

Construction Specification - Arizona Department of
Transportation Standard Specifications for Road
and Bridge Construction, latest Edition.

All Concrete shall be Class "S" ($f'_c = 4000$ psi).

All bends and hooks shall meet the requirements of AASHTO Article 5.10. All bend dimensions for reinforcing steel shall be out-to-out of bars.

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

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

Dimensions shall not be scaled from drawings.

A cross-sectional diagram of a joint sealant application. The diagram shows a joint opening with a width of 2 inches. The sealant is applied in a 2-inch wide channel. The sealant is labeled "1/2 inch Tooled radius (Typ)" and "2 inch Silicone joint sealant". A "2 1/2 inch diameter Foam backer rod" is shown in the joint. The backer rod is surrounded by "2 inch Wide cellular plastic filler" and "2 inch Wide rigid polyethylene or polyurethane foam spacer". The total height of the assembly is labeled "6 inch (Min)".

[illegible]

STANDARDS ENGINEER	
A. ALZUBI	
RECOMMENDED FOR APPROVAL	
GROUP MANAGER	
D. BENTON	
APPROVED	
STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION	08/23 DATE

APPROACH SLAB DETAILS

The image contains two technical drawings of bridge railing details.

Left Drawing (Straight Bridge Centerline):

- Top Section:** Shows a cross-section of the railing. It includes a retaining wall or wingwall (Typ.) with a 1'-0" height. The railing is 1'-0" high. The bridge rail or sidewalk (Typ.) is shown with a 1'-0" width. The railing is made of L 5" x 3" x 1/2" (Typ.) angle. The bridge rail or sidewalk is made of 1/2" Bituminous Jt. filler with silicone sealant. The railing is shown with a grid pattern.
- Bottom Section:** Shows a plan view of the railing. It includes a 1'-0" width. The railing is made of L 5" x 3" x 1/2" (Typ.) angle. The bridge rail or sidewalk is shown with a 1'-0" width. The railing is shown with a grid pattern.
- Labels:** Retaining wall or wingwall (Typ.). See Project Plans. 1/2" Bituminous Jt. filler with silicone sealant. See DETAIL C. Bridge rail or sidewalk (Typ.). See Project Plans for details. Constr. ℓ . ℓ Brg. Abut. L 5" x 3" x 1/2" (Typ.). Limits of L 5" x 3" x 1/2" (**) (1'-0"). * 15'-0" (Min).

Right Drawing (Skewed Bridge Centerline):

- Top Section:** Shows a cross-section of the railing. It includes a retaining wall or wingwall (Typ.) with a 1'-0" height. The railing is 1'-0" high. The bridge rail or sidewalk (Typ.) is shown with a 1'-0" width. The railing is made of L 5" x 3" x 1/2" (Typ.) angle. The bridge rail or sidewalk is made of 1/2" Bituminous Jt. filler with silicone sealant. The railing is shown with a grid pattern.
- Bottom Section:** Shows a plan view of the railing. It includes a 1'-0" width. The railing is made of L 5" x 3" x 1/2" (Typ.) angle. The bridge rail or sidewalk is shown with a 1'-0" width. The railing is shown with a grid pattern.
- Labels:** Bar spacing measured parallel to Constr. ℓ . Bar spacing measured perpendicular to Constr. ℓ . Constr. ℓ . ℓ Brg. Abut. L 5" x 3" x 1/2" (Typ.). Limits of L 5" x 3" x 1/2" (**) (1'-0"). * 15'-0" (Min). Skew Angle. See DETAIL C (Typ.). 90°. For skew angle over 20°, square ends of railing.

DETAIL C

ALTERNATE ANCHOR DETAIL

1/2" Silicone joint sealant shall be ASTM D5893 Type NS. 2" Silicone joint sealant shall be rapid-cure, self leveling, two-part silicone rubber sealant designed for expansion joints. Prime coat concrete sides of joint. Do not prime coat the backer rod. Backer rod shall be closed cell polyethylene foam.

PLAN C

Skewed Bridge
Skew Angle $> 45^\circ$

- * See Bridge drawings for length.
- ** Omit total guard angle for concrete pavement alternate.

silicone
silicone
concrete
od shall

Bituminous
Pavement

L 5" x 3" x 1/2"

5/8" Cir. to hole

5/8" Φ holes @ 9"

3/2" 2"

30°
(Typ)

5/8" Φ x 1'-3"
Anchors
alternate
@ 9" spacing

5"

10"

3"

Brg.
but.

DETAIL A

Bituminous Pavement Alternate
(See Project Plans for joint detail
when an integral abutment is used)

1/2" Sealant Recess

New PCCP or Anchor Slab

2"

See DETAIL B

Approach Slab

1'-0"

1'-0"

3"

1'-0"

8"

1'-6"

1'-6"

#5@12"

6-#5

1/2" Hardboard over 40# Roofing paper (2 Layers) bond breaker

B

DETAIL A

Concrete Pavement Alternate

* 15'-0" (Min)

DETAIL A

1'-0"

6 1/2"

1'-6"

#5@18"

3" CLR

2 1/2" CLR

#5@12"

#5@12"

#5@12"

#8@9"

4'-0"

9"

6 1/2"

Jt. filler with silicone sealant.
See DETAIL C.

3/4" Chamfer

6"

Brg. Abut.

#5@12" (Bar included in Abutment Quantities)

SECTION A-A

STANDARDS ENGINEER
A. ALZUBI
RECOMMENDED FOR APPROVAL
GROUP MANAGER
D. BENTON
APPROVED

SECTION A-A

Note to Designer: The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without the approval of a competent professional engineer. Examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

PRIOR DISTRIBUTION DATE	12/07
-------------------------	-------

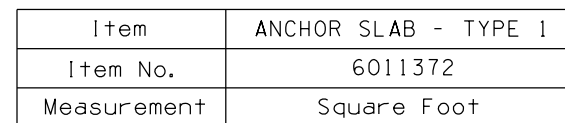
Construction Specification - Arizona Department of
Transportation Standard Specifications for Road
and Bridge Construction, latest Edition.

All Concrete shall be Class "S" ($f'c = 4000$ psi).

All bends and hooks shall meet the requirements of AASHTO Article 5.10. All bend dimensions for reinforcing steel shall be out-to-out of bars.

All reinforcing steel shall have 3 inch clear cover unless noted otherwise.

Dimensions shall not be scaled from drawings.



Pavement Length

15'-0"

Constr. Joint

Optional Constr. Joint (Typ)

#6x40'-0" @ 8" See LONGITUDINAL REINFORCING LAYOUT

#5@12" (Typ)

2'-0" Transfer @ 12" (See Standard Details for TC Details)

6" x 6" Filler (Typ)

#5@16"

6 1/2"

1'-6"

5'-6"

9"

9"

6'-0"

1'-6"

1'-6"

1'-6"

1'-6"

8'-#5

2'-0"

4'-8"

#5@16"
(Typ)

#6x40'-0"@8"

4'-8"

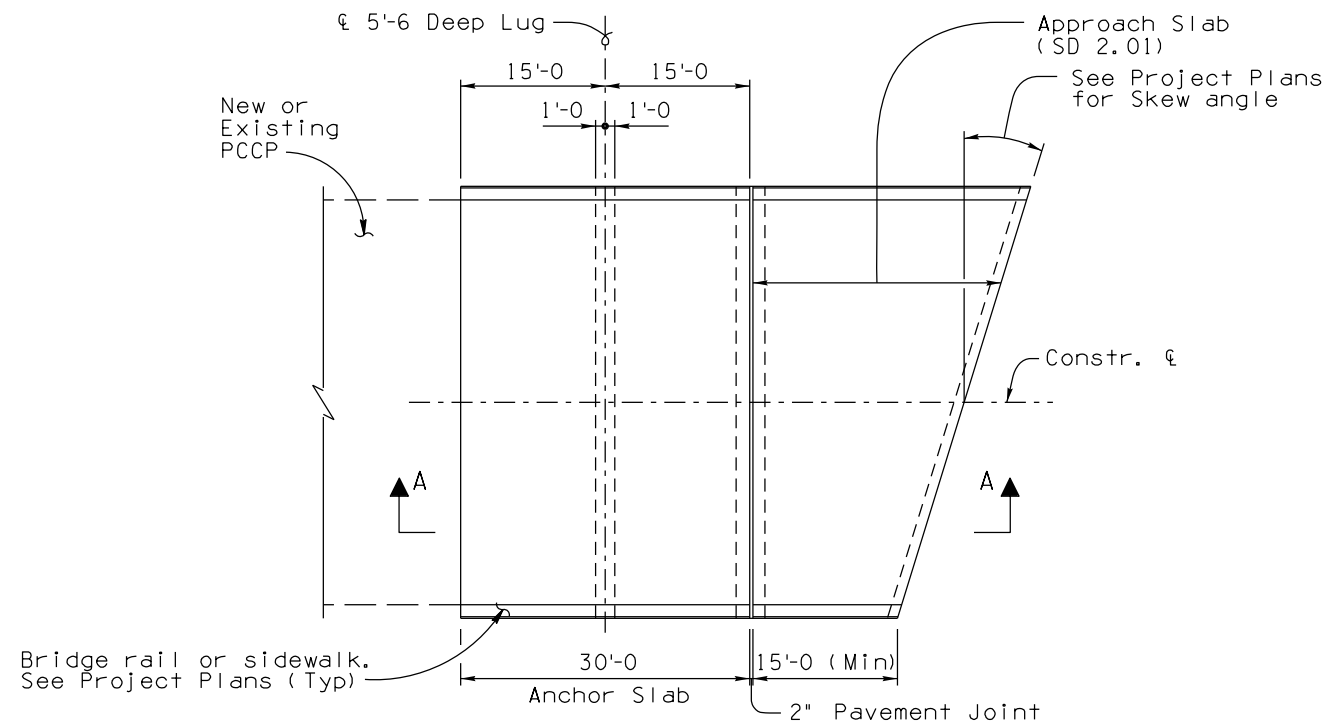
STANDARDS ENGINEER A. ALZUBI	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP STANDARD DRAWING	
RECOMMENDED FOR APPROVAL GROUP MANAGER D. BENTON		
APPROVED	TYPE 1 ANCHOR SLAB DETAILS	DRAWING NO. SD 2.02
STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION	08/23 DATE	

Note to Designer:
The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

PRIOR DISTRIBUTION DATE	12/07
-------------------------	-------

Note to Designer: Information presented in this Standard Drawing has been prepared in accordance with recognized engineering practices and is for general use. It should not be used for specific applications without the approval of a competent professional engineer. Contents within the inner border line shall not be altered.

PRIOR DISTRIBUTION DATE 12/07



PLAN - TYPE 2 ANCHOR SLAB
(For Pavement 300 Feet to 700 Feet in length)

Item	ANCHOR SLAB - TYPE 2
Item No.	6011373
Measurement	Square Foot

GENERAL NOTES:

Construction Specification - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest Edition.

Design Specifications - AASHTO LRFD Bridge Design Specifications, 8th Edition 2017.

All Concrete shall be Class "S" ($f'c = 4000$ psi).

Reinforcing steel shall conform to ASTM Specification A615. All reinforcing shall be furnished as Grade 60. All reinforcing shall be epoxy coated at locations above 4000 foot elevation or as specified in the project plans.

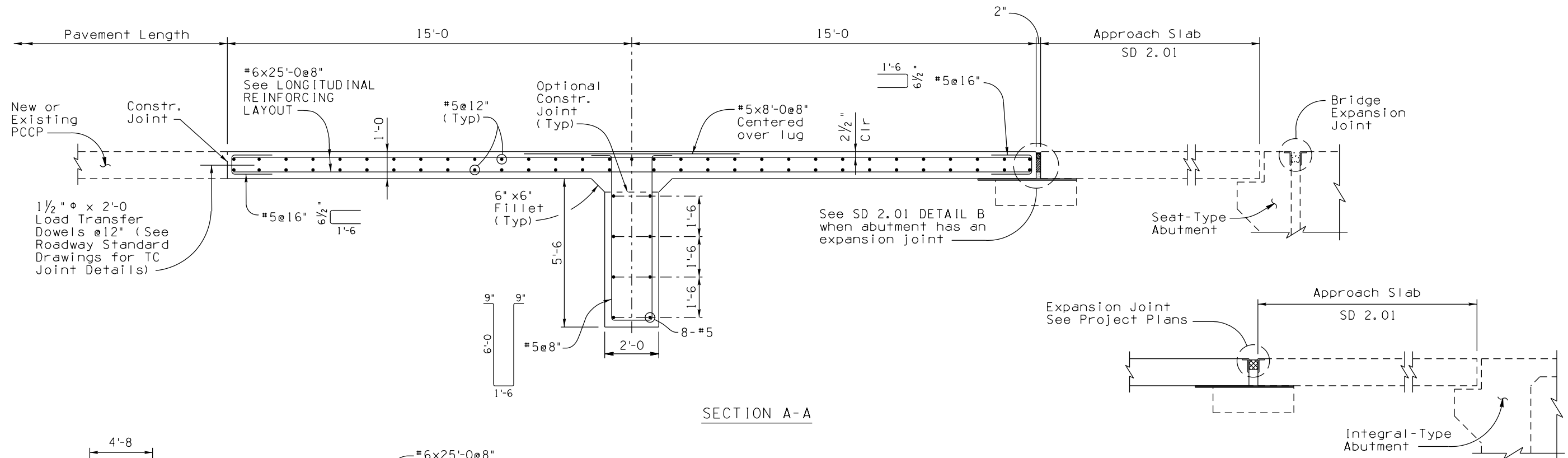
All bends and hooks shall meet the requirements of AASHTO Article 5.10. All bend dimensions for reinforcing steel shall be out-to-out of bars.

All placement dimensions for reinforcing steel shall be to center of bars unless noted otherwise.

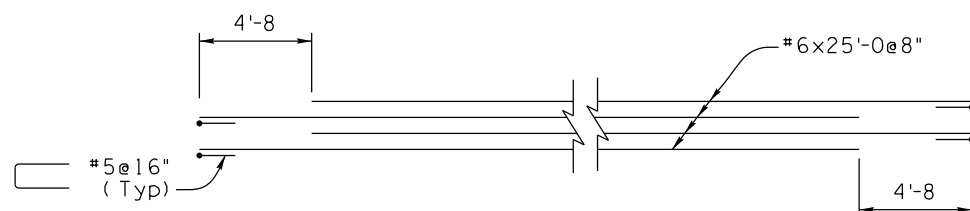
All reinforcing steel shall have 3 inch clear cover unless noted otherwise.

Anchor lugs shall be cast in precompacted roadway embankment or cast in forms and soil compacted to embankment requirements around lugs prior to casting the Anchor Slab.

Dimensions shall not be scaled from drawings.



SECTION A-A



LONGITUDINAL REINFORCING LAYOUT

STANDARDS ENGINEER A. ALZUBI RECOMMENDED FOR APPROVAL GROUP MANAGER D. BENTON APPROVED STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP STANDARD DRAWING	DRAWING NO. SD 2.03
08/23 DATE	TYPE 2 ANCHOR SLAB DETAILS	

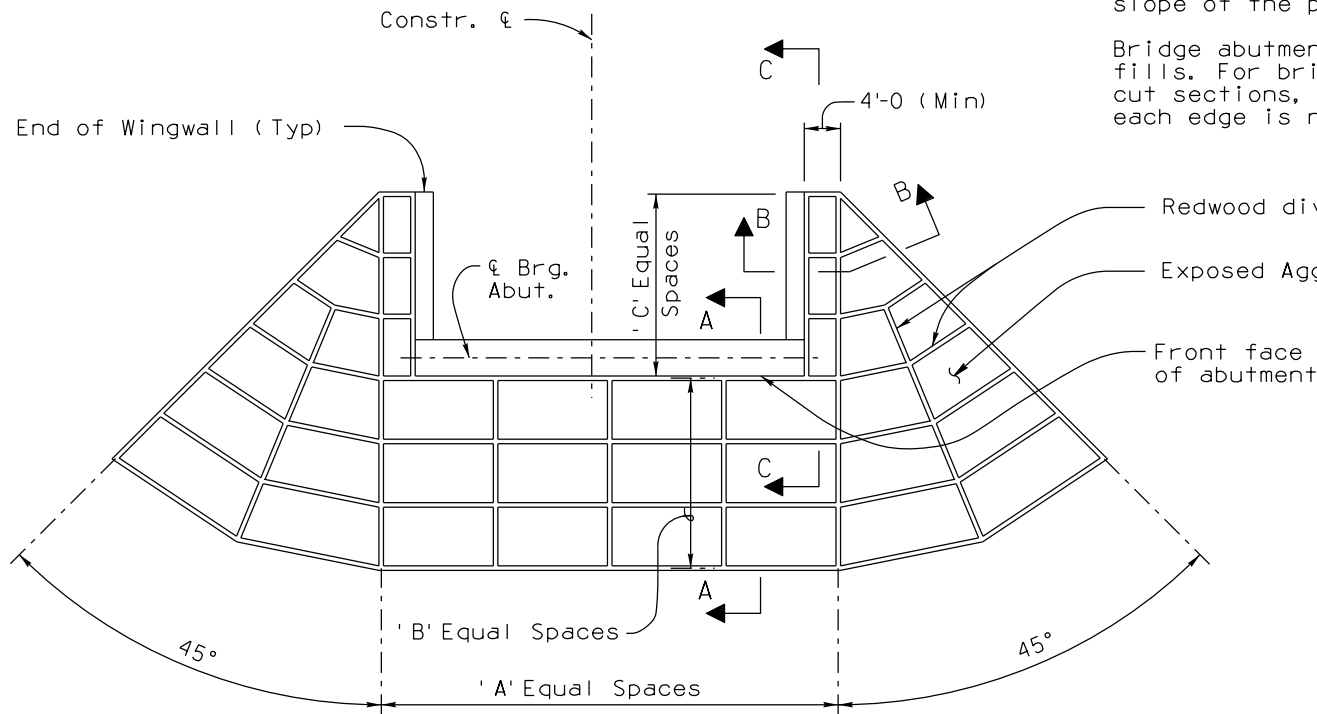
Note to Designer:
The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

PRIOR DISTRIBUTION DATE 12/07

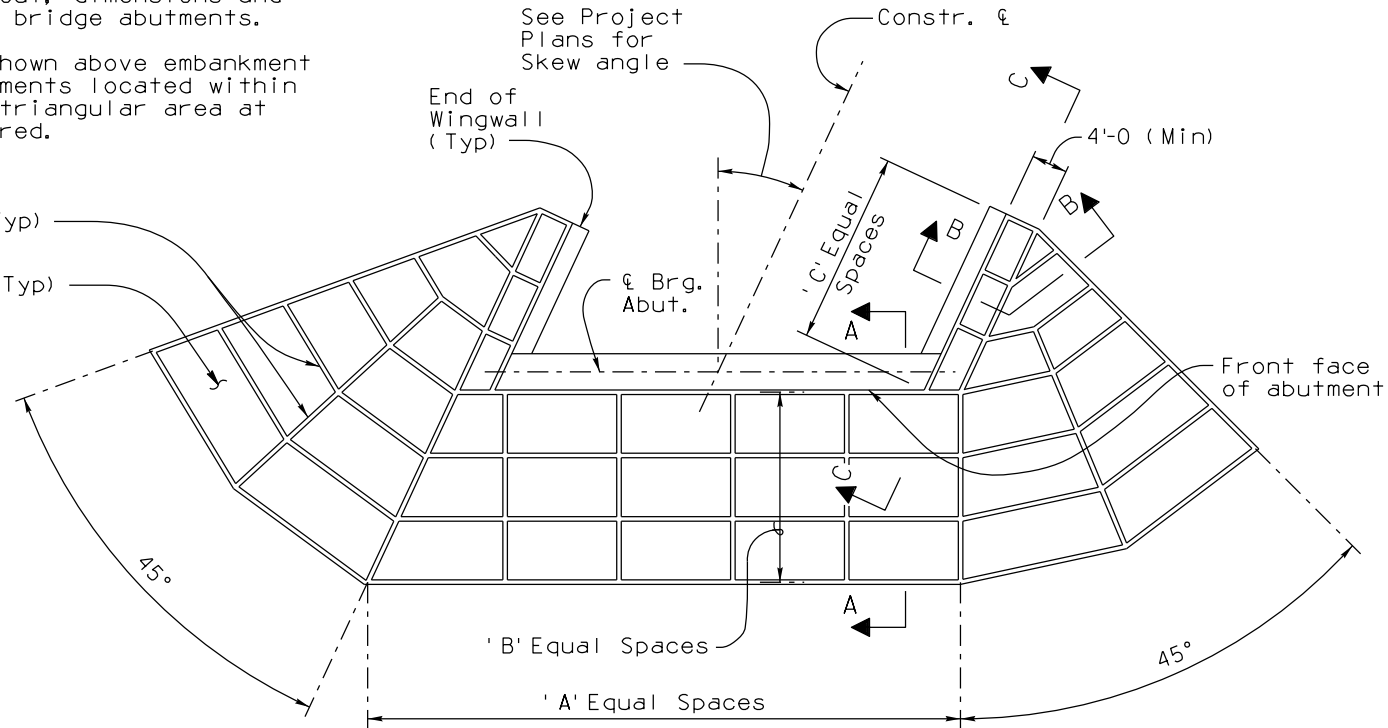
NOTES:

A, B, C and D equal spaces are measured along slope (8 feet maximum vertical and 15 feet maximum horizontal). Project Plans shall show site specific layout, dimensions and slope of the paving at bridge abutments.

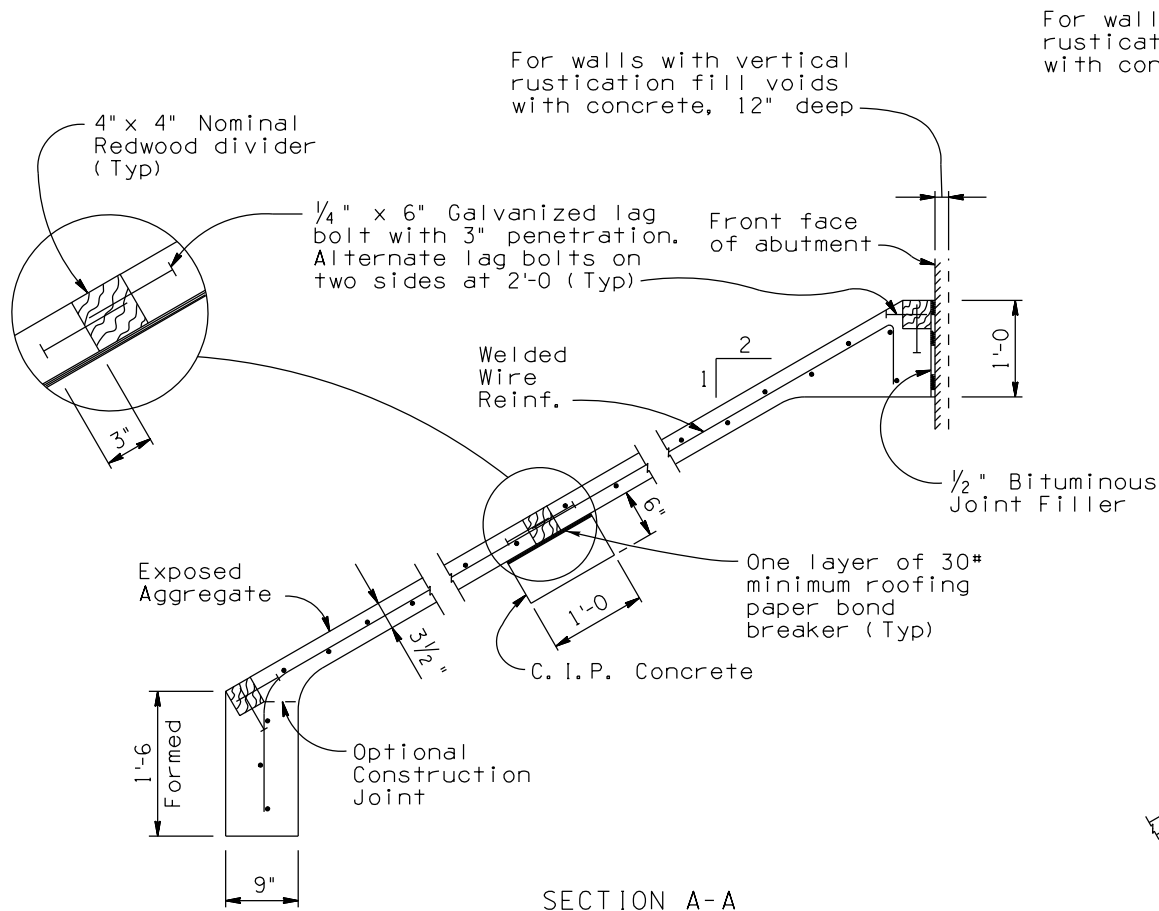
Bridge abutments are shown above embankment fills. For bridge abutments located within cut sections, the 45° triangular area at each edge is not required.



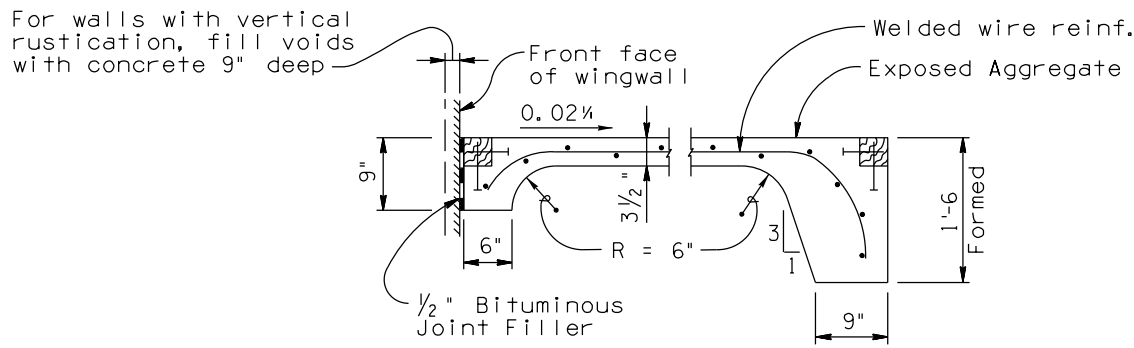
PLAN - RIGHT ANGLE BRIDGE



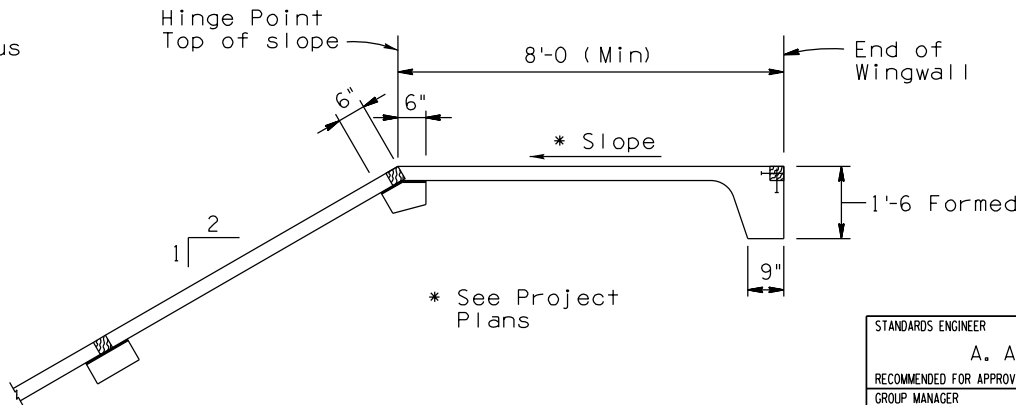
PLAN - SKEW BRIDGE



SECTION A-A



SECTION B-B



SECTION C-C

GENERAL NOTES:

Construction Specification - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, latest Edition.

Design Specifications - AASHTO LRFD Bridge Design Specifications, 8th Edition 2017.

Concrete for slope paving shall be Class "S", (f'c = 3000 psi) with exposed aggregate surface. Maximum size coarse aggregate shall be 3/4 inch.

Shotcreting shall not be allowed.

Welded Wire Reinforcement 6 x 6 - W2.5 x W2.5 shall conform to ASTM A1064.

Slope paving is shown for 2:1 slopes. Slope paving may not be required for slopes less than 3:1 (See Project Plans).

Slope Paving work will be paid for under its respective Contract Item.

STANDARDS ENGINEER	A. ALZUBI
RECOMMENDED FOR APPROVAL	
GROUP MANAGER	
APPROVED	D. BENTON
STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION	08/23 DATE

ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP STANDARD DRAWING	
SLOPE PAVING DETAILS	DRAWING NO. SD 2.04