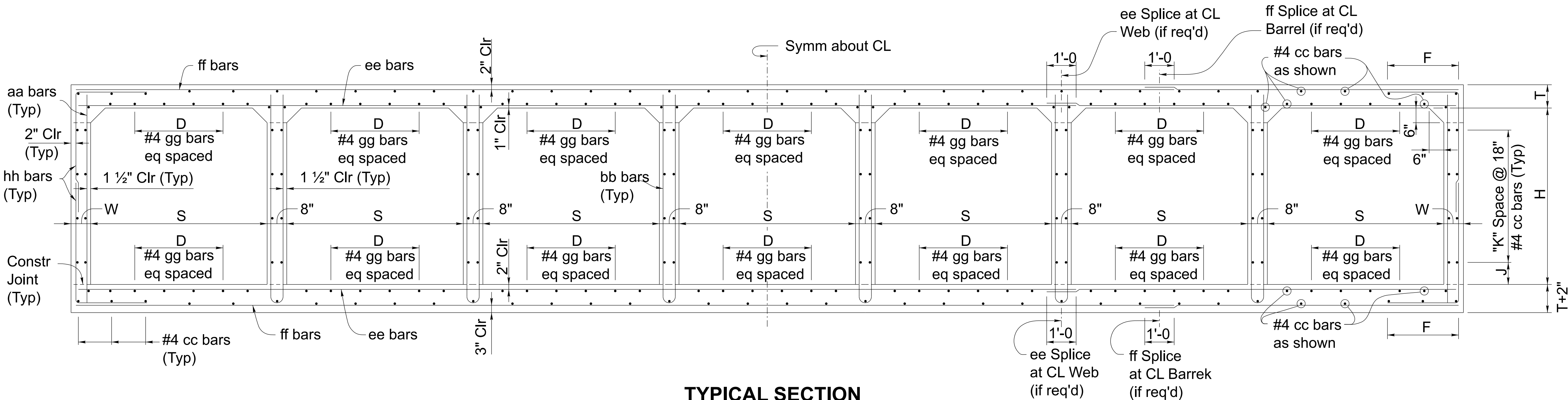
FOR CBC 2 - 7 barel 5' x 10' x 44'																						
Span "S"	Height "H"	Top Slab "T"	Walls "W"	aa			bb			cc	ee			ff			gg		hh			
				Bar Size	Spacing	Length	Bar Size	Spacing	Length	⌀ Number	Bar Size	Spacing	Length *	Bar Size	Spacing	Length *	⌀ Number	D	Bar Size	Spacing	Length	F
10'	5'	10½"	11"	5	12"	6'-6	5	12"	12'-11	142	5	6"	65'-10	6	6"	65'-10	132	5'-0	5	6"	6'-9	2'-8

Height "H"	"J" Dim	"K" Spaces
5'	12"	2



- ⊕ Total number of bars in the cross-section.
- * Includes lap splice length.

BENDS



NOTE:
For General Notes, Dimensions, and additional Details, see SD 6.01 (1 to 4).

DETAIL F1



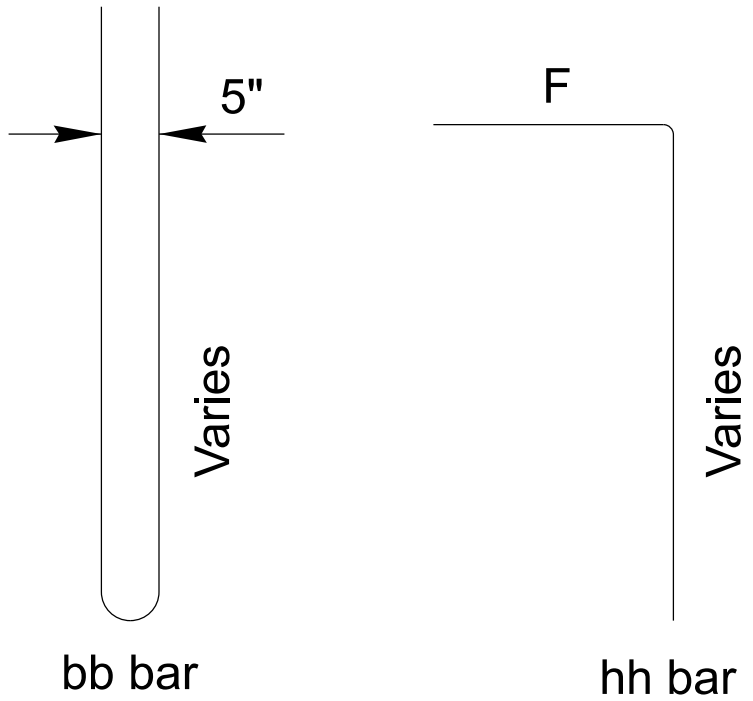
	NAME	DATE
DESIGN	L. O'Rourke	4/26
DRAWN	L. O'Rourke	4/26
CHECKED	T. Crowley	4/26
TEAM LEADER	R. Cvijanovic	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	
CULVERT DETAILS (1 OF 2)	

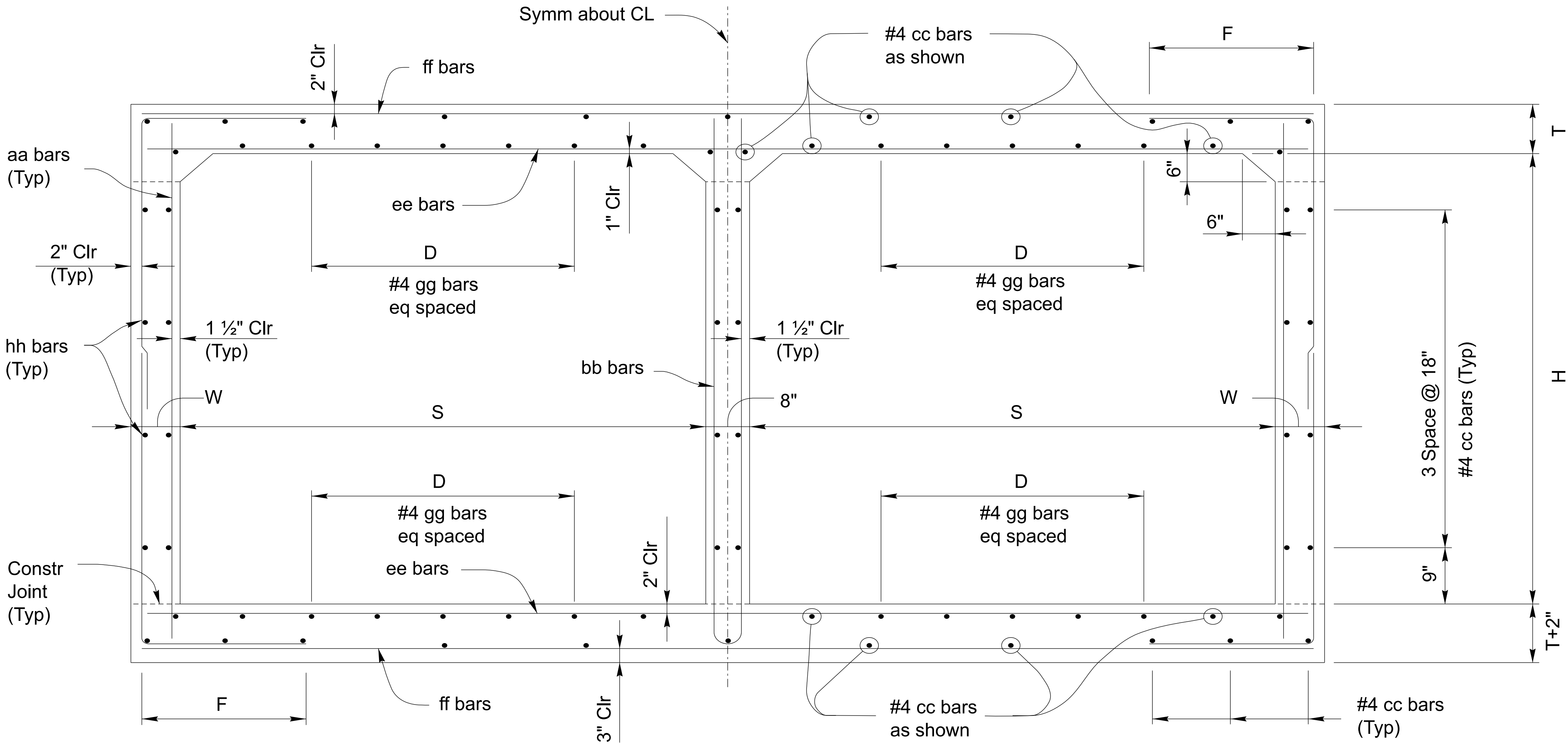
ROUTE SR 85	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST 5.36		ARIZ.	085 MA 004	085-A(210)T	26	30	
	LOCATION QILOTOSA WASH - W THAYER RD						SHEET 1 OF 2
STRUCTURE NO. 4557	TRACS NO. F0833 01C						___ OF ___

For CBC 5 - 2 barrel 7' x 6' x 45'																						
Span "S"	Height "H"	Top Slab "T"	Walls "W"	aa			bb			cc	ee			ff			gg		hh			
				Bar Size	Spacing	Length	Bar Size	Spacing	Length	⊕ Number	Bar Size	Spacing	Length	Bar Size	Spacing	Length	⊕ Number	D	Bar Size	Spacing	Length	F
7'	6'	9½"	9"	5	12"	7'-4	5	12"	14'-8	60	5	6	17'-9	6	8"	17'-9	28	4'-0	5	6"	7'-0	2'-6

⊕ Total number of bars in the cross-section.



BENDS



DETAIL F2

TYPICAL SECTION

Not to scale

NOTE:

For General Notes, Dimensions, and additional Details, See SD 6.01 (1 to 4).



	NAME	DATE
DESIGN	L. O'Rourke	4/26
DRAWN	L. O'Rourke	4/26
CHECKED	T. Crowley	4/26
TEAM LEADER	R. Cvijanovic	4/26

ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP
CULVERT DETAILS (2 OF 2)

ROUTE SR 85
MILEPOST 4.39
STRUCTURE NO.

F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 27	TOTAL SHEETS 30	RECORD DRAWING
LOCATION QILOTOSA WASH - W THAYER RD						SHEET 2 OF 2
TRACS NO. F0833 01C						___ OF ___

CONTROL MEASURE INDEX SHEET (CMIS)

TO BE COMPLETED FOR PROJECT WITH ONE (1) ACRE OR MORE OF SOIL/GROUND DISTURBANCE Outside of Jurisdictional Waters of the U.S. (≥1 ACRE*)
* For projects that meet the definition of maintenance under AZPDES CGP, the permit threshold is five (≥5) Acres. Consult with ADOT EP Water Resources Management to define Jurisdictional Waters of the U. S.

I. PROJECT DESCRIPTION

A. Owner Name and Address:

Arizona Department of Transportation
205 South 17th Avenue
Phoenix, Arizona 85007-3213

B. Project TRACS Number: F0833 01C

C. Project Name/Location (be consistent with the plan set cover sheet):

SR—85, QILOTOSA WASH — W THAYER RD
SR—85, MP 4.4 — MP 6.2

City: County: Maricopa

Beginning Latitude (NAD 83): 32°53'50.6076"

Beginning Longitude (NAD 83): -112°44'41.6040"

Ending Latitude (NAD 83): 32°52'17.1012"

Ending Longitude (NAD 83): -112°45'33.8580"

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:

Drainage improvement by extending existing Concrete Box Culverts (CBC) up to the Clear Zone. Replacing existing pavement, removing existing guardrail, replacing existing fence, placing riprap, pavement marking, and other related work.

II. HYDROLOGIC INFORMATION

A. Percentage of the site that is impervious before and after construction:

Percentage before Construction: 11.15%

Percentage after Construction: 11.15%

B. Receiving Water(s), refer to the plan set cover sheet and the NHD Plus HR Availability Map Web Link below:

https://usgs.maps.arcgis.com/apps/MapTools/index.html?appid=41a5c2ca49bd4a83b239450e61022d53

(If unnamed, state as unnamed)

QILOTOSA WASH

III. SOIL STABILIZATION MEASURES

All disturbed soil, which will not be paved, ripped or otherwise covered to prevent erosion, will be revegetated and/or landscaped in accordance with the project plans and specifications.

IV. MEASURES TO CONTROL STORMWATER AND AIR QUALITY

A. Temporary Stormwater and Air Quality Control Measures (CMs) / Best Management Practices (BMPs)

- Temporary Diversion Dikes
Temporary Rock Check Dams
Stabilized Construction Entrance/Exit Gravel Pad
Soil Stabilizer for Wind Erosion and Dust Control
Rock Inlet/Outlet Protection
Sediment Control Berms
Silt Fences
Wattles (Excelsior/Straw/Compost)
Excelsior Logs / Sediment Logs
Erosion Control Matting
Seeding (Class II with final mulch cover)
Gravelbag
Catch Basin Temporary Fabric Filter
Designated Washout Areas
Protected Chemical and Material Storage Area
Equipment Maintenance Procedures
Others Describe:

B. Permanent and Post-construction Stormwater and Air Quality Control Measures (CMs) / Best ManagementPractices (BMPs):

- Crown Ditch/Dike
Rock Protection
Rock Riprap Channel Lining
Sediment Basin
Embankment Curb
Spillways
Downdrains
Minibenching
Solid Waste Management
**Rock-filled Stormwater Infiltration CM/BMP as Infiltration Basin and/or Trench
**Filtration Structures
**Infiltration Basin and/or Trench
**Retention and/or Detention Basins
**Bioretention
**Manufactured Treatment Devices
Seeding established as a perennial vegetative cover with a density of 70% of the native background vegetative cover.
Others Describe:

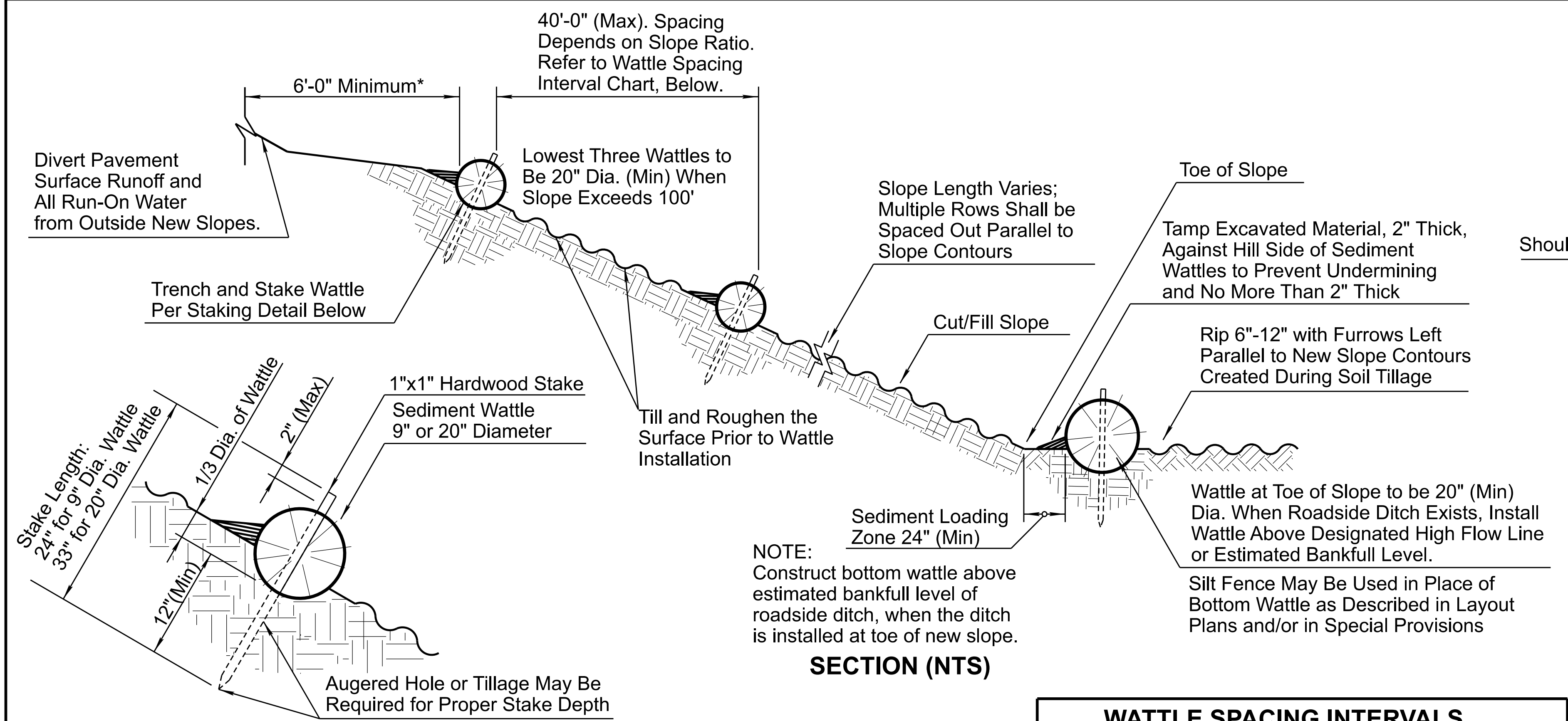
** Track and report to ADOT EP Water Resources Management: ADOTWater@azdot.gov



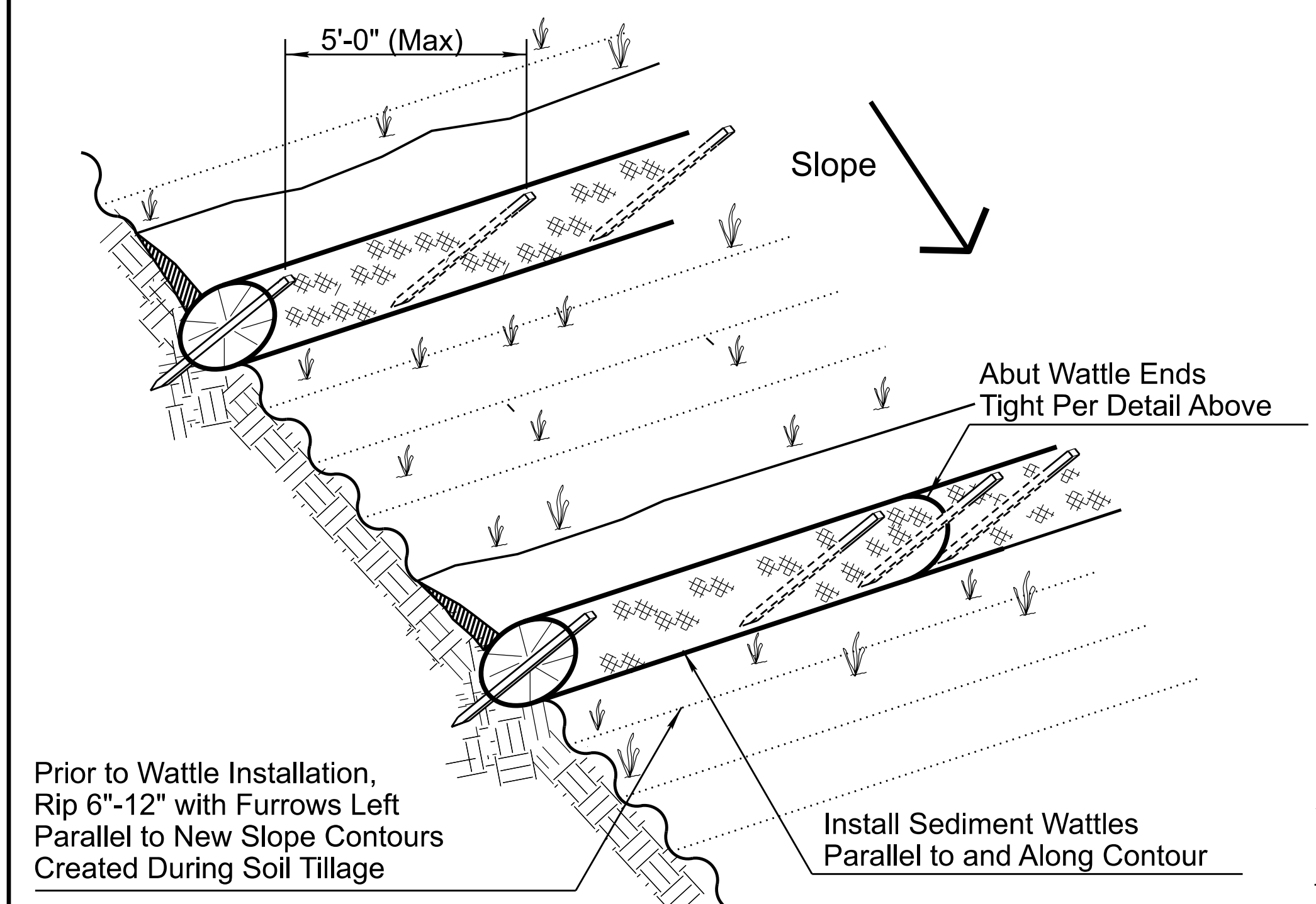
	NAME	DATE
DESIGN	TAO ZI FONG	04-26
DESIGN	Z. H. F.	04-26
DRAWN	TAO ZI FONG	04-26
DRAWN	Z. H. F.	04-26
CHECKED	JOHN R. HUCKO	04-26
TEAM LEADER	E. LEROY BRADY	04-26

ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADSIDE DEVELOPMENT SECTION
STORMWATER & AIR QUALITY CONTROL MEASURE INDEX SHEET (CMIS)

ROUTE SR 85	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 28	TOTAL SHEETS 30	RECORD DRAWING
MILEPOST	LOCATION QILOTOSA WASH - W THAYER RD					SHEET 1 OF 1	
STRUCTURE NO.	TRACS NO. F0833 01C					OF	



SEDIMENT WATTLE STAKING
DETAIL (NTS)

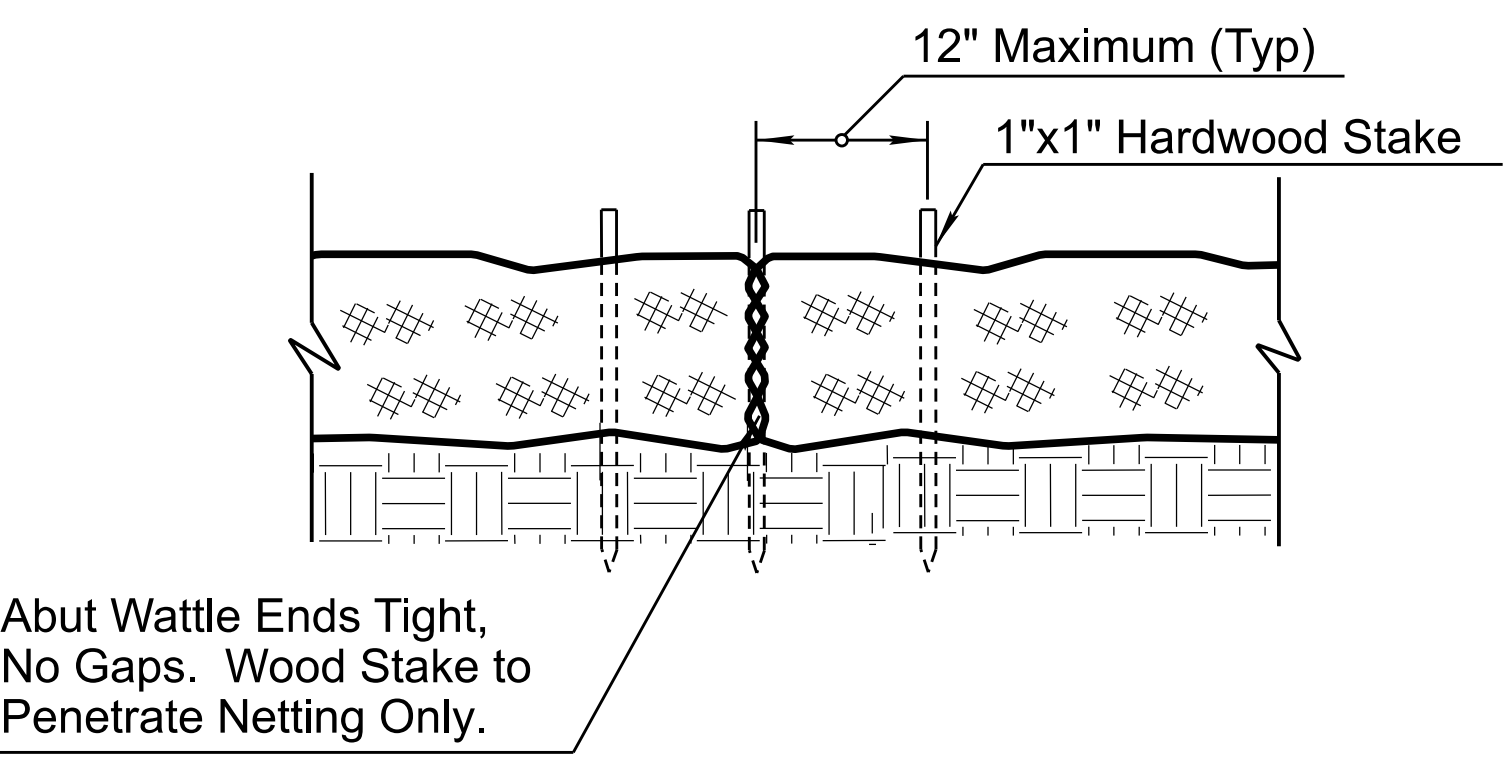


SEDIMENT WATTLE
LAYOUT (NTS)

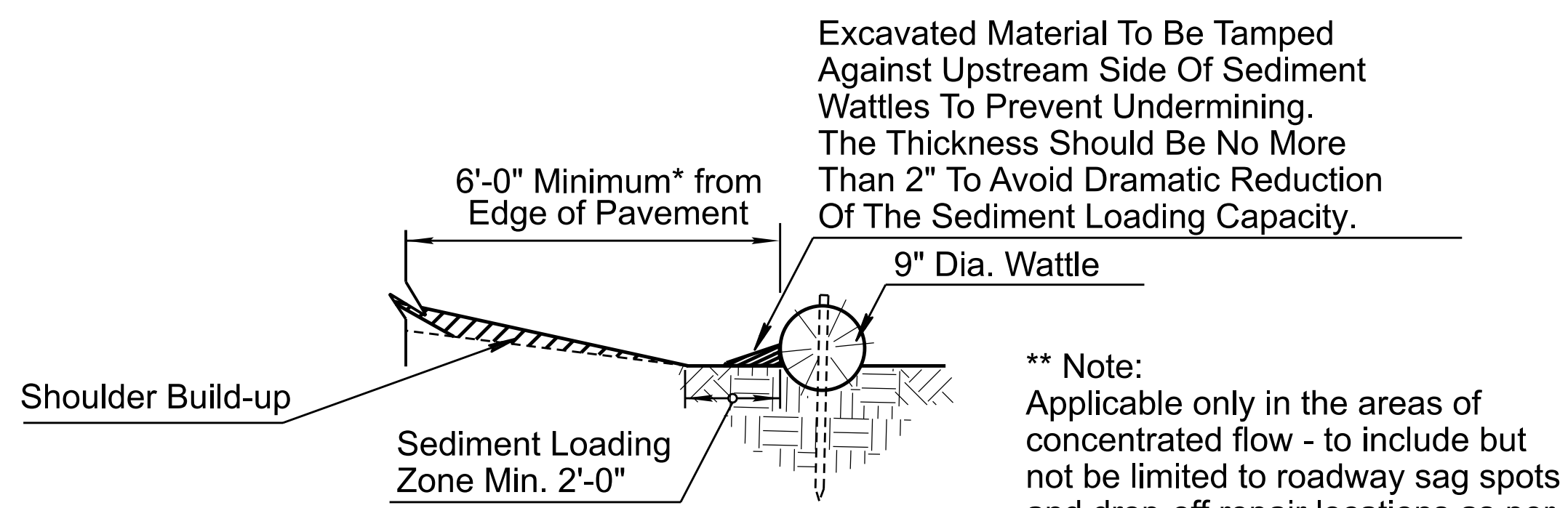
SECTION (NTS)

WATTLE SPACING INTERVALS	
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.



SEDIMENT WATTLE
OVERLAP (NTS)



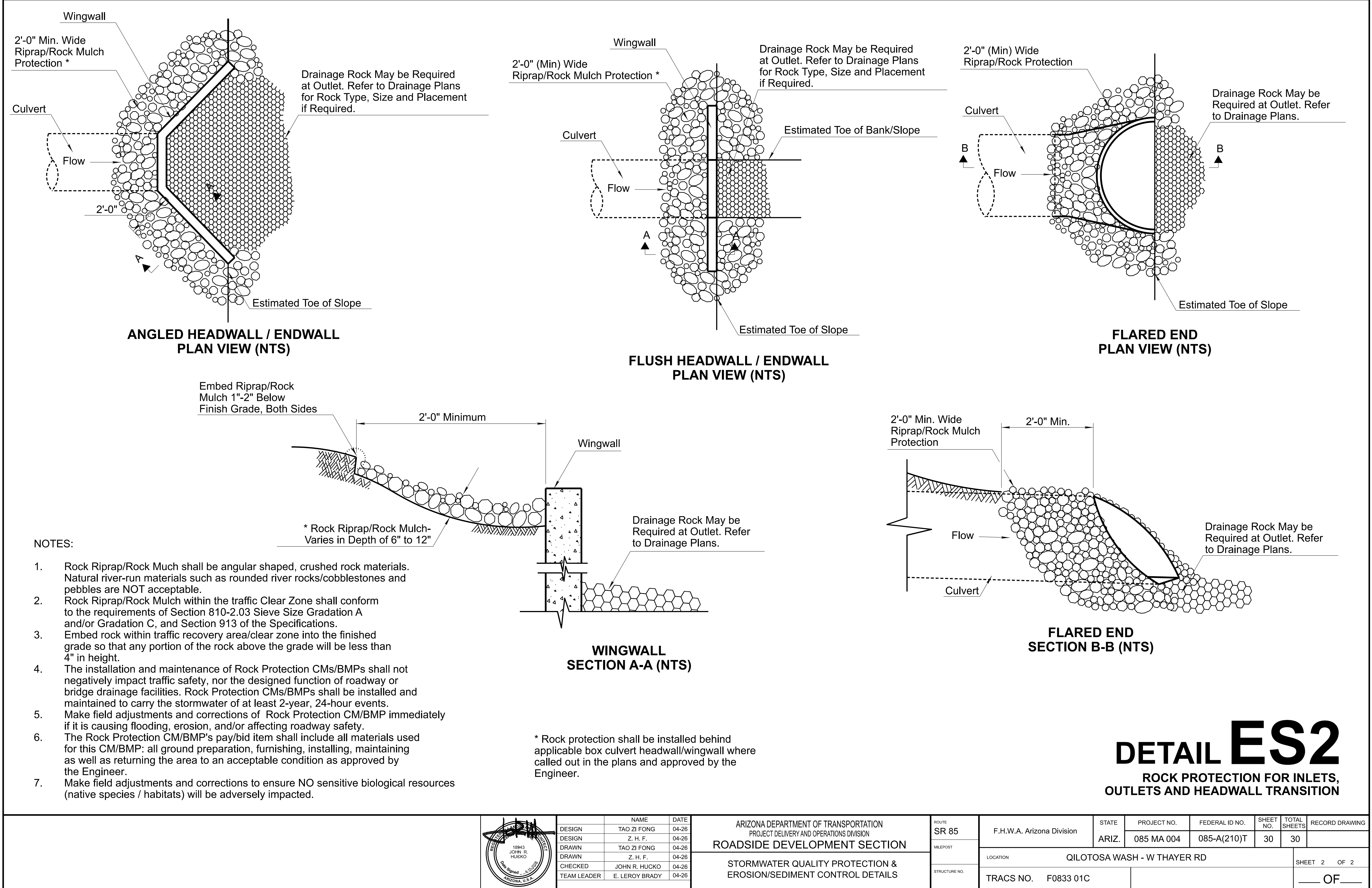
NEW SHOULDER BUILDUP **
PROTECTION SECTION (NTS)

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 CM/BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
5. Construction of cut slopes 2:1 and steeper in soil and rock materials that can be ripped shall be constructed, whenever possible, by Minibenching. Refer to Slope Minibenching CM/BMP Detail.
6. 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 Specifications and these project special provisions. 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 CMs/BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities.
8. Install and maintain Sediment Wattle CMs/BMPs to carry the stormwater of at least 2-year, 24-hour events.
9. The Sediment Wattle CM/BMP's pay/bid item shall include all materials used for this CM/BMP: all ground preparation, furnishing, installing, maintenance, final removal, and disposal of this temporary CM/BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
10. Refer to 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.

DETAIL ES1
SEDIMENT WATTLE

	DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADSIDE DEVELOPMENT SECTION	ROUTE	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	DESIGN	Z. H. F.	04-26		085 MA 004			085-A(210)T	29	30		
	DRAWN	TAO ZI FONG	04-26	STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS	MILEPOST	LOCATION QILOTOSA WASH - W THAYER RD						
	DRAWN	Z. H. F.	04-26		STRUCTURE NO.							
	CHECKED	JOHN R. HUCKO	04-26		TRACS NO. F0833 01C							
	TEAM LEADER	E. LEROY BRADY	04-26									
SHEET 1 OF 2												
___ OF ___												

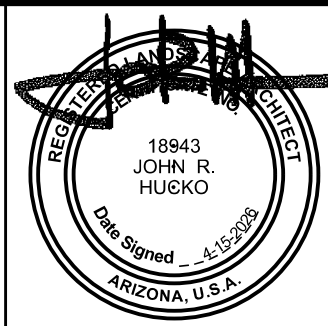


NOTES:

1. Rock Riprap/Rock Much shall be angular shaped, crushed rock materials. Natural river-run materials such as rounded river rocks/cobblestones and pebbles are NOT acceptable.
2. Rock Riprap/Rock Mulch within the traffic Clear Zone shall conform to the requirements of Section 810-2.03 Sieve Size Gradation A and/or Gradation C, and Section 913 of the Specifications.
3. Embed rock within traffic recovery area/clear zone into the finished grade so that any portion of the rock above the grade will be less than 4" in height.
4. The installation and maintenance of Rock Protection CMs/BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities. Rock Protection CMs/BMPs shall be installed and maintained to carry the stormwater of at least 2-year, 24-hour events.
5. Make field adjustments and corrections of Rock Protection CM/BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
6. The Rock Protection CM/BMP's pay/bid item shall include all materials used for this CM/BMP: all ground preparation, furnishing, installing, maintaining as well as returning the area to an acceptable condition as approved by the Engineer.
7. Make field adjustments and corrections to ensure NO sensitive biological resources (native species / habitats) will be adversely impacted.

* Rock protection shall be installed behind applicable box culvert headwall/wingwall where called out in the plans and approved by the Engineer.

DETAIL ES2
ROCK PROTECTION FOR INLETS,
OUTLETS AND HEADWALL TRANSITION



	NAME	DATE
DESIGN	TAO ZI FONG	04-26
DESIGN	Z. H. F.	04-26
DRAWN	TAO ZI FONG	04-26
DRAWN	Z. H. F.	04-26
CHECKED	JOHN R. HUCKO	04-26
TEAM LEADER	E. LEROY BRADY	04-26

ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION ROADSIDE DEVELOPMENT SECTION
STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS

ROUTE SR 85	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 085 MA 004	FEDERAL ID NO. 085-A(210)T	SHEET NO. 30	TOTAL SHEETS 30	RECORD DRAWING
MILEPOST	LOCATION QILOTOSA WASH - W THAYER RD					SHEET 2 OF 2	
STRUCTURE NO.	TRACS NO. F0833 01C					___ OF ___	