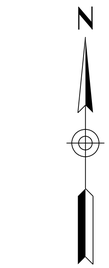


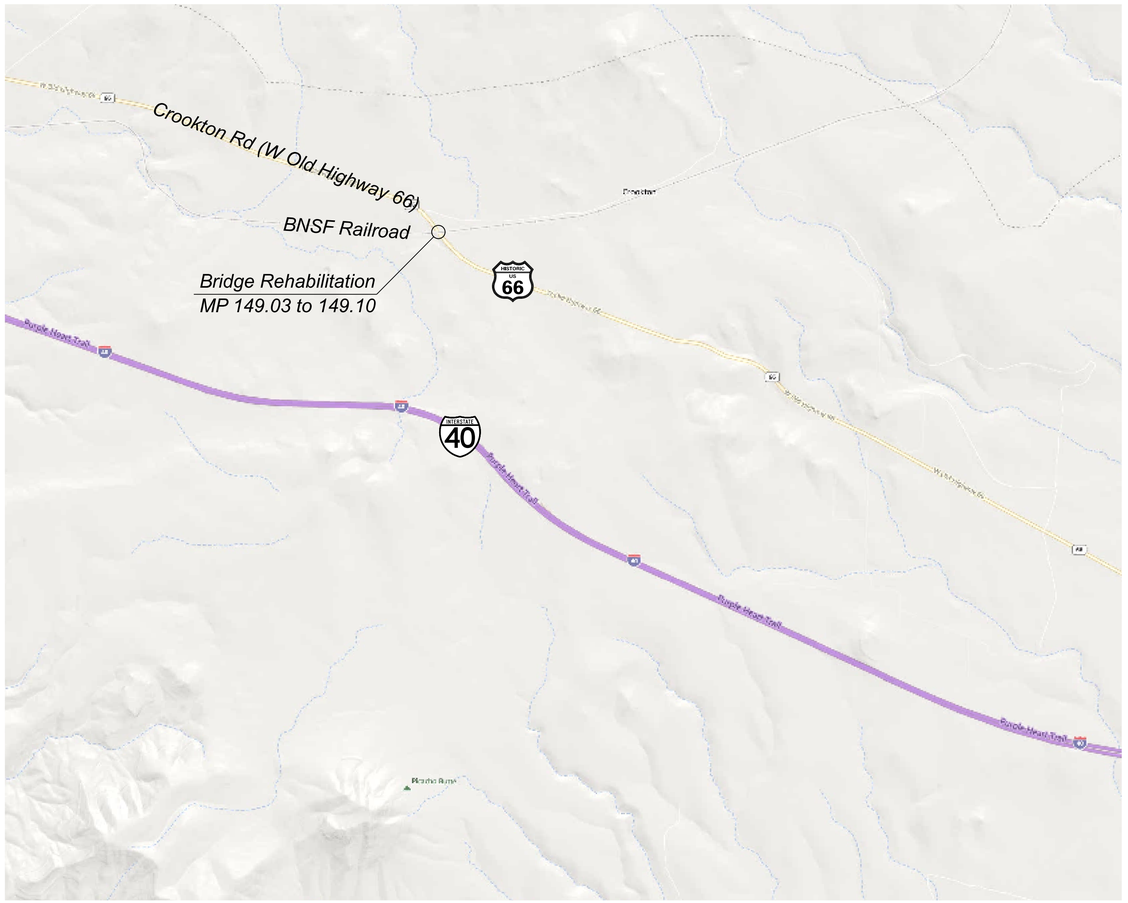
YAVAPAI COUNTY

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION

PROJECT PLANS

ARIZONA — DEPARTMENT OF — TRANSPORTATION

STATE HIGHWAY
YAVAPAI COUNTY



Constructed by:

Construction Company

Completion Date

Red-Lines by:

Construction Administrator Name & Company

Completion Date

Record Drawings by:

Record Drawings Designer Name & Company

Completion Date

Stage PS & E

CROOKTON RD AT BNSF RR OP

PROJECT NO. 0000 YV YYV T0592 01 C
FEDERAL AID NO. YYV-0(225)T

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
GREGORY BYRES, P.E., STATE ENGINEER

REC. DWGS. DATA	REC. DWG. DATE	_____ OF _____

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
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

	NAME	DATE
CONSTRUCTION STANDARDS		

PROJECT NO. 0000 YV YYV T0592 01 C — 1A OF 34

RECORD DRAWING DATA | FEDERAL ID NO. YYV-0(225)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
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 CROSSOVERS
2/21	M-27 SHT 2	DELINEATION DETAILS FOR MEDIAN CROSSOVERS
6/14	M-29	OFF- MAINLINE REFERENCE MARKER LOCATION DETAIL
6/14	M-30	OFF- MAINLINE REFERENCE MARKER DETAILS
6/14	M-32	BRIDGE AND BARRIER MARKER DETAILS
6/14	M-33	BRIDGE 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

	NAME	DATE
SIGNING & MARKING STANDARDS		

PROJECT NO.			
0000 YV YYV T0592 01 C	1B-1	OF	34

RECORD DRAWING DATA	FEDERAL ID NO.	REC. DWG. DATE	
	YYV-0(225)T		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

	NAME	DATE
SIGNING & MARKING STANDARDS		

PROJECT NO.			
0000 YV YYV T0592 01 C	1B-2	OF	34

RECORD DRAWING DATA	FEDERAL ID NO.	REC. DWG. DATE	
	YYV-0(225)T		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

	NAME	DATE
STRUCTURES STANDARDS		

PROJECT NO. 0000 YV YYV T0592 01 C		1D OF 34	
RECORD DRAWING DATA	FEDERAL ID NO. YYV-0(225)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

☑ No CWA Section 402 Construction General Permit (CGP) Action Required; See Std. Spec. 104.09 and 104.10 for General Requirements

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.

☑ No Vegetation Protection Program Action Required; See Std. Spec. 107.11 for General Requirements

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: Arizona Department of Environmental Quality Air Quality Division

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 partial removal of the bridge wing walls and backwall 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 (ADEQ) 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	Tatum Wertin	**R.E. Name**	
Environmental Planning Date of Completion	10/28/2025	**R.E. Signature**	
FEDERAL ID NO.	YYV-0(225)T		
PROJECT NO.	0000 YV YYV T0592 01C	With the above signature, the R.E. attests that all EPIC work for this project has been satisfactorily completed.	
REC DWG DATE:		**___1F___ OF ____34____**	**Sheet 1F**

MIDPOINT OF PROJECT

Central Zone
State Plane Coordinates

X=456623.00
Y=1562558.08

LENGTH OF PROJECT

Sta 825+26.25 to Sta 828+98.41 = 372.2'
Gross & Net Length = 372.2'-0.07 Miles
Mile Post 149.10 to 149.03

INDEX OF SHEETS

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.

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

Pavement lift thickness is nominal.

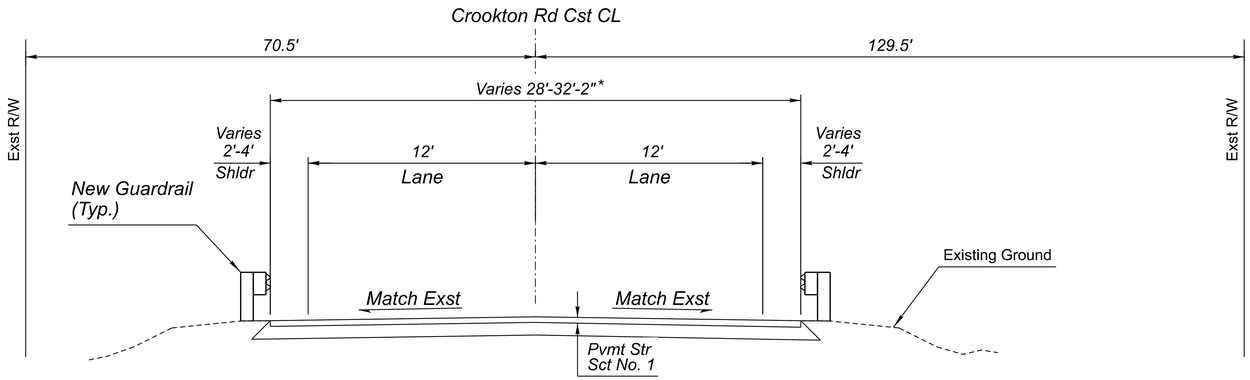
Where only the horizontal location of an existing utility is shown, the location is approximate. Where both the horizontal and vertical location of an existing utility is shown, the location has been verified by field survey methods. The contractor shall comply with all current Blue Stake laws and Section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

Delineators, object markers and mile post markers shall be removed and reset as required at no additional cost to the Department.

New Right of Way and easements are not required.

The average project elevation is 5680'.

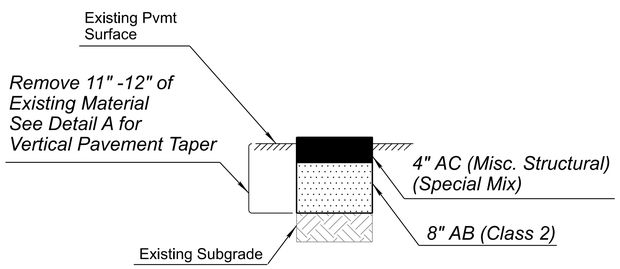
Changes in location or length of spillway or downdrain installation may be made by the Engineer to improve drainage conditions.



TYPICAL SECTION

Sta 825+26.25 to 826+26.25
Sta 827+98.41 to 828+98.41

** Taper guardrail and shoulder at bridge approaches.*



Total Thickness = 12"

SECTION NO. 1

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Registered Professional Engineer (Civil) Certificate No. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M.CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B.GRIMALDI	10/25

ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

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

DESIGN SHEET

ROUTE	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
CKTN RD	ARIZ.	0000 YV YYV	YYV-0(225)T	2	34	
MILEPOST 149	LOCATION CROOKTON RD, YAVAPAI COUNTY					DWG NO. G-1.01
STRUCTURE NO. 08216	TRACS NO. T0592 01 C					____ OF____

F.H.W.A. Arizona Division

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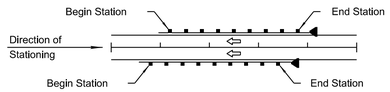
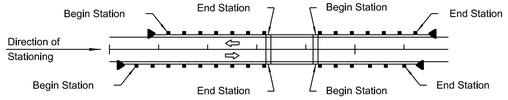
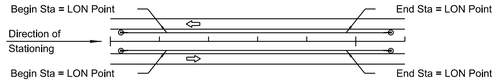
ONE-WAY ROADWAY



TWO-WAY ROADWAY WITH STRUCTURE ◑



DIVIDED ROADWAY WITH
HIGH TENSION MEDIAN CABLE BARRIER



LOCATION	◇	BARRIER																								TRANSITION					END TREATMENT																	
		NEW GUARDRAIL								EXISTING GUARDRAIL					CONCRETE BARRIER								CABLE			RAIL		CONC BARRIER			NEW						EXISTING											
																										Each		Each			Each ◪						Action				Each ◪							
Begin / End Station (Approximate) (0)	Plan Reference Number ◇	C-10.01 Guardrail Installation	C-10.03 (Timber Post)	C-10.04 (Steel Post)	Detail	Length (Linear Feet) (0.0)	C-10.06 Long Span	C-10.07 Box Culvert Post (Each)	Shop Curved Guardrail Length (Linear Feet) (0.0)	Reconstruct-Exst Post, Block Length (Linear Feet) (0.0)	Reconstruct-New Post, Block Length (Linear Feet) (0.0)	Remove and Salvage Length (Linear Feet) (0.0)	Construct from Salvage Length (Linear Feet) (0.0)	Remove Length (Linear Feet) (0.0)	Length (Linear Feet) (0.0)	C-10.40 (32" Median)	C-10.41 (42" Median)	C-10.50 (32" Half)	C-10.54 (32" Half at Piers)	C-10.55 (42" Half at Piers)	Detail	Remove Existing Length (Linear Feet) (0.0)	● High-Tension Cable Barrier Length (Linear Feet) (0)	C-12.30 Chain-Link Cable Barrier Length (Linear Feet) (0.0)	Begin = Treatment at Beginning End = Treatment at End	C-10.30 (Wood Post)	C-10.31 (Steel Post)	C-10.70 32" or C-10.72 42"	C-10.74 42" to 32"	Detail	◧ Tangent C-10.20 thru C-10.24	◧ Flared C-10.26	End Anchor C-10.08 or Detail	High-Tension Cable Terminal	■ Sand Barrels C-1 or Detail	Attenuator Detail	Reconstruct (See Special Prv)	Remove and Salvage	Construct from Salvage	Remove	Tangent	Flared	End Anchor C-10.08 or Detail	High-Tension Cable Terminal	■ Sand Barrels C-1 or Detail	Attenuator Detail	BCT (L=12.5')	REMARKS
Crookton Rd CL 825+26, Rt	1													105											Begin																							
Crookton Rd CL 826+21, Rt																									End																							
Crookton Rd CL 825+26, Lt	2													105											Begin																							
Crookton Rd CL 826+21, Lt																									End																							
Crookton Rd CL 827+93, Rt	3													105											Begin																							
Crookton Rd CL 828+98, Rt																									End																							
Crookton Rd CL 827+93, Lt	4													105											Begin																							
Crookton Rd CL 828+98, Lt																									End																							
Crookton Rd CL 825+26, Rt	5	X	X			100																			Begin						1																	Taper new guardrail to existing per ADOT Standard Drawing C-10.38.
Crookton Rd CL 826+26, Rt																									End	1																						
Crookton Rd CL 825+26, Lt	6	X	X			100																			Begin						1																	Taper new guardrail to existing per ADOT Standard Drawing C-10.38.
Crookton Rd CL 826+26, Lt																									End	1																						
Crookton Rd CL 827+98, Rt	7	X	X			100																			Begin	1																						Taper new guardrail to existing per ADOT Standard Drawing C-10.38.
Crookton Rd CL 828+98, Rt																									End						1																	
Crookton Rd CL 827+98, Lt	8	X	X			100																			Begin	1																						Taper new guardrail to existing per ADOT Standard Drawing C-10.38.
Crookton Rd CL 828+98, Lt																									End						1																	
																									Begin																							
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																									End																							
Sheet Total						400								420												4					4																	

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

● LENGTH IS FROM LENGTH OF NEED (LON) POINT TO LON POINT. ACTUAL SEGMENT LENGTH VARIES DEPENDING ON TERMINAL TYPE. SEE SPECIAL PROVISIONS.

◧ NOTE: FOR RECORD DRAWING PREPARATION - CIRCLE END TREATMENT INSTALLED.

◑ SEE BRIDGE SHEETS FOR BRIDGE BARRIER DETAILS AND QUANTITIES.

◪ ALLOWABLE END TREATMENT OPTIONS ARE INDICATED WITH THE NUMBER '1' IN THE SPACE. BLANK SPACES ARE NOT VIABLE ALTERNATIVES.

■ ARRAY TYPE AND ANGLE IS NOTED UNDER 'REMARKS'.

REV. DATE: 8/25

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44976
BRIAN A.
GRIMALDI
11/19/25

	NAME	DATE
DESIGN	M.CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B.GRIMALDI	10/25

ethos
ENGINEERING, LLC.
9180 S Kyrene Rd
Suite #104
Tempe, AZ 85284

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

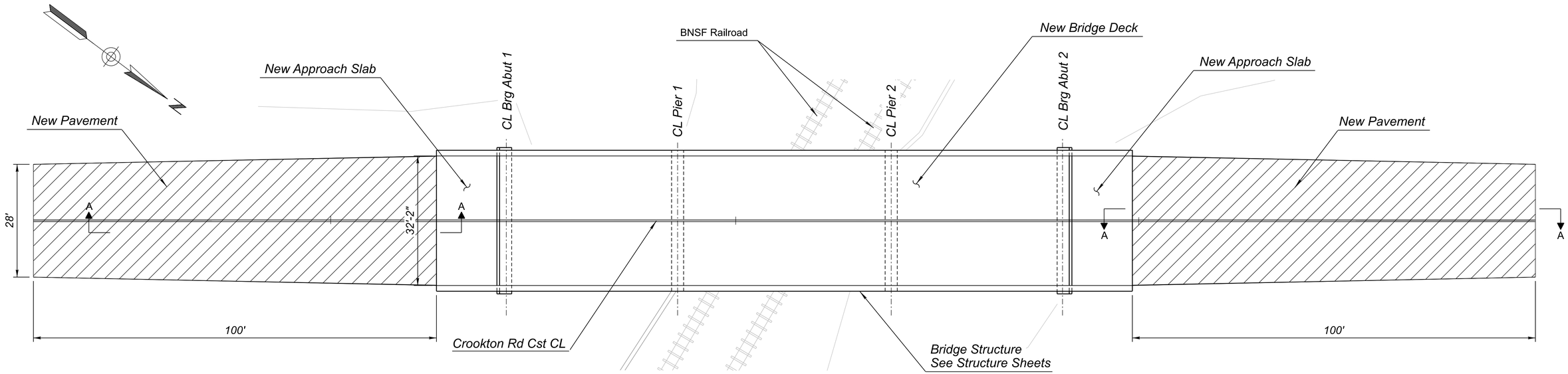
BRIDGE DECK REMOVAL AND RECONSTRUCTION
BARRIER SUMMARY SHEET

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	3	34	

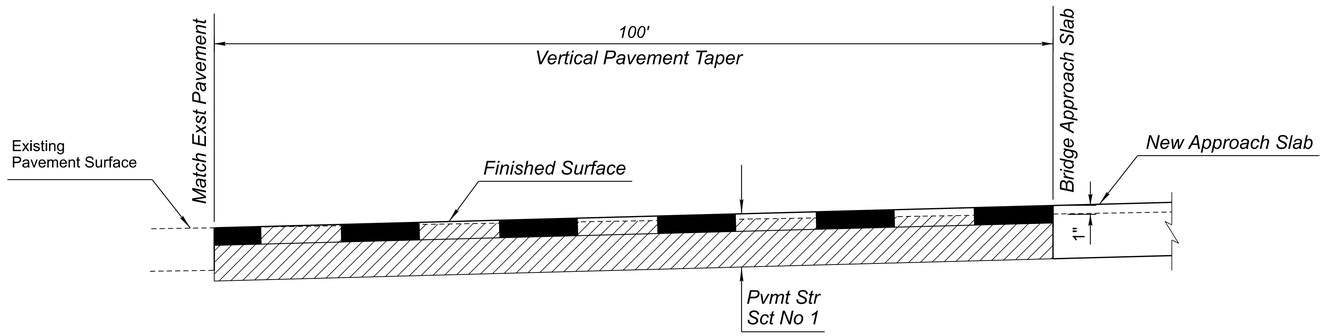
LOCATION CROOKTON RD, YAVAPAI COUNTY
DWG NO. G-1.02
TRACS NO. T0592 01 C
____ OF____

POLIDEN 10/30/2025 11:39:38 AM \\VR-FILE\Projects\2023050 - Yavapai County - BNSF RR Deck Replacement\CADD\General\G-1.02 Barrier Summary Sheet.dgn



PLAN VIEW

NTS



SECTION A-A

NTS

DETAIL A

PAVEMENT TRANSITION

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Registered Professional Engineer (Civil)
CERTIFICATE NO.
44976
BRIAN A. GRIMALDI
11/19/25
Date Signed
ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M.CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B.GRIMALDI	10/25

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

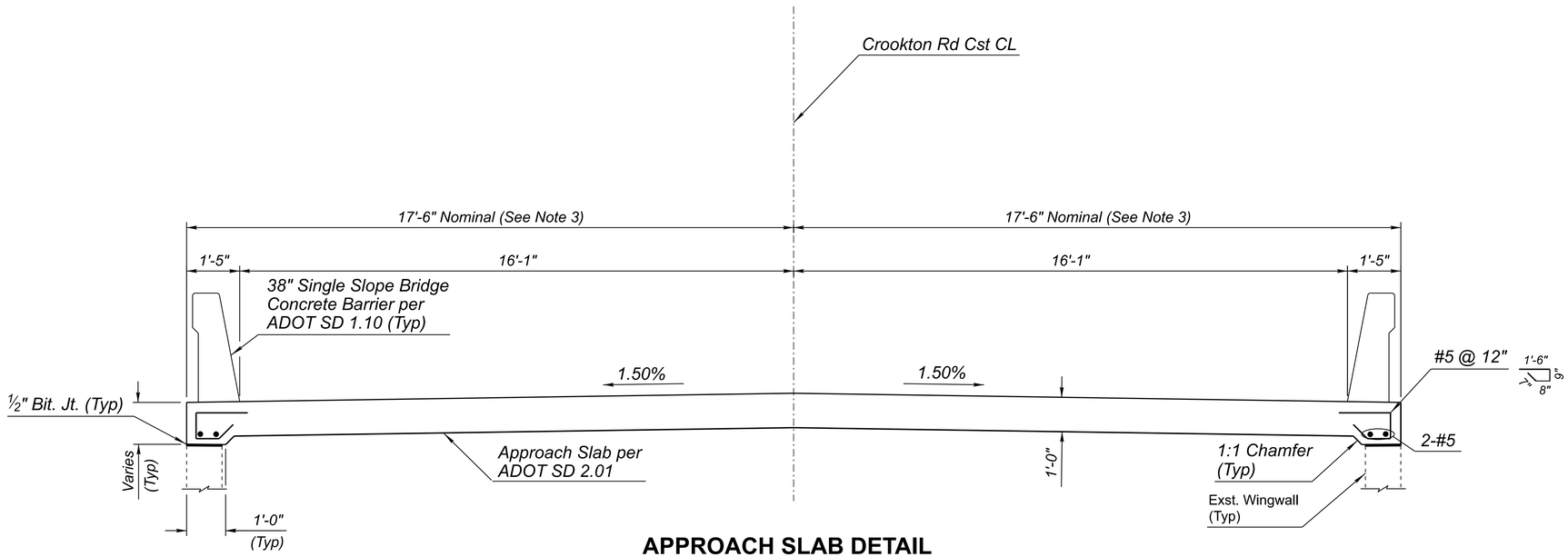
PAVEMENT TRANSITION DETAIL
DETAIL A

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	4	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY — DWG NO. G-2.01

TRACS NO. T0592 01 C — ____ OF____



APPROACH SLAB DETAIL

Scale: ½" = 1'-0"

NOTES

1. *Standard approach slab and barrier reinforcing not shown for clarity.*
2. *Approach slab thickened edge shall be constructed as shown to compensate for any elevation dfference between the removal limit of the existing wingwall and the bottom of the standard approach slab.*
3. *Outside edge of approach slab shall be extended as necessary to match the exterior face of wingwalls.*

DETAIL B

APPROACH SLAB

Registered Professional Engineer (Civil)
CERTIFICATE NO.
44976
BRIAN A. GRIMALDI
11/19/25
Date Signed
ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M.CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B.GRIMALDI	10/25

ethos ENGINEERING, LLC.
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Suite #104
Tempe, AZ 85284

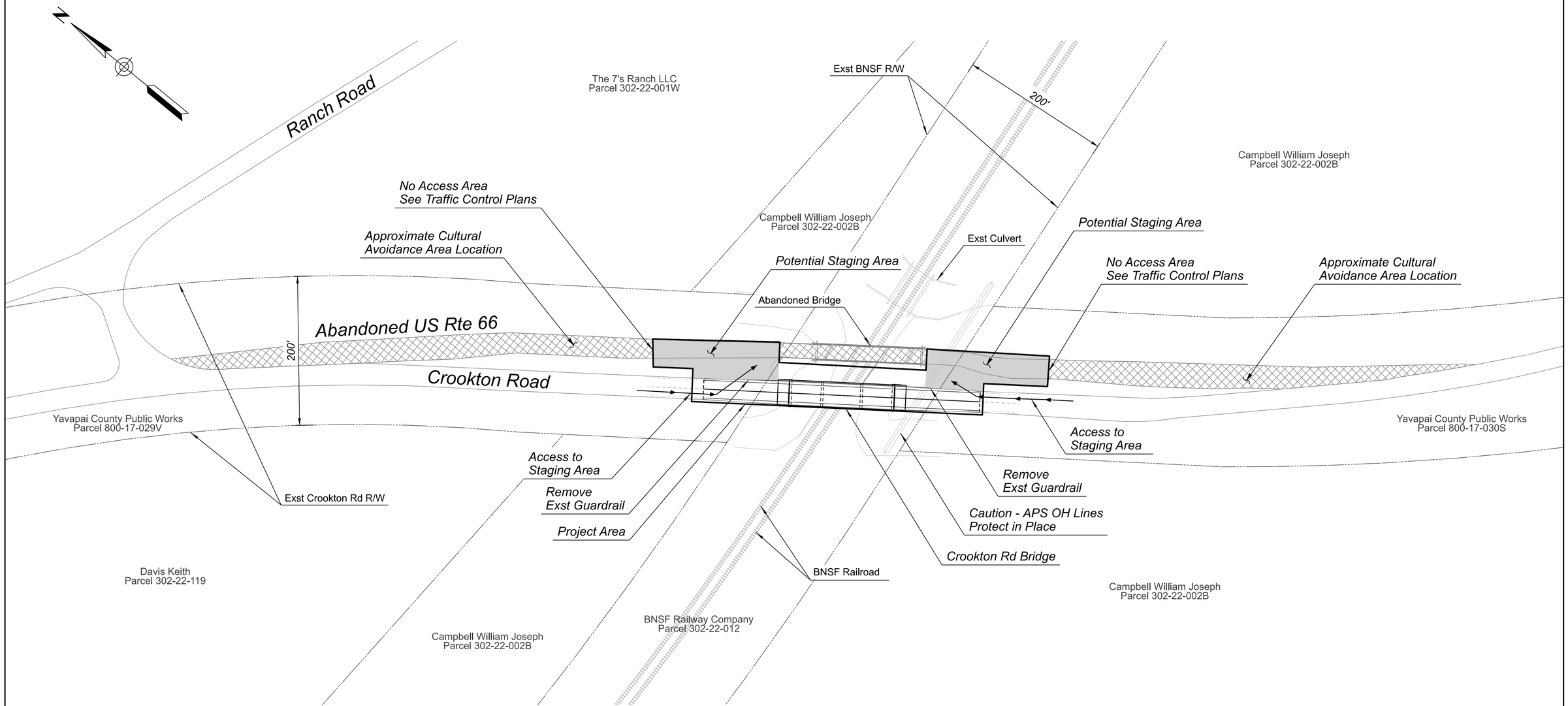
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

APPROACH SLAB DETAIL
DETAIL B

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	5	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY
DWG NO. G-2.02
TRACS NO. T0592 01 C
____ OF ____



NOTES

1. *Construction staging must be limited to the designated potential staging areas shown on the plans. Use of the abandoned bridge and access along the abandoned Historic US Route 66 for construction activities is prohibited. No construction equipment, materials, or vehicles are allowed on the abandoned bridge at any time. These restrictions apply to all cultural avoidance areas. All work, including ground disturbance and staging of vehicles or equipment, must remain within the existing roadway prism.*
2. *All work shall be conducted in BNSF right-of-way and must comply with the Special Provisions and the Contractor's C-1 Agreement with BNSF.*
3. *Contractor is responsible in maintaining proper clearances from overhead lines at all times.*

DETAIL C

CULTURAL
AVOIDANCE AREA

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Registered Professional Engineer (Civil)
CERTIFICATE NO.
44976
BRIAN A.
GRIMALDI
11/19/25
Date Signed
ARIZONA, U.S.A.

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DRAWN	A. SAMOHUALLPA	10/25
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Suite #104
Tempe, AZ 85284

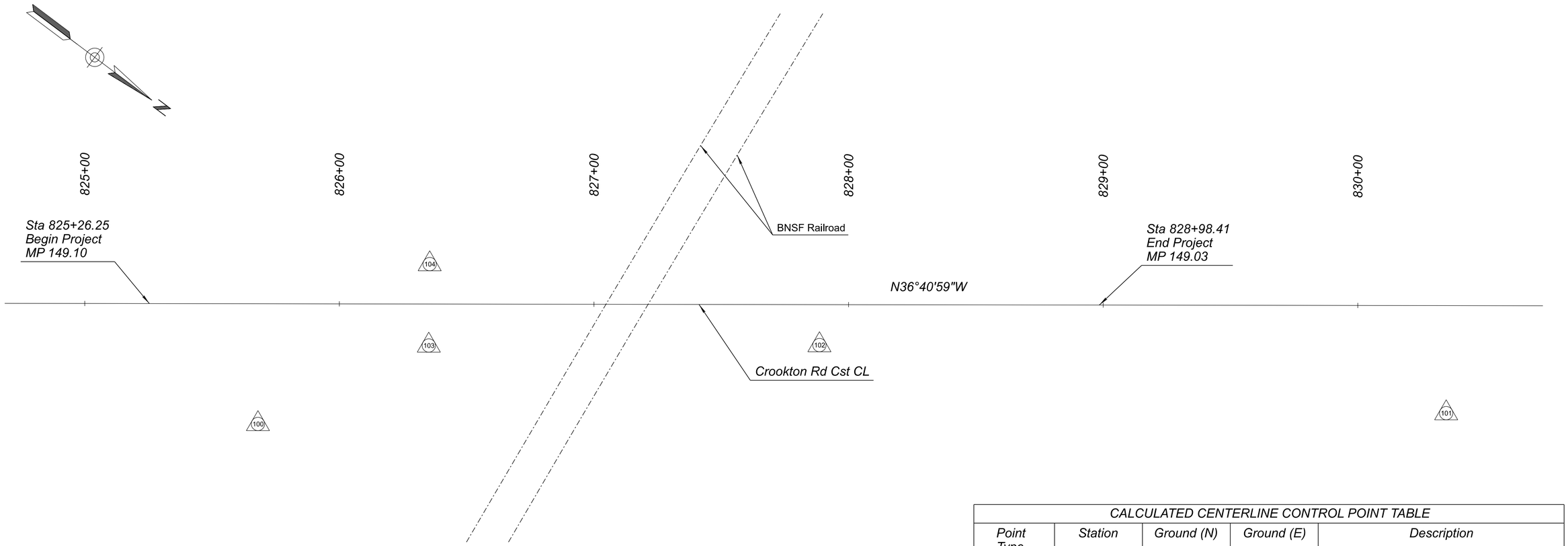
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

CULTURAL AVOIDANCE AREAS DETAIL
DETAIL C

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	6	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY
DWG NO. G-2.03
TRACS NO. T0592 01 C
____ OF____



GENERAL NOTES

The following parameters were used for the basis of this survey:

System: United States State Plane, Arizona Central Zone
Horizontal Datum: NAD 83
Vertical Datum: NAVD 88
Units: International Feet (1 Foot = 0.3048 Meters Exactly)

Basis of Bearings:
TRACE Consulting, LLC furnished the coordinates for this project. All coordinates listed are 1983 (2011 Epoch) State Plane ground coordinates Arizona Central Zone. Standard Transverse Mercator projection, with a scale of origin of X=0.0000 and Y=0.0000. using a grid adjustment factor of 1.0003 as provided by ADOT. These coordinates can be utilized as ground datum. To convert back to grid coordinates divide each coordinate value by 1.0003.

Basis of Elevations:
An elevation of 5679.38 was held on Point #101 established through NGS OPUS solution on July 25, 2023.

All bearings are grid bearings. Distances are ground distances and coordinates are ground coordinates.

The field portion of this survey was performed during July 2023 and February 2024.

The bases of coordinates and elevations for this project were derived from National Geodetic Survey (NGS) OPUS Solutions,performed on July 25, 2023.

"Trace #100"		
NAD 83 (2011)	*35° 17' 25.5796" (N)*	*112° 43' 56.2113" (W)*
Grid Coordinates	*N 1562002.21*	*E 456609.87*
Ground CoordInates	*N 1562470.81*	*E 456746.86*
NAVD 88 Elevation	*5677.20*	
"Trace #101"		
NAD 83 (2011)	*35° 17' 29.2277" (N)*	*112° 43' 59.6572" (W)*
Grid Coordinates	*N 1562373.39*	*E 456327.17*
Ground Coordinates	*N 1562842.10*	*E 456464.07*
NAVD 88 Elevation	*5679.38'*	

CALCULATED CENTERLINE CONTROL POINT TABLE

Point Type	*Station*	*Ground (N)*	*Ground (E)*	*Description*
POB	*825+26.25*	*1562408.65*	*456734.32*	*Crookton Rd Begin Project*
POE	*828+98.41*	*1562707.51*	*456511.69*	*Crookton Rd End Project*

SURVEY CONTROL POINTS

*Name **	*Ground (N)*	*Ground (E)*	*Elevation*	*Description*
100	*1562470.81*	*456746.86*	*5677.20*	*Set Mag Nail (OPUS Solution)*
101	*1562842.10*	*456464.07*	*5679.38*	*Set Mag Nail (OPUS Solution)*
102	*1562628.92*	*456590.03*	*5681.58*	*Found AZ Highway Dept BCF*
103	*1562506.12*	*456682.01*	*5679.20*	*Found AZ Highway Dept BCF*
104	*1562487.27*	*456656.21*	*5679.64*	*NGS 394 USCGBCF - W EDGE OF CAP*

* △ = *Survey Control Point Name*

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Registered Professional Engineer (Civil) Certificate No. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

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DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B.GRIMALDI	10/25

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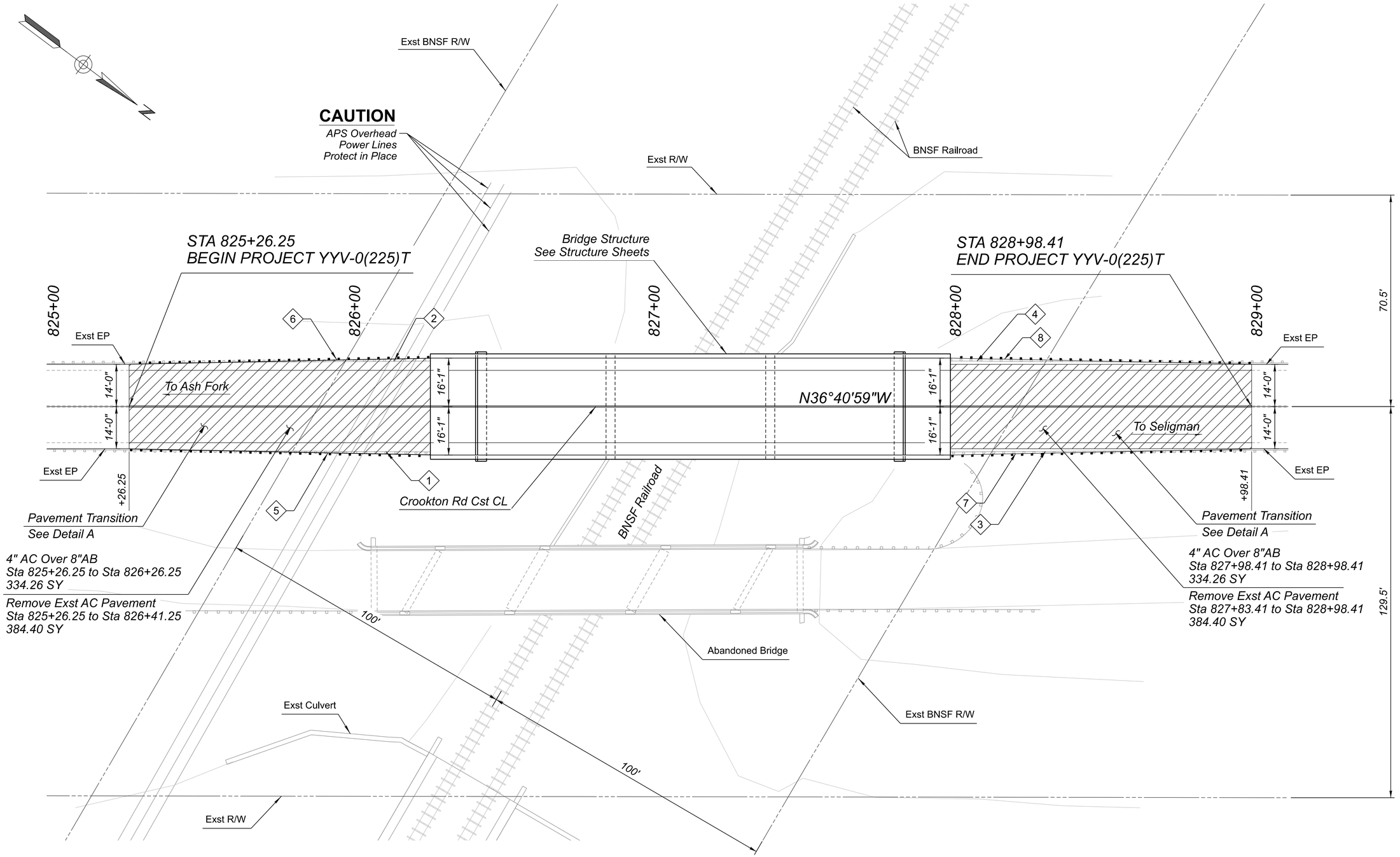
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION

GEOMETRIC & SURVEY CONTROL SHEET

ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
CKTN RD		ARIZ.	0000 YV YYV	YYV-0(225)T	7	34	
MILEPOST 149	LOCATION CROOKTON RD, YAVAPAI COUNTY						DWG NO. C-1.01
STRUCTURE NO. 08216	TRACS NO. T0592 01 C						____ OF____



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Registered Professional Engineer (Civil)
44976
BRIAN A.
GRIMALDI
11/19/25
Date Signed
ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M.CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
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Suite #104
Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SECTION
CROOKTON RD BNSF RR OP
PLAN SHEET
825+00 TO 829+00

ROUTE	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
CKTN RD	ARIZ.	0000 YV YYV	YYV-0(225)T	8	34	
MILEPOST 149						
STRUCTURE NO. 08216						

F.H.W.A. Arizona Division

LOCATION CROOKTON RD, YAVAPAI COUNTY

DWG NO. C-1.02

TRACS NO. T0592 01 C

___ OF ___

TRAFFIC CONTROL NOTES

1. *The traffic control plans represent a suggested method for traffic control during construction. The contractor may prepare and submit 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 traffic control plans shall be in accordance with the requirements of Section 701 "Maintenance and Protection of Traffic" 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, ADOT Temporary Traffic Control Design Guidelines (TCDG) 2019, the Arizona Supplement to the MUTCD 2009, and the Special Provisions Section 104.04. 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.*

2. *Adjustments to the details of these traffic control plans and requirements may be necessary due to construction activities, as directed and approved by the Engineer.*

3. *All existing signs in conflict with the construction signs shall be covered in place as directed by the Engineer. The cost shall be included in the price of contract items. Any sign damaged during the course of construction shall be replaced at no additional cost to the department.*

4. *The retroreflective sheeting on all construction and caution signs shall meet criteria established in Section 1007 of ADOT Standard Specifications and in Section 380 of the ADOT Traffic Engineering Policies, Guidelines and Procedures.*

5. *All advance warning signs are to remain for the duration of the project. All signs shown on the plans shall be mounted on portable sign stands or barricades per plans. All signs may be installed at the height recommended by the sign stand or barricade manufacturer.*

6. *Flags shall be mounted on top of all construction and caution signs on portable sign stands and on top of all barricades type II and III.*

7. *Type A flashing warning lights shall be required on all night-time construction and caution signs mounted on sign stands.*

8. *Type A warning lights shall be mounted on all type II barricades.*

9. *A Type A warning light and an orange flag shall be mounted on each end of each type III barricade.*

10. *Type C steady-burning yellow lights shall be mounted on every vertical panel.*

11. *Channelizing devices shall be placed 40 feet on center in tapers and 80 feet on center in tangents, except as otherwise noted on plans.*

12. *Construction signs shall not be displayed to traffic more than 24 hours prior to the actual start of construction. These signs may be installed sooner but they must be covered or turned away from traffic. The cost for covering or turning them shall be considered part of the sign installation cost. No further compensation will be made. These signs shall be removed within 24 hours after the completion of construction activities.*

13. *All construction signs shall have black letters on an orange background, except as otherwise noted.*

14. *All caution signs shall have black upper panels with yellow "CAUTION" header lettering and yellow lower panels with black letters, except as otherwise noted. Caution signs shall be in accordance with the requirements of OSHA Accident Prevention Signs and Tags Standard (OSHA 1926.200) and OSHA Power Line Safety (Up to 350kV)-- Equipment Operations Standard (OSHA 1926.1408).*

15. *Type I and Type II barricades shall be used for channelizing devices, unless directed by the Engineer to use vertical panels. The contractor may substitute Type I barricades for Type II barricades as long as the reflective area on the top panel of each Type I barricades is equivalent or greater than the reflective area of a Type II barricade.*

16. *When traffic control devices are not in use, they shall be moved at least 30 feet from the roadway.*

17. *An adequate number of Type III barricades shall be placed across each roadway to be closed. A 48 x 30 inch “BRIDGE CLOSED” sign shall be attached to one of the Type III barricades closing the roadway.*

18. *The contractor shall abide by the traffic control requirements contained in subsection 104.04 "Maintenance of Traffic" of the Special Provisions.*

19. *The contractor shall place the changeable message boards two weeks prior to the start of construction to alert traffic of the upcoming road restrictions. The contractor shall position changeable message boards as directed by the Engineer. Cycle time and duration of the messages shall be such that the entire message can be read twice at operating speed from no further than 650 feet. The contractor shall locate the changeable message boards just off the paved roadway in compliance with the clear zone requirements or as directed by the Engineer. The Engineer will determine the messages on the changeable message boards to coincide with construction activities.*

20. *The contractor shall maintain traffic on paved surfaces at all times.*

21. *The contractor shall preserve all roadway signs, sign supports, object markers and milepost markers. The contractor shall replace any signs, sign supports, and markers damaged as a result of the construction at no additional cost to the department.*

22. *Embedded sign post locations shall be field-adjusted based on AZ811 utility markings and as approved by the engineer to avoid conflict with existing underground utilities.*

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Registered Professional Engineer (Civil)
CERTIFICATE NO.
44976
BRIAN A.
GRIMALDI
11/19/25
Date Signed
ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M. CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B. GRIMALDI	10/25

ethos ENGINEERING, LLC.
9180 S Kyrene Rd
Suite #104
Tempe, AZ 85284

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

TRAFFIC CONTROL
GENERAL NOTES

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	9	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

DWG NO. T-1.01

TRACS NO. T0592 01 C

____ OF____

MAINTENANCE OF TRAFFIC				
Activity No.	*Construction Activity*	*Duration (Calendar Days)*	*Traffic Control*	*Comments*
1	*Place all advance warning signs prior to the start of any work.* *Maintain full road closure on Crookton Road for the entire duration of the construction activities.*	*141*	*Provide advance warning signs per details on sheets T-1.04 through T-1.07.*	*Provide Changeable Message Board (CMB), support trailer and ten Type II barricades surrounding each CMB per Figure SA-15 of the ADOT TCDG. CMBs shall be placed 14 days prior to the road closure as directed by the Engineer.* *Lights shall be provided on each barricade as described in the Traffic Control Notes.* *Advanced warning signs and caution signs shall remain for the duration of the work.*
2	*Deck Replacement:* *A. Install Protection System for BNSF Tracks.* *B. Remove existing railing, guardrail, curb and dados.* *C. Remove existing concrete deck.* *D. Remove portions of the existing backwall and wingwalls and reconstruct as shown on structural plans.* *E. Perform modifications on existing steel girders and install new shear studs.* *F. Construct new deck and install deck drains and deck joints.* *H. Construct new approach slabs.* *I. Construct bridge barrier and install chain link fence to top of barrier.* *J. Remove Protection System for BNSF Tracks.* *K. Slurry backfill at front face of the abutments.*	*109*	*Install erosion control, construct deck replacement, and construct bridge approach roadways under full road closure per details on sheet T-1.07.*	
3	*Bridge Approach Roadway:* *A. Remove and install new pavement at the bridge approach roadway as shown on roadway sheets.* *B. Remove and construct new roadway guardrail and thrie beam transitions.*	*66*		
4	*Install new pavement markings.* *Remove all advance warning signs once all work is completed.*	*5*	*Perform pavement and marking activities under full road closure per details on sheet T-1.07*	

NOTES

1. *The order of activities above does not constitute a sequence of construction. The contractor shall perform the work in the most expeditious manner consistent with the project plans, ADOT project Special Provisions and approval of the Engineer.*

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Registered Professional Engineer (Civil)
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BRIAN A. GRIMALDI
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ARIZONA, U.S.A.

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DESIGN	M. CONTRERAS	10/25
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CHECKED	B. GRIMALDI	10/25

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Tempe, AZ 85284

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

TRAFFIC CONTROL
MAINTENANCE OF TRAFFIC

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	10	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

DWG NO. T-1.02

TRACS NO. T0592 01 C

____ OF____

APPROXIMATE TRAFFIC CONTROL QUANTITIES							
		Estimated Duration (Calendar Days)	*141 Days*	*109 Days*	*66 Days*	*5 Days*	
Bid Item Number	*Element Of Work*	*Unit*	*Activity 1*	*Activity 2*	*Activity 3*	*Activity 4*	*Total*
7016030	*Barricade (Type II, Vertical Panel)*	*Each-Day*	*8,883*				*8,883*
7016031	*Barricade (Type III, High Level Flag Tree)*	*Each-Day*	*2,115*				*2,115*
7016033	*Portable Sign Stand (Spring Type)*	*Each-Day*	*2,256*				*2,256*
7016035	*Warning Light (Type A)*	*Each-Day*	*13,818*				*13,818*
7016037	*Warning Light (Type C)*	*Each-Day*	*1,551*				*1,551*
7016051	*Temporary Sign (Less Than 10 S.F.)*	*Each-Day*	*1,269*				*1,269*
7016052	*Temporary Sign (10 S.F. Or More)*	*Each-Day*	*2,820*				*2,820*
7016067	*Changeable Message Board (Contractor Furnished)*	*Each-Day*	*705*				*705*

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

TRAFFIC CONTROL
QUANTITIES

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	11	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

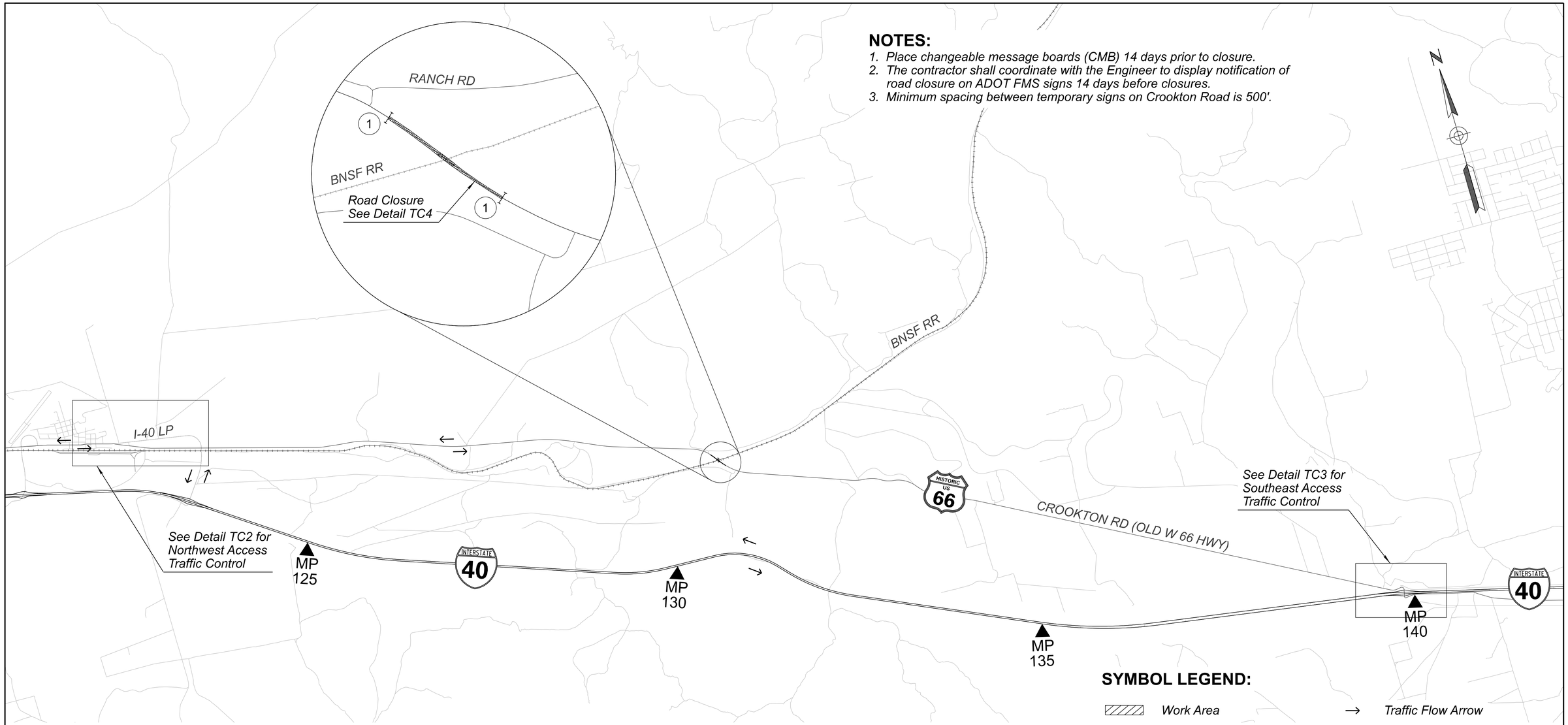
DWG NO. T-1.03

TRACS NO. T0592 01 C

____ OF ____

NOTES:

1. *Place changeable message boards (CMB) 14 days prior to closure.*
2. *The contractor shall coordinate with the Engineer to display notification of road closure on ADOT FMS signs 14 days before closures.*
3. *Minimum spacing between temporary signs on Crookton Road is 500'.*



SYMBOL LEGEND:

	Work Area	→	*Traffic Flow Arrow*
	Bridge Area		*Changeable Message Board (CMB)*
●	*Vertical Panel with Flashing Light Type C*		*Sign on Embedded Post*
⊢	*Type II Barricade with Flashing Light Type A*	⊢	*Sign on Spring Stand*
⊢⊢	*Type III Barricade with Flashing Light Type A*		*Existing Sign*

1

BRIDGE CLOSED

R11-2
48" x 30"

DETAIL TC1

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1-800-533-2891

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CERTIFICATE NO.
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BRIAN A. GRIMALDI
11/19/25
Date Signed
ARIZONA, U.S.A.

	NAME	DATE
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DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B. GRIMALDI	10/25

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

DETAIL TC1
ADVANCED WARNING SIGN DETAIL

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division

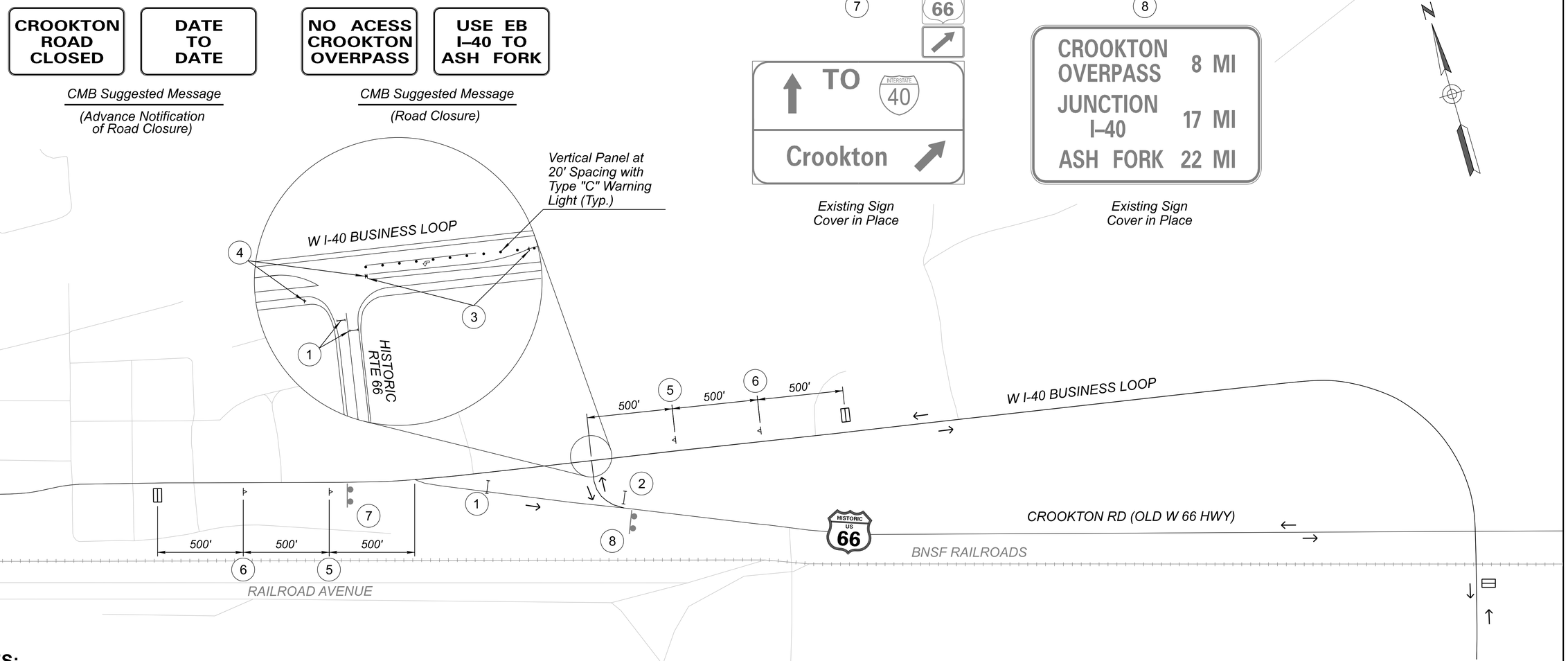
STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYY	YYV-0(225)T	12	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY

DWG NO. T-1.04

TRACS NO. T0592 01 C

____ OF ____



NOTES:

1. *Place changeable message boards (CMB) 14 days prior to closure.*
2. *The contractor shall coordinate with the Engineer to display notification of road closure on ADOT FMS signs 14 days before closures.*
3. *Minimum spacing between temporary signs on Crookton Road is 500'.*

1 — ROAD CLOSED TO THRU TRAFFIC — *R11-4 60" x 30"*

2 — ROAD CLOSED 8 MILES AHEAD LOCAL TRAFFIC ONLY — *R11-3a 60" x 30"*

3 — *Type "A" Warning Light (Typ.)* — *R3-2 24" x 24"*

4 — *R3-1 24" x 24"*

5 — ROAD CLOSED AHEAD — *W20-3 48" x 48"*

6 — ROAD WORK AHEAD — *W20-3 48" x 48"*

SYMBOL LEGEND:

- *Work Area*
- *Bridge Area*
- *Vertical Panel with Flashing Light Type C*
- *Type II Barricade with Flashing Light Type A*
- *Type III Barricade with Flashing Light Type A*
- *Traffic Flow Arrow*
- *Changeable Message Board (CMB)*
- *Sign on Embedded Post*
- *Sign on Spring Stand*
- *Existing Sign*

DETAIL TC2

Contact Arizona 811 at least two full working days before you begin excavation
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Registered Professional Engineer (Civil) CERTIFICATE NO. 44976 BRIAN A. GRIMALDI Date Signed 11/19/25 ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M. CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B. GRIMALDI	10/25

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

DETAIL TC2
ADVANCED WARNING SIGN DETAIL

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	13	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

DWG NO. T-1.05

TRACS NO. T0592 01 C

____ OF ____

CROOKTON ROAD CLOSED	DATE TO DATE

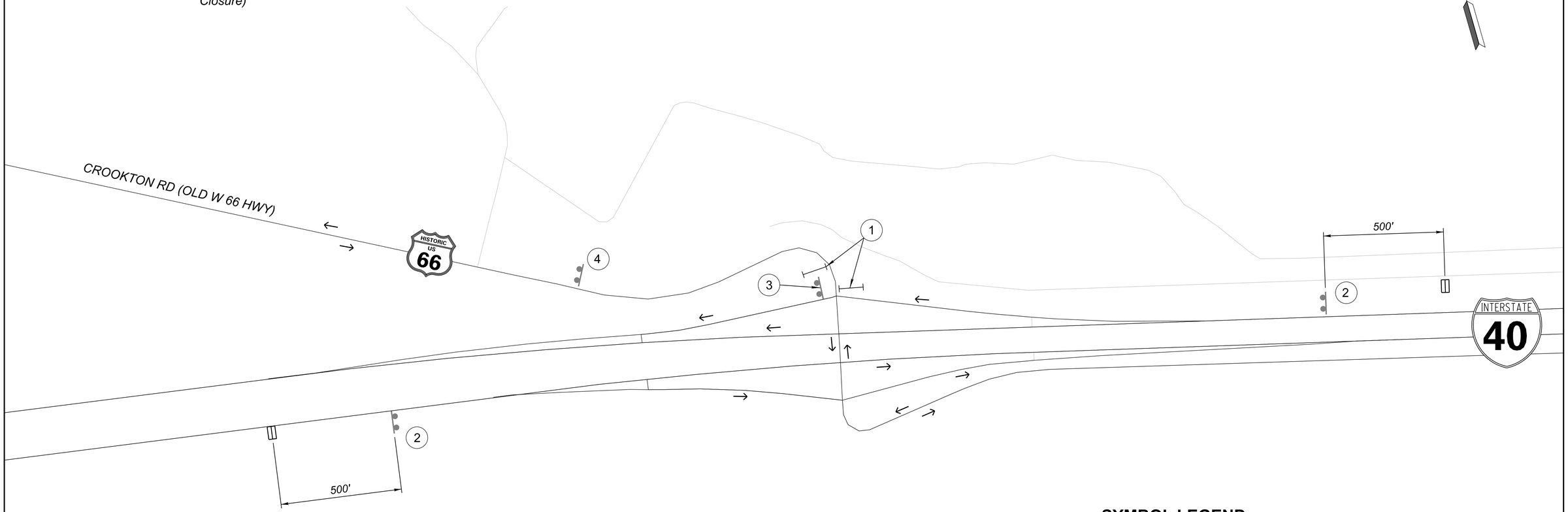
CMB Suggested Message
Advance Notification of Road Closure)

NO ACCESS CROOKTON OVERPASS	USE WB I–40 TO SELIGMAN

CMB Suggested Message
(Road Closure)

NOTES:

1. *Place changeable message boards (CMB) 14 days prior to closure.*
2. *The contractor shall coordinate with the Engineer to display notification of road closure on ADOT FMS signs 14 days before closures.*
3. *Minimum spacing between temporary signs on I-40 and Crookton Road is 500'.*



1

R11-4
60" x 30"

2

Existing Sign
Cover in Place

3

Existing Sign
Cover in Place

4

Existing Sign
Cover in Place

SYMBOL LEGEND:

- *Work Area*
- *Bridge Area*
- *Vertical Panel with Flashing Light Type C*
- *Type II Barricade with Flashing Light Type A*
- *Type III Barricade with Flashing Light Type A*
- *Traffic Flow Arrow*
- *Changeable Message Board (CMB)*
- *Sign on Embedded Post*
- *Sign on Spring Stand*
- *Existing Sign*

DETAIL TC3

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA 811 Call 811 or click Arizona811.com

BNSF CALL BEFORE YOU DIG 1–800–533–2891

Registered Professional Engineer (Civil) CERTIFICATE NO. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M. CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B. GRIMALDI	10/25

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

DETAIL TC3
ADVANCED WARNING SIGN DETAIL

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	14	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY — DWG NO. T-1.06

TRACS NO. T0592 01 C — ____ OF ____

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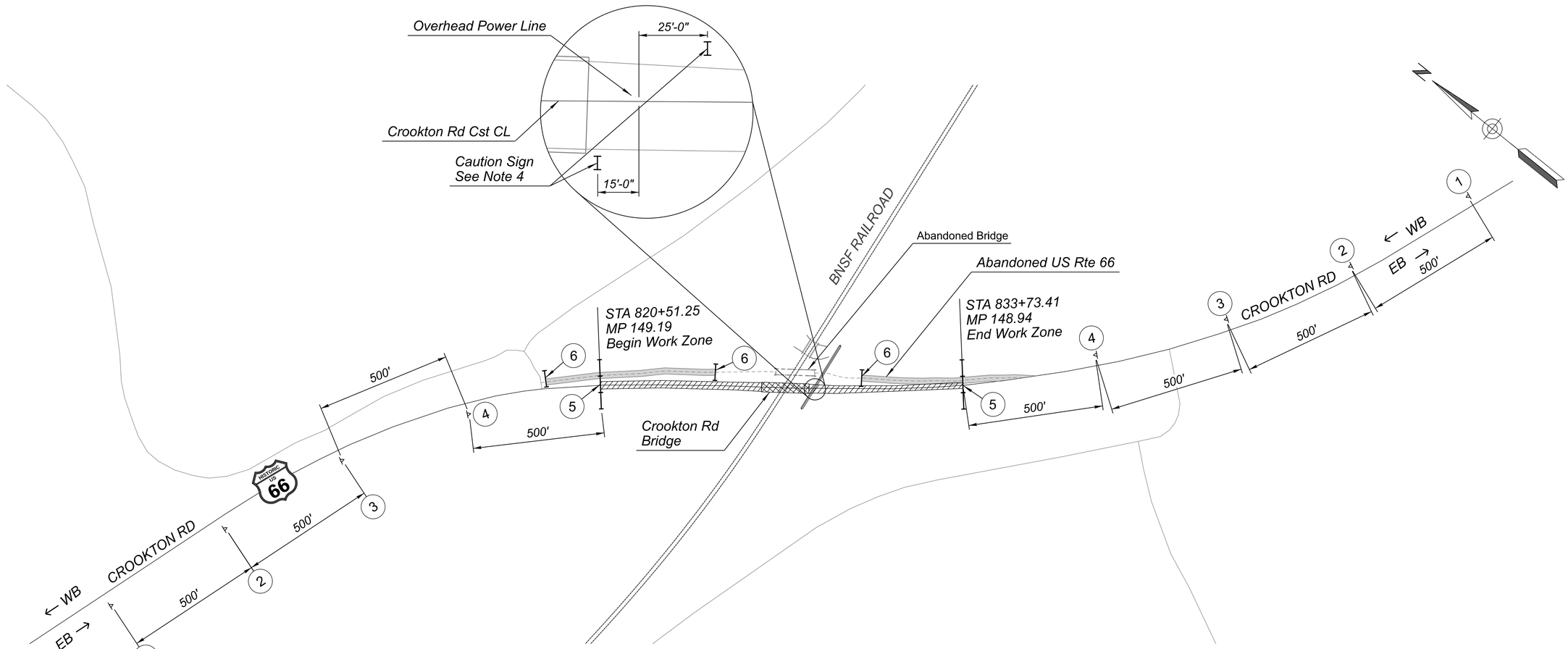

NOTES:

1. Place changeable message boards (CMB) 14 days prior to closure.
2. The contractor shall coordinate with the Engineer to display notification of road closure on ADOT FMS signs 14 days before closures.
3. Minimum spacing between temporary signs on Crookton Road is 500'.
4. Install caution signs with CAUTION WATCH OVERHEAD POWER LINES message.
5. EM-2 signs to be placed at road boundaries of the Potential Staging Area. See Detail C in General Detail Sheets.

Type "A" Warning Light (Typ.)

1	2	3	4	5	6
ROAD WORK AHEAD	BE PREPARED TO STOP	ROAD CLOSED 1000FT	ROAD CLOSED 500FT	BRIDGE CLOSED	AREA CLOSED
W20-3 48" x 48"	W3-4 48" x 48"	W20-3 48" x 48"	W20-3 48" x 48"	R11-2 48" x 30"	EM-2 30" x 24"

SYMBOL LEGEND:

- Work Area
- Bridge Area
- No Access Area
- Vertical Panel with Flashing Light Type C
- Type II Barricade with Flashing Light Type A
- Type III Barricade with Flashing Light Type A
- → Traffic Flow Arrow
- Changeable Message Board (CMB)
- Sign on Embedded Post
- Sign on Spring Stand
- Existing Sign

DETAIL TC4

Contact Arizona 811 at least two full working days before you begin excavation
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BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer (Civil) Certificate No. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

	NAME	DATE
DESIGN	M. CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B. GRIMALDI	10/25

ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

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

DETAIL TC4
ADVANCED WARNING SIGN DETAIL

ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
CKTN RD		ARIZ.	0000 YV YYV	YYV-0(225)T	15	34	
MILEPOST 149	LOCATION CROOKTON RD, YAVAPAI COUNTY						DWG NO. T-1.07
STRUCTURE NO. 08216	TRACS NO. T0592 01 C						OF

PAVEMENT MARKING NOTES:

1. *All markings shall be in compliance with the latest editions of the ADOT Standard Specifications, ADOT Signing and Marking Standard Drawings, the Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition, and the Arizona Supplement to the MUTCD, unless noted in the Special Provisions or these plans.*

2. *The dimensions shown to pavement stripes are to the center of the stripe.*

3. *Final striping shall be a two-part epoxy pavement marking material placed at a minimum of 30 days after the initial striping. The two-part material shall conform to the requirements of the Special Provisions.*

4. *All reflective raised pavement markers shall have an abrasion-resistant coating on the face of the prismatic reflectors and shall conform to details M-19 of the ADOT Standard Drawings. They shall be installed with a bituminous adhesive which is on the ADOT Approved Products List.*

5. *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 epoxy pavement markings. The roadway surface shall be dry. The pavement temperature shall not be less than 40 degree F and the air temperature wind chill factor shall not be less that 35 degree F for the placement of epoxy pavement markings.*

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 any construction joint, unless otherwise directed by the Engineer.*

7. *The contractor shall be responsible for the layout and installation of permanent pavement markings on the final surface course following control points that have been set no more than 50 feet apart along the lines to be striped.*

8. *When stripe obliteration is necessary, it shall be accomplished by an approved method. Painting over striping, and overlaying pavement do not constitute stripe obliteration.*

9. *The pavement marking drawings are schematic only and not to scale. The contractor shall follow all dimensions and details when installing pavement markings.*

10. *The Engineer may modify pavement marking plans.*

11. *The contractor shall remove the curing compound before installing pavement markings on the new Crookton Rd over BNSF Railroad bridge deck.*

APPROXIMATE PAVEMENT MARKING QUANTITIES

Bid Item Number			Unit	Total	4" Equivalent Total
7090001	Dual Component Pavement Marking	6" White Epoxy	L.Ft.	745	1,118
7090002		6" Yellow Epoxy	L.Ft.	745	1,118
7090014	Removal of Curing Compound for Striping		L.Ft.	689	-
7060015	Pavement Marker, Raised, Type D		Each	10	-

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Registered Professional Engineer (Civil)
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ARIZONA, U.S.A.

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DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B. GRIMALDI	10/25

ethos ENGINEERING, LLC.
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Tempe, AZ 85284

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

PAVEMENT MARKING
GENERAL NOTES & QUANTITIES

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division

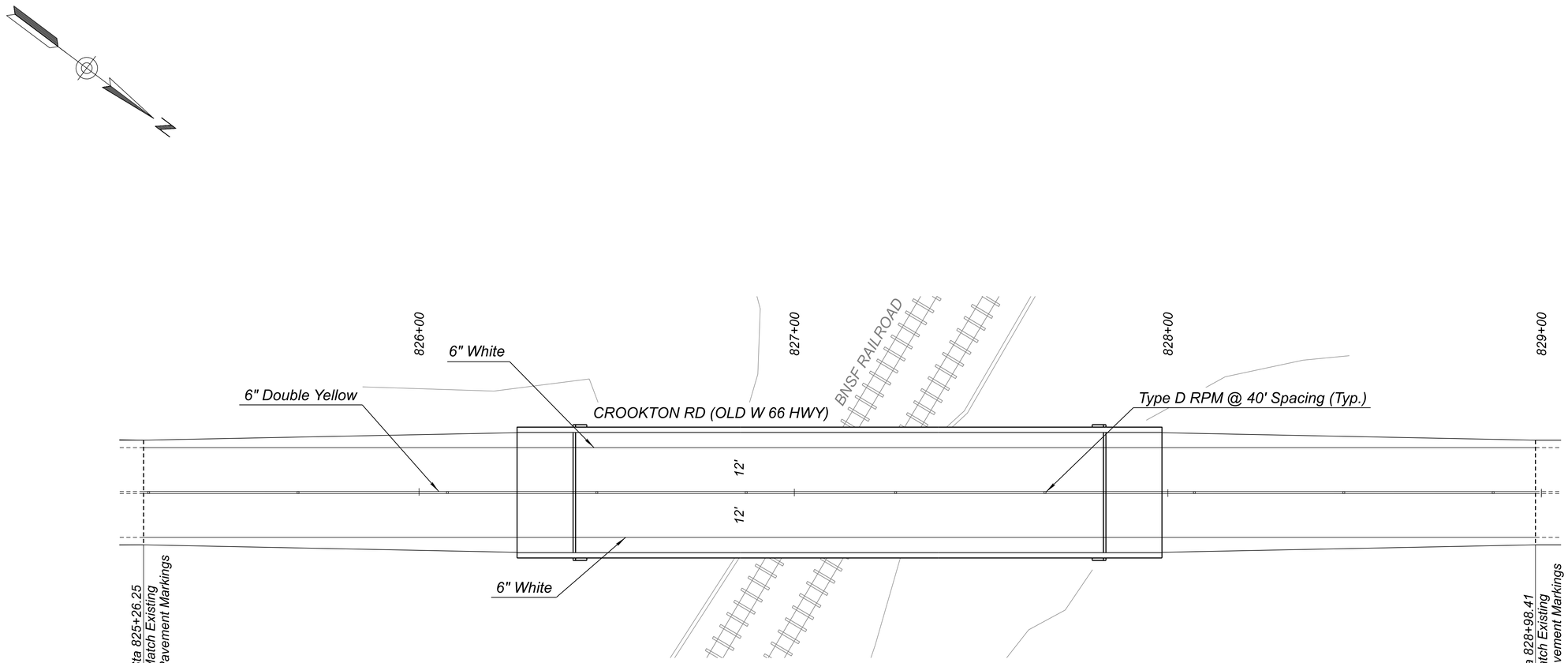
STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	16	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

DWG NO. T-2.01

TRACS NO. T0592 01 C

____ OF____



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Call 811 or click Arizona811.com

BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer (Civil)
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BRIAN A. GRIMALDI
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ARIZONA, U.S.A.

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CHECKED	B. GRIMALDI	10/25

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9180 S Kyrene Rd
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Tempe, AZ 85284

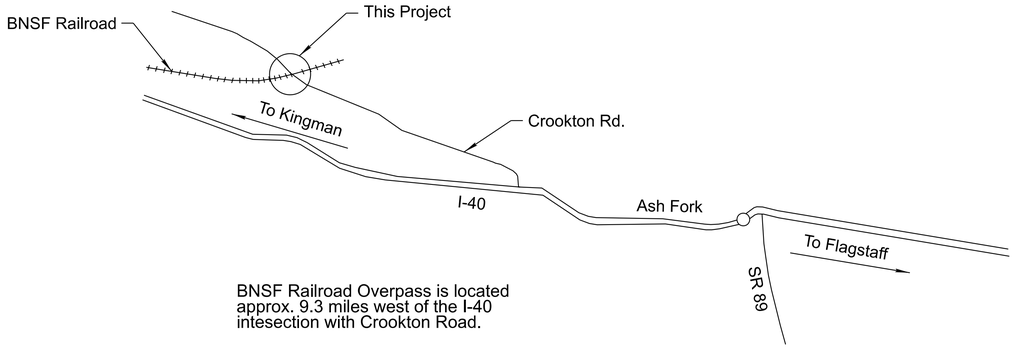
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

PERMANENT PAVEMENT MARKING PLAN
825+00 to 829+00

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	17	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY
DWG NO. T-2.02
TRACS NO. T0592 01 C
____ OF____



BNSF Railroad Overpass is located approx. 9.3 miles west of the I-40 intesection with Crookton Road.

VICINITY MAP

NO SCALE

BRIDGE DECK REMOVAL AND RECONSTRUCTION

INDEX OF DRAWINGS

NOTE:

1. Details Provided on Drawings S-1.12 through S-1.15 are Taken Directly from the BNSF Guidelines. These Standard Drawings shall be Followed During Bridge Removal Operations.

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Registered Professional Engineer (Civil) C. Brian A. Grimaldi
44976
BRIAN A. GRIMALDI
11/19/25
Date Signed
ARIZONA, U.S.A.

	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

ethos ENGINEERING, LLC.
9180 S Kyrene Rd
Suite #104
Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
VICINITY MAP AND INDEX
OF DRAWINGS

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

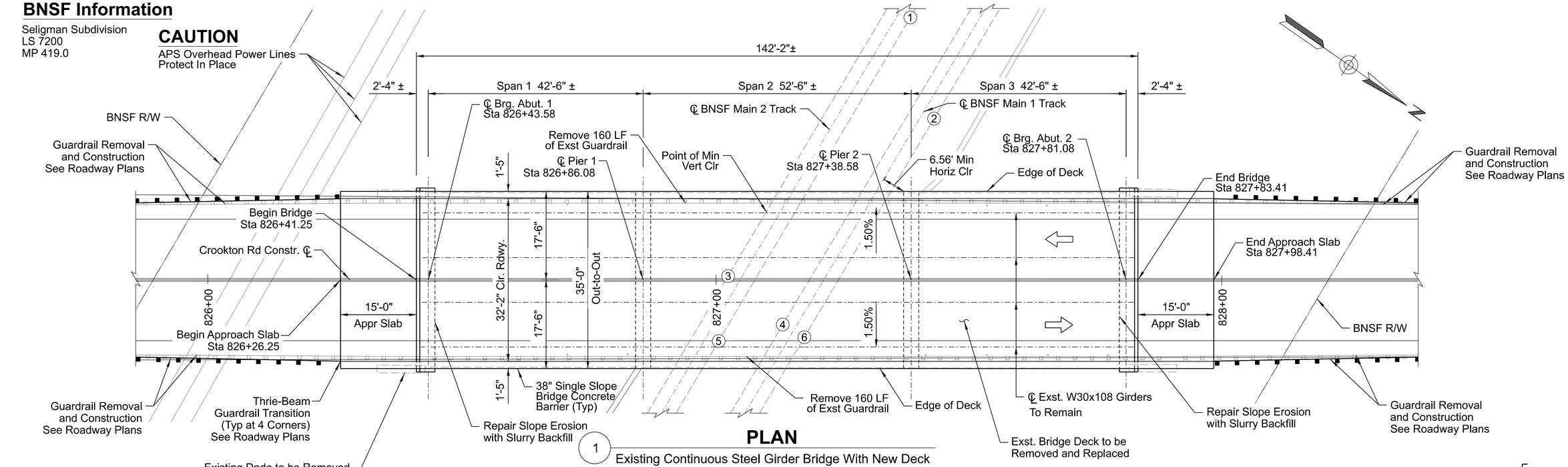
F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	18	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY
DWG NO. S-1.01
TRACS NO. T0592 01 C
____ OF____

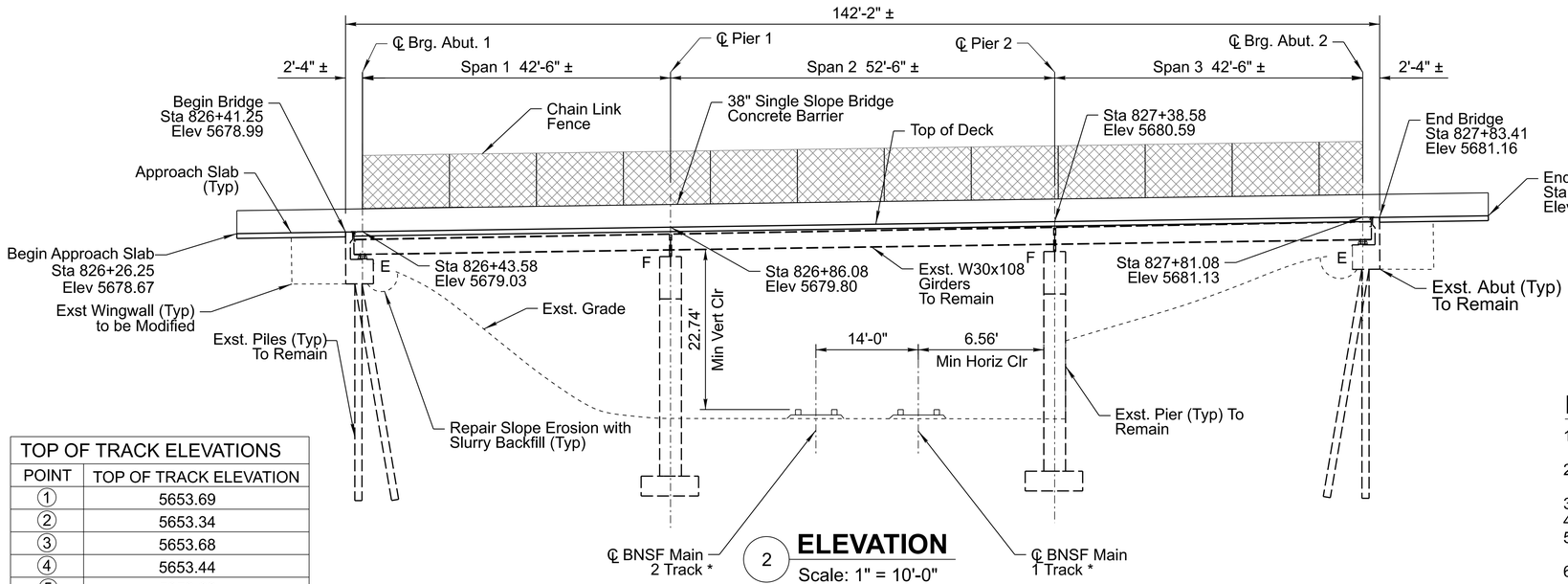
BNSF Information

Seligman Subdivision
LS 7200
MP 419.0

CAUTION
APS Overhead Power Lines
Protect In Place



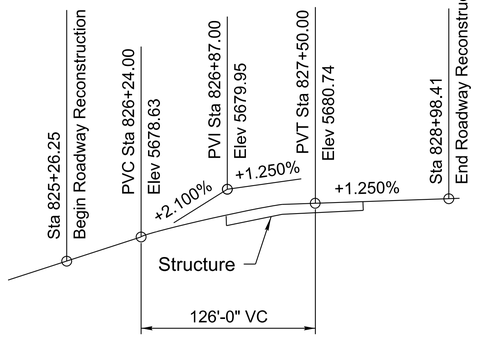
PLAN
1 — Existing Continuous Steel Girder Bridge With New Deck
No Skew
Scale: 1" = 10'-0"



ELEVATION
2 — Scale: 1" = 10'-0"

* : BNSF LS 7200, MP 419, Seligman Division

TOP OF TRACK ELEVATIONS	
POINT	TOP OF TRACK ELEVATION
①	5653.69
②	5653.34
③	5653.68
④	5653.44
⑤	5653.62
⑥	5653.36



PROFILE GRADE - CROOKTON RD

NOTES:

1. The existing bridge was constructed by the Arizona Highway Department under Project No. NON FA 80-B-1955 in 1956.
2. The original bearings were replaced in 2000 as shown in the as-built drawings (Cannon & Associates).
3. See S-1.04 and S-1.05 for deck removal limits.
4. Stations and Elevations are given along the Construction Centerline.
5. All Stations, Elevations, and Dimensions shown on this sheet are for the proposed bridge deck.
6. Repair slope erosion at front face of each abutment using slurry backfill. See Bid Item No. 9240142 - Miscellaneous Work (Slurry Backfill) and Special Provisions.

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 Call 811 or click Arizona811.com
BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer — Civil — 44976 — BRIAN A. GRIMALDI — 11/19/25 — Date Signed — ARIZONA, U.S.A.

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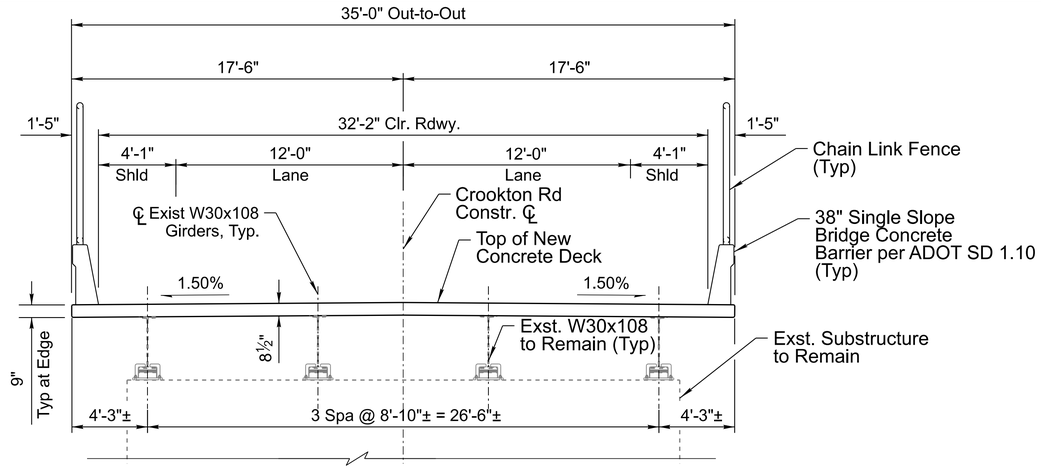
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
GENERAL PLAN & ELEVATION

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	19	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY
TRACS NO. T0592 01 C
DWG NO. S-1.02
____ OF ____



1 **NEW TYPICAL SECTION**

Scale: ¼" = 1'-0"

GENERAL NOTES:

Construction Specification - ADOT Standard Specifications for Road and Bridge Construction, 2021 and Special Provisions.

Design Specifications - AASHTO LRFD Bridge Design Specifications, 9th Edition, 2020.

Dead Load - Dead load includes an allowance for 25 psf for future wearing surface (FWS) and 15psf for metal stay-in-place deck forms.

Live Load - Loading Class HL-93 (Deck design only).
Loading Class HS20-44 (Girder Rating only).

Inventory and operating Ratings are in accordance with the AASHTO Manual for Bridge Evaluation, 3rd Edition with Interim Revisions through 2020, in accordance with the Load and Resistance Factor Rating Method.
Inventory Load Rating - 1.04
Operating Load Rating - 1.46

All concrete shall be Class 'S' unless noted otherwise.

Reinforcing steel shall conform to ASTM Specification A615. All reinforcing shall be furnished as Grade 60 Epoxy Coated.

All bends and hooks shall meet the requirements of AASHTO Article 5.10.2. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing steel shall be to center of bars unless noted otherwise.

All reinforcing steel shall have 2 inch clear cover unless noted otherwise.

Material Strengths:

Deck	f'c =	4.5	ksi
Approach Slabs	f'c =	4.0	ksi
38" Single Slope Bridge Concrete Barrier	f'c =	4.0	ksi
All Other Class 'S' Concrete	f'c =	3.5	ksi
Grade 60 Transverse Deck Reinforcement	fs =	24.0	ksi
All Other Grade 60	fy =	60.0	ksi
Structural Steel Shear Studs (ASTM A108)	fy =	50.0	ksi
Miscellaneous Structural Steel	fy =	36.0	ksi

All welding shall conform to the requirements of the American Welding Society. ANSI/AASHTO/AWS D1.5 Bridge Welding Code, latest edition.

Lead is likely present in the paint on the girders and on the bearings. Removal of lead based paint material, if required, shall be in accordance with the Specifications.

Barriers shall be constructed after spans have taken dead load deflection. Barriers shall not be slip formed.

Chamfer all exposed corners ¾" unless noted otherwise.

Dimensions shall not be scaled from drawings.

Construction joints not shown on plans shall require the approval of the Engineer prior to construction.

Approximate Quantities (For Information Only)			
Description	Units	Total	As-Built
Remove (Bridge Railing)	LF	285	
Removal of Structural Concrete	CY	170	
Remove (Guard Rail on Crookton Bridge)	LF	320	
Structural Excavation	CY	30	
Structure Backfill	CY	30	
Structural Concrete (Class S) (f'c = 3,500)	CY	12	
Structural Concrete (Class S) (f'c = 4,500)	CY	134	
Bridge Deck Drain Assembly	LS	1	
Single Slope Bridge Concrete Barrier and Transition (38")	LF	345	
Deck Joint Assembly (3x3 Compression Seal)	LF	65	
Approach Slab (SD 2.01)	SF	1,050	
Reinforcing Steel (Epoxy Coated)	LB	46,655	
Chain Link Fence (Crookton Bridge)	LF	275	
Force Account Work (Steel Girder Modifications)	LS	1	
Miscellaneous Work (Shear Studs)	LS	1	
Miscellaneous Work (Slurry Backfill)	CY	8	

In addition to the requirements of section 202-3.05 of the standard specifications, at least ten working days before beginning any bridge removal operations either wholly or in part, the contractor shall submit to the Engineer for review and approval, details of the proposed removal operations showing the methods and sequence of removal and equipment to be used.

All dimensions are based on the record drawings and shall be verified prior to the fabrication of any materials.

The contractor shall measure the existing top of deck along the inside face of curb and at the centerline of the bridge at the tenth points prior to the start of construction. The elevation, northing, and easting shall be provided to the Engineer for review.

Design and construction of deck falsework systems by the contractor shall ensure that bridge girders are braced and tied to resist any forces that would cause rotation or torsion in the girders caused by the placing of the deck concrete or shall verify the bridge girders are adequate for those effects.

All construction joints shall be intentionally roughened to an amplitude of 1/4" unless noted otherwise.

Work associated with the Railroad Protection System is included under the item "Removal of Structural Concrete," in accordance with the Special Provisions.

ADOT Structure Detail Drawings:

SD 1.10, SD 2.01 & SD 3.01.

LEGEND:

DETAIL Marker — 1 / XX — 1: Detail Number; XX: Drawing Number

ELEVATION Marker — 1 / XX — 1: Elevation Number; XX: Drawing Number

SECTION Marker — A / XX — A: Section Letter; XX: Drawing Number

Contact Arizona 811 at least two full working days before you begin excavation. Arizona811 Call 811 or click Arizona811.com

BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer (Civil) CERTIFICATE NO. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

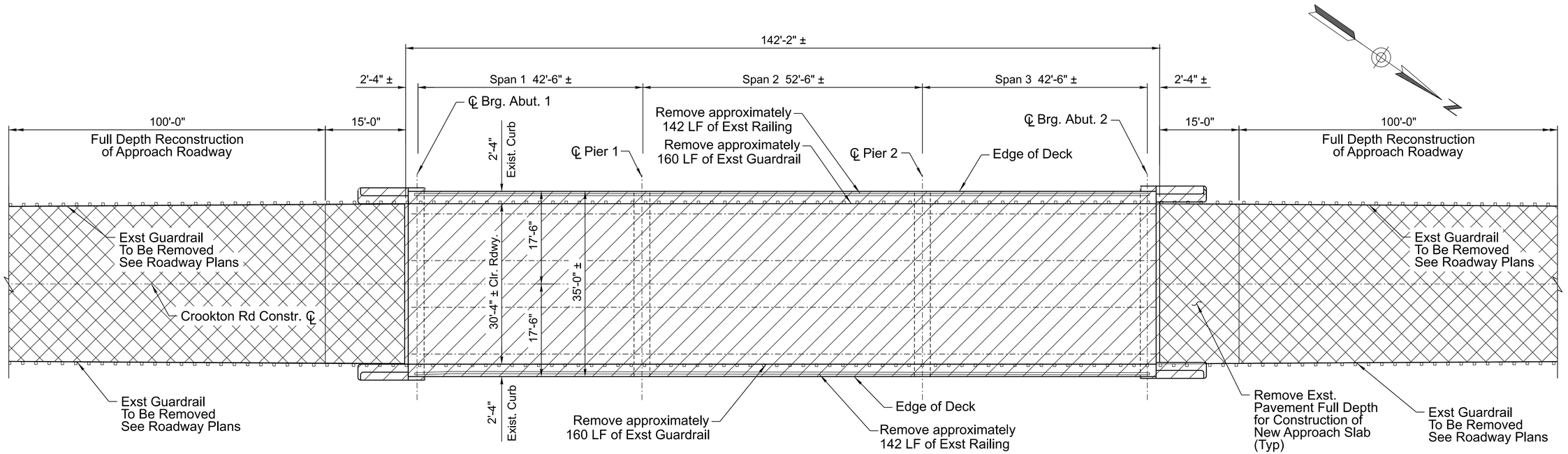
BNSF RR OVERPASS BRIDGE
TYPICAL SECTION

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	20	34	

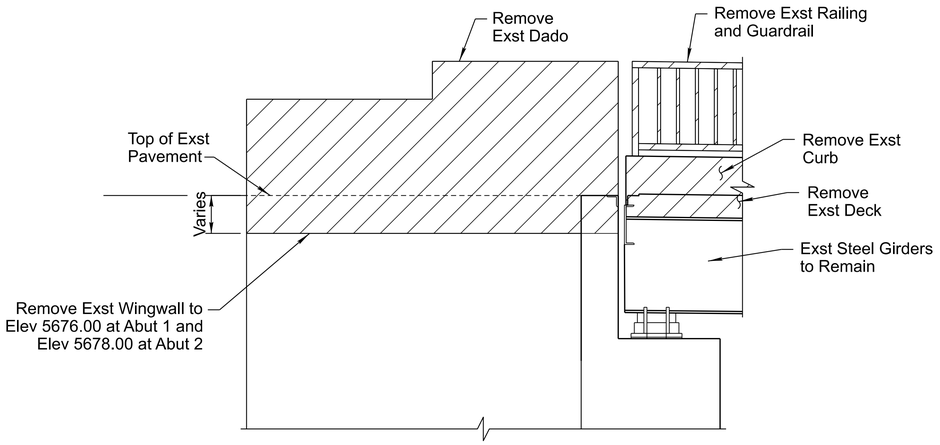
LOCATION: CROOKTON RD, YAVAPAI COUNTY — DWG NO. S-1.03

TRACS NO. T0592 01 C — ____ OF ____



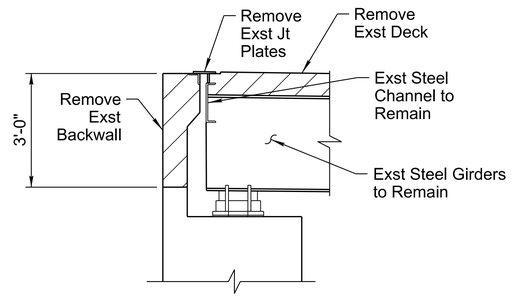
1 BRIDGE DECK CURBS, RAILINGS, PAVEMENT, AND GUARDRAILS REMOVAL PLAN

Scale: 1" = 10'-0"



2 DADO AND PARTIAL WINGWALL REMOVAL

Scale: 1/2" = 1'-0"



3 PARTIAL BACKWALL REMOVAL

Scale: 1/2" = 1'-0"

LEGEND:

Hatched area indicates concrete removal of existing deck, curbs, railings, guardrails, wingwalls, backwalls, and dados.

Removal of Existing Pavement Full Depth

GENERAL REMOVAL NOTES

1. Concrete, railings, and guardrails shall be removed to the limits shown in accordance with Section 202 of the ADOT Standard Specifications.
2. All removal shall comply with BNSF Demolition Guidelines and BNSF Grade Separation Guidelines.

DECK REMOVAL NOTES

1. Damage to the existing girders, as a result of the Contractor's removal operations, shall be repaired to the satisfaction of the Engineer.
2. The size, type, and spacing of the existing shear connectors on the top flange of the girders are unknown. All existing shear connectors that are in conflict with the new shear studs shall be removed and disposed of. Existing shear connectors that are not in conflict with the new shear studs may remain in place.
3. New shear studs shall be installed per detail on Dwg S-1.09.
4. A Removal Plan shall be submitted to the Engineer and BNSF for approval prior to starting any removal operations over the BNSF railroad tracks. See BNSF Track Protection Details.

DADO AND WINGWALL REMOVAL NOTES

1. The Contractor shall exercise due care in removal of the existing concrete to prevent damage to the remaining concrete.
2. Existing reinforcement shall be cut flush with the removal limit and sealed with epoxy.

BACKWALL REMOVAL NOTES

1. Existing vertical reinforcement shall be protected during removal of the concrete. Reinforcement shall be cleaned and straightened for incorporation into the new concrete.

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ARIZONA811 Call 811 or click Arizona811.com
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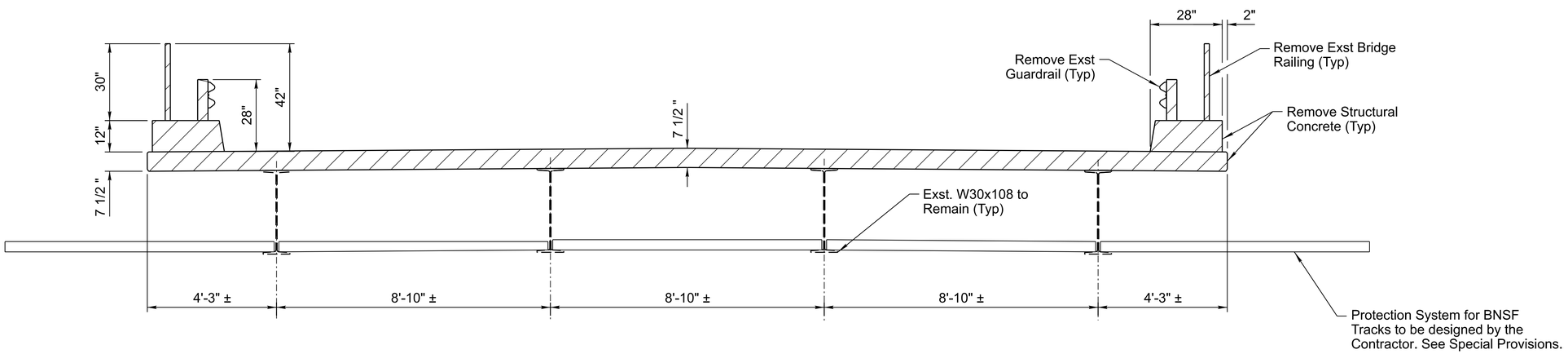
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
REMOVAL DETAILS 1

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	21	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY
DWG NO. S-1.04
TRACS NO. T0592 01 C
____ OF ____



EXISTING TYPICAL SECTION

(Looking North)
Scale: 1/2" = 1'-0"

NOTE:

1. Existing guardrail and railing shall be removed and disposed of by the contractor. See Special Provisions.

LEGEND:

Hatched area indicates removal of existing deck, curbs, railings, and guardrails.

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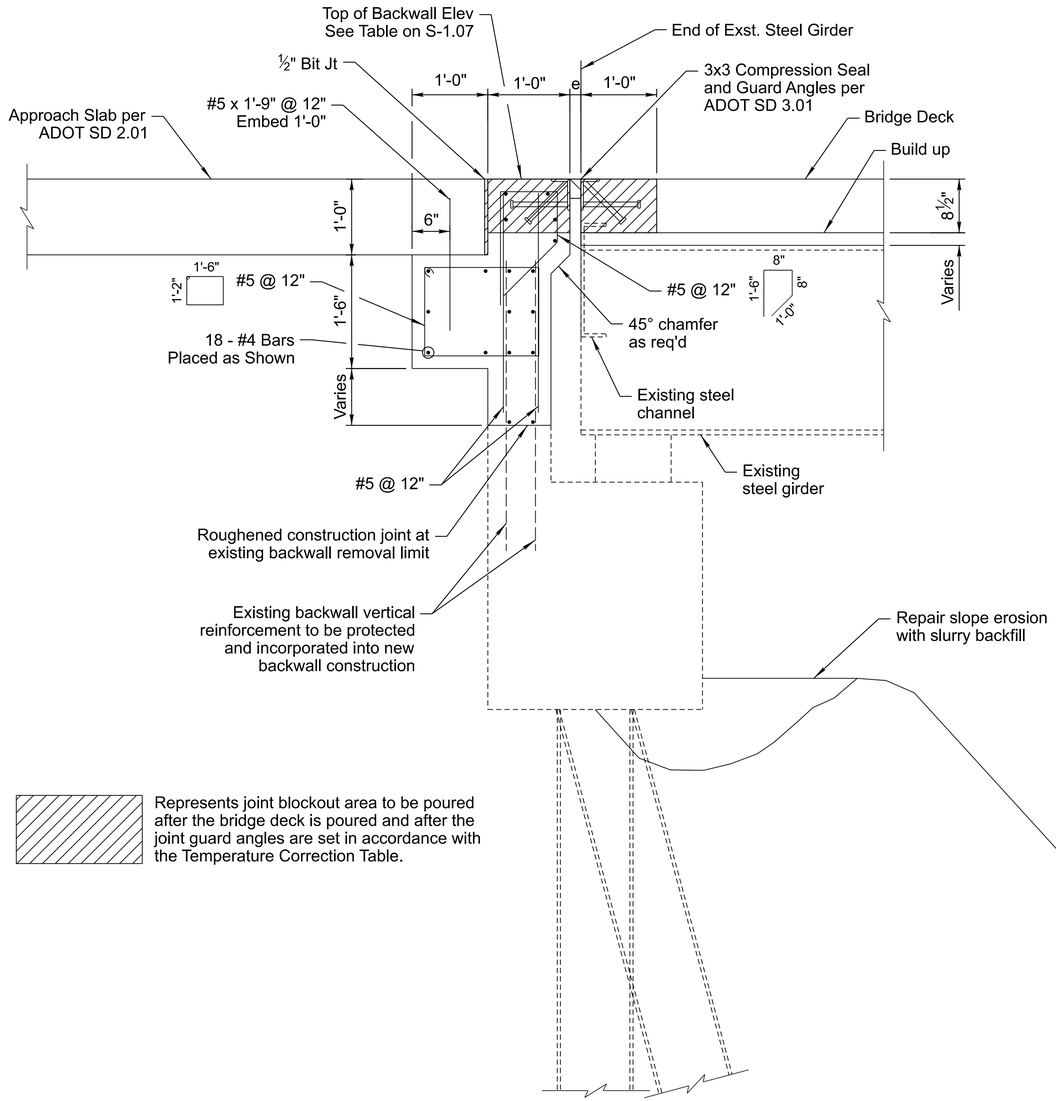
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
REMOVAL DETAILS 2

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	22	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY
DWG NO. S-1.05
TRACS NO. T0592 01 C
____ OF____



Represents joint blockout area to be poured after the bridge deck is poured and after the joint guard angles are set in accordance with the Temperature Correction Table.

Temp Correction	
Temp (°F)	e (in)
20	2
30	1 15/16
40	1 15/16
50	1 7/8
60	1 13/16
65	1 13/16
70	1 3/4
80	1 11/16
90	1 5/8
100	1 9/16

NOTES:

1. Repair slope erosion at front face of each abutment using slurry backfill. See Bid Item No. 9240142 - Miscellaneous Work (Slurry Backfill) and Special Provisions.
2. Approach slab and deck reinforcement not shown for clarity.
3. The 'e' dimension shall be adjusted according to the Temperature Correction Table based on the ambient temperature at the time the joint blockout concrete is poured.
4. Limits of new backwall construction are from left edge of deck to right edge of deck.
5. Limits of new approach slab shelf are from exterior face of existing left wingwall to exterior face of existing right wingwall.

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

BNSF RR OVERPASS BRIDGE
ABUTMENT DETAILS

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division

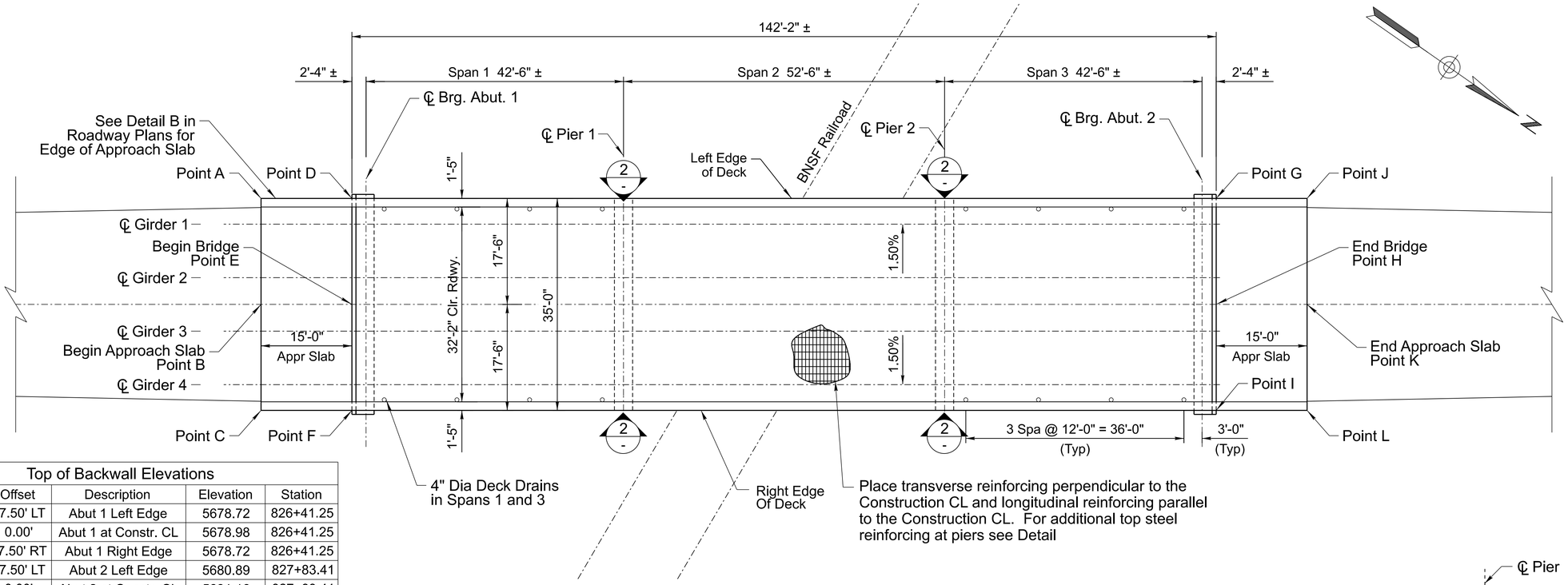
STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	23	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

DWG NO. S-1.06

TRACS NO. T0592 01 C

____ OF____

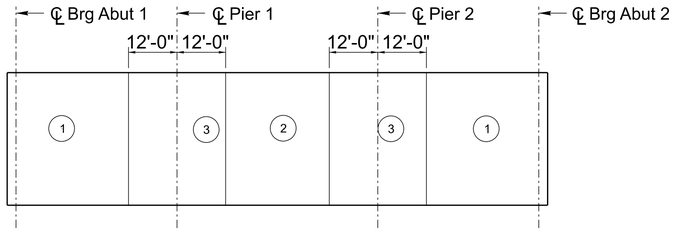


Top of Backwall Elevations				
Point	Offset	Description	Elevation	Station
D	17.50' LT	Abut 1 Left Edge	5678.72	826+41.25
E	0.00'	Abut 1 at Constr. CL	5678.98	826+41.25
F	17.50' RT	Abut 1 Right Edge	5678.72	826+41.25
G	17.50' LT	Abut 2 Left Edge	5680.89	827+83.41
H	0.00'	Abut 2 at Constr. CL	5681.16	827+83.41
I	17.50' RT	Abut 2 Right Edge	5680.89	827+83.41

APPROACH SLAB FINISHED GRADE ELEVATIONS				
LOCATION	ABUTMENT #1		ABUTMENT #2	
	Begin Approach Slab	End Approach Slab	Begin Approach Slab	End Approach Slab
Left Edge	Point A	Point D	Point G	Point J
	Sta 826+26.25	Sta 826+41.25	Sta 827+83.41	Sta 827+98.41
	17.50' LT	17.50' LT	17.50' LT	17.50' LT
	Elev 5678.41	Elev 5678.72	Elev 5680.89	Elev 5681.08
Constr CL	Point B	Point E	Point H	Point K
	Sta 826+26.25	Sta 826+41.25	Sta 827+83.41	Sta 827+98.41
	0.00' RT	0.00' RT	0.00' RT	0.00' RT
	Elev 5678.67	Elev 5678.98	Elev 5681.16	Elev 5681.34
Right Edge	Point C	Point F	Point I	Point L
	Sta 826+26.25	Sta 826+41.25	Sta 827+83.41	Sta 827+98.41
	17.50' RT	17.50' RT	17.50' RT	17.50' RT
	Elev 5678.41	Elev 5678.72	Elev 5680.89	Elev 5681.08

POUR NOTES:

1. Numbers (1), (2) & (3) indicate placing sequence of deck concrete. Pour (2) sections a minimum of 48 hours after (1) sections have been poured. Pour (3) sections a minimum of 12 hours after adjacent (1) & (2) sections have been poured.
2. As an alternate, (1) and (2) sections may be poured consecutively in sequence in one direction only. The rate of pour shall be such that each new section shall be poured before the previously poured adjacent section has set.
3. Sections (2) and (3) may be poured consecutively but only if the concrete remains plastic during the entire pour and a minimum of 48 hours after the adjacent (1) section has been poured.
4. The contractor shall submit a Deck Pour Schedule to the Engineerfor approval prior to placing concrete.



DECK POUR SCHEDULE (1)

NOTE:

See SD 1.10 for additional information.

OPEN JOINT DETAIL (2)

Over Continuous Piers
Scale: 1" = 1'-0"

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
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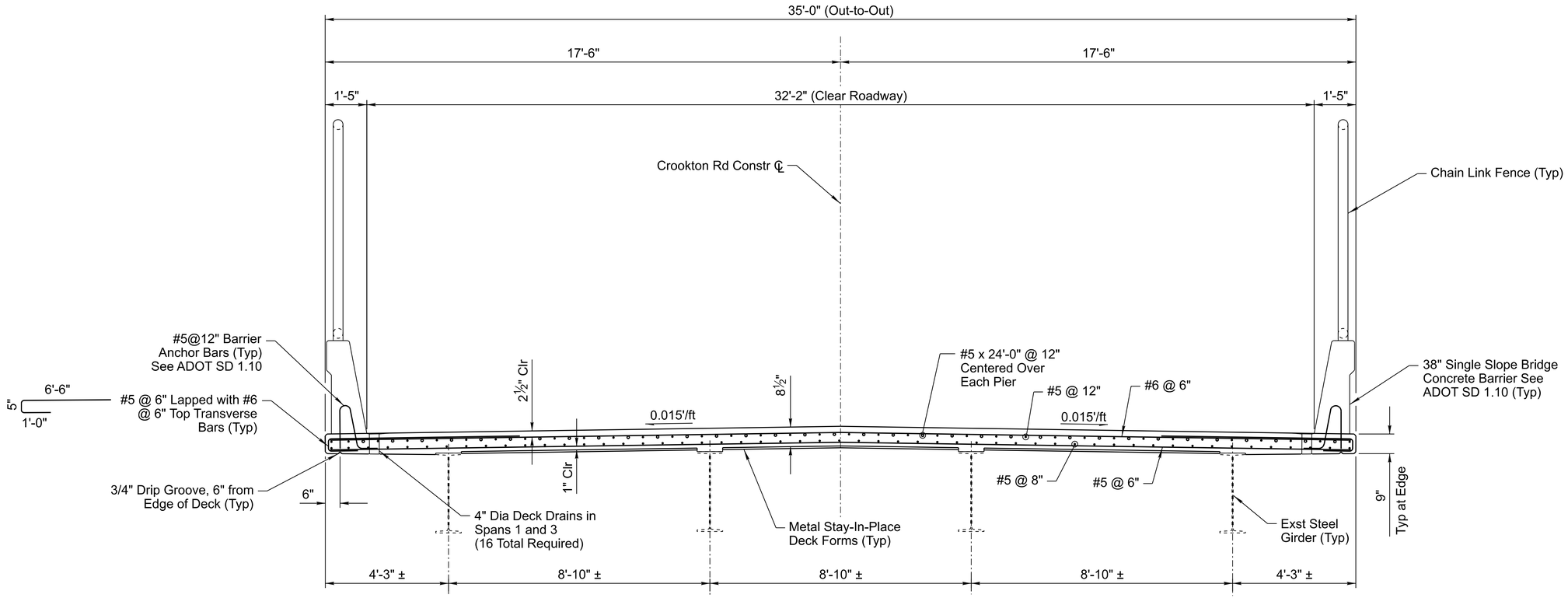
BNSF RR OVERPASS BRIDGE
DECK PLAN & DETAILS

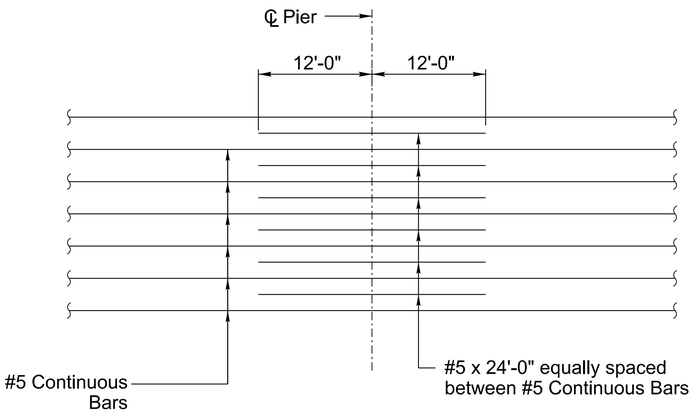
ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYY	YYV-0(225)T	24	34	
LOCATION CROOKTON RD, YAVAPAI COUNTY						DWG NO. S-1.07
TRACS NO. T0592 01 C						____ OF ____



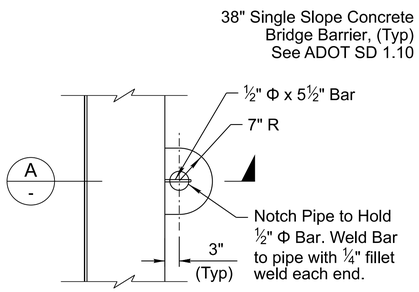
1 TYPICAL SECTION

Scale: 1/2" = 1'-0"



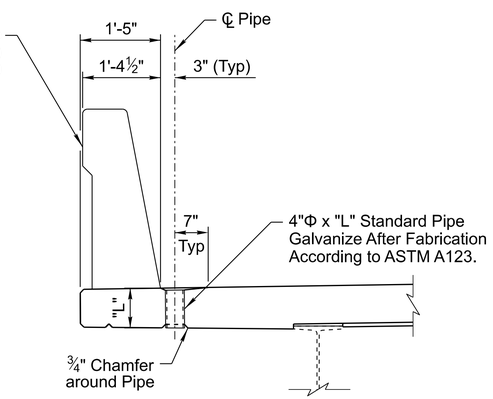
2 ADDITIONAL LONGITUDINAL TOP STEEL REINFORCING

Scale: NTS



3 DECK DRAIN DETAIL

Scale: 3/4" = 1'-0"



A DECK DRAIN DETAIL

Scale: 3/4" = 1'-0"

SUPERSTRUCTURE NOTES:

All continuous horizontal reinforcing steel in the Deck Slab, and Barriers may be spliced if approved by the Engineer with minimum lap lengths specified in Note 1 and subject to the following limitations in Notes 2 thru 6, unless otherwise noted.

1. Minimum lap length of bar splices shall be: #5 bars..... 2'-4"
   #6 bars..... 2'-9"
2. Bars shall not be spliced within the required lap length of the adjacent bars.
3. Top transverse reinforcing in the deck slab may only be spliced at CL of slab span (halfway between girders). Adjacent bars shall not be spliced at the same location.
4. Bottom transverse reinforcing in the deck slab may only be spliced at CL of girders. Adjacent bars shall not be spliced at the same location.
5. Additional #5 top longitudinal reinforcing in the deck slab shall not be spliced.
6. No splice shall be allowed for longitudinal deck reinforcing within 15'-0 either side of pier CL.

Registered Professional Engineer (Civil) CERTIFICATE NO. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed 11/19/25 ARIZONA, U.S.A.

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DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

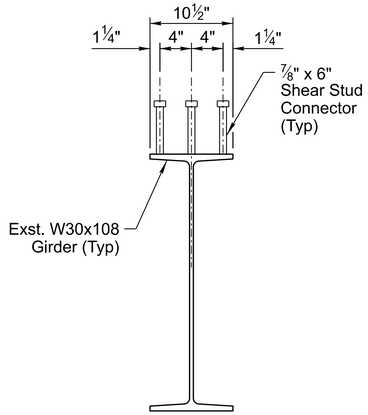
ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
DECK SECTION & DETAILS

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

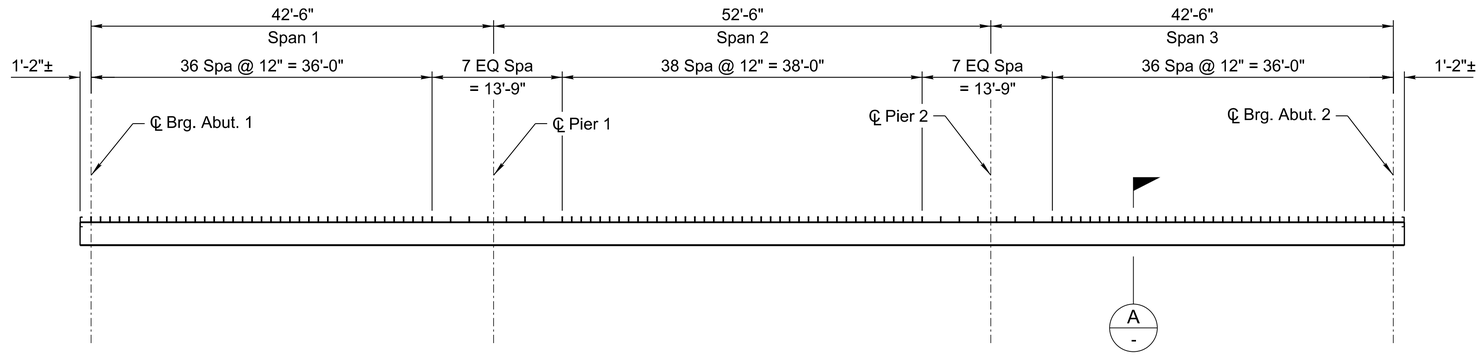
F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	25	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY
DWG NO. S-1.08
TRACS NO. T0592 01 C
____ OF____



A
-

SECTION



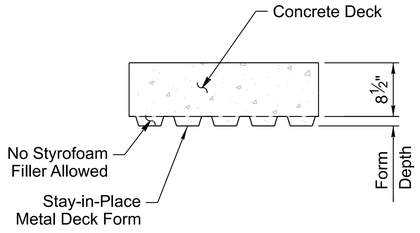
ELEVATION

SHEAR STUD NOTES:

1. Shear stud spacing may be adjusted as needed to avoid existing splice plates.
2. The size, type, and spacing of the existing shear connectors on the top flange of the girders are unknown. All existing shear connectors that are in conflict with the new shear studs shall be removed and disposed of. Existing shear connectors that are not in conflict with the new shear studs may remain in place.
3. The approximate number of new shear studs is 1,500.

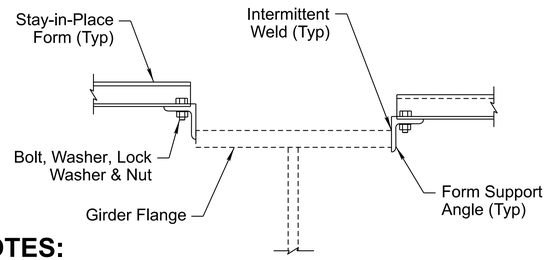
NEW SHEAR STUD LAYOUT

Scale: NTS



STAY-IN-PLACE DECK FORM

Scale: NTS



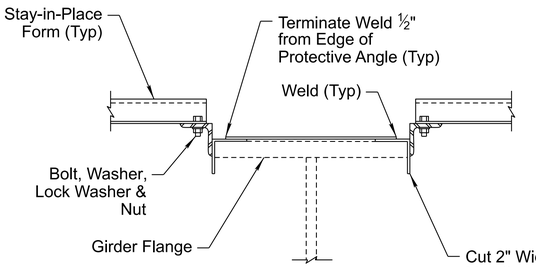
NOTES:

1. Use this detail within the limits of Deck Pours (1) and (2) as shown on the Deck Pour Schedule.

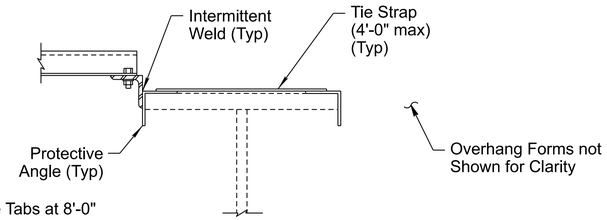
TYPICAL GIRDER

STAY-IN-PLACE FORM AT COMPRESSION FLANGE

Scale: NTS



INTERIOR GIRDER



EXTERIOR GIRDER

STAY-IN-PLACE FORM AT TENSION FLANGE

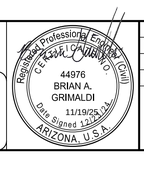
Scale: NTS

NOTE:

Use this detail within the limits of Deck Pour (3) as shown on the Deck Pour Schedule.

STAY-IN-PLACE DECK FORM NOTES:

1. The deck forms shall be galvanized in accordance with ASTM A653 and A924. Angles shall be galvanized in accordance with ASTM A123. All bolts shall conform to ASTM specification A325. All nuts, bolts, and washers shall be galvanized in accordance with ASTM A153.
2. The contractor shall submit shop drawings showing details of the stay-in-place deck forms including the method of installation and adjustment to the Engineer for review and approval.
3. The contractor shall design all members and connections to support the required loads.
4. The cost of stay-in-place forms is considered to be included to the cost of deck concrete. No payment will be made for any additional concrete necessary for the stay-in-place metal deck forming system.



	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

ethos ENGINEERING, LLC.
9180 S Kyrene Rd
Suite #104
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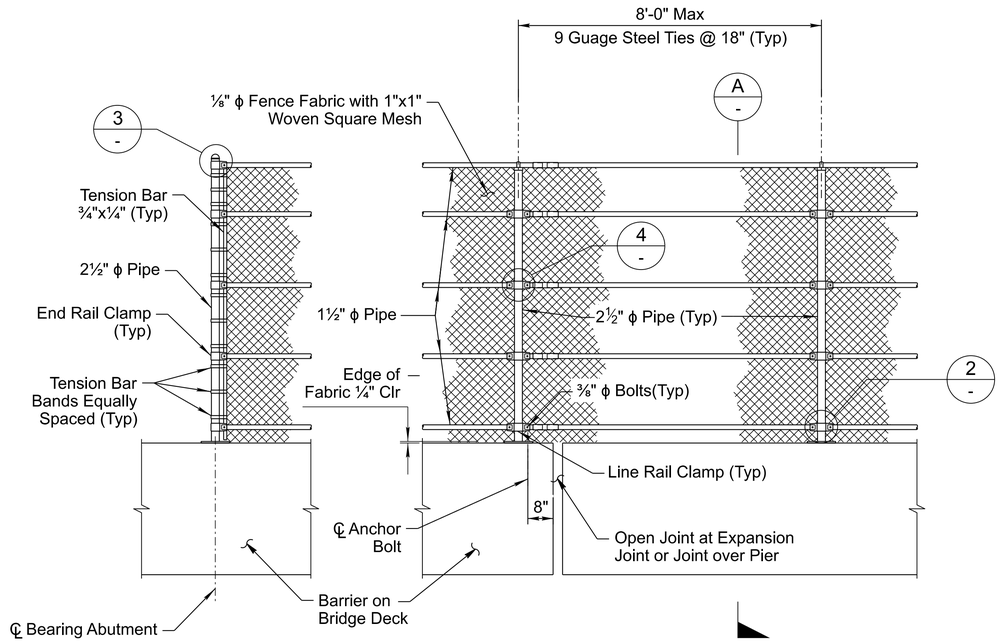
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
MISCELLANEOUS DETAILS

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	26	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY
DWG NO. S-1.09
TRACS NO. T0592 01 C
____ OF ____

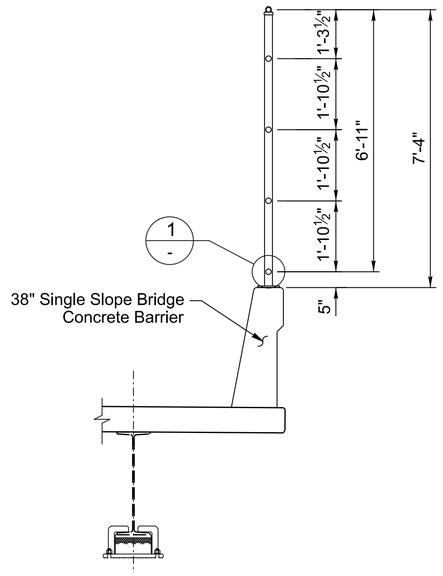


TYPICAL END POST ELEVATION (1)

Scale: ½" = 1'-0"

TYPICAL PANEL ELEVATION (2)

Scale: ½" = 1'-0"

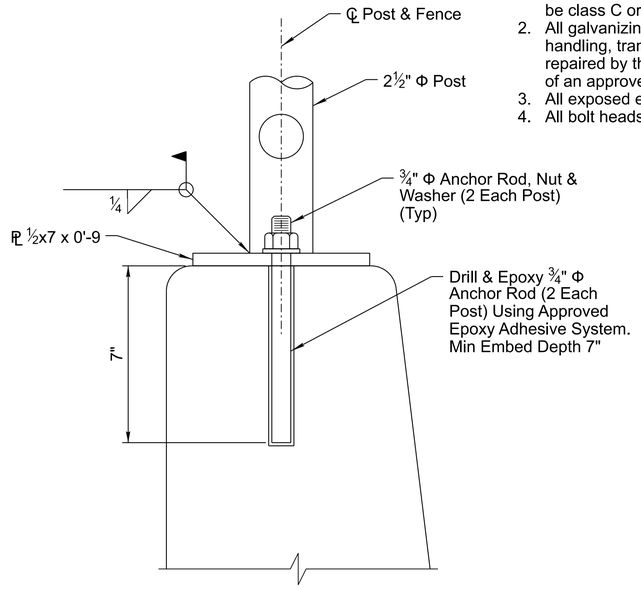


SECTION (A)

Scale: ½" = 1'-0"

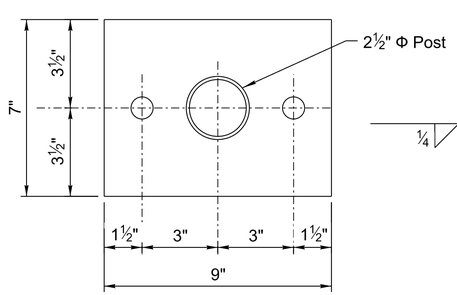
NOTES:

1. Chain link fence fabric, posts, fittings and hardware shall conform to AASHTO M181 - Grade I or Grade II. The zinc coated fabric shall be class C or D.
2. All galvanizing that has been damaged in handling, transporting or welding shall be repaired by the application of a paste compound of an approved zinc powder and flux.
3. All exposed edges shall be smooth.
4. All bolt heads shall be to the inside.

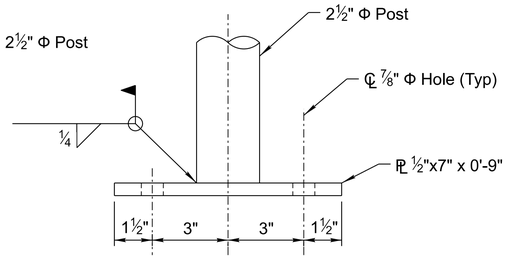


DETAIL (1)

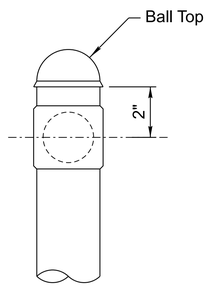
Scale: NTS



PLAN

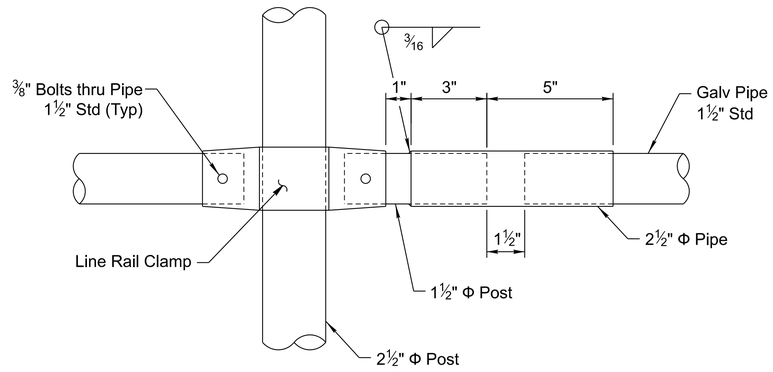


SECTION



DETAIL (3)

Scale: NTS



EXPANSION JOINT DETAIL (4)

Scale: NTS

DETAIL (2)

Scale: NTS

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ARIZONA811 Call 811 or click Arizona811.com

BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer (Civil) Certificate No. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
CHAIN LINK FENCE DETAILS

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	27	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY — DWG NO. S-1.10

TRACS NO. T0592 01 C — ____ OF ____

GIRDER DEFLECTION (FT)											
	CL Abut #1	0.1 pt	0.2 pt	0.3 pt	0.4 pt	0.5 pt	0.6 pt	0.7 pt	0.8 pt	0.9 pt	CL Pier #1
Span 1	0.000	0.009	.017	0.022	0.024	0.023	0.019	0.014	0.007	0.002	0.000

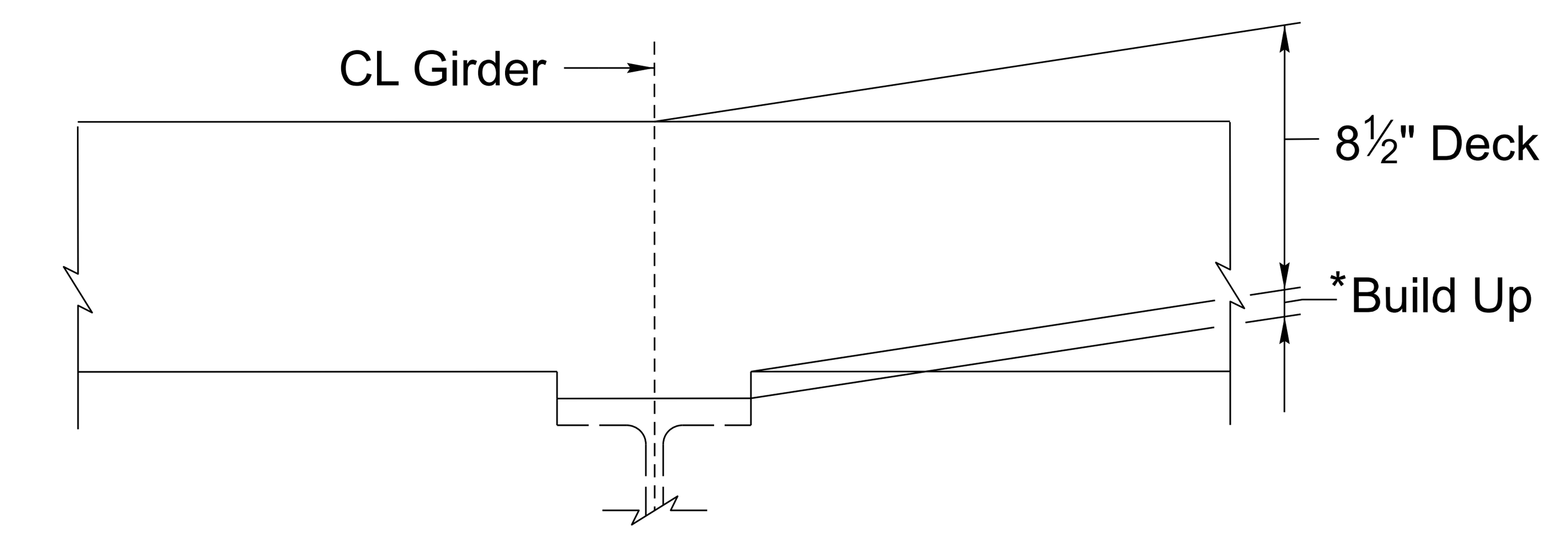
GIRDER DEFLECTION (FT)											
	CL Pier #1	0.1 pt	0.2 pt	0.3 pt	0.4 pt	0.5 pt	0.6 pt	0.7 pt	0.8 pt	0.9 pt	CL Pier #2
Span 2	0.000	0.004	0.012	0.020	0.027	0.029	0.027	0.020	0.012	0.004	0.000

GIRDER DEFLECTION (FT)											
	CL Pier #2	0.1 pt	0.2 pt	0.3 pt	0.4 pt	0.5 pt	0.6 pt	0.7 pt	0.8 pt	0.9 pt	CL Abut #2
Span 3	0.000	0.002	0.007	0.014	0.019	0.023	0.024	0.022	0.017	0.009	0.000

NOTES:

1. The deflections include the weight of the concrete deck, barriers and fencing. The deflections do not include the weight of the steel girders and cross-frames since those will be included in the top of girder survey elevations.
2. The screed elevations will be provided to the contractor within 5 days after receipt of top of girder elevations.

* The Build Up thickness will vary depending on the screed elevations and the girder camber. At no time shall the build up be less than 0 inches.



BUILD UP DETAIL (2)

No Scale

BRIDGE SCREED ELEVATIONS SPAN 1											
Location	CL Brg Abut 1	0.1 pt	0.2 pt	0.3 pt	0.4 pt	0.5 pt	0.6 pt	0.7 pt	0.8 pt	0.9 pt	CL Pier 1
Lt Edge											
CL Girder 1											
CL Girder 2											
Constr CL											
CL Girder 3											
CL Girder 4											
Rt Edge											

BRIDGE SCREED ELEVATIONS SPAN 2											
Location	CL Pier 1	0.1 pt	0.2 pt	0.3 pt	0.4 pt	0.5 pt	0.6 pt	0.7 pt	0.8 pt	0.9 pt	CL Pier 2
Lt Edge											
CL Girder 1											
CL Girder 2											
Constr CL											
CL Girder 3											
CL Girder 4											
Rt Edge											

BRIDGE SCREED ELEVATIONS SPAN 3											
Location	CL Pier 2	0.1 pt	0.2 pt	0.3 pt	0.4 pt	0.5 pt	0.6 pt	0.7 pt	0.8 pt	0.9 pt	CL Brg Abut 2
Lt Edge											
CL Girder 1											
CL Girder 2											
Constr CL											
CL Girder 3											
CL Girder 4											
Rt Edge											

SCREED ELEVATION NOTES:

The Contractor shall provide the Engineer the following for calculation of girder screed elevations prior to setting deck formwork

1. Top of girder elevations at tenth points along the girder spans.
2. Deck pour plan

The cost of surveying the top of the existing steel girders after the existing deck is removed shall be included in the Construction Surveying and Layout pay item.

The Screed Elevations shall be used in setting screeds regardless of the measured top of erected girder elevations (DO NOT USE FINISH GRADE ELEVATIONS FOR SETTING SCREEDS).

The Build Up shall be calculated based on the measured Top of Existing Girder Elevation. The Build Up equals the (Screed Elevation) minus (Measured Erected Girder Elevation) minus (Slab Thickness of 8½ inches).

Contact Arizona 811 at least two full working days before you begin excavation
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BNSF
CALL BEFORE
YOU DIG
1–800–533–2891

Registered Professional Engineer (Civil)
CERTIFICATE NO. 44976
BRIAN A. GRIMALDI
11/19/25
Date Signed 12/2?/24
ARIZONA, U.S.A.

	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

ethos ENGINEERING, LLC.
9180 S Kyrene Rd
Suite #104
Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

BNSF RR OVERPASS BRIDGE
SCREED ELEVATIONS

ROUTE CKTN RD
MILEPOST 149
STRUCTURE NO. 08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	28	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY
DWG NO. S-1.11
TRACS NO. T0592 01 C
____ OF ____

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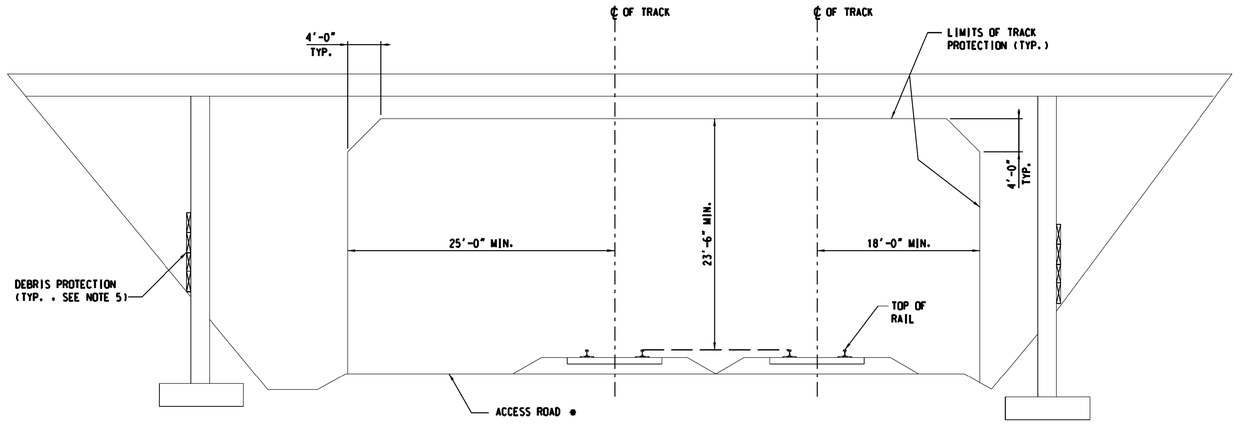

BRIDGE ELEVATIONS
STANDARD LIMITS OF PROTECTION FOR FRAME PROTECTION

BRIDGE ELEVATION
MINIMUM LIMITS OF PROTECTION FOR FRAME PROTECTION
(SPECIAL PERMISSION REQUIRED, SEE NOTE 1)

1. THE STANDARD LIMITS OF PROTECTION NOTED ARE THE MIN. CLEARANCES ALLOWED WITHOUT SPECIAL PERMISSION FROM THE RAILROAD. THE REDUCED CLEARANCES NOTED MAY BE ALLOWED BY THE RAILROAD. SPECIAL PERMISSION FOR THE REDUCED CLEARANCES IS REQUIRED FROM THE RAILROAD AND PUBLIC AGENCY.
2. THE PROTECTION FRAME SHALL AS A MINIMUM MATCH THE DEMOLITION LIMITS SHOWN AND EXTEND PAST THE BRIDGE WIDTH AS SHOWN ON THE ATTACHED DEMOLITION PLAN SHEET.
3. FOR ADDITIONAL CLEARANCE AND PROTECTION INFORMATION REFER TO CONTRACT EXHIBITS.
4. THE PROTECTION FRAME SHALL PREVENT DEMOLITION DEBRIS, DUST AND FINE MATERIAL FROM FALLING INTO THE RAILROAD TRACKS, ACCESS ROAD OR TRAINS. THE FRAME SHALL BE DESIGNED BY THE CONTRACTOR TO SUPPORT THE ANTICIPATED DEMOLITION LOADS, AND IN ACCORDANCE WITH CALTRANS FALSEWORK MANUAL FOR STRUCTURES OVER THE RAILROAD.
5. DEBRIS PROTECTION IS REQUIRED NEAR THE BASE OF THE SIDE SLOPES AND ADJACENT TO ROADS USED BY DEMOLITION EQUIPMENT TO PREVENT DEBRIS FROM ROLLING ONTO TRACK, ACCESS ROAD OR DITCH. USE TIMBERS AS REQUIRED TO STOP LARGE PIECES OF ROLLING DEBRIS.
6. ANY ACTIVITY WITHIN 25 FEET OF THE NEAREST RAIL OF A TRACK REQUIRES A FLAGMAN.

* IF NO ACCESS ROAD USE MIN. DIMENSION FROM OTHER SIDE OF DETAIL

BNSF RAILWAY

DEMOLITION FRAME PROTECTION DETAILS

DATE: OCTOBER 17, 2007 SHEET: 1 OF 3

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 Call 811 or click Arizona811.com

BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer (Civil) Certificate No. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
BNSF TRACK PROTECTION DETAILS
SHEET 1 OF 4

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	29	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

DWG NO. S-1.12

TRACS NO. T0592 01 C

____ OF ____

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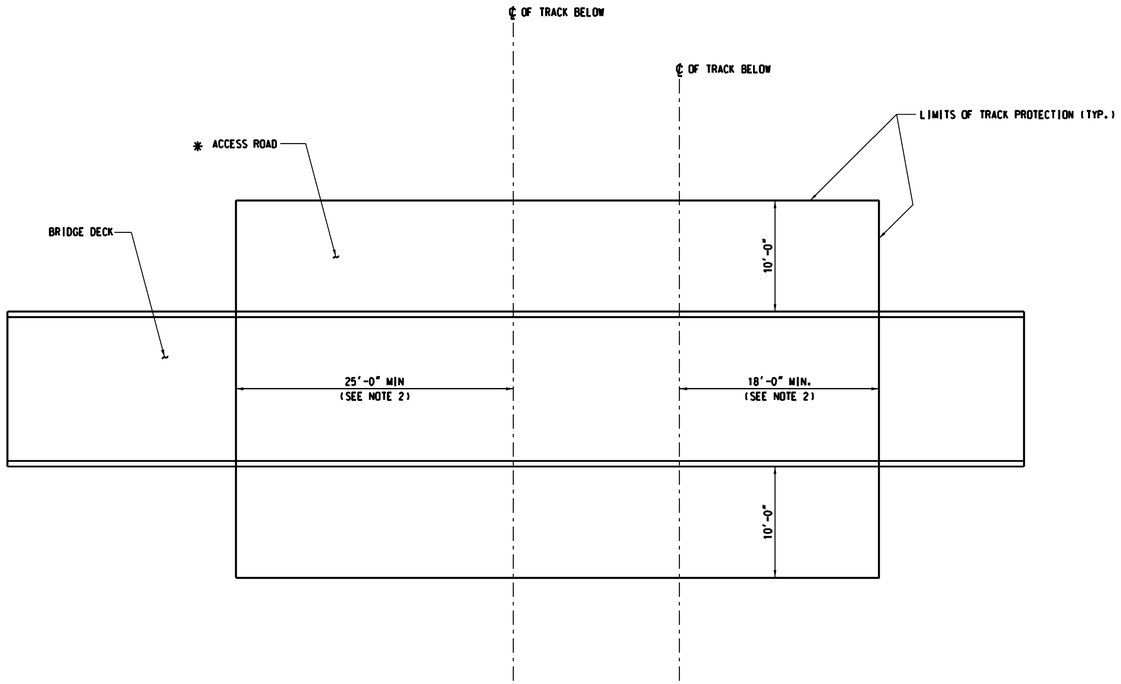
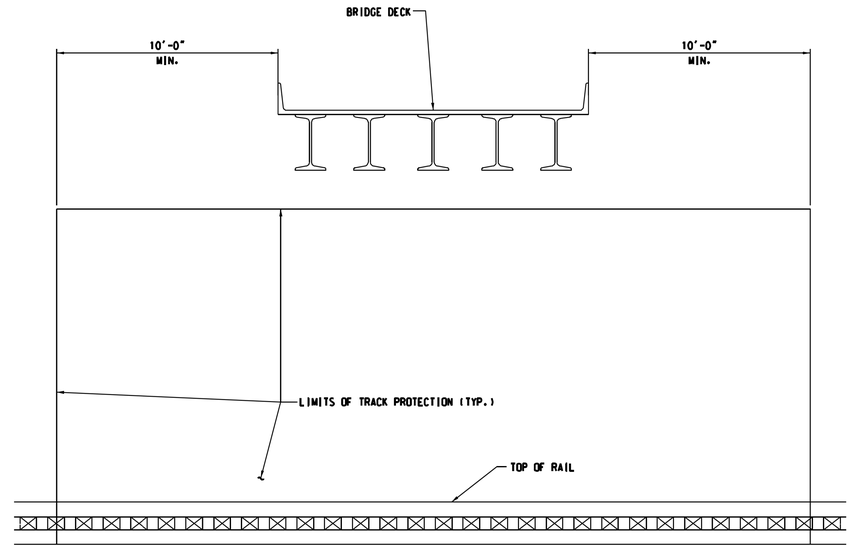


BRIDGE PLAN
STANDARD LIMITS OF PROTECTION FOR FRAME PROTECTION

NOTES:

1. SEE GENERAL NOTES ON BRIDGE ELEVATION SHEET.
2. STANDARD LIMITS OF PROTECTION ARE SHOWN. FOR MIN. LIMITS OF PROTECTION DIMENSIONS. SEE BRIDGE ELEVATION. MINIMUM LIMITS OF PROTECTION.



BRIDGE DECK CROSS SECTION
STANDARD LIMITS OF PROTECTION

* IF NO ACCESS ROAD, USE MIN. DIMENSION FROM OTHER SIDE

BNSF RAILWAY

DEMOLITION FRAME PROTECTION DETAILS

DATE: OCTOBER 17, 2007 SHEET: 2 OF 3

Contact Arizona 811 at least two full working days before you begin excavation
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Registered Professional Engineer (Civil) Certificate Number 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP
BNSF RR OVERPASS BRIDGE
BNSF TRACK PROTECTION DETAILS
SHEET 2 OF 4

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division

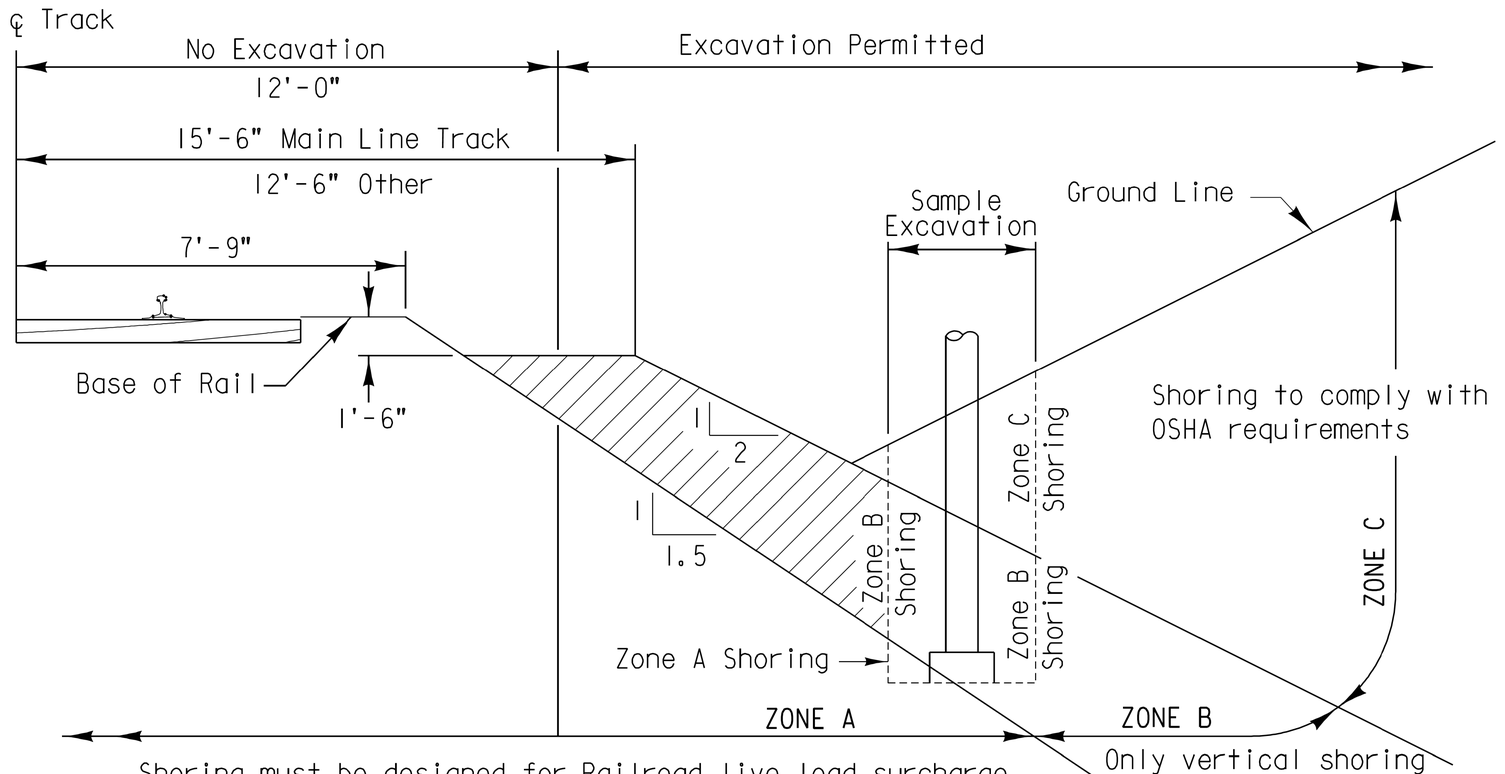
STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	30	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

TRACS NO. T0592 01 C

DWG NO. S-1.13

____ OF ____



Shoring must be designed for Railroad live load surcharge in addition to OSHA Standard loads for excavation in Zone A.
APPLICABLE RAILROAD LIVE LOAD: COOPER E80

GENERAL NOTES:

All dimensions are measured perpendicular to ℄ of track.

Prior to commencing any work, the contractor shall submit for approval by the Railroad detailed plans indicating the nature and extent of the track protection shoring proposed. The contractor shall install the temporary shoring system per the approved plans. Design of the temporary shoring system to comply with **GUIDELINES FOR TEMPORARY SHORING.**

For excavations which encroach into zone A or B, shoring plans shall be accompanied by design calculations. Plans and calculations must be signed and stamped by a Professional Engineer registered in the state where the work will be performed.

GENERAL EXCAVATION ZONES

SCALE: (NOT TO SCALE)

REVISIONS		
DATE	LTR.	DESCRIPTION
5 /03	1	FORMERLY UPRR C.E. 106613
/		
/		
/		
/		
/		

DESIGN BY: PGP | DRAWN BY: JFS | CHECKED BY: AA

APPROVED:

K.H. Jennison
BNSF - ASSISTANT DIRECTOR STRUCTURES DESIGN

George J. Myers 9-1-04
UPRR - MGR SPECIAL PROJECTS STRUCTURES DESIGN

BURLINGTON NORTHERN SANTA FE RAILWAY — UNION PACIFIC

BRIDGE STANDARDS

GENERAL SHORING REQUIREMENTS

FILE OWNER: UPRR | DATE: 5-6-03
PLAN NO.: 710000 (1) | SHEET: 1 OF 1

PLOTTED: $$$$DATE$$$ $TIME

Contact Arizona 811 at least two full working days before you begin excavation
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BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer (Civil) CERTIFICATE NO. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed 12/31/26 ARIZONA, U.S.A.

	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

BNSF RR OVERPASS BRIDGE
BNSF TRACK PROTECTION DETAILS
SHEET 3 OF 4

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division

STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
ARIZ.	0000 YV YYV	YYV-0(225)T	31	34	

LOCATION CROOKTON RD, YAVAPAI COUNTY

TRACS NO. T0592 01 C

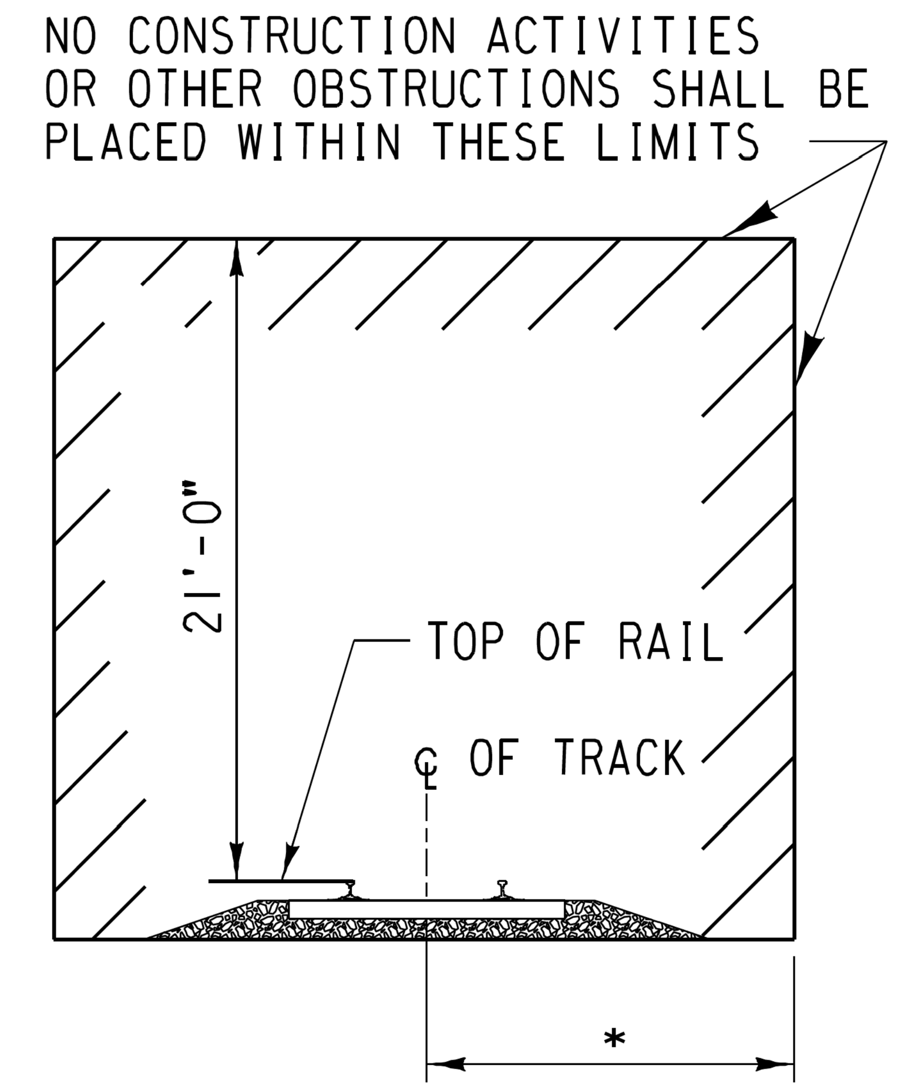
DWG NO. S-1.14

____ OF ____

MCONTRERAS 10/16/2025 11:12:02 AM \\VR-FILE\Projects\2023050 - Yavapai County - BNSF RR Deck Replacement\CADD\Str\S-1.14 Track Protection Details (3 of 4).dgn

CONSTRUCTION NOTES:

1. Any shoring system that impacts the Railroad's operation and/or supports the Railroad's embankment shall be designed and constructed per Railroad Guidelines for Temporary Shoring.
2. All demolition within the Railroad's right-of-way and/or demolition that may impact the Railroad's tracks or operations shall comply with the Railroad's Demolition requirements.
3. Erection over the Railroad's track shall be planned such that it enables the track(s) to remain open to traffic per Railroad requirements.
4. The elevation of the existing top-of-rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Railroad prior to construction.
5. The proposed grade separation project shall not change the quantity and/or characteristics of the flow in the Railroad ditches and/or drainage structures.
6. The contractor must submit a proposed method of erosion and sediment control and have the method approved by the Railroad prior to beginning any grading on the project site.
7. For Railroad coordination please refer to the Railroad's Coordination Requirements as part of the Specifications or Special Provisions of the project.
8. Temporary Construction Clearances, including falsework clearances, shall comply with Figure 1.
9. All permanent clearances shall be verified before project closeout.



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

(NORMAL TO RAILROAD)

FIGURE 1

* 15'-0" for BNSF and 12'-0" for UPRR

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REVISIONS		
DATE	LTR.	DESCRIPTION
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DESIGN BY: RAF | DRAWN BY: KDM | CHECKED BY: KHJ

APPROVED:

K.H. Jennison

BNSF - ASSISTANT DIRECTOR STRUCTURES DESIGN

George J. Meyn

UPRR - MGR SPECIAL PROJECTS STRUCTURES DESIGN

BNSF RAILWAY — UNION PACIFIC

BRIDGE STANDARDS

GRADE SEPARATION GUIDELINES (OVERHEADS)

CONSTRUCTION NOTES

FILE OWNER: UPRR | DATE: 1/24/07

PLAN NO.: 711100 | SHEET: 3

PLOTTED: 3/30/2007 2:54:07 PM

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CALL BEFORE YOU DIG
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Registered Professional Engineer (Civil)
CERTIFICATE NO. 44976
BRIAN A. GRIMALDI
11/19/25
Date Signed 12/23/24
ARIZONA, U.S.A.

	NAME	DATE
DESIGN	B. GRIMALDI	10/25
DRAWN	P. OLIDEN	10/25
CHECKED	S. OLIDEN	10/25

ethos ENGINEERING, LLC.
9180 S Kyrene Rd
Suite #104
Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

BNSF RR OVERPASS BRIDGE
BNSF TRACK PROTECTION DETAILS
SHEET 4 OF 4

ROUTE: CKTN RD
MILEPOST: 149
STRUCTURE NO.: 08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	32	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY

DWG NO. S-1.15

TRACS NO. T0592 01 C

____ OF ____

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PART 1 - To be completed by the Landscape Architect or Design Engineer

I. PROJECT DESCRIPTION

A. Owner Name and Address:

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

B. Project TRACS Number: T0592 01 C

C. Project Location: Crookton Road

City: Seligman County: Yavapai

Beginning Latitude (NAD 83): 35° 17' 25.04" N

Beginning Longitude (NAD 83): 112° 43' 56.50" W

Ending Latitude (NAD 83): 35° 17' 27.97" N

Ending Longitude (NAD 83): 112° 43' 59.19" W

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: Bridge Rehabiliation

II. HYDROLOGIC INFORMATION

A. Project Size:
Length (Mi.) 0.07
Area (Ac.) 0.28

B. Area to be Graded (Ac.) *: 0.00

* Blading of the shoulder build-up area is considered as grading and ground disturbance and should be covered by stormwater and/or other environmental regulations.

C. Percentage of the site that is impervious before and after construction:
Percentage before Construction: 100%
Percentage after Construction: 100%

D. Receiving Water(s), refer to the Arizona Department of Water Resources Web Link below (USGS Topo) :
https://gisweb.azwater.gov/WellRegistry/Default.aspx

III. PRESERVATION OF EXISTING VEGETATION

A. In accordance with the specifications, existing vegetation will be preserved. Clearing limits shall be confined to areas that require grading. Existing vegetation outside the boundaries of the cleared area shall be protected from damage by construction activities. Existing trees within the area to be cleared shall be preserved and protected, wherever possible.

IV. SOIL STABILIZATION MEASURES

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

B. Scheduling of the revegetation effort can be found on PART 2 of this sheet under SCHEDULE OF MAJOR ACTIVITIES.

V. MEASURES TO CONTROL EROSION AND SEDIMENT

A. Temporary Erosion and Sediment Controls: (Refer to the Following SWPPP Site Plan and Specifications)

- ___ Erosion Control Mattings
- ___ Temporary Diversion Dikes
- ___ Check Dams
- ___ Rock Inlet/Outlet Protection
- ___ Sediment Control Berms
- ___ Silt Fences
- X Wattles (Excelsior/Straw)
- ___ Excelsior Logs / Sediment Logs
- ___ Seeding (Class II with mulch)
- ___ Others Describe: ___

B. Permanent Erosion and Sediment Controls and Post-construction Storm Water Management Measures: (Refer to SWPPP Site Plan and Specifications)

- ___ Crown Ditch/Dike
- ___ Rock Protection
- ___ Rock Riprap Channel Lining
- ___ Sediment Basin
- ___ Embankment Curb
- ___ Spillways and Downdrains
- ___ Minibenching
- ___ Seeding established as a perennial vegetative cover with a density of 70% of the native background vegetative cover.
- ___ Others Describe: ___

VI. MAINTENANCE AND INSPECTIONS

A. Frequency of Inspections:

- ___ At least once every 7 calendar days, OR
- X Every 14 calendar days and within 24 hours after a rainfall of 0.5 inches (12.7 mm) or more.

NOTE: RAINFALL GAUGE TO BE KEPT ON-SITE TO DETERMINE DEPTH OF RAINFALL

B. Inspection Procedure:

ADOT's Contractor's Inspection Log and Compliance Evaluation Report (CER) will be completed by the contractor or his representative and will be kept on file for 3 years. A signed copy of the CER will be sent to the ADOT resident engineer. If repairs are necessary, they shall be initiated within 24 hours of the inspection report.

PART 2 - To be completed by ADOT & CONTRACTOR

http://www.azdot.gov/inside_adot/OES/Water_Quality/Stormwater/Docs/swppp_construction_template.dot

I. SCHEDULE OF MAJOR ACTIVITIES

A. Project Schedule: ___

Start Date: ___

End Date: ___

B. Construction Sequencing Schedule: (Attach Additional Sheets)
Construction Activities ___

II. INVENTORY OF POLLUTANTS

A. The materials or substances checked below are expected to be onsite during construction:

- ___ Concrete
- ___ Asphalt
- ___ Paints
- ___ Fertilizer
- ___ Herbicides
- ___ Wood
- ___ Fuel
- ___ Oil
- ___ Others, List: ___

III. POLLUTION CONTROL MEASURES

A. Other Best Management Practices:

- ___ Wind Erosion and Dust Control
- ___ Solid Waste Management
- ___ Equipment Maintenance Procedures
- ___ Designated Washout Areas
- ___ Stabilized Construction Entrance
- ___ Protected Chemical and Material Storage Area
- ___ Other, Describe: ___

IV. SPILL PREVENTION AND RESPONSE

A. Spill Prevention:
The procedures outlined in the Best Management Practices listed under Pollution Control Measures will be followed to prevent and contain spills of hazardous material. These preventative action include BMP's on equipment maintenance and proper handling, storage and disposal of chemicals and materials. All manufacturer's recommendations for usage, clean-up and disposal shall be followed.

B. Spill Response:
In the event of any accidental spill of chemicals or hazardous materials, contact the ADOT Traffic Operations Center at 800-379-3701. If a reportable quantity is discharged into the storm water, ADOT shall contact the National Response Center and document the spill to the EPA. ADOT's Hazardous Materials Specialist shall provide instructions.

V. CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

A. This Storm Water Pollution Prevention Plan (SWPPP) has been prepared in accordance with the latest updated version of ADOT's EROSION AND POLLUTION CONTROL MANUAL FOR HIGHWAY DESIGN AND CONSTRUCTION, published by ADOT Intermodal Transportation Division.

___SWPPP is in compliance with other Federal, State Laws, or Local Regulations.

VI. POLLUTION PREVENTION PLAN CERTIFICATION

A. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Applies to VI. B., C., and D)

B. The operator/contractor as defined in AZPDES should sign the SWPPP in accordance with CGP Part VIII. J, and retain the SWPPP on-site at the construction site or other location easily accessible during normal business hours.

Signature: (operator/contractor) ___
Date: ___
Name: ___
Title: ___
Company: ___

C. ADOT Resident Engineer

Signature: (owner) ___
Date: ___
Name: ___
Title: ___
ADOT District: ___

D. MUNICIPALITY for Municipal Separate Storm Sewer System (MS4)

Signature: ___
Date: ___
Name: ___
Title: ___
MS4 Name: ___

VII. OTHER REQUIREMENTS

A. A copy of the General Permit and NOI are attached in accordance to AZPDES General Permit for Storm Water Discharges From Construction Activities To The Water Of The United States.

B. Projects that are within ¼ mile of impaired or unique waters require the SWPPP to be sent to ADEQ in combination with the NOI. Refer to the Arizona Outstanding, Impaired and Not-Attaining Waters *.PDF Maps by County web link:
http://www.azdot.gov/inside_adot/OES/Water_Quality/Stormwater/outstanding_unique_waters_maps_by_county.asp

C. For further requirements, check the ADEQ's Smart NOI Web Page: *https://az.gov/app/smartnoi/*

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Call 811 or click Arizona811.com

BNSF CALL BEFORE YOU DIG 1-800-533-2891

Registered Professional Engineer (Civil) CERTIFICATE NO. 44976 BRIAN A. GRIMALDI 11/19/25 Date Signed ARIZONA, U.S.A.

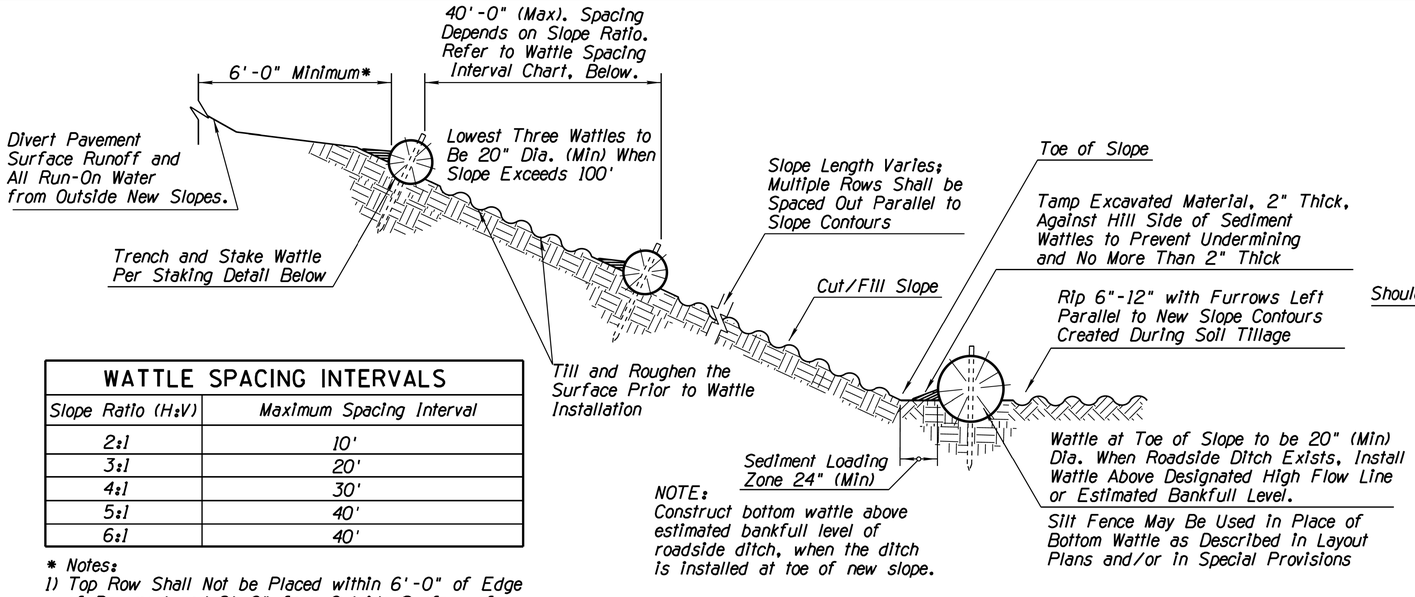
	NAME	DATE
DESIGN	M. CONTRERAS	10/25
DRAWN	A. SAMOHUALLPA	10/25
CHECKED	B. GRIMALDI	10/25

ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
ROADSIDE DEVELOPMENT SECTION

AZPDES SWPPP INDEX SHEET

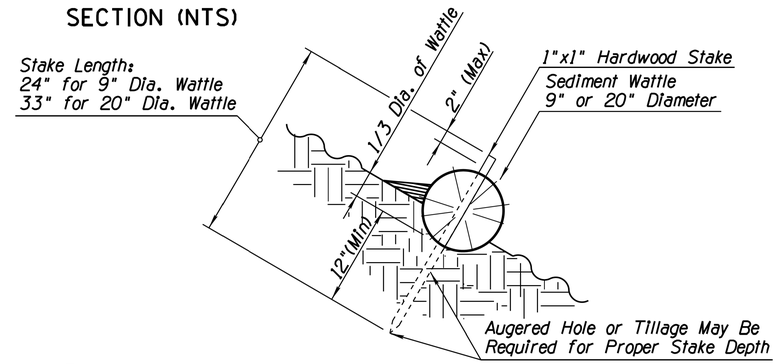
ROUTE	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
CKTN RD	ARIZ.	0000 YV YYV	YYV-0(225)T	33	34	
MILEPOST 149	F.H.W.A. Arizona Division					
STRUCTURE NO. 08216	LOCATION CROOKTON RD, YAVAPAI COUNTY					DWG NO. E-1.01
	TRACS NO. T0592 01 C					___ OF ___



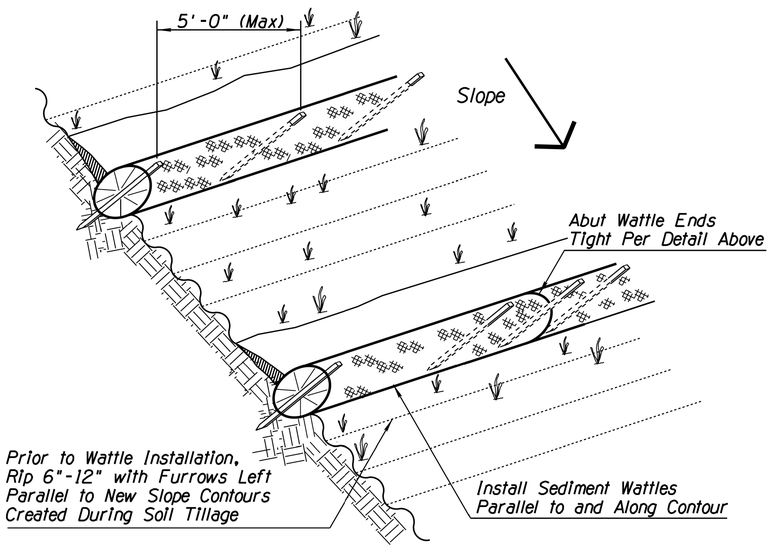
SECTION (NTS)

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'

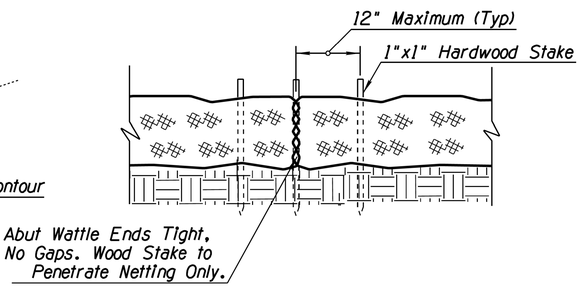
* Notes:
1) Top Row Shall Not be Placed within 6'-0" of Edge of Pavement and 9'-0" from Outside Surface of Barrier.
2) For erosive soils, place rows of wattles closer together.
3) For soils with low erosive potential, place rows of wattles further apart.



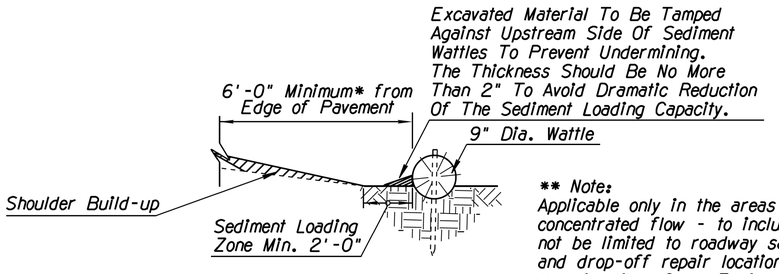
SEDIMENT WATTLE STAKING DETAIL (NTS)



SEDIMENT WATTLE LAYOUT (NTS)



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 project special provisions.
7. 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.
8. Installation and maintenance of Sediment Wattle CMs/BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities.
9. Install and maintain Sediment Wattle CMs/BMPs to carry the stormwater of at least 2-year, 24-hour events.
10. 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.
11. Refer to Specification Section 810-2.06(C) for Sediment Wattle material specifications.
12. Make field adjustments and corrections to ensure NO sensitive biological resources (native species / habitats) will be adversely impacted.

DETAIL ES1

SEDIMENT WATTLE

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ethos ENGINEERING, LLC. 9180 S Kyrene Rd Suite #104 Tempe, AZ 85284

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

ROUTE	MILEPOST	STRUCTURE NO.
CKTN RD	149	08216

F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	ARIZ.	0000 YV YYV	YYV-0(225)T	34	34	

LOCATION: CROOKTON RD, YAVAPAI COUNTY
TRACS NO. T0592 01 C
DWG NO. E-2.01
____ OF ____