Appendix G: Record Drawing Example

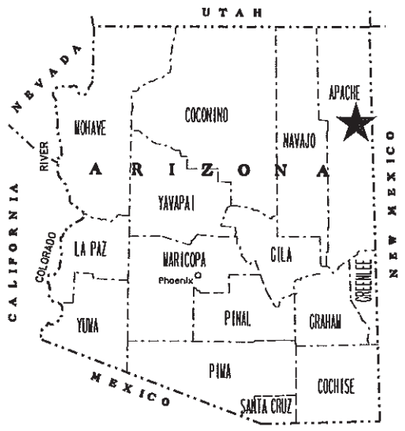
PDF/A Identification

STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION

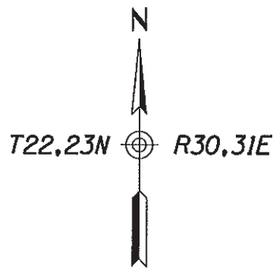
ADOT

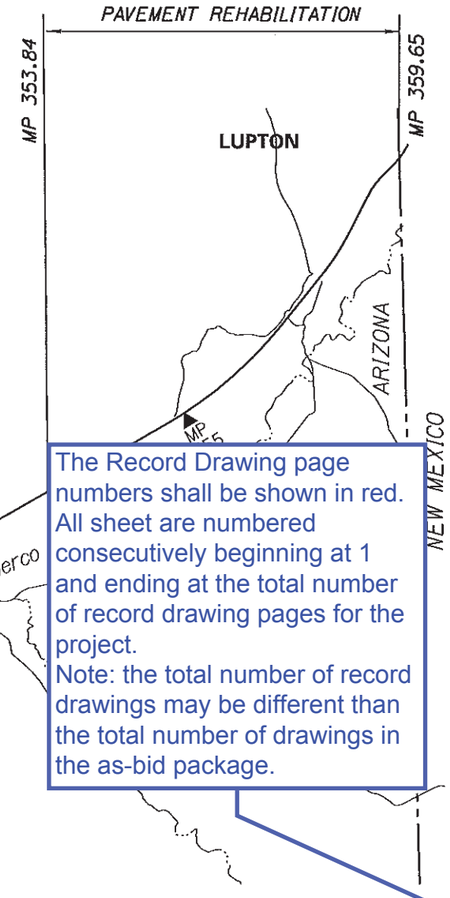
PROJECT PLANS

STATE HIGHWAY
HOLBROOK–LUPTON HIGHWAY
INTERSTATE 40



Note: This is an example of how Record Drawings need to be completed. The blue text, blue circles and blue lines are for informational purposes only and should not be included on the Record Drawings.





The Record Drawing page numbers shall be shown in red. All sheet are numbered consecutively beginning at 1 and ending at the total number of record drawing pages for the project.
Note: the total number of record drawings may be different than the total number of drawings in the as-bid package.

This information needs to be filled out in red as shown. The Construction Administrator is the RE on the project and needs to be a PE & designated as a PE as shown. Also needs to be an ADOT employee.

Constructed by:
Great Contracting, Inc.
Construction Company
3/24/2017
Completion Date

Red-Lines by:
Carl Rickson, P.E., ADOT
Construction Administrator Name & Company
3/28/2017
Completion Date

Record Drawings by:
Jon Sey, P.E. ADOT
Record Drawings Designer Name & Company
4/3/2017
Completion Date

ALLENTOWN RD–STATE LINE
PROJECT NO. 040 AP 353 H8781 01 C
FEDERAL AID NO. NH–040–E(218)T

Page numbers in lower left corner are for reference only and should not be shown on record drawings.

Page 1

Record Drawing date shall be shown in red.

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
DALLAS HAMMIT, P.E., STATE ENGINEER

REC. DWGS DATE	REC. DWG. DATE		
	4/3/2017	1 OF	75

V:/Roadway\users\hp071\ 1:41:37 PM half_fs.tbl

ADOT STANDARD DRAWINGS
C STANDARDS

ISSUE OR REVISION DATE	STANDARD NO.	SUBJECT
		CONSTRUCTION
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
5/12	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
5/12	C-04.10 SH 1	SPILLWAY, EMBANKMENT SINGLE INLET
5/12	C-04.10 SH 2	SPILLWAY, EMBANKMENT DOUBLE INLET
5/12	C-04.20 SH 1	DOWNDRAIN, EMBANKMENT SINGLE INLET
5/12	C-04.20 SH 2	DOWNDRAIN, EMBANKMENT DOUBLE INLET
5/12	C-04.30	SPILLWAY LENGTH TABLE
5/12	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
5/12	C-07.06	TRENCH BACKFILL AND PAVEMENT REPLACEMENT
5/12	C-08.20	PAVED GORE AREA
5/12	C-10.00	GUARDRAIL MEASUREMENT LIMITS
5/12	C-10.01	GUARDRAIL INSTALLATION, TYPE A AND REFLECTOR TAB
5/12	C-10.02	GUARDRAIL INSTALLATION, TYPE B AND REFLECTOR TAB
5/12	C-10.03	W-BEAM GUARDRAIL, G4(1W) AND G4(2W), BLOCKED-OUT TIMBER POST
5/12	C-10.04	W-BEAM GUARDRAIL, G4(1S), BLOCKED-OUT STEEL POST
5/12	C-10.05 SH 1	W-BEAM GUARDRAIL, G4(MODIFIED) WITH FREEWAY CURB AND GUTTER
5/12	C-10.05 SH 2	W-BEAM GUARDRAIL, G4(MODIFIED) WITH FREEWAY CURB AND GUTTER
5/12	C-10.06 SH 1	W-BEAM GUARDRAIL, NESTED, TYPES 1 AND 2
5/12	C-10.06 SH 2	W-BEAM GUARDRAIL, NESTED, TYPE 3
5/12	C-10.07 SH 1	W-BEAM GUARDRAIL, BOLTED ANCHOR
5/12	C-10.07 SH 2	W-BEAM GUARDRAIL, BOLTED ANCHOR
5/12	C-10.08	W-BEAM GUARDRAIL, END ANCHOR
5/12	C-10.20	THRIE-BEAM GUARDRAIL, G9, BLOCKED-OUT STEEL POST
5/12	C-10.30 SH 1	GUARDRAIL TRANSITION, THRIE BEAM TO CONCRETE HALF BARRIER, 32" TYPE 'F'
5/12	C-10.30 SH 2	GUARDRAIL TRANSITION, THRIE BEAM TO CONCRETE HALF BARRIER, 32" TYPE 'F'
5/12	C-10.40	CONCRETE MEDIAN BARRIER, 32" TYPE 'F', CAST-IN-PLACE
5/12	C-10.41	CONCRETE MEDIAN BARRIER, 42" TYPE 'F', CAST-IN-PLACE
5/12	C-10.42 SH 1	GLARE SCREEN, CONCRETE MEDIAN BARRIER
5/12	C-10.42 SH 2	GLARE SCREEN, CONCRETE MEDIAN BARRIER
5/12	C-10.42 SH 3	GLARE SCREEN, CONCRETE MEDIAN BARRIER
5/12	C-10.50 SH 1	CONCRETE HALF BARRIER, 32" TYPE 'F', CAST-IN-PLACE
5/12	C-10.50 SH 2	CONCRETE HALF BARRIER, 32" TYPE 'F', PRECAST
5/12	C-10.51	CONCRETE HALF BARRIER, 32" TYPE 'F' WITH SIDEWALK
5/12	C-10.52	CONCRETE HALF BARRIER, 32" TYPE 'F' WITH GUTTER
5/12	C-10.53	CONCRETE HALF BARRIER, 42" TYPE 'F' WITH GUTTER
5/12	C-10.54 SH 1	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, CAST-IN-PLACE
5/12	C-10.54 SH 2	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, PRECAST
5/12	C-10.54 SH 3	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, LAYOUT
5/12	C-10.55 SH 1	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, CAST-IN-PLACE
5/12	C-10.55 SH 2	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, PRECAST
5/12	C-10.55 SH 3	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, LAYOUT
5/12	C-10.70 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
5/12	C-10.70 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
5/12	C-10.70 SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS

ISSUE OR REVISION DATE	STANDARD NO.	SUBJECT
		CONSTRUCTION
5/12	C-10.71 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER
5/12	C-10.71 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER
5/12	C-10.72 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
5/12	C-10.72 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
5/12	C-10.72 SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
5/12	C-10.73 SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER
5/12	C-10.73 SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER
5/12	C-10.74	CONCRETE HALF-BARRIER TRANSITION, 42" TO 32" TYPE 'F'
5/12	C-10.75 SH 1	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F', TANGENT DEPARTURE TYPE 1
5/12	C-10.75 SH 2	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F', TANGENT DEPARTURE TYPE 2
5/12	C-10.76	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' AT RADIUS, 32" TO 0"
5/12	C-10.77	CONCRETE HALF-BARRIER TRANSITION, END TERMINAL CURB AND GUTTER
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, TYPES 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
5/12	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	
5/12	C-15.91	
5/12	C-15.91	
5/12	C-15.92	
5/12	C-15.92	
5/12	C-16.40	
5/12	C-17.10	. 2 & 3
5/12	C-17.15	& 6
5/12	C-17.20	9
5/12	C-18.10	
5/12	C-18.10	
5/12	C-18.10	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

Text should be readable at full extents of sheet. For 17"x11" sheets use 10 point and for 34"x22" sheets use 20 point fonts. Place text in the correct location and uniform.

The Record Drawing page numbers shall be shown in red.

Record Drawing date shall be shown in red.

ADOT STANDARD DRAWINGS
REVISION DATES and STANDARD NO.'s REVIEW

	NAME	DATE
CONSTRUCTION Standards	JKF	1/12/16

PROJECT NO. H8781 01 C — IA OF 62

RECOR DRAWING DATA	FEDERAL AID NO.	RECORD DWG DATE	
	NH-040-E(218)T	4/3/2017	2 OF 75

REV.: 05/12

Page 2

ADOT STANDARD DRAWINGS

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

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

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

Note: The next several sheets will be omitted in this example to reduce file size and redundancy of information.

NO.1	DESCRIPTION OF REVISION: REVISED M-2 SHT1, M-41, M-19 SHT5 SAA, REVISED 5-1 SHT3 ON PDG, UPDATED BORDER TITLE BLOCK	MADE BY: L. LOPEZ	DATE: 5/15
NO.2	DESCRIPTION OF REVISION: REVISED ALL DRAWINGS AND RE-ISSUED. CREATED SHEET 2.	MADE BY: L. LOPEZ	DATE: 6/14

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW		
SIGNING & MARKING STANDARDS	NAME	DATE 1/12/16
PROJECT NO. H8781 01 C	IB-1	OF 62
RECORD DRAWING DATA	FEDERAL AID NO. NH-040-E(218)T	REC. DWG. DATE 4/3/2017 — 3 OF 75

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	2	62	4/3/2017
		040-AP-353			

The Record Drawing date shall be shown in red.

MIDPOINT OF PROJECT

Eastern Zone
State Plane Coordinates

X=829,000
Y=1,581,000

REFERENCES

I-40-5 (42)
I-40-5 (8)
I-40-5 (29)
STP-40-5(90)
I-40-5-504
1M-04D-E(211)A
1M-40-5(102)P

DESIGN DATA

2016 AADT = 19,200
2026 AADT = 23,800
Design Speed = 75 MPH

LOOP DETECTOR / CLASSIFIER SYSTEMS

Std T.S. 6-1 Type C = Traffic Counter
Std T.S. 6-2 Type SA or SB = Speed and Vehicle Class

Systems	Type	Approximate Location
1 *	C	MP 357.1 EB & WB
1 *	C	MP 357.9 EB & WB

* Partial Replacement

Notes:
1. Depth of sawcut shall be 4"
2. Contractor shall install loops prior to AR-ACFC placement

LENGTH OF PROJECT

Westbound ◒
Beg Proj Sta 2569+44.00 to 2723+38.10 BK = 15,394.10'
Sta 2723+58.10 AHD to 2803+11.28 BK = 7,953.18'
Sta 2803+22.63 AHD to 2850+56.84 BK = 4,734.21'
Sta 2850+37.77 AHD to 2871+13.04 BK = 2,075.27'
Sta 2871+29.03 AHD to End Proj 2876+60.28 = 531.25'

Westbound Net Length = 30,688.01' = 5.81 miles
Mile Post 353.84 to 359.65

Eastbound ◒
Beg Proj Sta 2569+44.00 to 2723+78.22 BK = 15,434.22'
Sta 2723+58.16 AHD to 2803+33.99 BK = 7,975.83'
Sta 2803+22.63 AHD to 2850+18.70 BK = 4,696.07'
Sta 2850+37.77 AHD to 2871+45.02 BK = 2,107.25'
Sta 2871+29.03 AHD to End Proj 2874+89.23 = 360.20'

Eastbound Net Length = 30,573.57' = 5.79 miles
Mile Post 353.84 to 359.63

◒ *Station Limits include all structures within the limits of the project.*

Hawthorne TI Bridge: MP 354.61 to MP 354.62
Window Rock TI Bridge: MP 357.53 to MP 357.54
Lupton/Grants TI Bridge: MP 359.20 to MP 359.21

INDEX OF SHEETS

GENERAL NOTES

The roadway plans have been designed utilizing the 2012 Construction Standard Drawings (C-Series) and Current Revisions. Refer to the 1A sheet for a listing of current revision dates.

Prior to the start of construction, the contractor shall establish control for locating and documenting existing striping and reflective pavement markers. After paving, the striping and reflective pavement markers shall be installed using survey control and documented existing striping and reflective pavement marker information, while also using the current edition of the Signing and Marking Standard drawings (M & S Series). This item is paid for under construction survey & layout.

Existing centerline information shown is based on as-built information. No geometric survey was completed for this project. The contractor shall establish survey control.

All paving limits shall be as shown on the plans or as determined by the Engineer based on field conditions.

Pavement lift thickness is nominal.

The average project elevation is 6100'.

Existing utility locations are approximate. The contractor shall verify the exact location and depth of all underground facilities and comply with all current blue stake laws and section 107.15 of the specifications.

Delineators and object markers shall be removed and replaced with new as noted in the plans. The cost of removal is considered included in the price of contract items.

New right-of-way and easements are not required.

For right-of-way information not shown, see right-of-way plans D-1-T-252, A-1-T-210 and D-1-T-217B.

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

Elevations noted in ( ) are approximate. Contractor shall verify all existing elevations prior to construction.

Approximately 8 Tons of AC (Misc Str) and 11 CY of embankment (milled AC) are estimated for the construction of each guardrail end terminal pad. See Special Provisions.

The seal and signature need to be on each drawing. This also needs to be readable.

The Record Drawing page numbers shall be shown in red.

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

DESIGN SHEET

ROUTE	LOCATION
I-40	ALLENTOWN RD - STATE LINE

TRACS NO. H8781 01 C | NH-040-E(218)T

Expires 09/30/2017

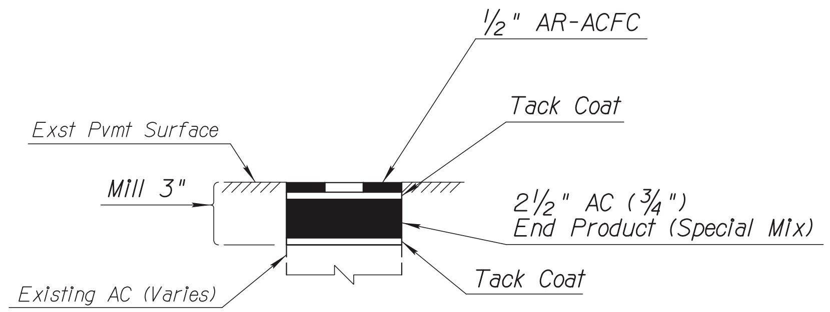
SHEET 2 OF 62

9 OF 75

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

1/12/2016 T:\I-40\data\H8781_ds01.dgn

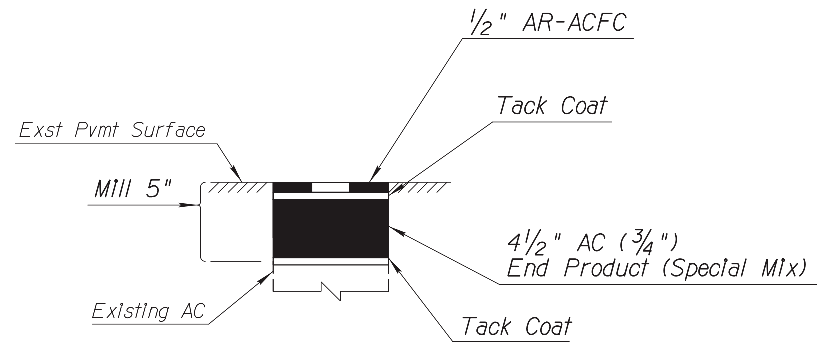
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	3	62	4/3/2017
		040-AP-353			



Total Thickness = 3"

PAVEMENT STRUCTURAL SECTION NO. 1

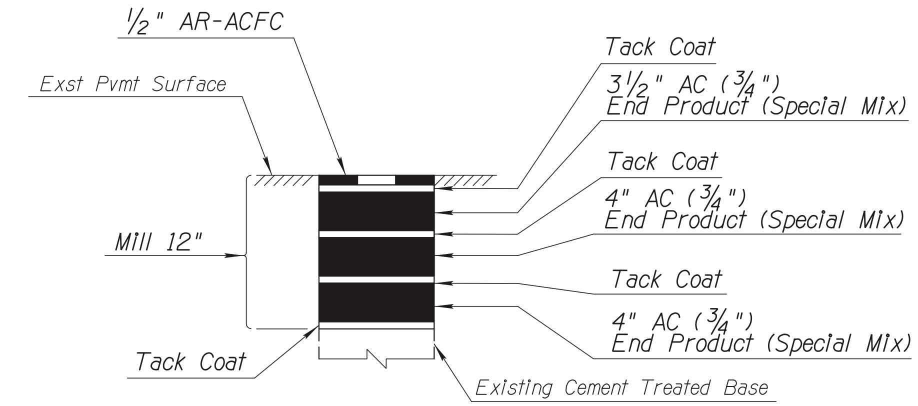
I-40 West Bound Passing Lane
I-40 East Bound Passing Lane
Ramps and Bridge Decks at:
Hawthorne Road T.I.,
Window Rock T.I.,
Grant Rd/Lupton T.I.



Total Thickness = 5"

PAVEMENT STRUCTURAL SECTION NO. 2

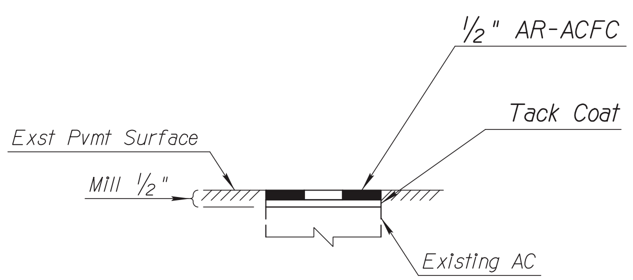
I-40 East Bound Travel Lane
I-40 West Bound Travel Lane



Total Thickness = 12"

PAVEMENT STRUCTURAL SECTION NO. 3

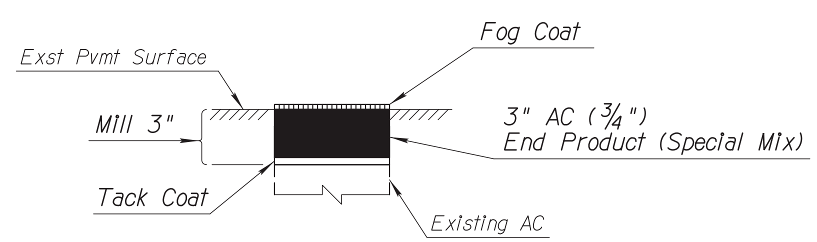
I-40 East Bound Travel Lane
I-40 West Bound Passing and Travel Lanes



Total Thickness = ½"

PAVEMENT STRUCTURAL SECTION NO. 4

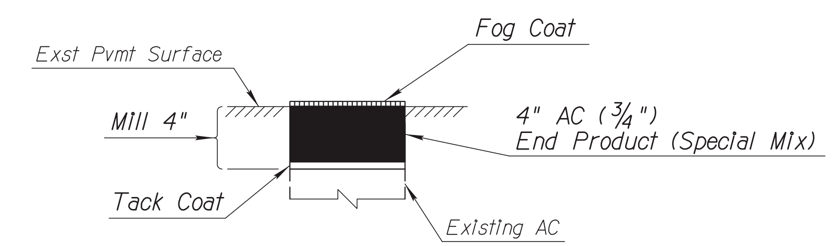
I-40 West Bound Inside and Outside Shoulders
I-40 East Bound Inside and Outside Shoulders



Total Thickness = 3"

PAVEMENT STRUCTURAL SECTION NO. 5

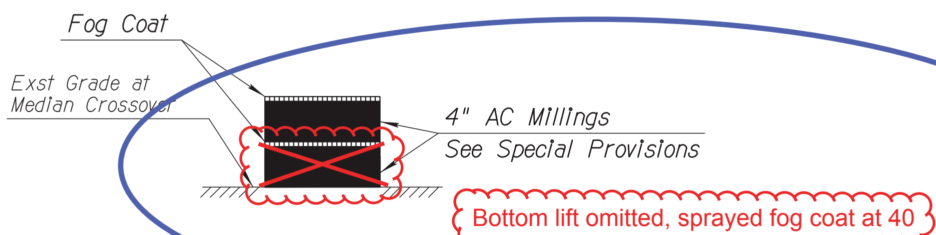
Cross Streets at:
Hawthorne Road T.I.,
Window Rock T.I.,
Grant Rd/Lupton T.I.



Total Thickness = 4"

PAVEMENT STRUCTURAL SECTION NO. 6

Text should be readable at full extents of sheet. For 17"x11" sheets use 10 point and for 34"x22" sheets use 20 point fonts. Place text in the correct location and uniform.



All field changes need to be shown clearly. The field changes need to be clouded as shown and also in red.

Total Thickness = 8"

PAVEMENT STRUCTURAL SECTION NO. 7

Median Crossovers

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

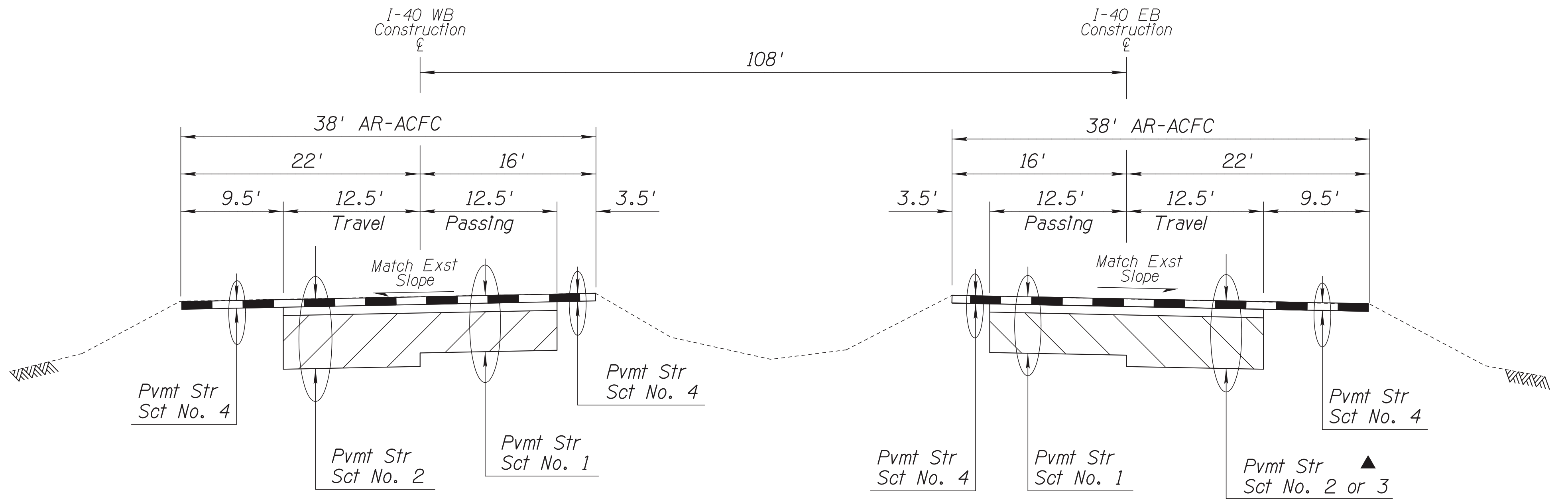
DESIGN SHEET
PAVEMENT STRUCTURAL SECTIONS

Expires 09/30/2017

ROUTE I-40 | LOCATION ALLENTOWN RD - STATE LINE | SHEET 3 OF 62

TRACS NO. H8781 01 C | NH-040-E(218)T | 10 OF 75

1/12/2016 T:\I-40\data\H8781_ds03.dgn



▲ Pvmt Str Sct No. 2: Sta 2569+44 to 2773+57.54
Pvmt Str Sct No. 3: Sta 2773+57.54 to 2805+24.15

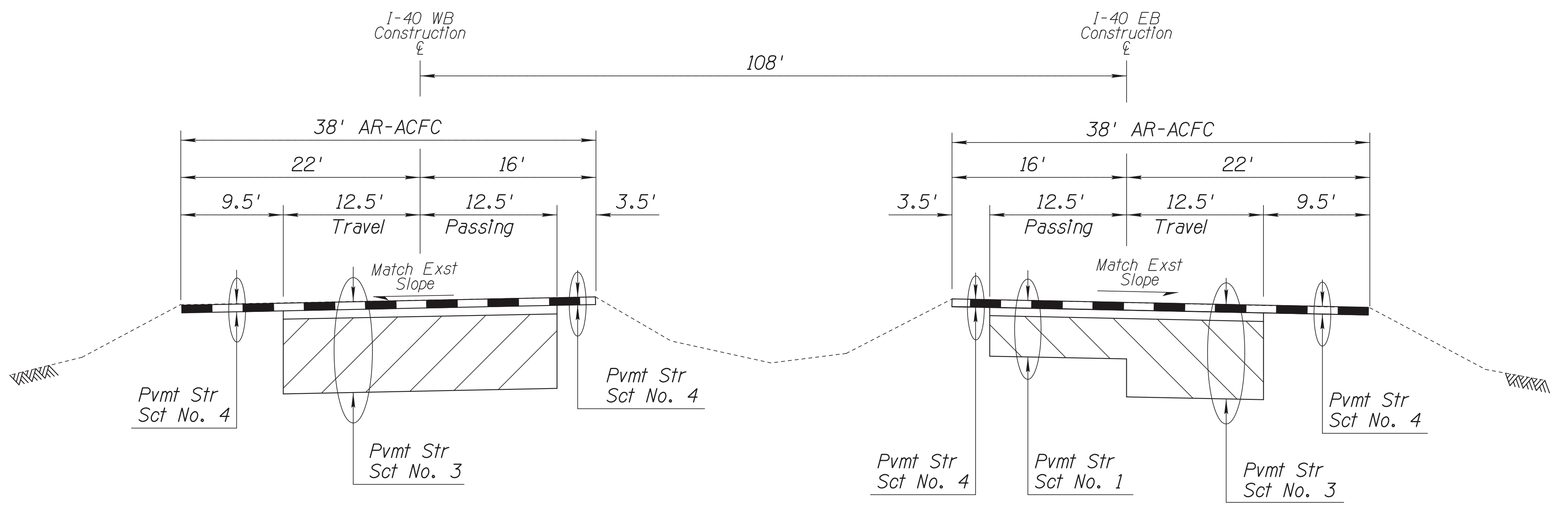
TYPICAL SECTION

WESTBOUND

Sta 2569+44.00 to 2723+38.10 BK
Sta 2723+58.10 AHD to 2803+11.28 BK
Sta 2803+22.63 AHD to 2805+24.15

EASTBOUND

Sta 2569+44.00 to 2723+78.22 BK
Sta 2723+58.16 AHD to 2803+33.99 BK
Sta 2803+22.63 AHD to 2805+24.15



I-40 BRIDGE DECKS ◪			
		Beg Sta	End Sta
EB	Hawthorne T.I.	2610+05	2610+95
	Window Rock T.I.	2764+33	2764+67
	Grant/Lupton T.I.	2852+18	2852+52
WB	Hawthorne T.I.	2610+05	2610+95
	Window Rock T.I.	2764+33	2764+67
	Grant/Lupton T.I.	2852+18	2852+52

◪ All bridge decks to receive Pvmt Str Sct No. 1

TYPICAL SECTION

WESTBOUND

Sta 2805+24.15 to 2850+56.84 BK
Sta 2850+37.77 AHD to 2871+13.04 BK
Sta 2871+29.03 AHD to 2876+60.28

EASTBOUND

Sta 2805+24.15 to 2850+18.70 BK
Sta 2850+37.77 AHD to 2871+45.02 BK
Sta 2871+29.03 AHD to 2874+89.23

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

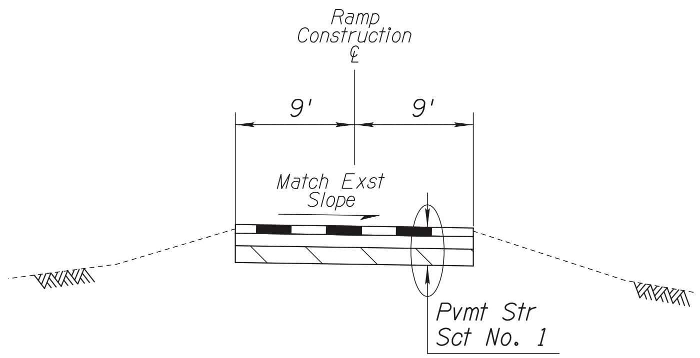
ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

DESIGN SHEET
TYPICAL SECTION

ROUTE I-40 — LOCATION ALLENTOWN RD - STATE LINE

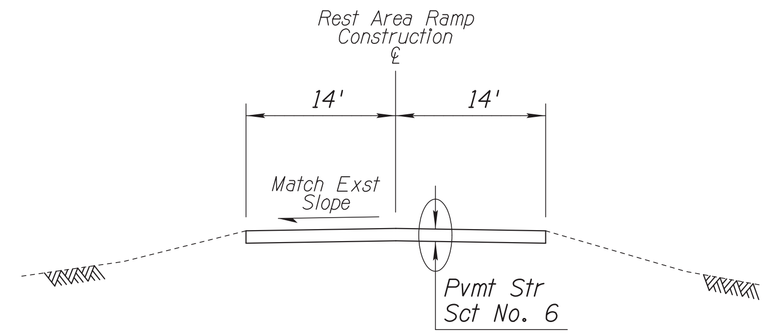
Expires 09/30/2017

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	5	62	4/3/2017
		040-AP-353			



TYPICAL SECTION

Hawthorne, Window Rock &
Grant Rd/Lupton T.I. On and Off Ramps

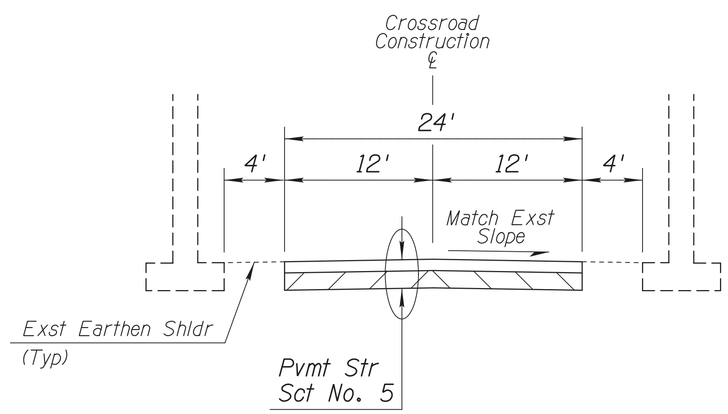


TYPICAL SECTION

I-40 Painted Cliffs Rest Area Ramps & Roads

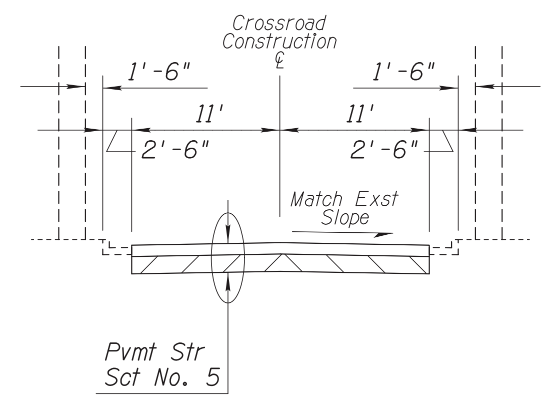
RAMP PAVING LIMITS

Ramp ℄	Begin Sta	End Sta
Hawthorne Rd TI		
EB Off-Ramp	4+24	10+97
EB On-Ramp	0+55	5+10
WB ~~On-Ramp~~ Off Ramp	0+57	7+47
WB ~~Off-Ramp~~ On Ramp	4+41	9+90
Window Rock TI		
EB Off-Ramp	5+24	11+31
EB On-Ramp	0+70	5+67
WB ~~On-Ramp~~ Off Ramp	0+57	7+78
WB ~~Off-Ramp~~ On Ramp	5+34	11+31
Grant/Lupton TI		
EB Off-Ramp	2+83	11+36
EB On-Ramp	0+55	12+15
WB ~~On-Ramp~~ Off Ramp	0+84	9+25
WB ~~Off-Ramp~~ On Ramp	5+62	9+56



TYPICAL SECTION

Hawthorne T.I. Crossroad



TYPICAL SECTION

Window Rock, Grant Rd/Lupton T.I. Crossroads

CROSSROAD PAVING LIMITS

Crossroad	Begin Sta	End Sta
Hawthorne Rd	0+70	5+29
Window Rock/N12	17+81	22+16
Grant Rd	0+00	5+86

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

DESIGN SHEET
TYPICAL SECTION

ROUTE I-40 | LOCATION ALLENTOWN RD - STATE LINE

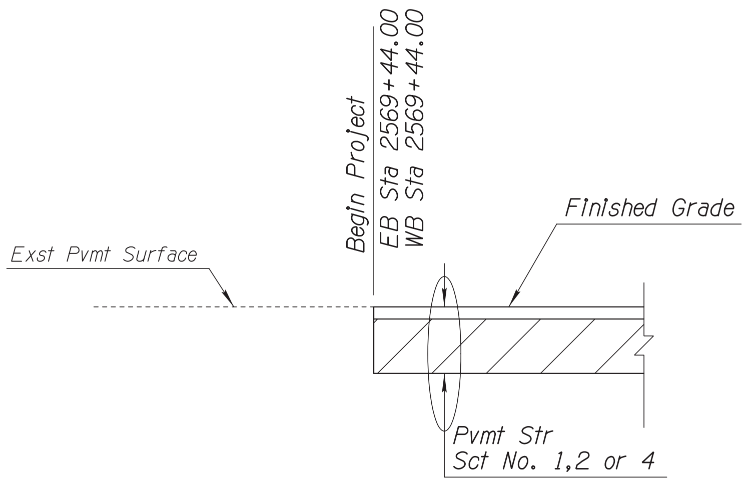
TRACS NO. H8781 01 C | NH-040-E(218)T

ARIZONA U.S.A. — Expires 09/30/2017

SHEET 5 OF 62

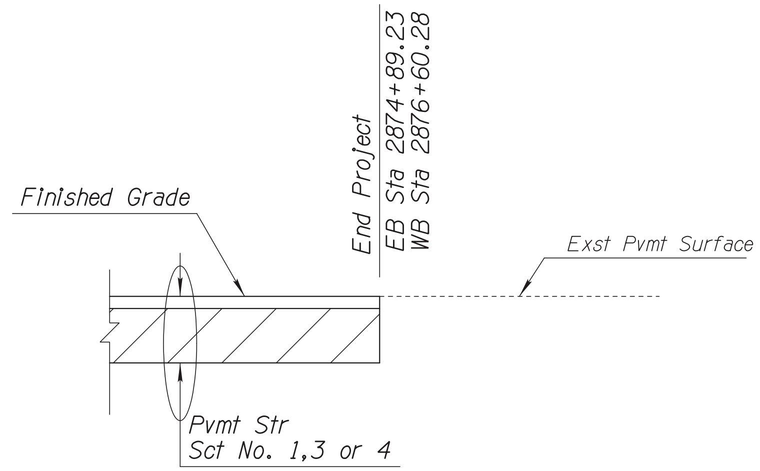
12 OF 75

1/12/2016 T:\I-40\data\H8781_ds07.dgn



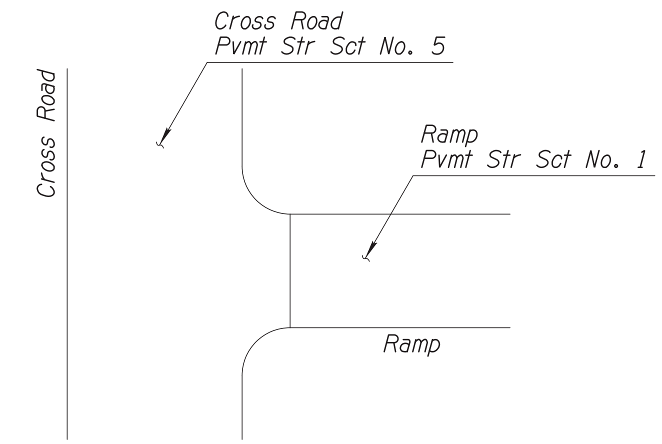
TREATMENT AT BEGIN OF PROJECT

I-40 Travel & Passing Lane, Shoulders

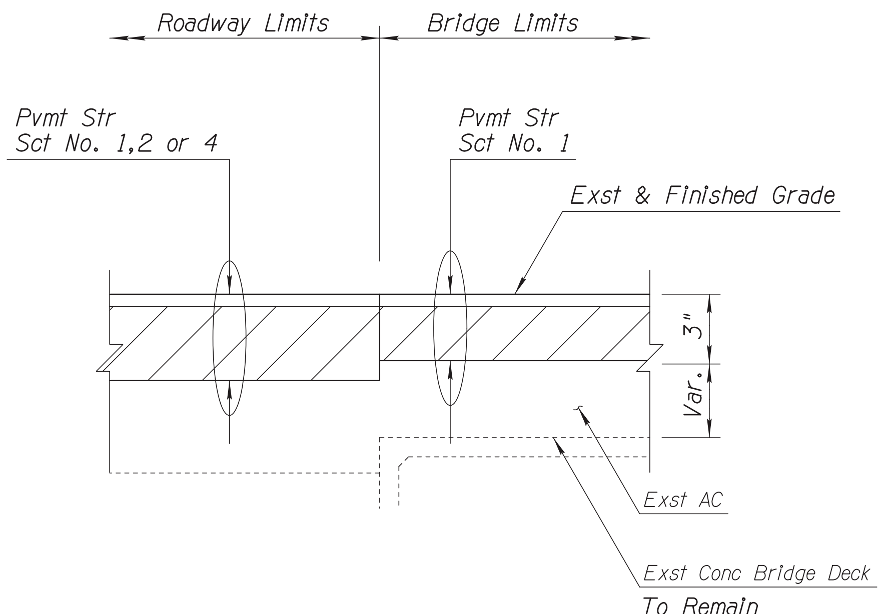


TREATMENT AT END OF PROJECT

I-40 Travel & Passing Lane, Shoulders

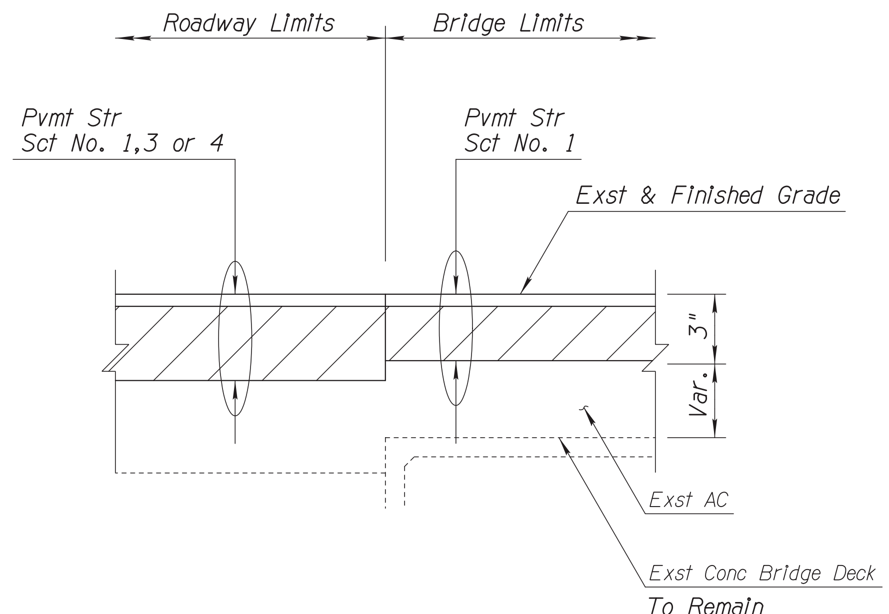


PAVEMENT TRANSITION
AT CROSS ROADS AND RAMPS



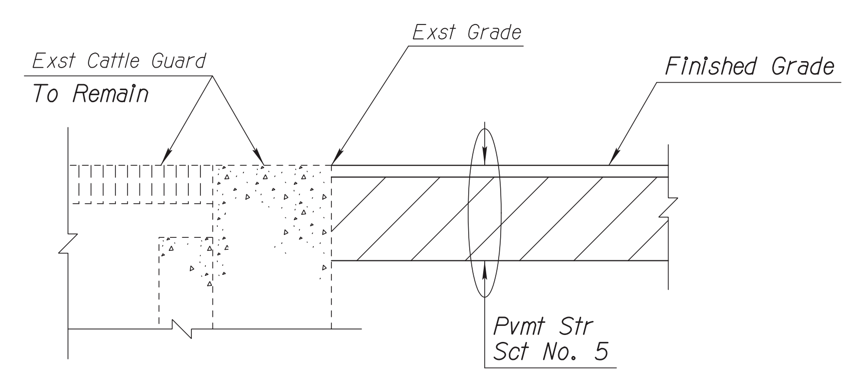
TREATMENT AT
HAWTHORNE & WINDOW ROCK
BRIDGE STRUCTURES

I-40 Travel & Passing Lane, Shoulders



TREATMENT AT
GRANT/LUPTON
BRIDGE STRUCTURES

I-40 Travel & Passing Lane, Shoulders



TREATMENT AT
[CATTLE] GUARD (ALL CROSSROADS)

Note: The next several sheets will be omitted in this example to reduce file size and redundancy of information.

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

DESIGN SHEET
PAVEMENT DETAILS

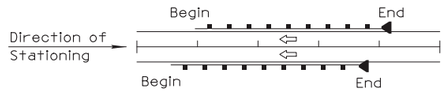
ROUTE I-40 | LOCATION ALLENTOWN RD - STATE LINE

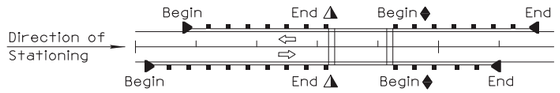
TRACS NO. H8781 01 C | NH-040-E(218)T

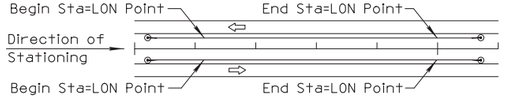
Expires 09/30/2017

SHEET 6 OF 62

1/12/2016 T:\I-40\data\H8781_ds04.dgn







F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	9	62	4/3/2017
		040-AP-353			

REV. DATE: 01/12/2015

ONE-WAY ROADWAY

TWO-WAY ROADWAY WITH STRUCTURE ◒

DIVIDED ROADWAY WITH HIGH TENSION MEDIAN CABLE BARRIER

LOCATION		BARRIER																						
	◇	NEW GUARDRAIL								EXISTING GUARDRAIL					CONCRETE BARRIER								CABLE	
Begin Station (Approximate) (0)	Plan Reference Number ◇	Type "A" C-10.01, Type "B" C-10.02	C-10.03 (Timber)	C-10.04 (Steel)	Detail	Length (Linear Feet) (0.0)	C-10.06 Nested W-Beam ▼ Length (Linear Feet) (0.0)	C-10.07 Bolted Anchor (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)	C-10.40 (32" Median Barrier)	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)
I-40 EB 2586+25 Rt	1																							
I-40 EB 2605+02 Lt	2	A	X			400 ~~437.5~~																		
I-40 EB 2605+40 Rt	3	A	X			400.0	37.5																	
I-40 WB 2606+03 Lt	4	A	X			325 ~~387.5~~	0 ~~37.5~~																	
I-40 WB 2608+52 Rt	5	A	X			75 ~~137.5~~																		
I-40 WB 2611+15 Lt	6	A	X			300 ~~450.0~~	37.5 ~~75.0~~								450.0									
I-40 WB 2611+15 Rt	7	A	X			375 ~~425.0~~									412.5									
I-40 EB 2611+15 Lt	8	A	X			75 ~~175.0~~									125.0									
I-40 EB 2611+15 Rt	9	A	X			300 ~~425.0~~	37.5								425.0									
I-40 EB 2609+05 Lt	10																							
I-40 EB 2611+97 Lt	11																							
I-40 EB 2631+50 Rt	12																							
I-40 WB 2639+77 Lt	13	A	X			1050 ~~1087.5~~	37.5								1075.0									
Sheet Total						~~3925.0~~ 3300	~~225.0~~ 150								3950.0									

		TRANSITION					END TREATMENT																
		RAIL Each		CONC BARRIER Each			NEW Each ◩						EXISTING Action				EXISTING Each ◩						
Begin Station (Approximate) (0)	Begin = Treatment at Beginning End = Treatment at End	C-10.30 Thrie Beam	Reconstruct Rub Rail	C-10.70 32" or C-10.72 42"	C-10.74 42" to 32"	Detail XX	Tangent Details A and B ◧	Flared Details and ◧	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
I-40 EB 2586+25 Rt	Begin																							TO REMAIN
	End																							NO WORK ANTICIPATED
I-40 EB 2605+02 Lt	Begin						1									1	1							REMOVE EXST RUB RAIL (25 LF) SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End	1																						
I-40 EB 2605+40 Rt	Begin						1									1	1							REMOVE EXST RUB RAIL (25 LF) SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End	1																						
I-40 WB 2606+03 Lt	Begin								1							1			1					SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End	1																						
I-40 WB 2608+52 Rt	Begin								1							1			1					SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End	1																						
I-40 WB 2611+15 Lt	Begin	1																						REMOVE EXST RUB RAIL (25 LF) SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End						1									1	1							
I-40 WB 2611+15 Rt	Begin	1																						REMOVE EXST RUB RAIL (25 LF) SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End						1									1	1							
I-40 EB 2611+15 Lt	Begin	1																						SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End								1							1			1					
I-40 EB 2611+15 Rt	Begin	1																						SEE BRIDGE SHEETS FOR BRIDGE SD 1.03 TRANSITION
	End								1							1			1					
I-40 EB 2609+05 Lt	Begin																							MEETS STD, TO REMAIN
	End																							ED
I-40 EB 2611+97 Lt	Begin																							AIN
	End																							ED
I-40 EB 2631+50 Rt	Begin																							
	End																							ED
I-40 WB 2639+77 Lt	Begin								1							1			1					
	End						1									1	1							
Sheet Total		8					5		5								5		5					

Note: The end treatment used in the project needs to be circled and the Detail sheet for the end treatment that was not used on the project needs to be "X'd" out (see the next page). If both end treatments were used, then this is not required.

Note: The next several sheets will be omitted in this example to reduce file size and redundancy of information.

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

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

△ END STATION BEFORE BRIDGE TRANSITION

◆ BEGIN STATION AFTER BRIDGE TRANSITION

◒ SEE BRIDGE SHEETS FOR BRIDGE BARRIER DETAILS AND QUANTITIES

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

◩ 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'

◧ FOR AS-BUILT PREPARATION - CIRCLE END TREATMENT INSTALLED

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

BARRIER SUMMARY SHEET

Registered Professional Engineer (Civil)
Date Signed 1/12/16
ARIZONA U.S.A.
Expires 09/30/2017

ROUTE I-40
LOCATION ALLENTOWN RD - STATE LINE
SHEET 9 OF 62
TRACS NO. H8781 01 C
NH-040-E(218)T
16 OF 75

1/12/2016
T:\I-40\data\H8781_bsum1.dgn

Note to Designer:
The information presented in this Roadway Plans Detail is for general use. Designer's should satisfy themselves that their project site conditions are appropriate for use of this drawing. Contents within the inner border shall not be altered, except for the addition of the Detail designation.

Date: 12/12/14

NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1			
2			
3			
4			

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	13	62	4/3/2017
		040-AP-353			

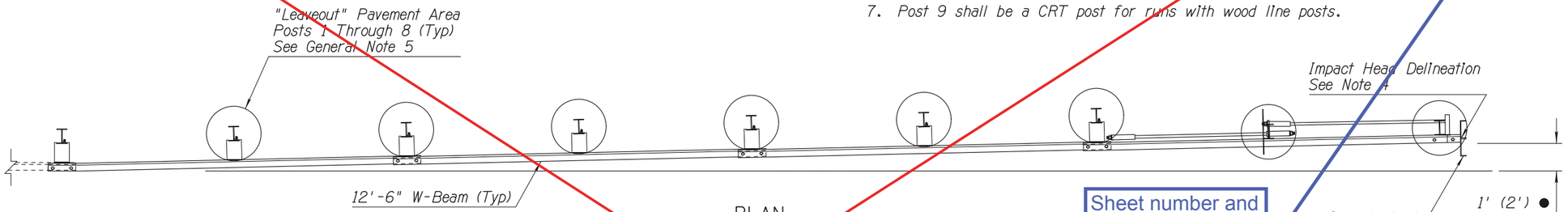
● FOR ELEVATIONS ABOVE 4,000', USE THE VALUES IN PARENTHESES

Note: This end treatment was not used on the project. The Contractor was given the option of Detail A or Detail B for an end treatment. Detail A was not used. The barrier summary sheet (the previous sheet to this sheet) was circled with the end treatment that was used. Detail B was used. This sheet is "X'd" out from corner to corner as shown.

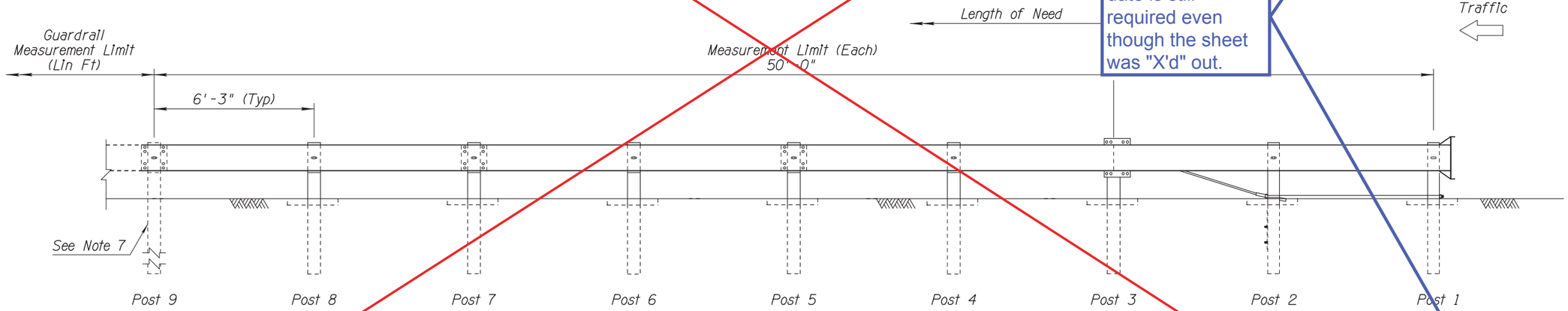
GENERAL NOTES

1. This detail is for roadway layout only.
2. The X-LITE shall be installed in accordance with the manufacturer's specifications and current approved drawings including all details, hardware, hardware quantities, and other information.

   The current manufacturer's approved drawing is number XLTSUS-50, 10/2014. Visit the Roadway Design web site to view and print the drawing.
3. The 50' W-Beam length shall consist of four 12'-6" sections.
4. See specifications and Traffic Signing and Marking Standard Drawings.
5. "Leaveouts" shall be provided in the AC pavement around guardrail posts 1 through 8. "Leaveouts" shall be filled flush to top of pavement with 3" (6" max) of CLSM grout having a 28 day compressive strength between 40 and 120 psi.
6. Posts 4 - 8 shall be steel line posts. Posts 1 - 3 are proprietary.
7. Post 9 shall be a CRT post for runs with wood line posts.



PLAN



ELEVATION

Sheet number and date is still required even though the sheet was "X'd" out.

DETAIL A

Sheet 1 of 2

LAYOUT FOR X-LITE
TANGENT
(AC PAVEMENT)

ADOT Standard Sheet not required

Note: PE stamp is not required on this sheet. This is a Standard Drawing.

DESIGN APPROVED: J.C. Cooper	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY GROUP PLANS DETAIL
APPROVED FOR DISTRIBUTION: Annette Riley	DETAIL SHEET DETAIL A
ROUTE / LOCATION: ALLENTOWN RD - STATE LINE	SHEET 13 OF 62
TRACS NO. H8781 01 C	NH-040-E(218)T — 20 OF 75

Page 10

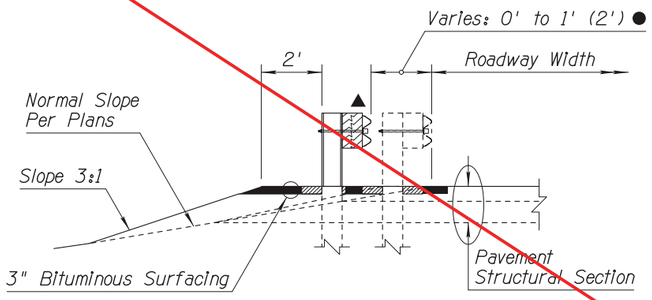
Note to Designer:
The information presented in this Roadway Plans Detail is for general use. Designers should satisfy themselves that their project site conditions are appropriate for use of this drawing. Contents within the inner border shall not be altered, except for the addition of the Detail designation.

Date: 12/12/14

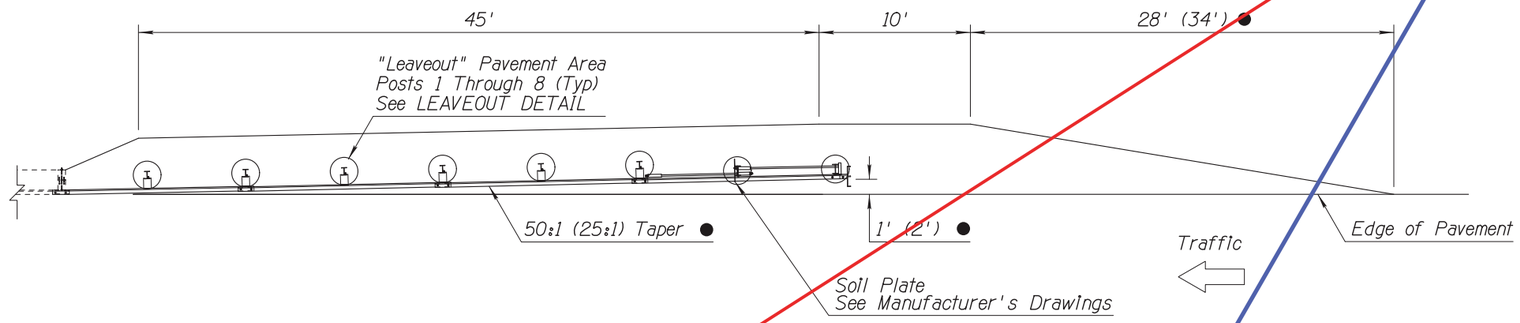
● FOR ELEVATIONS ABOVE 4,000 FT, USE THE VALUES IN PARENTHESES

▲ Top of Rail = 28"
See General Note 1
Std Dwg C-10.03

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	14	62	4/3/2017
		040-AP-353			



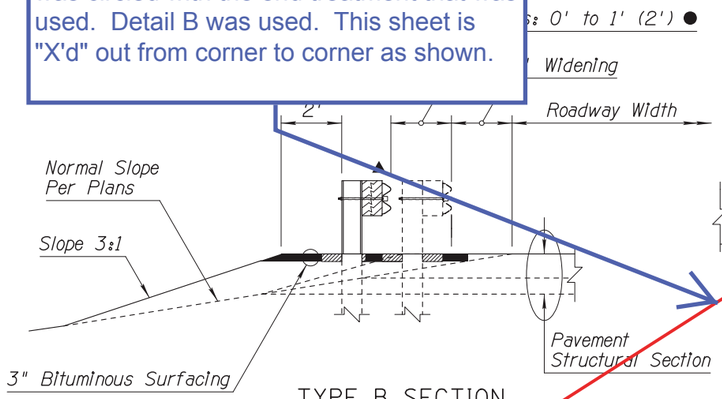
TYPE A SECTION



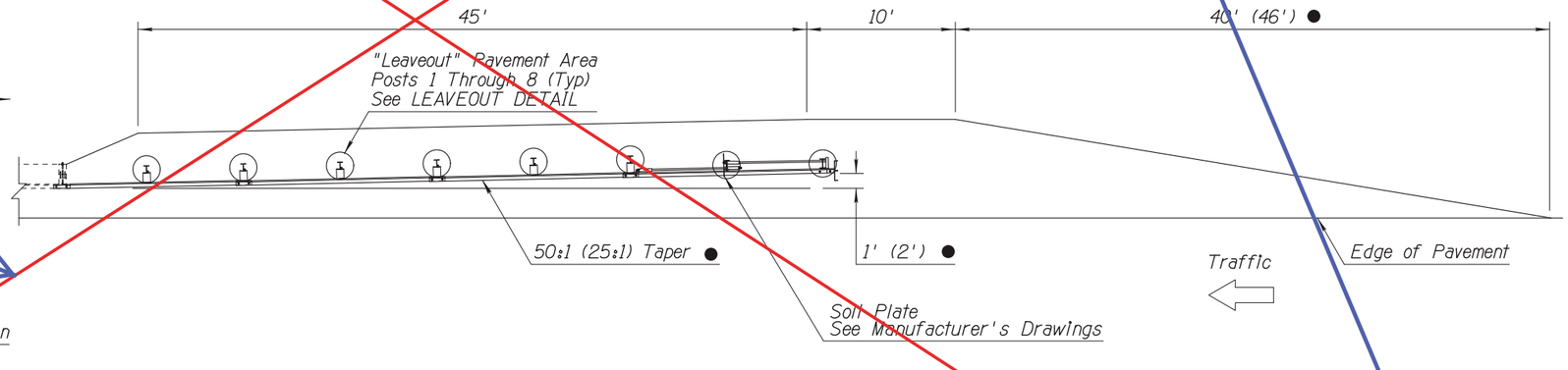
TYPE A GUARDRAIL INSTALLATION
(FACE OF RAIL AT EDGE OF PAVEMENT)

Note: This end treatment was not used on the project. The Contractor was given the option of Detail A or Detail B for an end treatment. Detail A was not used. The barrier summary sheet (sheet 16 of 75) was circled with the end treatment that was used. Detail B was used. This sheet is "X'd" out from corner to corner as shown.

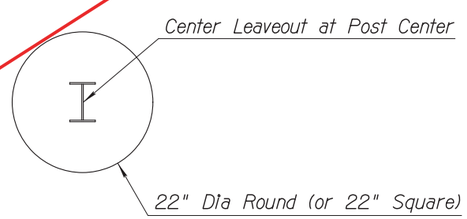
Sheet number and date is still required even though the sheet was "X'd" out.



TYPE B SECTION



TYPE B GUARDRAIL INSTALLATION
(FACE OF RAIL OFFSET 2' FROM NORMAL EDGE OF PAVEMENT)



LEAVEOUT DETAIL

DETAIL A

Sheet 2 of 2

LAYOUT FOR X-LITE
TANGENT
(AC PAVEMENT)

ADOT Standard Sheet not required

Note: PE stamp is not required on this sheet. This is a Standard Drawing.

DESIGN APPROVED: J.C. Cooper	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION ROADWAY GROUP PLANS DETAIL
APPROVED FOR DISTRIBUTION: Annette Riley	DETAIL SHEET DETAIL A
ROUTE / LOCATION: ALLENTOWN RD - STATE LINE	SHEET 14 OF 62
TRACS NO. H8781 01 C	NH-040-E(218)T

21 OF 75

NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1			
2			
3			
4			

U:\ADOT_V8i\ADOT\users\flyj 1:51:22 PM 1/12/2016 T:\I-40\data\y11402.dgn

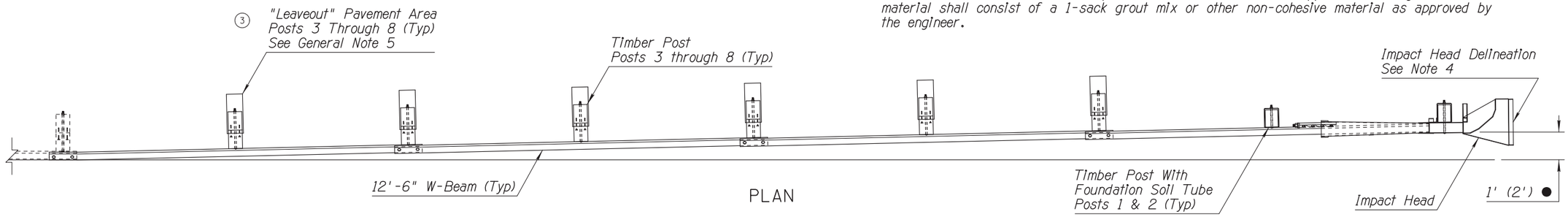
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	15	62	4/3/2017
		040-AP-353			

● FOR ELEVATIONS ABOVE 4,000', USE THE VALUES IN PARENTHESES

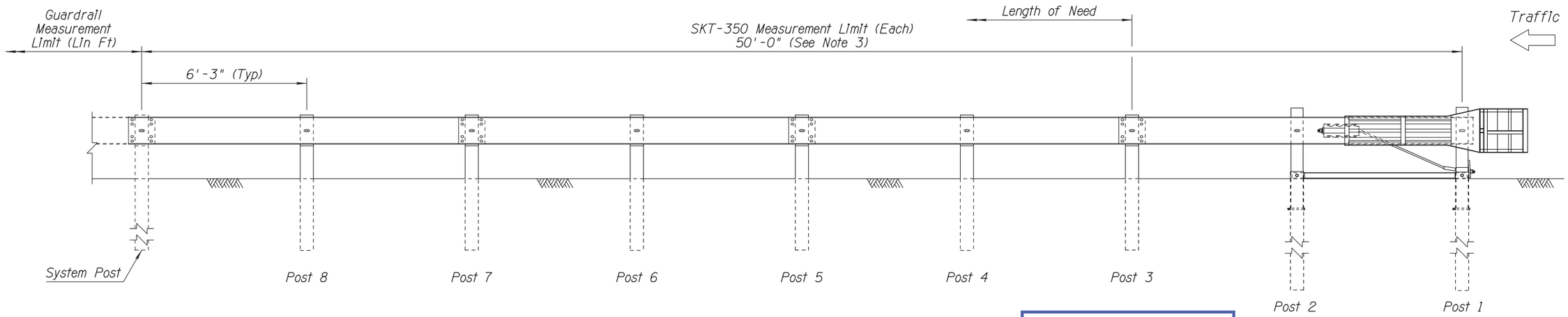
GENERAL NOTES

1. This detail is for roadway layout only.
2. The SKT-350 shall be installed in accordance with the manufacturer's specifications and current approved drawings including all details, hardware, hardware quantities, and other information.

   The current manufacturer's approved drawing is number SKT-W-2US-AZ, 06/04/11. Visit the Roadway Design web site to view and print the drawing.
3. The 50' W-Beam length shall consist of four 12'-6" sections, the end section being a proprietary split rail.
4. See specifications and Traffic Signing and Marking Standard Drawings.
5. ③ "Leaveouts" in asphaltic concrete shall be provided in the AC pavement around the guardrail posts at the locations and dimensions specified on the manufacturer approved drawings. "Leaveout" material shall consist of a 1-sack grout mix or other non-cohesive material as approved by the engineer.



PLAN



ELEVATION

This is the end treatment that was used on the project. This is noted in the summary sheet on page 16 of 75.

DETAIL B

Sheet 1 of 2

LAYOUT FOR SKT-350
2 FOUNDATION SOIL TUBES ①
(AC PAVEMENT)

Note: PE stamp is not required on this sheet. This is a Standard Drawing.

DESIGN APPROVED	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION **ROADWAY GROUP PLANS DETAIL**
J.C. Cooper	
APPROVED FOR DISTRIBUTION Mary Viparina	DETAIL SHEET DETAIL B
ROUTE / LOCATION: ALLENTOWN RD - STATE LINE	SHEET 15 OF 62
TRACS NO. H8781 01 C	NH-040-E(218)T — 22 OF 75

Note to Designer:
The information presented in this Roadway Plans Detail is for general use. Designer's should satisfy themselves that their project site conditions are appropriate for use of this drawing contents, which the inner border shall not be altered, except for the addition of the Detail designation.

Date: 6/06/11

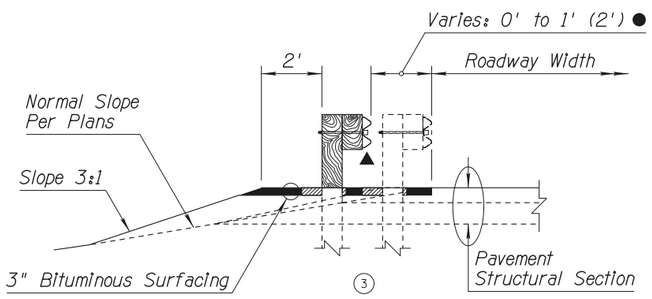
NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	REISSUED DRAWING WITH MODIFIED APPROACH TAPER	RLF	5/22/07
2	REVISED TITLE BLOCK NAME & DRAWING DATE	RLF	7/09/09
3	ADDED "LEAVEOUT" CALLOUT & NEW GENERAL NOTE 5	RLF	6/06/11
4			

Page 12

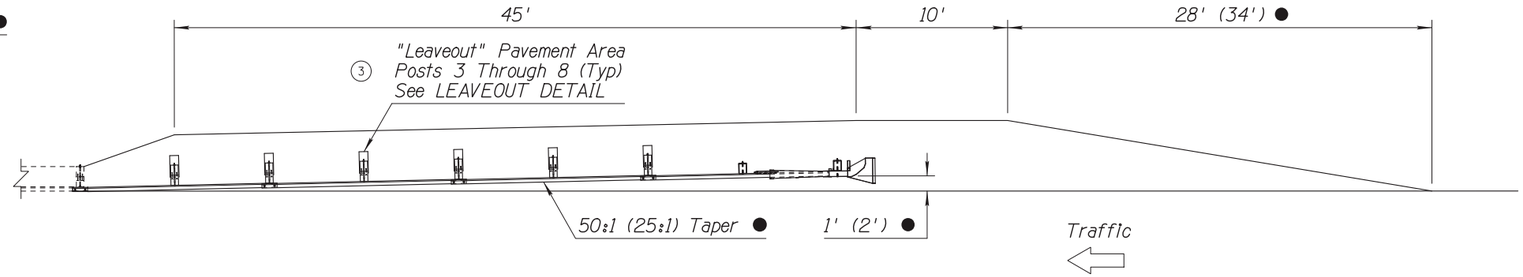
● FOR ELEVATIONS ABOVE 4,000 FT, USE THE VALUES IN PARENTHESES

▲ *Top of Rail = 28"*
See General Note 1
Std Dwg C-10.03

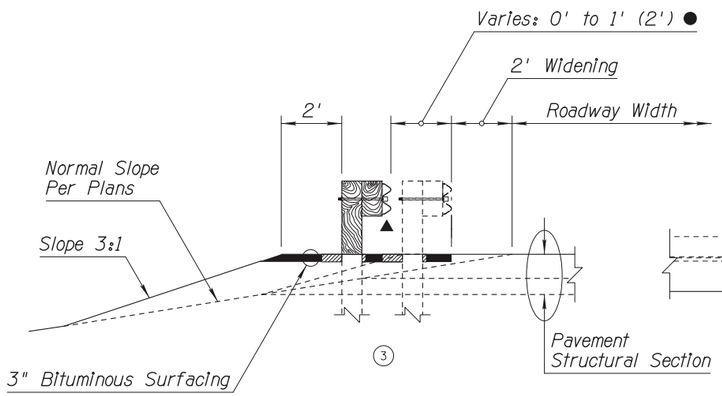
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	16	62	4/3/2017
		040-AP-353			



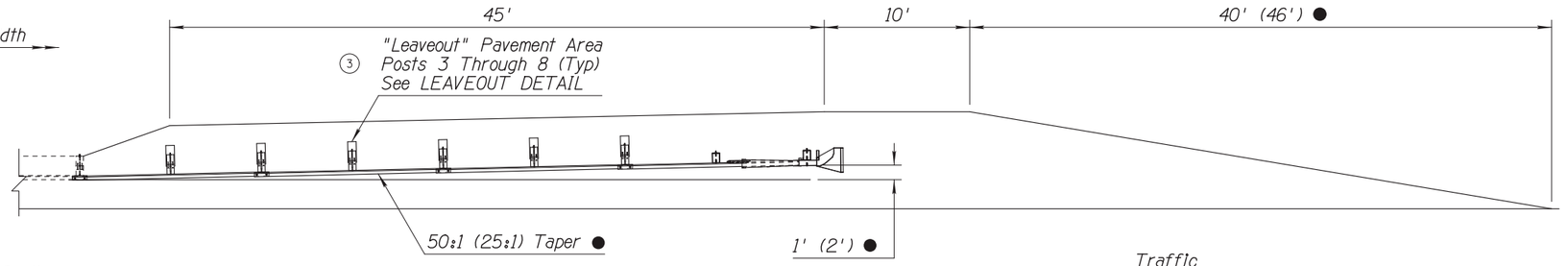
TYPE A SECTION



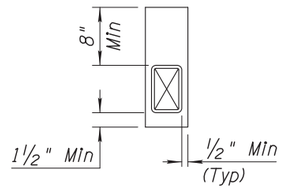
TYPE A GUARDRAIL INSTALLATION
(FACE OF RAIL AT EDGE OF PAVEMENT)



TYPE B SECTION



TYPE B GUARDRAIL INSTALLATION
(FACE OF RAIL OFFSET 2' FROM NORMAL EDGE OF PAVEMENT)



LEAVEOUT DETAIL
4

This is the end treatment that was used on the project. This is noted in the summary sheet on page 16 of 75.

DETAIL B

Sheet 2 of 2

LAYOUT FOR SKT-350
2 FOUNDATION SOIL TUBES
(AC PAVEMENT)

Note: PE stamp is not required on this sheet. This is a Standard Drawing.

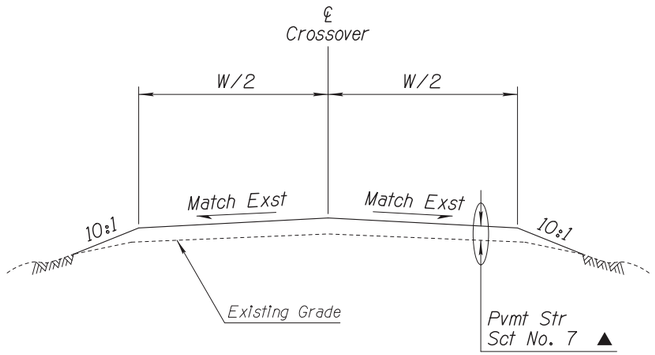
DESIGN APPROVED	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION **ROADWAY GROUP PLANS DETAIL**
J.C. Cooper	
APPROVED FOR DISTRIBUTION Mary Viparina	DETAIL SHEET DETAIL B
ROUTE / LOCATION: ALLENTOWN RD - STATE LINE	SHEET 16 OF 62
TRACS NO. H8781 01 C	NH-040-E(218)T — 23 OF 75

Note to Designer:
The information presented in this Roadway Plans Detail is for general use. Designers should satisfy themselves that their project site conditions are appropriate for use of this drawing. Contents within the inner border shall not be altered, except for the addition of the Detail designation.

Date: 6/06/11

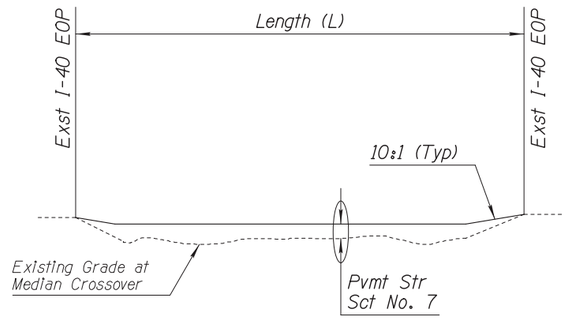
NO	DESCRIPTION OF REVISIONS	MADE BY	DATE
1	REISSUED DRAWING WITH MODIFIED APPROACH TAPER	RLF	5/22/07
2	REVISED APPROACH TAPER CRITERIA	RLF	7/09/09
3	ADDED "LEAVEOUT" CALLOUT & REVISED SECTION VIEWS	RLF	6/06/11
4	ADDED "LEAVEOUT" DETAIL	RLF	6/06/11

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	17	62	4/3/2017
		040-AP-353			



SECTION A-A

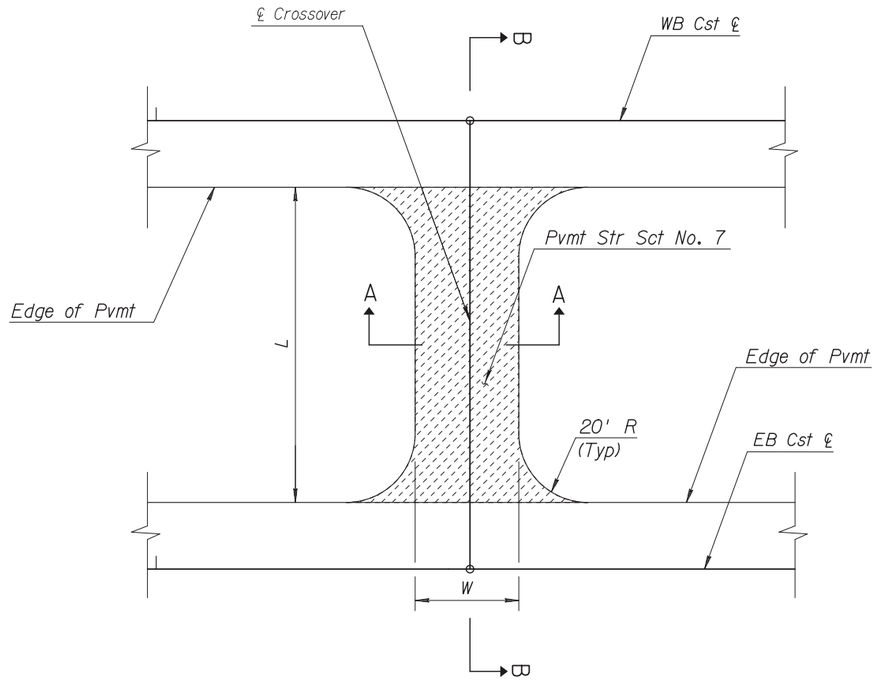
▲ Screen AC Millings to pass 1 - ½" screen prior to placement. See Special Provisions.



SECTION B-B

CROSSOVER SCHEDULE

⬭	Station	L	W	Area (SF)
1	2580+00	76	20	1,864
2	2700+85	76	20	1,864
3	2795+17	76	20	1,864
4	2874+69	76	20	1,864



PLAN

NOTE:

1. Contractor shall match exst elevations at the edge of I-40 shoulder.
2. Locations and dimensions above are approximate. Contractor shall verify measurements in the field.

DETAIL C

MEDIAN CROSSOVERS

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

DETAIL SHEET
DETAIL C

ROUTE: I-40
LOCATION: ALLENTOWN RD - STATE LINE

TRACS NO. H8781 01 C | NH-040-E(218)T

Registered Professional Engineer
Date 11/12/16
ARIZONA U.S.A.
Expires 09/30/2017

SHEET 17 OF 62
24 OF 75

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

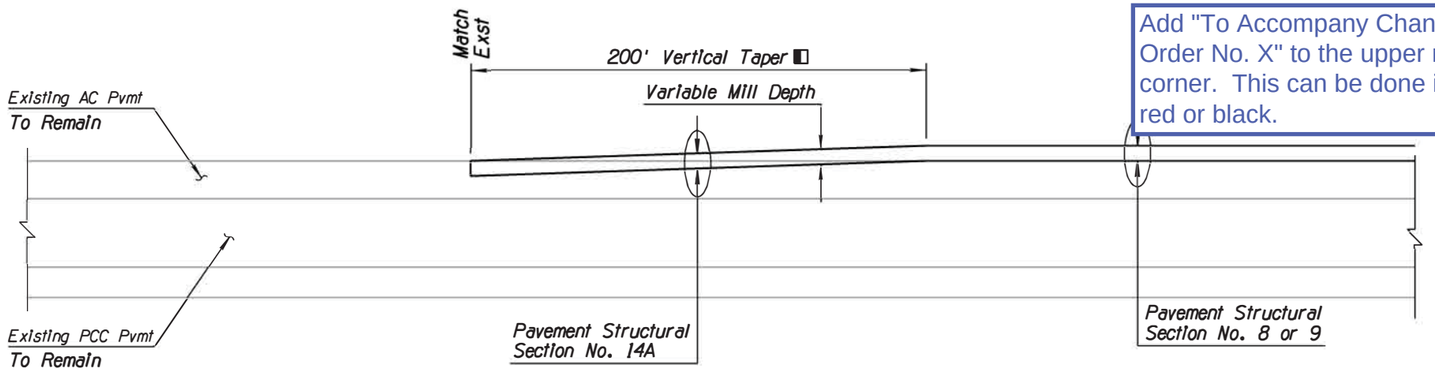
1/12/2016 T:\I-40\data\H8781_dt01.dgn

TO ACCOMPANY CHANGE ORDER NO. 1

REV NO.	LOCATION	DATE	BY
1	REVISED PHASING - EB ROADWAY FIRST	07/21/2017	DBK

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-C(225)T	21A	112	01/11/2019
		040 CN 156			

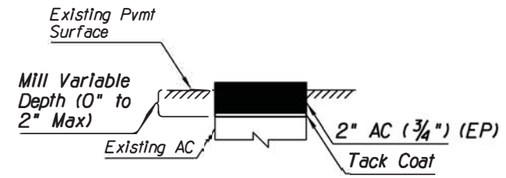
Add "To Accompany Change Order No. X" to the upper right corner. This can be done in red or black.



TREATMENT AT BEGIN/END WB OVERLAY
(CONSTRUCTION PHASE 1B)

NOTE:

See Dwg No. C-4.06 for notes.



Total Thickness = 2"

SECTION NO. 14A

This sheet is a change order sheet that was added and did not replace another sheet in the plans.

This sheet requires a new seal, signature and date.

DETAIL C

Sheet 2 of 2

PAVEMENT TREATMENTS

Cloud the title block and add the triangle with the addendum number. This must be done in red.

1

	NAME	DATE
DESIGN	DBK, RG	05/17
DRAWN	JK, ME, DS	05/17
CHECKED	KCH	05/17

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

Gannett Fleming

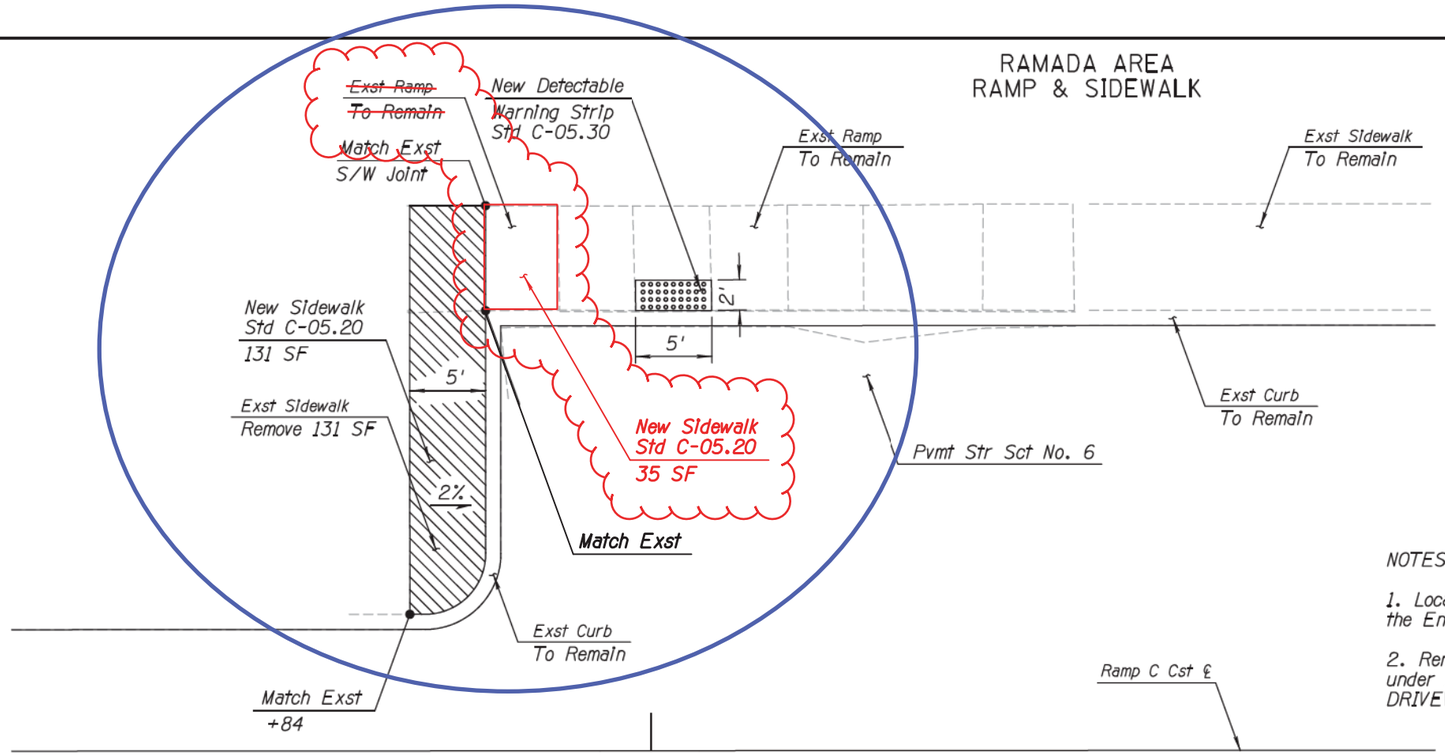
DETAIL SHEET
DETAIL C

ROUTE	LOCATION	DWG No.
I-40	DEVIL DOG - WILLIAMS	S-1.06A
TRACS NO. F0131 01C	040-C(225)T	38 OF 172

7/21/2017 c:\pwworking\gfpw01\dkelly\d0699353\F0131dtC2_RI.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	18	62	4/3/2017
		040-AP-353			

RAMADA AREA
RAMP & SIDEWALK

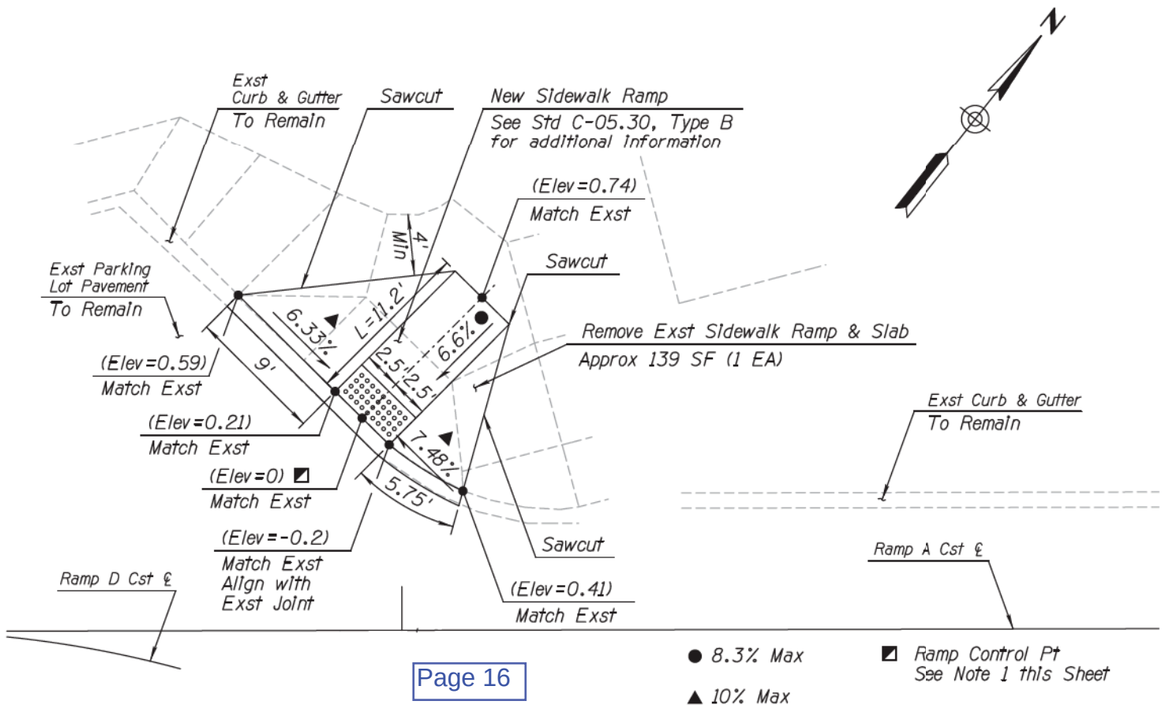


NOTES:

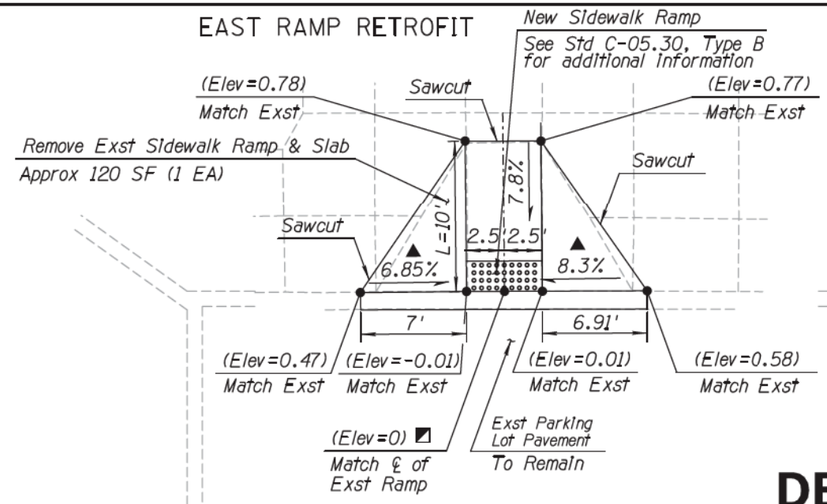
1. Locations of Detail D work shall be staked and verified by the Engineer prior to the start of work in the area.

2. Removal of sidewalk, ramps and slabs is to be paid for under ITEM 2020025 - REMOVAL OF CONCRETE SIDEWALKS, DRIVEWAYS AND SLABS.

WEST CURB RAMP RETROFIT



EAST RAMP RETROFIT



DETAIL D

REST AREA SIDEWALK & CURB RAMPS

	NAME	DATE
DESIGN	JKF	12/15
DRAWN	CPG	12/15
CHECKED	ZK	12/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

DETAIL SHEET
DETAIL D

ROUTE: I-40 | LOCATION: ALLENTOWN RD - STATE LINE

TRACS NO. H8781 01 C | NH-040-E(218)T

Expires 09/30/2017

SHEET 18 OF 62

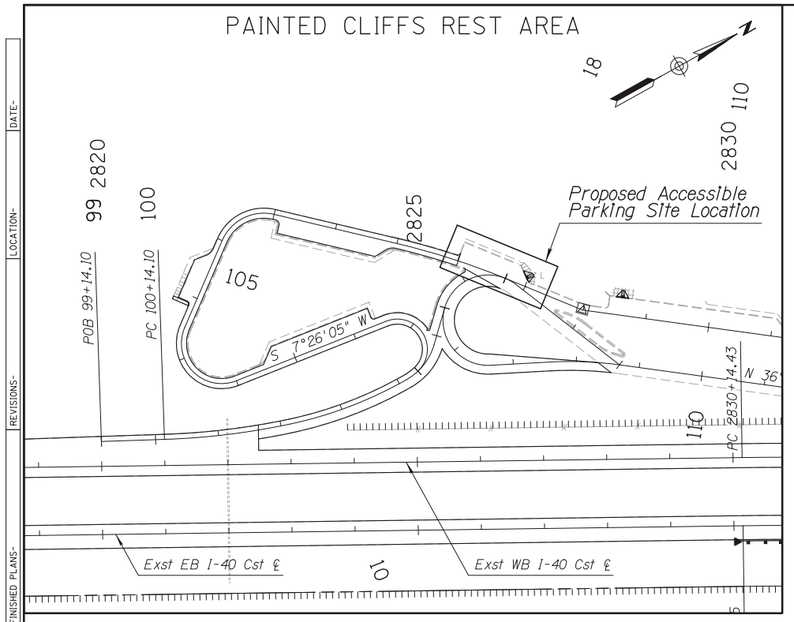
25 OF 75

1/12/2016 T:\I-40\data\H8781_dt02.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	19	62	4/3/2017
		040-AP-353			

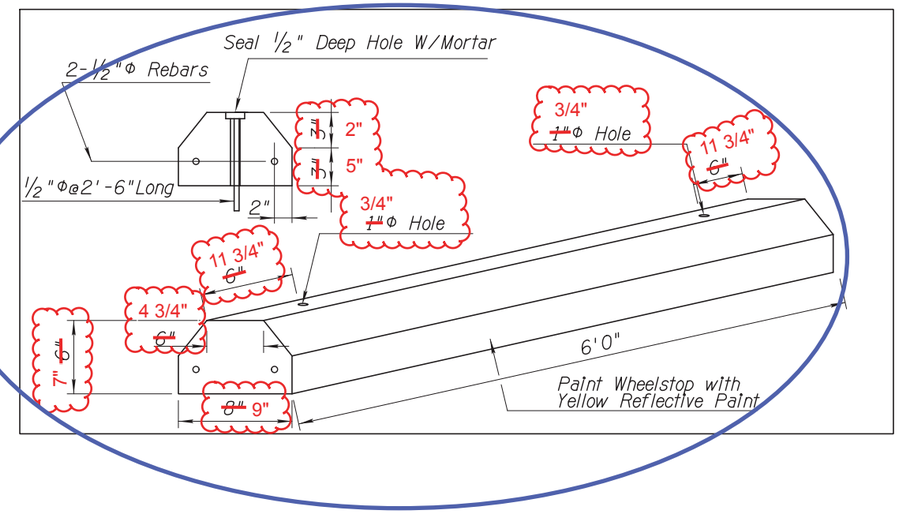
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

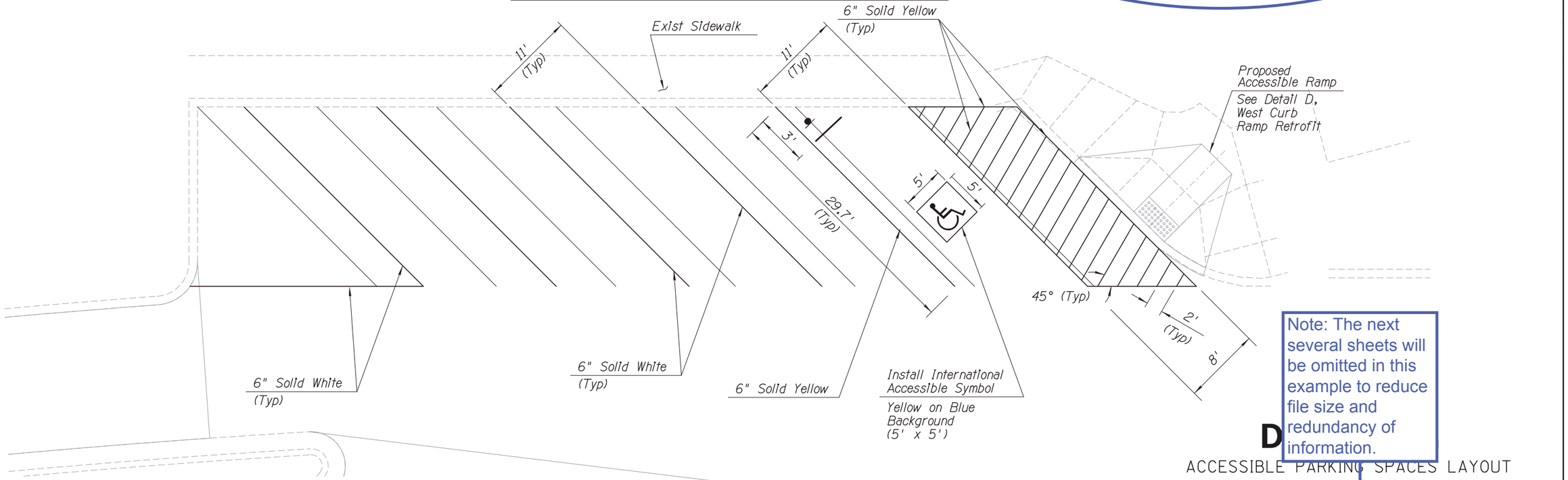
PAINTED CLIFFS REST AREA



Accessible Parking Approximate Quantities			
Description	Unit	Quantity	Item No
Warning, Marker or Regulatory Sign Panel	SQ.FT	3.00	6080005
Sign post perforated	L.FT	12.00	6070054
Foundation for Sign Post (Concrete)	EACH	1.00	6070060
Miscellaneous Work (Wheelstop)	EACH	1.00	9240119
Dual Component Epoxy 4" White Equivalent Pavement Marking	L.FT	390	7090001
Dual Component Epoxy 4" Yellow Equivalent Pavement Marking	L.FT	410	7090002
Permanent Pavement Marking 4" White Equivalent Pavement Marking	L.FT	195	7080001
Permanent Pavement Marking 4" Yellow Equivalent Pavement Marking	L.FT	275	7080011

WHEELSTOP DETAIL:





D

ACCESSIBLE PARKING SPACES LAYOUT

Note: The next several sheets will be omitted in this example to reduce file size and redundancy of information.

SYMBOL LEGEND:

●	New R7-8AZ 12" x 18" New R7-8P 18" x 12" Install new sign on square 2S type post. Install wheel stop in advance of the sign.
———	Wheelstop

	NAME	DATE
DESIGN	SG	12/15
DRAWN	CPG	12/15
CHECKED	HAO	12/15

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

PARSONS BRINCKERHOFF

DETAIL SHEET
DETAIL E

Registered Professional Engineer — Date Signed 01-12-16 — ARIZONA U.S.A. — Expires 03/31/16

ROUTE	LOCATION	SHEET
I-40	ALLENTOWN RD - STATE LINE	SHEET 19 OF 62
TRACS NO. H8781 01 C	NH-040-E(218)T	26 OF 75

1/12/2016 T:\I-40\data\H8781_dt03.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	29	62	4/3/2017
		040-AP-353			

TRAFFIC CONTROL GENERAL NOTES:

1. The traffic control plans represent a suggested method for traffic control during construction. The contractor may prepare another traffic control plan in accordance with Section 701 of the Specifications at no cost to the Department. All traffic control plans are subject to the approval of the Engineer before beginning construction.
2. Adjustments to the details of these traffic control plans and requirements may be necessary due to construction activities, as directed by the Engineer at no cost to the Department.
3. The contractor shall maintain two lanes of traffic on I-40 on weekends, holidays and as directed by the Engineer.
4. The contractor shall maintain traffic on a paved surface at all times.
5. All existing signs in conflict with the construction signs shall be removed, relocated or covered in place, as directed by the Engineer. The contractor shall store and reinstall items which have been removed or relocated in a manner approved by the Engineer at no additional cost to the Department.
6. Speed limit signing is preliminary and is subject to review and change by the Engineer as dictated by field conditions.
7. "WATCH FOR TRUCKS" signs shall be installed wherever truck ingress or egress is expected.
8. Use double fines signing when workers are present. See Figure SA-12 of the ADOT Traffic Control Design Guidelines 2010.
9. The retroreflective sheeting on all construction signs shall meet the minimum criteria established in Section 1007 of the Specifications.
10. All construction signs shall have black letters on a fluorescent orange background, except, as otherwise noted.
11. For signs installed on spring or rigid stands, sign mounting height shall be according to the sign manufacturer recommendation.
12. 2 flags shall be mounted on top of all construction signs except the "END ROAD WORK THANK YOU" sign. Type "A" flashing warning lights shall be required on all night time construction signs except the "END ROAD WORK THANK YOU" sign.
13. Construction signs shall not be displayed to traffic no 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 completion of the construction activities.
14. When traffic control devices are not in use, they shall be moved at least 30 feet from the roadway and covered or turned away from traffic.
15. Drums, Type 2 barricades and vertical panels shall be placed 40 feet on center in tapers and 80 feet on center in tangents, except as otherwise noted on the plans.
16. The contractor may substitute Type 1 barricades for Type 2 barricades as long as the reflective area on the top panel of the Type 1 barricade is equivalent or greater than the reflective area of a Type 2 barricade.
17. For night work, a Type C steady-burning yellow light shall be mounted on every drum, Type 2 barricade, and vertical panel when used for channelization only.
18. During nighttime the contractor shall not utilize cones for channelization devices unless otherwise directed by the Engineer.
19. The contractor shall utilize a flashing arrow panel in the sequential chevron mode for each closure of a through lane. The contractor shall not utilize a flashing arrow panel in connection with any shifting taper.
20. For temporary concrete barrier details, see Standard Drawing C-3. BM-1 (white) or BM-2 (yellow) barrier markers listed on the ADOT Approved Products List and conforming to Standard Drawings M-32 and M-33 shall be installed at 25 foot spacing. The installed price for the marker shall be considered a part of the barrier cost.
21. For sand barrel crash cushion details, see Standard Drawings C-1 and C-2.
22. All existing pavement markings in conflict with the traffic control striping plan shall be removed by methods approved by the Engineer. Painting over striping does not constitute stripe obliteration. For a daytime shift in traffic, the shift may be accomplished through channelizing devices with the existing pavement markings remaining in place.
23. No pavement marking obliteration work will be allowed on existing yellow pavement markings. The existing yellow left edge stripes shall be removed with the passing lane and ramp milling process (activities 2B and 2C).
24. When no longer required, temporary pavement markings shall be removed.
25. Existing pavement markers shall be removed when present along existing stripe obliteration at no cost to the Department.
26. The contractor shall clean the roadway surface to the satisfaction of the Engineer by sweeping and air-jet blowing, immediately prior to the placement of all temporary pavement markings. The roadway surface shall be dry.
27. At the completion of the new pavement surface each day, center lines, lane lines and stop bars shall be striped with one application of standard reflectorized traffic paint at the location of the permanent striping, or as directed by the Engineer.
28. All drawings are schematic only and not to scale. All dimensions are in feet, unless otherwise noted.
29. The contractor shall ensure the earthen material or aggregate base under the temporary sand barrel crash cushions, under the temporary concrete barrier and between the barrier and the roadway is 10:1 or flatter in each direction for setups off the pavement.
30. The Contractor shall provide flaggers and uniformed police officers (DPS) as directed by the Engineer during the installation, relocation or removal of Temporary Concrete Barrier.
31. For temporary concrete barrier markers, see ADOT Standard Drawing M-32 barrier markers. Markers shall be installed at 20 feet spacing. The installed price for the markers shall be [illegible] the barrier cost.

This sheet is "X'd" out because it was replaced as part of an addendum. The next sheet shows the addendum # 1 in the upper right corner.

[illegible] Uniform Traffic Control Devices Part 6, Temporary Traffic Control, 2009 Edition as amended by the January, 2012 ADOT Supplement.

Note: If this sheet is available, please provide it with the "X" through the sheet as shown. The "X" does not need to be in red. Red or Black "X" on this sheet is acceptable. If the sheet is not available it is not necessary to include it in the record drawings. The addendum sheet (see next sheet) must be present.

[illegible] raffic Control Design Guidelines, 2010.

	NAME	DATE
DESIGN	SG	01/16
DRAWN	CPG	01/16
CHECKED	HAO	01/16

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL
GENERAL NOTES

Registered Professional Engineer (Civil) CERTIFICATE NO. Date Signed 01-12- ARIZONA U.S.A. Expires 03/31/16

ROUTE I-40 | LOCATION ALLENTOWN RD - STATE LINE | SHEET 29 OF 62

TRACS NO. H8781 01 C | NH-040-E(218)T | 36 OF 75

1/12/2016 T:\I-40\Trfcnt\T8781_tcn1.dgn

TO ACCOMPANY ADDENDUM NO. 1

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	29	62	4/3/2017
		040-AP-353			

TRAFFIC CONTROL GENERAL NOTES:

1. The traffic control plans represent a suggested method for traffic control during construction. The contractor may prepare another traffic control plan in accordance with Section 701 of the Specifications at no cost to the Department. All traffic control plans are subject to the approval of the Engineer before beginning construction.

2. Adjustments to the details of these traffic control plans and requirements may be necessary due to construction activities, as directed by the Engineer at no cost to the Department.

3. The contractor shall maintain traffic on I-40 on weekends and holidays as specified in Maintenance of Traffic sheets or as directed by the Engineer. △1

4. The contractor shall maintain traffic on a paved surface at all times.

5. All existing signs in conflict with the construction signs shall be removed, relocated or covered in place, as directed by the Engineer. The contractor shall store and reinstall items which have been removed or relocated in a manner approved by the Engineer at no additional cost to the Department.

6. Speed limit signing is preliminary and is subject to review and change by the Engineer as dictated by field conditions.

7. "WATCH FOR TRUCKS" signs shall be installed wherever truck ingress or egress is expected.

The addendum information is typically shown clouded with a triangle number. Because this was done before construction, this does not need to be shown in red.

8. Use double fines ... SA-12 of the ADOT Traffic Control Design Guidelines ...

9. The retroreflectivity ... the minimum criteria established in Section 1007 of ...

10. All construction signs shall have black letters on a fluorescent orange background, except, as otherwise noted.

11. For signs installed on spring or rigid stands, sign mounting height shall be according to the sign manufacturer recommendation.

12. 2 flags shall be mounted on top of all construction signs except the "END ROAD WORK THANK YOU" sign. Type "A" flashing warning lights shall be required on all night time construction signs except the "END ROAD WORK THANK YOU" sign.

13. Construction signs shall not be displayed to traffic no 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 completion of the construction activities.

14. When traffic control devices are not in use, they shall be moved at least 30 feet from the roadway and covered or turned away from traffic.

15. Drums, Type 2 barricades and vertical panels shall be placed 40 feet on center in tapers and 80 feet on center in tangents, except as otherwise noted on the plans.

16. The contractor may substitute Type 1 barricades for Type 2 barricades as long as the reflective area on the top panel of the Type 1 barricade is equivalent or greater than the reflective area of a Type 2 barricade.

17. For night work, a Type C steady-burning yellow light shall be mounted on every drum, Type 2 barricade, and vertical panel when used for channelization only.

18. During nighttime the contractor shall not utilize cones for channelization devices unless otherwise directed by the Engineer.

19. The contractor shall utilize a flashing arrow panel in the sequential chevron mode for each closure of a through lane. The contractor shall not utilize a flashing arrow panel in connection with any shifting taper.

TO ACCOMPANY ADDENDUM NO. XX must be shown. It does not need to be in red. Addendum's are typically inserted in the plans before construction begins.

20. For temporary concrete barrier details, see Standard Drawing C-3. BM-1 (white) or BM-2 ...rrier markers listed on the ADOT Approved Products List and conforming to Standard ...M-32 and M-33 shall be installed at 25 foot spacing. The installed price ...rker shall be considered a part of the barrier cost.

21. ...barrel crash cushion details, see Standard Drawings C-1 and C-2.

22. ... pavement markings in conflict with the traffic control striping plan shall be ... methods approved by the Engineer. Painting over striping does not constitute ...eration. For a daytime shift in traffic, the shift may be accomplished through ...g devices with the existing pavement markings remaining in place.

23. No pavement marking obliteration work will be allowed on existing yellow pavement markings. The existing yellow left edge stripes shall be removed with the passing lane and ramp milling process (activities 2B and 2C).

24. When no longer required, temporary pavement markings shall be removed.

25. Existing pavement markers shall be removed when present along existing stripe obliteration at no cost to the Department.

26. The contractor shall clean the roadway surface to the satisfaction of the Engineer by sweeping and air-jet blowing, immediately prior to the placement of all temporary pavement markings. The roadway surface shall be dry.

27. At the completion of the new pavement surface each day, center lines, lane lines and stop bars shall be striped with one application of standard reflectorized traffic paint at the location of the permanent striping, or as directed by the Engineer.

28. All drawings are schematic only and not to scale. All dimensions are in feet, unless otherwise noted.

29. The contractor shall ensure the earthen material or aggregate base under the temporary sand barrel crash cushions, under the temporary concrete barrier and between the barrier and the roadway is 10:1 or flatter in each direction for setups off the pavement.

30. The Contractor shall provide flaggers and uniformed police officers (DPS) as directed by the Engineer during the installation, relocation or removal of Temporary Concrete Barrier.

31. For temporary concrete barrier markers, see ADOT Standard Drawing M-32 barrier markers. Markers shall be installed at 20 feet spacing. The installed price for the markers shall be considered part of the barrier cost.

This sheet is the addendum sheet. This sheet replaces the original sheet. Addendum sheets must be included with the record drawings. If the original sheet is available, that sheet can be included with an "X" from corner to corner. If the original sheet is not available, it may be omitted.
If there are more than one addendum's on a sheet, as long as the final addendum shows all of the information from the previous addendum's, the previous addendum's do not need to be included. If the final addendum sheet does not show the information from previous addendum's those additional addendum's must be included.

...evices Part 6, Temporary Traffic Control, 2009 Edition ...ement.

...es, 2010.

	NAME	DATE
DESIGN	SG	01/16
DRAWN	CPG	01/16
CHECKED	HAO	01/16

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL GENERAL NOTES

Registered Professional Engineer (Civil), Certificate, Date Signed 02-16-16, ARIZONA U.S.A., Expires 03/31/16

ROUTE I-40 | LOCATION ALLENTOWN RD - STATE LINE

TRACS NO. H8781 01 C | NH-040-E(218)T

SHEET 29 OF 62

37 OF 75

2/16/2016 T:\I-40\Trfcnt\T8781_tcn1.dgn

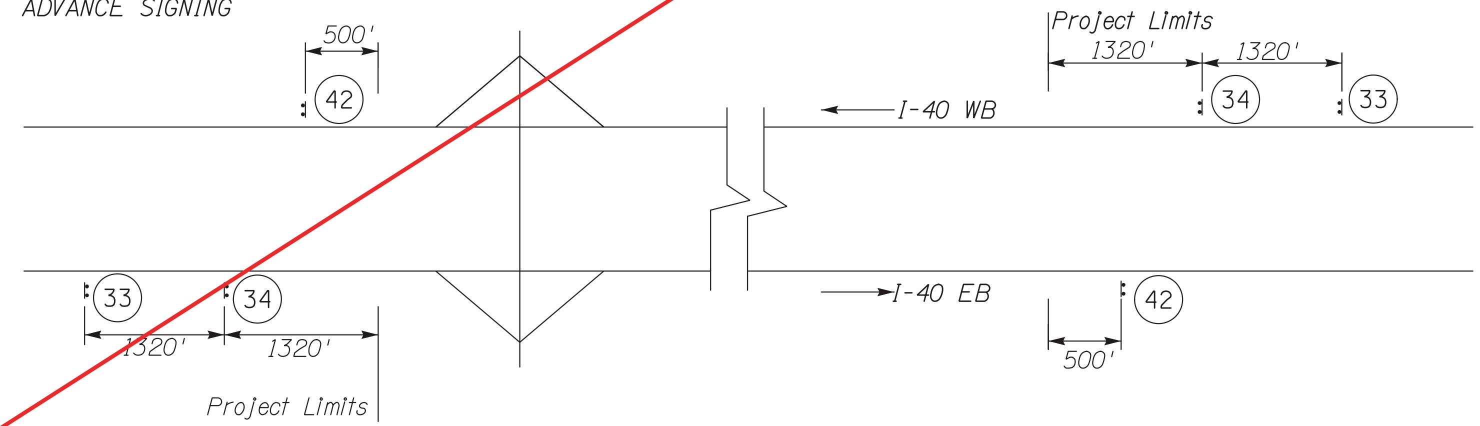
Another example of an addendum sheet.

MAINTENANCE OF TRAFFIC

ACTIVITY NO	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	COMMENTS
1	Advance signs	Specialty signs: "ROAD WORK (DATE) TO (DATE)" and "ROAD WORK NEXT 6 MILES" in advance of work zone. Provide "ROAD WORK AHEAD" sign on all ramps.	Signs are to remain in place for the duration of the project. The "ROAD WORK (DATE) TO (DATE)" sign should be installed at least 1 week before work begins.
2A	Mill and replace ramps	Temporarily close ramp and detour traffic per Sheets 35, of these plans and Figure SA-10 of Traffic Control Design Guidelines (TCDG). Use detour on Sheet 36 for Lupton Rd TI Ramp Closure.	Night work only at Grant Rd/Lupton TI. Day time work only at other TI's. Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2B	Mill and replace travel lane and outside shoulder Install Guard Rail Install Loop Counter System	Maintain 1-lane traffic per Figure SA-5(R) of the Traffic Control Design Guidelines. Reduce speed to 45 mph. When working next to gore areas, temporarily close ramp and detour traffic per Sheets 35, 36 of these plans.	Maintain 2-lane traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2C	Mill and replace travel lane (12" pavement) and outside shoulder. Install Guard Rail Install Loop Counter System	Maintain 1-lane traffic per sheet 34A. Reduce speed to 45 mph. When working next to gore areas, temporarily close ramp and detour traffic per Sheets 35, 36 of these plans.	Maintain 2-lane traffic on weekends and holidays.
2D	Mill and replace passing lane and inside shoulder Install Guard Rail Install Loop Counter System	Maintain 1-lane traffic per Figure SA-5(L) of the ADOT TCDG. Reduce speed to 45 mph.	Maintain 2-lane traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2E	Mill and replace passing lane (12" pavement) and inside shoulder. Install Guard Rail Install Loop Counter System	Maintain 1-lane traffic per sheet 34B. Reduce speed to 45 mph.	Maintain 2-lane traffic on weekends and holidays.
2F	Mill and replace cross roads	Work shall be limited to one side of the roadway at a time. Maintain two-way traffic with a flagging operation. Traffic control shall be per MUTCD TA-10.	Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2G	Mill and replace Rest Area Approach Road	Work shall be limited to one side of the roadway at a time. Maintain two-way traffic with a flagging operation. Traffic control shall be per MUTCD TA-10.	Day time work only. Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2H	Mill and replace rest area	Maintain the traffic circulation inside the rest area. Work shall be phased such that there is access to parking spaces at all times.	Night time work only. Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.

NOTES:
1. Areas of milled pavement shall be replaced the same day with required depth of AC pavement per the applicable pavement structural sections in the entire areas milled. There shall be no uneven lanes at the end of a day.
2. The order of construction activities does not constitute a sequence of construction. The contractor shall perform the work in the most expeditious manner consistent with the plans and special provisions with the approval of the Engineer. Any modifications to these plans shall require review and approval by the Engineer.

ADVANCE SIGNING



(42) G20-2AZ 48"X36"

(33) See Sheet No. 37 For Detail

(34) See Sheet No. 37 For Detail

	NAME	DATE
DESIGN	SG	01/16
DRAWN	CPG	01/16
CHECKED	HAO	01/16

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL PLAN
MAINTENANCE OF TRAFFIC
(1 OF 2)

ROUTE: I-40 | LOCATION: ALLENTOWN RD - STATE LINE

Expires 03/31/16

SHEET 30 OF 62

TRACS NO. H8781 01 C | NH-040-E(218)T

1/12/2016 T:\I-40\Trfcnt\T8781_mot01.dgn

TO ACCOMPANY ADDENDUM NO. 1

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	30	62	4/3/2017
		040-AP-353			

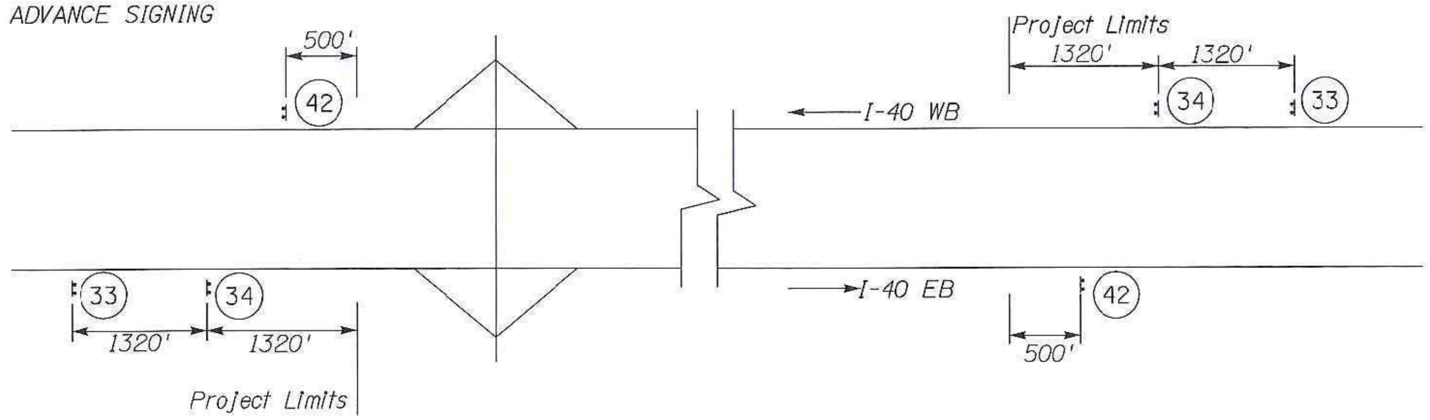
MAINTENANCE OF TRAFFIC

ACTIVITY NO	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	COMMENTS
1	Advance signs	Provide specialty signs: "ROAD WORK (DATE) TO (DATE)" and "ROAD WORK NEXT 6 MILES" in advance of work zone. Provide "ROAD WORK AHEAD" sign on all ramps.	Signs are to remain in place for the duration of the project. The "ROAD WORK (DATE) TO (DATE)" sign should be installed at least 1 week before work begins.
2A	Mill and replace ramps	Temporar... traffic per Sheets 35, of these plans and Figure S... Design Guidelines (TCDG). Use detour on Sheet... mp Closure.	Night work only at Grant Rd/Lupton TI. Day time work only at other TI's. Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2B	Mill and replace travel lane and outside shoulder Install Guard Rail Install Loop Counter System	Maintain ... SA-5(R) of the Traffic Control Design Guidelines. Reduce speed to 45 mph. When working next to gore areas, temporarily close ramp and detour traffic per Sheets 35, 36 of these plans.	Maintain 2-lane traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2C	Mill and replace travel lane (12" pavement) and outside shoulder. Install Guard Rail Install Loop Counter System	Maintain 1-lane traffic per sheet 34A. Reduce speed to 45 mph. When working next to gore areas, temporarily close ramp and detour traffic per Sheets 35, 36 of these plans.	⚠1 One lane in each direction will be permitted over the weekends (not holidays) as approved by the Engineer
2D	Mill and replace passing lane and inside shoulder Install Guard Rail Install Loop Counter System	Maintain 1-lane traffic per Figure SA-5(L) of the ADOT TCDG. Reduce speed to 45 mph.	Maintain 2-lane traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2E	Mill and replace passing lane (12" pavement) and inside shoulder. Install Guard Rail Install Loop Counter System	Maintain 1-lane traffic per sheet 34B. Reduce speed to 45 mph.	⚠1 One lane in each direction will be permitted over the weekends (not holidays) as approved by the Engineer
2F	Mill and replace cross roads	Work shall be limited to one side of the roadway at a time. Maintain two-way traffic with a flagging operation. Traffic control shall be per MUTCD TA-10.	Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2G	Mill and replace Rest Area Approach Road	Work shall be limited to one side of the roadway at a time. Maintain two-way traffic with a flagging operation. Traffic control shall be per MUTCD TA-10.	Day time work only. Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.
2H	Mill and replace rest area	Maintain the traffic circulation inside the rest area. Work shall be phased such that there is access to parking spaces at all times.	Night time work only. Maintain traffic on weekends and holidays. Pavement replacement must be completed in milled areas on the same day before opening to traffic (see Note 1 below). Setup is to be taken down whenever work is not under way.

Another example of an addendum sheet.

NOTES:
1. Areas of milled pavement shall be replaced the same day with required depth of AC pavement per the applicable pavement structural sections in the entire areas milled. There shall be no uneven lanes at the end of a day.
2. The order of construction activities does not constitute a sequence of construction. The contractor shall perform the work in the most expeditious manner consistent with the plans and special provisions with the approval of the Engineer. Any modifications to these plans shall require review and approval by the Engineer.

ADVANCE SIGNING



(42) G20-2AZ 48"X36"

(33) See Sheet No. 37 For Detail

(34) See Sheet No. 37 For Detail

	NAME	DATE
DESIGN	SG	01/16
DRAWN	CPG	01/16
CHECKED	HAO	01/16

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES
TRAFFIC CONTROL PLAN
MAINTENANCE OF TRAFFIC
(1 OF 2)

ROUTE I-40 — LOCATION ALLENTOWN RD - STATE LINE

TRACS NO. H8781 01 C — NH-040-E(218)T

Expires 03/31/16

SHEET 30 OF 62

39 OF 75

2/16/2016 T:\I-40\Trfcnt\T8781_mot01.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	31	62	4/3/2017
		040-AP-353			

MAINTENANCE OF TRAFFIC

ACTIVITY NO	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	COMMENTS
3	Bridge rail work	Close adjacent lane per Sheets 33, 34 of these plans. Protect work zone with TCB. Reduce speed to 45 mph.	Day time work only. Maintain traffic on weekends and holidays. All bridge rail work shall be constructed on one side of freeway at a time.
4A	AR-ACFC Ramps	Temporarily close ramp and detour traffic per Sheet 35 of these plans and Figure SA-10 of ADOT TCDG. Use detour on Sheet 36 for Lupton Rd TI Ramp Closure.	Night work only at Grant Rd/Lupton TI. Day time work only at other TI's. Maintain traffic on weekends and holidays. Setup is to be taken down whenever work is not under way.
4B	AR-ACFC overlay travel lane	Maintain 1-lane traffic per Figure SA-5(R) of the Traffic Control Design Guidelines. Reduce speed to 45 mph. When working next to gore areas, temporarily close ramp and detour traffic per Sheet 35, 36 of these plans.	Maintain 2-lane traffic on weekends and holidays. Setup is to be taken down whenever work is not under way.
4C	AR-ACFC overlay passing lane	Maintain 1-lane traffic per Figure SA-5(L) of the ADOT TCDG. Reduce speed to 45 mph.	Maintain 2-lane traffic on weekends and holidays. Setup is to be taken down whenever work is not under way.
4D	Apply Fogcoat on the cross roads	Work shall be limited to one side of the roadway at a time. Maintain two-way traffic with a flagging operation. Traffic control shall be per MUTCD TA-10.	Maintain 2-lane traffic on weekends and holidays. Setup is to be taken down whenever work is not under way.
4E	Fogcoat Rest Area Approach Road	Work shall be limited to one side of the roadway at a time. Maintain two-way traffic with a flagging operation. Traffic control shall be per MUTCD TA-10.	Day time work only. Maintain traffic on weekends and holidays. Setup is to be taken down whenever work is not under way.
4F	Fogcoat Rest Area	Maintain the traffic circulation in the rest area. Work shall be phased such that there is access to parking spaces at all times.	Night time work only. Maintain traffic on weekends and holidays. Setup is to be taken down whenever work is not under way.
5	Permanent Striping	Mobile operation per Figure SA-18 of ADOT TCDG.	
6	Rumble strips and miscellaneous work	Provide traffic control per MUTCD TA-4.	...n whenever work is not under way.

Note: The next several sheets will be omitted in this example to reduce file size and redundancy of information.

Note:
The order of construction activities does not constitute a sequence of construction.
The contractor shall perform the work in the most expeditious manner consistent with the plans and special provisions with the approval of the Engineer.
Any modifications to these plans shall require review and approval by the Engineer.

	NAME	DATE
DESIGN	SG	01/16
DRAWN	CPG	01/16
CHECKED	HAO	01/16

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL PLAN
MAINTENANCE OF TRAFFIC
(2 OF 2)

Registered Professional Engineer (Civil) — Date Signed 01-12-16 — ARIZONA U.S.A. — Expires 03/31/16

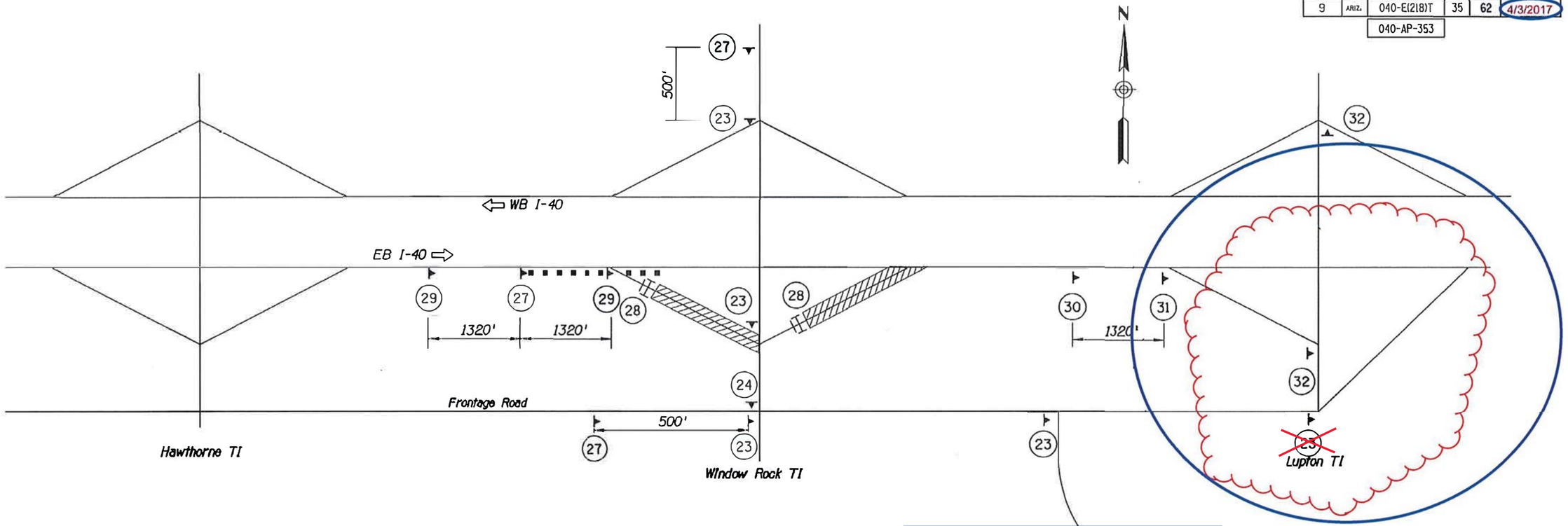
ROUTE: I-40 | LOCATION: ALLENTOWN RD - STATE LINE

SHEET 31 OF 62

TRACS NO. H8781 01 C | NH-040-E(218)T | 40 OF 75

1/12/2016 T:\I-40\Trfcnt\T8781_mot02.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	35	62	4/3/2017
		040-AP-353			



This sheet is marked up due to a change order. The change order number and triangle are not required because this is the original sheet, it hasn't been re-issued.

SIGN LEGEND:

27


W20-3gAZ
48"x48"

28


R11-2
48"x30"
Black on White

29


SPECIAL
108"x48"

30


SPECIAL
120"x60"

31


SPECIAL
126"x60"

SPECIAL
90"x48"

23


M4-8
24"X12"
M3-2
24"X12"
M1-1a
24"X24"
M6-3
24"X18"

24


M4-8
24"X12"
M3-2
24"X12"
M1-1a
24"X24"
M6-1(L)
24"X18"

25


M4-8
48"X18"
M3-2
48"X24"
M1-1a
36"X36"
M6-1(R)
24"X18"

Note: The next several sheets will be omitted in this example to reduce file size and redundancy of information.

SYMBOL LEGEND:

	Sign on Spring Stand
	Sign on Rigid Stand
	Type II Barricade
	Type III Barricade w/ Sign
	Flashing Arrow Panel
	Direction of Travel
	Work Zone

NOTES:

1. Typical crossroad TI ramp closure is shown. Use similar setup for westbound ramp closures. Use the setup for Hawthorne TI and Window Rock TI. Use Sheet 36 for Lupton TI Detour.
2. Ramps shall be closed only in one direction at a time at each TI.
3. Two consecutive entrance or exit ramps shall not be closed at the same time.
4. All M1-1a signs shall be white on red and blue.

	NAME	DATE
DESIGN	SG	01/16
DRAWN	CPG	01/16
CHECKED	HAO	01/16

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL
TEMPORARY RAMP CLOSURES
TYPICAL DETAIL

ROUTE	LOCATION	SHEET
I-40	ALLENTOWN RD - STATE LINE	SHEET 35 OF 62
TRACS NO. H8781 01 C	NH-040-E(218)T	47 OF 75

Registered Professional Engineer — Expires 03/31/16 — ARIZONA U.S.A.

3/31/2016 I:\I-40\Irfcnt\18781_tcs05.dgn

MADE BY- SG DATE- 04/01/16
DESCRIPTION OF REVISIONS- Revise Detour Plan LOCATION- DATE-
NO. SURVEY NO. REVISIONS- FINISHED PLANS-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-C(225)T	64	172	4/3/2017
		040 CN 156			

WB I-40 Cst ℄

Exst R/W

PC 694+53.41

WB-2 Cst ℄
Sta 43+25 30' Lt
Drainage Ditch
Elevation = 6882.70

Crossover WB-2 Cst ℄ Sta 44+73.12=
20.46' Lt EB I-40 Cst ℄ Sta 698+99.17

WB-2 Cst ℄
Sta 48+50 33.7' Lt
Drainage Ditch
Elevation = 6873.00

D8 401

Crossover WB-2 Cst ℄ Sta 50+36.72=
39.70' Rt WB I-40 Cst ℄ Sta 705+16.03

Exst Sewer Line (Williams)
To Remain

Exst Gas Line (UniSource)
To Remain

Exst Sewer Line (Williams)
To Remain

BE 310

N 63°03'20" E

Crossover WB-2 Cst ℄

C2

N 40°41'28" E

END CROSSOVER WB-2 CST ℄ STA 55+03.14=
12' RT WB I-40 CST ℄ STA 709+78.83

Exst OH Telephone (CTL)
To Remain

PC 693+35.14

WB-2 Cst ℄
Sta 40+00 to 50+36.72
2,286 SY New AC

Exst R/W

BE 309

EB I-40 Cst ℄

PT 48+41.92

E22

Exst Water Line (Williams)
To Remain

WB-2 Cst ℄
Sta 47+21 19.0' Rt
Drainage Ditch
Elevation = 6874.30

690 700 710 50 700 710

BEGIN CROSSOVER WB-2 CST ℄ STA 40+00.00=
EB I-40 CST ℄ STA 694+25.82

C2 CURVE DATA
PI Sta 44+25.76
N=1542541.710
E=609244.200
Δ=21°02'53" Lt
D=2°30'00"
R=2291.83'
L=841.92'
T=425.76'
Ext=39.21'

NOTE:
Asphalt Concrete shall be removed prior to the Winter Shutdown.

Match Exst | 44+81 | +0.023%ft Rt EP | +0.020%ft Rt EP | WB-2 Profile Grade & Axis of Rotation | -0.023%ft Lt EP | -0.020%ft Lt EP

PT 48+71.92
49+78

Match Exst | +0.043%ft Rt EP | -0.043%ft Lt EP

+0.06%ft
0.00%ft
-0.06%ft

6910 6900 6890 6880 6870 6860

SDh>1500'
110' VC

Exst EB I-40 Pavement Grade

-2.7075%

Finished Cst ℄ Grade

-1.6005%

CROSSOVER WB-2 STA 44+73.12
BEGIN PROFILE
Elev 6881.09

CROSSOVER WB-2 STA 50+36.72
END PROFILE
Elev 6871.44

Exst WB I-40 Pavement Grade

PI 45+30.00
Elev=6879.55
Corr=0.15'

Exst Ground Line

401 BE 309

40 45 50 55

This sheet was the original as-bid sheet. There was a Change Order that required major changes so a new sheet was developed with a new seal, signature and date as shown on the next sheet Page 25.

	NAME	DATE
DESIGN	DBK, RG	05/17
DRAWN	JK, ME, DS	05/17
CHECKED	KCH	05/17

Gannett Fleming

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

PLAN AND PROFILE
CROSSOVER WB-2

ROUTE I-40 | LOCATION DEVIL DOG - WILLIAMS

TRACS NO. F0131 01C | 040-C(225)T

DWG No. C-2.14

Registered Professional Engineer (Civil) Date Signed 06/30/17 Arizona, U.S.A. Expires 9/30/19

102 OF 172

Page 24

6/27/2017 c:\pwworking\gfpw01\dkelly\d0699353\F0131dr2.dgn

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

TO ACCOMPANY CHANGE ORDER NO. 1

The changes are shown on this sheet in black for the Change Order information that was done during construction, that REQUIRED a new sealed sheet to replace the original as-bid sheet. This includes the information in the upper right corner identifying the change order number and also black clouding around the changes.

REV NO.	LOCATION	DATE	BY
1	REVISED PHASING - EB ROADWAY FIRST	07/21/2017	DAS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-C(225)T	64	112	01/11/2019
		040 CN 156			

WB I-40 Cst ℄
Exst R/W
PC 694+53.41
Elevation = 6882.70
Drainage Ditch
Elevation = 6873.00
D8 to Remain
401
Crossover EB-2
Remove 2183 SY AC Pvmt
Crossover WB-2 Cst ℄
N 63°03'20" E
C2
Exst OH Telephone (CTL)
To Remain
PC 693+35.14
WB-2 Cst ℄
Sta 40+00 to 50+36.72
2,286 SY New AC
Exst R/W
690
BEGIN CROSSOVER WB-2 CST ℄ STA 40+00.00=
EB I-40 CST ℄ STA 694+25.82
WB-2 Cst ℄
Sta 47+21 19.0' Rt
Drainage Ditch
Elevation = 6874.30
PT 48+41.92
700
50
710
Crossover WB-2 Cst ℄ Sta 50+36.72=
39.70' Rt WB I-40 Cst ℄ Sta 705+16.03
Exst Sewer Line (Williams)
To Remain
Exst Gas Line (UniSource)
To Remain
Exst Sewer Line (Williams)
To Remain
BE 310
N 40°41'28" E
END CROSSOVER WB-2 CST ℄ STA 55+03.14=
12' RT WB I-40 CST ℄ STA 709+78.83
BE 309
EB I-40 Cst ℄
E22
Exst Water Line (Williams)
To Remain

C2 CURVE DATA
PI Sta 44+25.76
N=1542541.710
E=609244.200
Δ=21°02'53" Lt
D=2°30'00"
R=2291.83'

This sheet is the new sheet that was developed because of a Change Order. The original as-bid sheet is shown on Page 24 (previous sheet).

NOTE:
Asphalt Concrete shal

Match Exst
44+81
+0.023%ft Rt EP
+0.020%ft Rt EP
WB-2 Profile Grade &
Axis of Rotation
-0.023%ft Lt EP
-0.020%ft Lt EP
PT 48+71.92
49+78
Match Exst
+0.043%ft Rt EP
-0.043%ft Lt EP

+0.06%ft
0.00%ft
-0.06%ft
6910
6900
6890
6880
6870
6860

SDs>1500'
110' VC
PI 48+00.00
Elev=6875.40
Corr=-0.09'
Finished Cst ℄ Grade
Exst EB I-40 Pavement Grade
-2.8129%
1.3260%
-1.6010%
CROSSOVER WB-2 STA 44+73.12
BEGIN PROFILE
Elev 6880.58
PI 45+30.00
Elev=6878.98
Corr=0.20'
Exst Ground Line
250' VC
SSDs>1500'
401
BE 309
CR
END PROFILE
Elev 6871.61
Exst WB I-40 Pavement Grade

This sheet replaces the previous sheet and has a new seal, signature and date for the Change Order.

The title block needs to be clouded in red.

	NAME	DATE
DESIGN	DBK, RG	05/17
DRAWN	JK, ME, DS	05/17
CHECKED	KCH	05/17

Gannett Fleming

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

PLAN AND PROFILE
CROSSOVER WB-2

ROUTE I-40 | LOCATION DEVIL DOG - WILLIAMS | DWG No. C-2.14

TRACS NO. F0131 01C | 040-C(225)T | 103 OF 172

Registered Professional Engineer (Civil) Date Signed 07/21/17 Arizona, U.S.A. Expires 3/31/20

40 45 50 55

Page 25

7/21/2017 c:\pwworking\gfpw01\dasmith\d0699353\F0131dr2-R2.dgn

TO ACCOMPANY CHANGE ORDER NO. 1

REV NO.	LOCATION	DATE	BY
1	REVISED PHASING - EB ROADWAY FIRST	07/21/2017	DAS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-C(225)T	64	112	01/11/2019
		040 CN 156			

WB I-40 Cst ℄

Exst R/W

PC 694+53.41

WB-2 Cst ℄
Sta 43+25 30' Lt
Drainage Ditch
Elevation = 6882.70

Crossover WB-2 Cst ℄ Sta 44+73.12=
20.46' Lt EB I-40 Cst ℄ Sta 698+99.17

WB-2 Cst ℄
Sta 48+50 33.7' Lt
Drainage Ditch
Elevation = 6873.00

D8 to Remain 401

Crossover WB-2 Cst ℄ Sta 50+36.72=
39.70' Rt WB I-40 Cst ℄ Sta 705+16.03

Exst Sewer Line (Williams)
To Remain

Exst Gas Line (UniSource)
To Remain

Exst Sewer Line (Williams)
To Remain

1 Crossover EB-2
Remove 2183 SY AC Pvmt

N 63°03'20" E

Crossover WB-2 Cst ℄

C2

N 40°41'28" E

BE 310

Exst OH Telephone (CTL)
To Remain

PC 693+35.14

WB-2 Cst ℄
Sta 40+00 to 50+36.72
2,286 SY New AC

Exst R/W

BE 309

EB I-40 Cst ℄

PT 48+41.92

END CROSSOVER WB-2 CST ℄ STA 55+03.14=
12' RT WB I-40 CST ℄ STA 709+78.83

E22

Exst Water Line (Williams)
To Remain

WB-2 Cst ℄
Sta 47+21 19.0' Rt
Drainage Ditch
Elevation = 6874.30

C2 CURVE DATA
PI Sta 44+25.76
N=1542541.710
E=609244.200
Δ=21°02'53" Lt
D=2°30'00"
R=2291.83'
L=841.92'
T=425.76'
Ext=39.21'

690 700 710 700 50 710

BEGIN CROSSOVER WB-2 CST ℄ STA ~~40+00.00~~=
EB I-40 CST ℄ STA ~~694+25.82~~
693+15.43

39+68.00

Changes after the new sealed sheet has been released (See Page 25) are shown and clouded in red. The previous sheet (Page 25) will require a red "X" through the sheet.

NOTE:
Asphalt Concrete shall be removed prior to the Winter Shutdown.

Match Exst
+0.023'/ft Rt EP
44+81
+0.020'/ft Rt EP
e Grade &
Rotation
.020'/ft Lt EP
PT 48+71.92
49+78
Match Exst
+0.043'/ft Rt EP
-0.043'/ft Lt EP

+0.06'/ft
0.00'/ft
-0.06'/ft

6910 6900 6890 6880 6870 6860

SDs>1500'
110' VC
PI 48+00.00
Elev=6875.40
Corr=-0.09'
Finished Cst ℄ Grade
Exst EB I-40 Pavement Grade
-2.8129%
1.3260%
-1.6010%
CROSSOVER WB-2 STA 50+36.72
END PROFILE
Elev 6871.61
Exst WB I-40 Pavement Grade
CROSSOVER WB-2 STA 44+73.12
BEGIN PROFILE
Elev 6880.58
PI 45+30.00
Elev=6878.98
Corr=0.20'
Exst Ground Line
250' VC
SSDs>1500'
401
BE 309

40 45 50 55

	NAME	DATE
DESIGN	DBK, RG	05/17
DRAWN	JK, ME, DS	05/17
CHECKED	KCH	05/17

Gannett Fleming

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

PLAN AND PROFILE
CROSSOVER WB-2

ROUTE I-40 | LOCATION DEVIL DOG - WILLIAMS | DWG No. C-2.14

TRACS NO. F0131 01C | 040-C(225)T | 103 OF 172

7/21/2017 c:\pwworking\gfpw01\dasmith\d0699353\F0131dr2-R2.dgn

Page 26

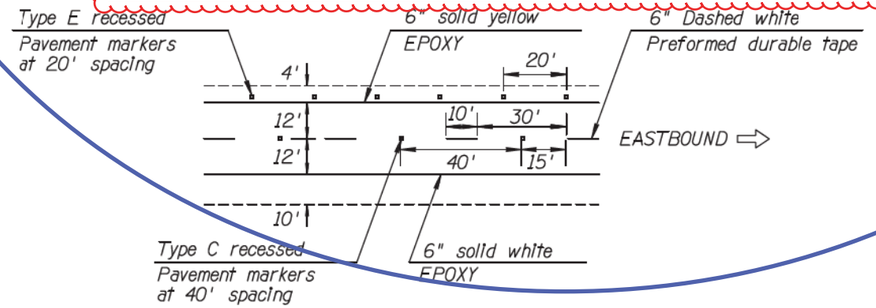
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	38	62	4/3/2017
		040-AP-353			

GENERAL PAVEMENT MARKING NOTES:

1. All striping shall be in compliance with the current ADOT Signing and Marking Standard Drawings and the Manual on Uniform Traffic Control Devices (MUTCD 2009 Edition as amended by the January 2012 ADOT Supplement).
2. The pavement marking details are schematic only and not to scale. The contractor shall follow all dimensions, details and standards when installing pavement markings and markers.
3. See the following ADOT standard drawings for striping details: M-15, M-16, M-18 and M-19.
4. All dimensions are in feet unless otherwise noted on the plans or the detailed drawings.
5. All striping dimensions are to the face of curb or edge of pavement, unless otherwise noted.
6. The dimensions shown to pavement striping are to the center of the striping or in the case of double striping to the center of the double striping.
7. The permanent pavement marking layout may be modified as directed by the Engineer.
8. It is the contractor's responsibility to develop an "as-built" plan of the existing striping and have the plan approved by the Engineer before any construction activities.
9. At the completion of the final pavement surface each day, edge lines, center lines, lane lines, and stop bars covered by the new pavement shall be striped with one application of 4" wide standard reflectorized traffic paint at the location of the permanent striping. The paint shall have a maximum thickness of 15 mils wet (10 mils dry).
10. It is the contractor's responsibility to ensure that the final surface course is placed so that the striping is offset one foot clear of the construction joint, unless otherwise directed by the Engineer.
11. 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.
12. The contractor shall clean the roadway surface to the satisfaction of the Engineer, by sweeping and air-jet blowing, immediately prior to the placement of all pavement markings. The roadway surface shall be dry. The air and pavement temperatures shall not be less than 40°F and the air temperature wind chill factor shall not be less than 35°F for the placement of epoxy pavement marking.
13. The final striping shall be two-part epoxy pavement marking placed at a minimum of 30 calendar days after completion of initial striping, or as directed by the Engineer. All other markings shall be applied at the same time. The two-part epoxy material shall conform to the specifications.
14. Freeway arrows shall be installed in accordance with Std Dwg M-12.
15. All final stop bars, pavement arrows, and transverse lines shall be two-part epoxy pavement markings.
16. All pavement markers shall have an abrasion-resistant coating on the face of the prismatic reflectors and shall conform to the details of Standard Drawing Number M-19. They shall be installed with a bituminous adhesive which is on the ADOT Approved Products List.
17. Where pavement markers are placed along solid striping, the nearest edge of each marker shall be offset from the nearest edge of the striping. Recessed pavement markers placed between double yellow striping shall be centered in the 6 inch gap between the lines.
18. All pavement markers shall be installed so that the reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow. Type C pavement markers shall be installed so that the clear reflective face of each marker is facing approaching traffic and perpendicular to the direction of traffic flow. Type E pavement markers shall be installed so that the yellow reflective face of each marker is facing approaching traffic and perpendicular to the direction of traffic flow.
19. The Contractor shall install ground-in rumble strips wherever the existing rumble strip is obliterated by milling or overlay work, except on concrete surfaces or on bridges with less than a half inch of AR-ACFC. The ground-in rumble strips shall conform to the details shown on Std Dwg M-22.
20. The Contractor shall delineate all new guard rail end treatments in accordance with Std Dwg M-34. There shall be no measurement or payment for the guard rail end treatment delineation.
21. The Contractor shall preserve all signs, roadway object markers, milepost markers and delineators and replace those signs, markers and delineators damaged as a result of the construction at the Contractor's expense.
22. All dashed lane lines and solid gore lines shall be preformed durable tape, see Special Provisions. ~~The tape shall not be placed in a groove.~~ The tape shall be placed in a groove.

APPROXIMATE PAVEMENT MARKING QUANTITIES

Description		Unit	Quantity	4" Equivalent	Item No.
Permanent pavement marking (painted)	4" white 80,025	L.FT.	~~274,145~~	~~274,145~~	7080001
	4" yellow 63,437	L.FT.	~~122,875~~	~~122,875~~	7080011
	Parking symbol	EACH	2		7080111
Dual component EPOXY pavement marking	6" white	L.FT.	83,140	124,710	7090001
	6" yellow	L.FT.	78,586	117,890	7090002
Dual component EPOXY transverse pavement marking	18" white	L.FT.	216	972	7090005
	Freeway arrow	EACH	8		7090012
	Parking symbol	EACH	2		7090012
Pavement Marker	Type C, recessed	EACH	1,585		7060100
	Type D, recessed	EACH	150		7060101
	Type E, recessed	EACH	3,080		7060102
Ground-in rumble strip	12"	L.FT.	126,720		9280037
Delineator (Flexible with concrete foundation)	Single white	EACH	194		7030026
	Single yellow	EACH	72		7030026
	Double white	EACH	8		7030026
	360° white	EACH	48		7030026
	360° Double yellow	EACH	24		7030026
Object marker	(M-23) (Type 2)	EACH	5		7030082
Preformed durable tape	6" white	L.FT.	15,820	23,730	7050022
	12" white	L.FT.	9,750	29,250	7050022
Sawcut Groove for Striping (Diamond Blade) (Grooves are 1/2" Wider & 1 foot longer than recessed stripe	6" White	L.FT.	17,401	28,364	9240210
	12" White	L.FT.	10,725	33,569	9240210



TYPICAL STRIPING DETAIL

	NAME	DATE
DESIGN	SG	01/16
DRAWN	CPG	01/16
CHECKED	HAO	01/16

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

PAVEMENT MARKING QUANTITIES AND GENERAL NOTES

ROUTE	LOCATION
I-40	ALLENTOWN RD - STATE LINE

TRACS NO. H8781 01 C | NH-040-E(218)T

Expires 03/31/16

SHEET 38 OF 62

51 OF 75

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

Page 27

1/12/2016 T:\I-40\Tfcnt\T8781_pmn.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.	040-E(218)T	39	62	4/3/2017
		040-AP-353			

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

I. PROJECT DESCRIPTION

A. Owner Name, Address and IRS Employee Identification Number (EIN):

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

IRS Employee Identification Number (EIN) for ADOT: 86-6004791

B. Project TRACS Number: H8781 01 C

C. Project Location: I-40 & Allentolon Rd

City: Lupton County: Apache

Beginning Latitude (NAD 83): 35° 17' 38.4" N
Beginning Longitude (NAD 83): 109° 08' 41.5" W
Ending Latitude (NAD 83): 35° 21' 47.5" N
Ending Longitude (NAD 83): 109° 02' 47.0" W

D. Project Description: Pavement preservation, on and off Ramps and Cross Roads at Three TI's Guardrail Installation, curb embankment replacement and bridge railing replacement, spillway replacement

II. HYDROLOGIC INFORMATION

A. Project Size:
Length (Mi.) 5.81
Area (Ac.) 288.74

B. Area to be Graded (Ac.) *: 1.45

* 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: 22.8%
Percentage after Construction: 22.8%

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

III. PRESERVAT

A. In accordance ... existing vege... Clearing limits ... that require ... outside the b... area shall be ... construction ... the area to b... and protecte...

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.

> Typically if more than 1 acre is being disturbed or graded, Part 2 of the SWPPP sheet needs to be filled in. If this information is not available or is not required, an "X" through Part 2 of this sheet needs to be placed in red to indicate the information was not provided, available or not required.

V. MEASURES TO CONTROL EROSION AND SEDIMENT

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

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

Construction Entrance

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

- ____ Crown Ditch/Dike
- X Rock Protection
- ____ Rock Riprap Channel Lining
- ____ Sediment Basin
- ____ Embankment Curb
- ____ Spillways and Downdrains
- ____ Minibenching
- X 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:

Regular Inspection Frequency:

____ At least once every 7 calendar days (weekly), OR

...4 calendar days (biweekly) and ...hours of a rainfall of 0.25 in. ...r.

...Sensitive) Waters Inspection:

...alendar days and within 24 hours ...fall of 0.25 in. or greater.

...UGE TO BE KEPT ON-... ...ERMINE DEPTH OF RAINFALL

B. Inspection Procedure:
ADOT's Contractor's Inspection Log a... Compliance Evaluation Report (CER) wil... be completed by the contractor or ... representative and will be kept on f... 3 years. A signed copy of the CER w... sent to the ADOT resident engineer. ... repairs are necessary, they shall be ... within 24 hours of the inspection re...

PART 2 - To be completed by ADOT & CONTRACTOR

Refer to: http://cfpub.epa.gov/npdes/stormwater/msgpenol.cfm
http://cfpub.epa.gov/npdes/stormwater/swppp.cfm#guide

I. SCHEDULE OF MAJOR ACTIVITIES

A. Project Schedule: See SWPPP

Start Date: 4/11/2016

End Date: 8/14/2017

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:

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

III. POLLUTION CONTROL MEASURES

A. Other Best Management Practices:

- X Wind Erosion and Dust Control
- X Solid Waste Management
- X Equipment Maintenance Procedures
- X Designated Concrete Washout Areas (Leak proof pits/containers are included.)
- X Stabilized Construction Entrance
- X 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.

...ill Response:
...the event of any accidental spill of ...emicals or hazardous materials, ...ntact the ADOT Traffic Operations ...nter at 800-379-3701. If a reportable ...antity is discharged into the storm ...ater, ADOT shall contact the National ...sponse Center and document the spill ...o the EPA. ADOT's Hazardous Materials ...ecialist shall provide instructions.

> Note: The remaining sheets have been omitted in this example to reduce file size and redundancy of information.

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.

X 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 NPDES should sign the SWPPP in accordance with CGP Part 7.2.15 and retain the SWPPP on-site at the construction site or other location easily accessible during normal business hours.
Signature: (operator/contractor) [signature]
Date: 3/23/2016
Name: Andrew Rice
Title: Environmental Director
ADOT District: Fann Contracting, Inc.

C. ADOT Resident Engineer
Signature: (owner) [signature]
Date: 04/13/16
Name: CARL ENCINITES
Title: SENIOR RESIDENT ENGINEER
ADOT District: NORTHEAST

D. MUNICIPALITY for Municipal Separate Storm Sewer System (MS4)
Signature:
Date:
Name:
Title:
Municipality:

VII. OTHER REQUIREMENTS

A. A copy of the General Permit and NOI should be attached.

B. A copy of the page from the environmental clearance for the project that discusses endangered or threatened species should be attached.

C. Use the process in NPDES General Permit Appendix C (ESA Review Procedures) to determine eligibility prior to submittal of the Notice of Intent (NOI) for Endangered and Threatened Species and Critical Habit Protection.

D. A seven-day waiting/review period between NOI submittal and authorization to begin construction will be used by U.S. Fish and Wildlife Service and National Marine Fisheries Service to screen proposed construction activities for potential impacts on endangered species.

	NAME	DATE
DESIGN	ACH	10/15
DRAWN	CPG	10/15
CHECKED	BGS	10/15

PARSONS BRINCKERHOFF

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
ROADWAY DESIGN SERVICES

NPDES SWPPP INDEX SHEET

ROUTE: I-40 LOCATION: ALLENTOWN RD - STATE LINE

TRACS NO. H8781 01 C NH-040-E(218)T

Registered Professional Engineer (Civil), Arizona U.S.A. Expires 6/30/16

SHEET 39 OF 62

52 OF 75

1/12/2016 T:\I-40\SWPPP\NPDES_SWPPP_Index_Sheet_2013.dgn