

## 2024 STANDARD PLANS DIGEST

October 21, 2024

The 2024 edition of the California Department of Transportation Standard Plans is based on U.S. Customary unit. This is the seventh edition since the Department reverted back to U.S. Customary units as its base units.

The 2024 edition of the Department's Standard Plans is to be used in conjunction with the 2024 edition of the Department's Standard Specifications.

The 2024 edition of the Department's Standard Plans was developed by incorporating the errata revisions made to the 2023 edition of the Department's Standard Plans. In addition, the following revisions that followed the errata, were incorporated:

### PLAN SPECIFIC

PLAN NO	CHANGES
A3A	Created an abbreviation <i>AGT</i> for Approach Guardrail Transition.
A20B	Detail 26, Detail 27:---Replaced the Type RY Red-Yellow Retroreflective Marker with Type H One-Way Yellow retroreflective Marker.
A24E	Added Pavement Marking details for "EAST", "WEST", "NORTH", and "SOUTH".
A24L	New 2024 Standard Plan for Pavement Markings- Speed Reduction.
A76A	Concrete Barrier Type 60MC: In the callout, replaced "Pvmt or well compacted base" with "Pvmt or PCC". Added a callout for "Lower Roadbed Structural section". Replaced #4 bar with #5 bar. Added a 2" min toe. Concrete Barrier Type 60MD:---In the callout, replaced "Pvmt or well compacted base" with "Pvmt or PCC". Concrete Barrier Type 60M:---In the callout, insert "vertical" between "Roadbed surfaces max" and "offset 1 1/2". Concrete Barrier Type 60MA:---In the callout, insert "staggered" between "Dowel" and "@24". Removed RSP reference in notes 1 and 2, revised note 7, and added note 10 for chamfer requirements for Type 60 barriers.
A76AB	Section A-A:---Added callout for chamfers at the top. Revised the callout for "FG" to "FG Pvmt or PCC." Added details A and B for section A-A. Concrete Barrier Type 60M - End Anchorage and Footing Details:---Added callout for well compacted base and revised the callout for---"FG" to "FG Pvmt or PCC". Revised note 2, revised notes 1 and 5 to remove RSP references, and in note 4, replaced the reference to Std Plan A76H with Std Plan A76HA. Title:---Revised the sheet title to "Concrete Barrier Type 60M Details".
A76AC	Title:---Revised the sheet title to "Concrete Barrier Type 60M Transition to Concrete Barrier Type 50". Revised note 2 for reinforcement.
A76C	Section A-A:---In the callout, replaced "Pavement or well compacted base under concrete barrier" with "Pavement or PCC". Revised the callout for chamfer to "3/4" chamfer or R = 1/2". Sections A-A, B-B, C-C:---Revisions to reinforcement and revised clearance from 6" to 3"?. Transition at Sign Pedestal, Transition at Bridge Columns:---Revised barrier cap width from 12" to 18", at transition.
A76D	Concrete Barrier Type 60MGC:---In the callout, replaced "Pvmt or well compacted base" with "Pvmt or PCC" and added a callout for "Lower Roadbed Structural section". Added a 2" min toe for concrete barrier. Replaced #4 reinf with #5 reinf. Concrete Barrier Type 60MG:---In the callout, replaced "Pvmt or well compacted base" with "Pvmt or PCC".

	Concrete Barrier Type 60MGA: In the callout, inserted "stagger" between "Dowels" and "@ 24". Revised note 6.
A76E	Concrete Barrier Type 60MG End Anchorage:---Revised the callout for "FG" to "FG pavement or pcc" and added a callout for "well compacted base". Concrete Barrier Type 60MG End Anchorage, Section B-B:---Revised the callout for "FG" to "Pavement or PCC" and added callout for "well compacted base". Section A-A: Added callout for "3/4" chamfer or R = 1/2". Added details A and B for section A-A. Revised note 2.
A76F	Section A-A:---Replaced the callout for "Pavement or well compacted base under concrete barrier" with "Pavement or PCC" and revised the callout for chamfer to "3/4" chamfer or R = 1/2". Section C-C:---Added a callout for "3/4" chamfer or 1/2" R". Transition at Sign Pedestal, Transition at Bridge Column:---Revised barrier cap width from 1'-0" to 18", at transition.
A76G	Concrete Barrier Type 60 MSC:---Replaced the callout for "Pvmt or well compacted base" with "Pavement or PCC" and added a callout for "Lower Roadbed Structural section". Replaced the horizontal reinforcement from #4 bars to #5 bars. Concrete Barrier Type 60MS:---Replaced the callout for "Pvmt or well compacted base" with "Pavement or PCC".---Added a 2" min toe for concrete barrier. Concrete Barrier Type 60MSA:--- In the callout, inserted "stagger" between "Dowels" and "@ 24". Revised note 7.
A76HA	Concrete Barrier Type 60MS End Anchorage and Section B-B:---Replaced the callout for "FG" with "FG Pavement or PCC" and added a callout for "Well Compacted Base". Section B-B:---Added a callout for "3/4" chamfer or R = 1/2". Revised note 2 for reinforcement.
A76I	Transition at Sign Pedestals:---Revised barrier cap width from 1'-0" to 18", at transition. Transition at Bridge Columns:---Revised barrier cap width from 1'-0" to 18", at transition. Sections A-A, B-B, and C-C: Minor revisions to these details.
A76K	Elevation:---Revised the callout arrows to point to expansion anchors at the end caps and revised the anchors to "4" instead of "3" in the callout, on both ends. Section A-A:---Revised the note to add reference to new note 7. Added additional bolts to the thrie beam end cap. Detail A - Square Washer:---Replaced the 3/4" dia hole with 11/16" by 1" slot. Notes:---Added note 7 regarding reference to footing reinforcement details. Plan, Elevation:---Minor revisions to show additional bolt holes.
A76L	Elevation: Moved the locations of Section A-A. Notes: Revised note 3 and added note 4 regarding reference to footing reinforcement details. Section A-A: Revised note to include reference to new note 4 and added missing reinforcement in the detail.
A77L4	Plan:---Revised detail to replace MGS wood posts with steel posts with 8" blocks instead of 12".
A77N1	6" x 12" wood block:---In the note, revised the reference to note 4 instead of note 5. 8" x 8" wood post, 8" x 8" wood block, 8" x 12" wood block:---Deleted these details. Deleted notes 4 and 6 and revised note 4, which used to be note 5.
A77N2	W6 x 8.5 or W6x9 Steel Post:---For post length of 6', in the side view, show the bolt holes. W6 x 9 or W6 x 8.5 Steel post:---For post length of 8', in the side view, show the bolt holes. Note 7:---Revised note by deleting "notched wood". Sheet Title:---Revised the title to "Midwest Guardrail System Steel Post and Block Details".
A77N3	Revised notes 1 and 3.

	Added "W6 x 8.5 or" before all callouts for "W6 x 9 x 6' - 0" Post" and---"W6 x 9 x 8' - 0" Post".
A77N4	Measure height detail at grade break:---Revised the detail to show height differential for varying "D" values. Guardrail delineation:---In the callout for delineator, removed the reference to Standard Plan A73C. Minor revisions to notes 5, 6, and 9. Added Note 12 regarding Type C Dike placement.
A77N5	Plan:---Added section B-B on the far right, moved section A-A to the far left post, and revised the middle post to be steel post. Added "6" Min" dimension for distance from edge of vegetation control to hinge point. Section A-A with Existing Dike, Section A-A with Existing Dike on Cut Slope:---Renamed these as Sections B-B, and replaced the wood post with steel post. Detail A (Optional):---Added new detail. Notes 10, 11:---Added new notes. Minor revisions to notes 1 and 6.
A77N5A	Plan:---Revised the post at section A-A from wood post to steel post. Added a dimension of 15" or less from back of wood post to hinge point, and added var distance of 0' to 6" from edge of vegetation control to hinge point. Added a dimension of 8" min 9" max from back of steel post to edge of block-out material. Section A-A:---Replaced the wood post with steel post and made some minor revisions to the detail. Revised notes 1, 2, and 7.
A77N6	Replaced "hinge point" with "hinge point or flow line" at all instances.
A77N7	Plan:---Replaced wood posts with steel posts and revised the layout of the posts. Removed backside rail element. Revised the alignment of posts at the end of double MGS in the median. Section A-A:---Replaced wood post with steel post.
A77N8	Plan:---Revised the callout for 1" expanded polystyrene by adding "all sides" at the end of the callout.
A77N9	Plan:---Revised the detail to show 25' of MGS past the end of fixed object in both directions and revised the alignment at the end of double MGS in the median. Section A-A: Section B-B: Replaced wood posts with steel posts.
A77N10	Plan:---Revised to show 25' of additional MGS past the end of the fixed object on both sides and replaced wood posts with steel posts. Section A-A, Section B-B: Replaced wood posts with steel posts. Section B-B:---Added callout for "1" Expanded Polystyrene" between minor concrete and man made fixed object.
A77N11	Elevation - End Anchor Assembly(Type SFT):---In the detail title, revised "Type SFT" to (Type SFT-M). Revised the detail for clarity and showed the ground strut. Added a Perspective drawing for clarity. Revised notes 1, 5, and 6.
A77N12	Plan:---Moved section A-A---to the steel post on the right and replaced the middle wood post with steel post. Plan - Fiber Vegetation Control Post Collar Detail:---Replaced the 2 wood posts on the right with steel posts. Sections A-A, Section C-C:---Replaced wood posts with steel posts. Revised notes 3 and 10.
A77N13	Plan:---Moved section A-A to the steel post on the far right, and replaced the middle wood post with steel post. Section A-A:---Replaced wood post with steel post and other minor revisions to the detail and reference to Note 9. Revised note 10.to become Note 9, deleted Note 9.
A77N14	Revised the standard plan by replacing all wood posts with steel posts and revised the alignment of hinge point at the end terminal in the lower Plan view.
A77N15	Plan (Upper & Lower detail):---Replaced all wood posts with steel posts and replaced Transition Railing (Type WB-31) with Transition railing (Type AGT). Plan (Lower detail):---Revised the alignment of double MGS at the end, in the median.

	Section A-A:---Replaced the wood post with steel post.
A77N17	Plan, Section A-A, Section B-B:---Replaced all wood posts with steel posts. Plan:---Revised to include additional 25' of MGS beyond the end of the fixed object in both directions.
A77N18	Plan, Section A-A, Section B-B:--- Replaced all wood posts with steel posts. Plan:---Revised to include additional 25' of MGS beyond the end of the fixed object on both sides.
A77P1	Replaced all instances of "Hinge point" with "Toe or hinge point". Note 9:---Revised note to remove "with buried end anchor". Revised the title of table to "Parabolic Flare Offsets for Connection to 15:1 Flare". In the table, revised X value for 2" offset (Y value). Parabolic Flare Offsets, Typical Flare Offsets for 10" End Offset:---Revised the titles for both details. Type 11A, 11B, and 11C Layouts: Replaced all wood posts with steel posts.
A77P2	Replaced all instances of "Hinge point" with "Toe or hinge point". Type 11D, 11E Layouts: Replaced all wood posts with steel posts.
A77P3	Replaced all instances of "Hinge point" with "Toe or hinge point". Note 7:---Revised note to remove "used with buried end anchors". Type 11F, 11G Layouts: Replaced all wood posts with steel posts.
A77P4	Replaced all instances of "Hinge point" with "Toe or hinge point". Type 11H Layout: Replaced all wood posts with steel posts.
A77P5	Replaced all instances of "Hinge point" with "Toe or hinge point". Note 9:---Revised note to remove "used with buried end anchors". Type 11I, 11J Layouts: Replaced all wood posts with steel posts.
A77P6	Replaced all instances of "Hinge Point" with "Toe or hinge point". Note 9:---Revised note to remove "used with buried end anchors". Type 11K, 11L Layouts: Replaced all wood posts with steel posts.
A77Q1	Replaced all instances of "Hinge point" with "Toe or hinge point". Type 12A, 12B Layouts: Replaced all wood posts with steel posts.
A77Q2	Type 12C Layout:---Added a cut section to allow for clear understanding of additional length of rail. Replace all instances of "Hinge point" with "Toe or hinge point". Type 12C, 12D Layouts: Replaced all wood posts with steel posts.
A77Q3	Replaced all instances of "Hinge point" with "Toe or hinge point". Plan:---Revised the spacing of posts at 25' parabola & deleted the callout for "variable departure angle". Section A-A:---Added "w6 x 8.5 or" to the callout for the post size. Parabolic Flare Offset table:---Revised the X value for Y = 2". Type 11E Layout: Replaced all wood posts with steel posts.
A77Q4	Replaced all instances of "Hinge point" with "toe or hinge point". Type 12AA, 12BB Layouts: Replaced all wood posts with steel posts.
A77Q5	Replaced all instances of "Hinge point" with "Hinge or toe point". Type 12CC Layout:---Added a cut section to allow for clear understanding of additional length of rail. Type 12CC, 12DD Layout: Replaced all wood posts with steel posts.
A77R1	Replaced all instances of "Hinge point" with "toe or hinge point". Strengthened Midwest guardrail system sections for fixed object with SFT-M:---In the note, revised "14A Layout" to say "14A, 15A, 16A, 16B, and 16C Layouts". Continuous Rail:---Added "see note C" to the callout for the beginning of the nested rail element. Type 14A Layout: Replaced all wood posts with steel posts.
A77R3	Replaced all instances of "Hinge point" with "toe or hinge point". Type 16A, 16B, 16C Layouts: Replaced all wood posts with steel posts.
A77R4	Replaced all instances of "Hinge point" with "toe or hinge point". Type 16D, 16E Layouts: Replaced all wood posts with steel posts.
A77R5	Replaced all instances of "Hinge point" with "toe or hinge point". Note 6: Removed "the buried post anchor" from the note. Type 16F, 16G Layouts: Replaced all wood posts with steel posts.

A77R6	Replaced all instances of "Hinge point" with "toe or hinge point". Type 16H Layout: Replaced all wood posts with steel posts.
A77R7	Replaced all instances of "Hinge point" with "toe or hinge point". Note 10: Removed "for the buried post anchor" from the note. Type 16I, 16J Layouts: Replaced all wood posts with steel posts.
A77R8	Replaced all instances of "Hinge point" with "toe or point". Note 9: Removed "for the buried post anchor" from the note. Type 16K, 16L Layouts: Replaced all wood posts with steel posts.
A77S1	Section A-A, End Anchor Assembly (Type SFT-M):---Minor revisions to the details. Note 7:---Replaced "alignment" with "orientation". Replaced all instances of "soil tubes" with "steel foundation tube".
A77S2	Elevation, Plan, Detail A:---Multiple revisions to these details. Revised notes 2 and 4, and added notes 5, 6 and 7.
A77T2	Elevation - (Profile along rail) - Buried Post End Anchor (Type B - F):---Added "W6 x 8.5 or" to the beginning of the callout for steel post. Plan:---Added "W6 x 8.5 or" to the beginning of the callouts for W6 x 9 x 6' steel posts. Revised notes 3 and 8.
A77T3	Plan:---Moved the location of section B-B to the angle point. Added "W6 x 8.5 or" to the beginning of the callouts for W6 x 9 x 6' steel posts. Elevation - (Profile along rail) - Buried Post End Anchor (Type B - S):---Added "W6 x 8.5 or" to the beginning of the callout for steel post without the block. In the callout, revised W6 x 9 x 7' steel post" with "W6 x 9 x 8' steel post". Revised notes 3, 5 and 12, deleted note 13.
A78C3	Plan:---Revised this detail to only include the steel posts and deleted the left portion of the detail which showed the wood post. Section A-A:---Revised the block size and replaced wood post with steel post. Revised notes 1, 3, and 4.
A78C4	Plan:---Revised this detail to only include the steel posts and deleted the left portion of the detail which showed the wood post. Section A-A:---Revised the block size and replaced wood post with steel post. Revised notes 1 and 2.
A78C5	Plan, Section A-A:---Replaced all wood posts with steel posts. Section A-A:---Revised the block size for both posts. Revised note 1 by replacing "standard plan A78C3" with "standard plan A78C4".
A78C6	Plan, Section A-A, Section B-B:---Replaced all wood posts with steel posts. Section A-A, Section B-B:---Revised the block sizes in both details for double thrie beam barrier.
A78C7	Plan:---Revised this detail to only include the steel posts and deleted the left portion of the detail which showed the wood post. Section A-A:---Revised the block size and replaced wood post with steel post. Added "max" to the callout of "24"" for the distance from back of post to edge of vegetation control. Revised notes 3, 4, and 10.
A78C8	Plan:---Revised this detail to only include the steel posts and deleted the left portion of the detail which showed the wood post. Section A-A:---Revised the size of both blocks for double thrie beam barrier and replaced wood post with steel post. Revised notes 3 and 4 to correct Standard Plan references.
A78C9	Plan:---Revised this detail by replacing wood posts with steel posts. Section A-A:---Revised the size of both blocks for thrie beam barrier and replaced both wood posts with steel posts. Revised notes 3 and 4 to correct Standard Plan references.
A78C10	Plan:---Revised this detail by replacing wood posts with steel posts. Section A-A:---Section B-B: Revised the size of blocks for double thrie beam barrier and replaced wood posts with steel posts. Revised notes 3 and 4 to correct Standard Plan references.
A78M1	Section A-A:---Revised the callout for 5/8" button head bolts. Revised note 5.

A78M3	<p>W6 x 9 Steel Post for Transition from Thrie Beam to MGS:---Added "W6 x 8.5 or" to the beginning of the detail title.</p> <p>6" x 8" Block for End Anchor Assembly:---Modified the title of the detail by adding "and Height Transition" to the end.</p> <p>Added a new detail for "6" x 8". Block for End Anchor Assembly (Type SFT-M)".</p> <p>Note 7:---Added note regarding plastic block dimensions.</p>
A78P1	Elevation:---Single/Double Thrie Beam Barrier (Type M) Transition to Midwest Guardrail System: Revised the dimension of MGS to "31" Typ".
A78P2	<p>Plan:---Revised the detail so the bolts are on the traffic side.</p> <p>Elevation:---Added the callouts for the block sizes.</p>
A78Q1	<p>Detail A - Wood post in soil tube:---Revised detail title to "Wood Post in Steel Foundation Tube".</p> <p>Elevation - End Anchor Assembly for double thrie beam barrier (Type M):---In the detail title, inserted "(Type CA)" after "End Anchor Assembly".</p> <p>End Anchor Assembly (Type SFT-M) for Traffic Departure end of Single Thrie Beam Barrier (Type M):---Revised the callout to remove reference to blocks in the last 2 posts, revised the size of block for the 3rd post, and added a reference to see note 7.</p> <p>Note 7:---Added note 7 regarding requirements for blocks when single sided thrie beam barrier (Type M) is used with End Anchor Assembly (Type SFT-M).</p>
A79A1	<p>Elevation - Transition Railing (Type AGT):---Added 25' dimension to represent the length of Transition Railing (Type AGT). In the callouts for the post size, beginning from MGS to Post #7, added "W6 x 8.5 or" at the beginning of the callout, before "W6 x 9".</p> <p>Plan - Transition Railing (Type Double AGT):---Added directional arrows to show two-way traffic on both sides.</p>
A79A2	<p>Elevation - Transition Railing (Type AGT):---Added 25' dimension to represent the length of Transition Railing (Type AGT). In the callout for the post size, beginning from Standard Thrie Beam rail to Post #7, added "W6 x 8.5 or" at the beginning of the callout, before "W6 x 9".</p> <p>Plan - Transition Railing (Type Double AGT):---Added directional arrows to show two-way traffic on both sides.</p>
A79A3	<p>End Cap (Type TCM):---Added a callout at the end of End Cap for "1" dia holes are permitted but not used".</p> <p>AGT Post T3 thru T7, AGT Post T2:---In the callouts for post size, added "W6 x 8.5 or" at the beginning of the callout, before "W6 x 9".</p>
A79B1	<p>Plan - Thrie Beam Bridge Departure Connection Detail CC:---Revised the callout for "W6 x 9 x 6'-0" Post" by adding "W6 x 8.5 or" at the beginning.</p> <p>Notes 1 to 5, 7 to 9:---Revised notes to correct RSP references.</p> <p>Note 10:---Revised note 10 for clarity.</p>
A79C1	<p>Elevation - Anchor Block for Transition Railing Connection:---In the anchor block, show the FG line as dashed.</p> <p>View D-D:---Changed 1" chamfers to <math>\frac{3}{4}</math>"</p>
A81A	Array U14M:---Revised the dimension for fixed object width from "2' 0" Min" to "2'-0" Max".
P75	Optional Detail "A", Note 5:---Replaced "#6 Longitudinal bar" with "#6 tie bar".
P76	Detail B, Optional Detail B, Note 4:---Replaced "#6 Longitudinal bar" with "#6 tie bar".
D80	<p>Typical Section - Spans 4' thru 8':---Deleted the callout for "2" clr", and added a callout for ""e" bars".</p> <p>Typical Section - Spans 10' thru 14':---Deleted the callouts for "2" clr".</p> <p>Added note 9 regarding concrete cover and revised notes 4 and 7.</p>
D81	<p>Typical Section Spans 4' thru 8':---Deleted the callout for "2" clr", and added a callout for ""e" bars".</p> <p>Typical Section Spans 10' thru 14':---Deleted the callout for "2" clr".</p> <p>Added note 10 regarding concrete cover, and revised notes 4 and 8.</p>
D83A	Alternative Detailing Option:---Revised the location of callout arrow for "C" wire.
D90	<p>Section C-C, Optional section C-C:---Revised reinforcement.</p> <p>Elevation:---Revised the callout for "Dia 60" or greater" to say "Dia from 5' to 15".</p>

	Elevation, Section D-D:---In the callout for #6 bar, replaced "additional bar" with "additional longitudinal bar".
D118	Extended Handrail - Section A-A:---In the callout at the lower portion of the ladder, replace "resin capsule anchor" with "concrete anchorage device". Wall Mounted Handrail - Section B-B:---In the callout at the lower portion of the ladder, replaced "resin capsule anchor" with "concrete anchorage device".
D131	Infiltration Trench - Section, Detail A:---Removed the filter fabric on the sides of trench. Revised notes 1, 2, 4, and 5. Deleted note 3 and renumbered remaining notes.
H6	Elevation - Wye Strainer Assembly:---Deleted "Brass" from the beginning of callout for "Brass Wye Strainer, position Strainer Barrel 45 degrees from Horiz". Elevation - Drip Valve Assembly:---Deleted "Electric" from the callout for "Electric Remote Control Valve (RCV)".---Deleted "valve" from the callout for "Pressure Regulation Valve". Replaced the callout for "Drip Wye Strainer" with "Wye Filter". Galvanized or Copper Pipe connection to Plastic Pipe:---Revised the detail by replacing "PVC male adapter" with "PVC female adapter" and added a callout for "Galv or Copper threaded nipple".
B0-5	Bridge Detail 5-10:---Deleted detail. Bridge Detail 5-11:---Corrected the typo in the detail title by removing "S" from "Diagrams". Revised the "S" dimension by moving the callout within the dimension line limits. Bridge Detail 5-15:---Removed "and deck reinforcement" from the callout for the continuous reinforcement. Deleted the vertical reinforcement at the sidewalk (left side of the detail).
B3-1B	Note 1:---Replaced "d" bars with "c" bars.
B11-52	Elevation:---Revised the distance from end of chain link railing to the end post from 9' to 2'-0". Revised Note 5 to reference correct sheets.
B11-58	Plan:---Replaced the circled reference to A79B2 and the callout with references to section G-G and F-F, at the departure and approach end block respectively. Added a reference to see note 12 at the departure end. Moved the callout for Formed Holes from Elevation to Plan view. At the approach end, revised the callout for "Thrie Beam Element" to "Transition Railing (Type AGT)". Section A-A:---Added a callout for utility openings and deleted the reference to note 7. Elevation ---Specified "limits of Note 12". Revised note 7 and added note 12 for vertical reinforcement.
B11-59	Sections C-C - Type E-2, Section D-D, Section H-H:---Replaced the callout for "wingwall" with "wingwall or retaining wall". Section C-C -Without Structure Approach, Pedestal Details - Section E-E:---Minor revisions to the details. Section E-E---deleted the "key" in the concrete.
B11-59A	Elevation - Approach End Block Details:---Removed "Transition" from detail title. Moved section F-F to include the slots. Details A, B, C:---Revised the detail titles by removing "Transition". Section F-F:---Showed the location of HSS and added the 3/4" chamfer. View G-G:---Added the 3/4" chamfer and a callout for "handrailing not shown".
B11-79	Plan:---Replaced the circled reference to Std Plan A79B1 and the callout with references to connection detail BB and AA, at the departure and approach end block respectively. Replaced the callout for "Thrie Beam Element" with "Transition Railing (Type AGT)" at the approach end. Elevation:---Deleted the callout for "Thrie Beam Element" and removed RSP references at the approach end. Note 2:---Revised note to include reference to section J-J and removed RSP references.
B11-80	Type 836:---Replaced "wall joint" with "deck joint" in the callout and in the detail title. Type 836A:---Added reinforcement information below detail title. Section B-B:---Added "10"" for #5 stirrup hook. Type 836A, 836B - Plan:---Added "or retaining wall" after the callout for "end of wingwall".

	View E-E:---Showed the centerline of electrolier. Minor revisions to notes 3 and 9.
B11-80A	Elevation:---In the callout, added "or retaining wall" between "wingwall" and "or Type 836B Trench". Section J-J:---Showed the location of HSS and added 3/4" chamfer. Added "Approx OG" callout. View S-S, Section J-J - for concrete barrier type 836B:---Added 3/4" chamfer and removed "optional" from callouts for "const joint". Removed "Transition" from detail titles. Removed RSP references from notes 2 and 3.
B11-81	Plan:---Replaced the circled references to Std Plan A79B1 and callouts with references to connection detail BB and AA, at the departure and approach end block respectively. Replaced the callout for "Thrie Beam Element" with "Transition Railing (Type AGT)" at the approach end. Revised the location of section J-J. Elevation:---Deleted the callout for "Thrie Beam Element" and removed RSP references at the approach end. Note 2:---Revised note to include reference for section J-J and removed RSP references.
B11-82	Type 842:---Replaced "wall joint" with "deck joint" in the callout and in the detail title. Type 842A:---Added reinforcement information below the detail title. Section B-B:---Added "10" for #5 stirrup hook. Type 842A, 842B - Plan:---Added "or retaining wall" after the callout for "end of wingwall". View E-E:---Showed the centerline of electrolier. Minor revisions to notes 3 and 9.
B11-82A	Elevation:---In the callout, added ",retaining wall," between "wingwall" and "or Type 842B trench footing". Section J-J:---Showed the location of HSS, added callout for "const joint", and added 3/4" chamfer. Added "Approx OG" callout. View S-S, Section J-J - for concrete barrier type 842B:---Added 3/4" chamfer and removed "optional" from callouts for "const joint". Removed "Transition" from detail titles.
B11-83	Plan:---Revised the reference from Standard Plan B11-85 to Standard Plan B11-87 in the callout for dual chamfer and approach end block details, on the approach end. Replaced the circled reference to Std Plan A79B1 with a callout along with reference to connection detail BB, on the departure end block. Added a callout for reference to Standard Plan A79B1 for Transition Railing (Type AGT) detail AA, at the approach end block. Elevation:---Deleted the callout for "Thrie Beam Element" and deleted the reference to RSP A79B1 at the approach end block. Revised notes 4, 7 and 8.
B11-83A	Section A-A:---Minor revision to correct the scale (size) of #6 bar. Deleted note 5.
B11-84	Section C-C:---Added two 1-1/2" diameter conduits in the lower portion of the concrete barrier.
B11-85	Revised note 1.
B11-87	Note 2:---Revised note by deleting "concrete barrier transition at" between "For typical connection for" and "departure end block". Section K-K, Section K-K - For Type 85B on trench footing, View L-L:---Added 3/4" standard chamfers. Removed "Transition" from detail titles.
B11-200	Typical Section:---Added "Bridge deck longitudinal reinf not shown for clarity" to the note under the detail title. Rail section at Post:---Revised the callout for stud bolt by adding "tot 2" to the end. Section A-A:---Added "or finished grade" to the callout for "top of deck". Minor revision to note 1.
B11-201	Elevation:---Multiple minor revisions to this detail.



	<p>ST-75B:---Removed the note under the detail title and added a callout for "See Type 2 anchor bar detail".</p> <p>Plan - Approach End Block Detail:---Removed "Transition" from detail title and revised the callout for "Thrie Beam Element, see RSP A79B1" to "Transition Railing (Type AGT), for connection detail AA see Standard Plan A79B1.</p> <p>Plan - Departure End Block Detail:---Revised the callout for "MGS, See RSP A79B1" to "MGS, see Standard Plan A79B1 for connection detail BB". Deleted "2' - 6" lap, typ" from the callout for #5 bar.</p> <p>Revised notes 3, 4, and 5.</p>
B11-202	<p>Plan:---Deleted "2' - 6" lap, typ" from the callout for #5 bar.</p> <p>Elevation:---Deleted "2' - 6" lap, typ" from the callout for #5 bar. Added a callout for wingwall and curb vert reinf not shown.</p> <p>Multiple detail titles:---Removed "Transition" from the titles and from Note 1.</p> <p>Section D-D, Section D-D - For St-75B on Trench Footing, View E-E, Section F-F:---Minor revisions to these details.</p>
B11-205	<p>Typical Section:---Added "Bridge deck longitudinal reinforcement not shown for clarity", to the end of the note under the detail title. Added a callout for "duct, conduit, or 4" round opening for future utilities".</p> <p>Rail Section at Post:---Added "tot 2" to the callout for stud bolts.</p> <p>Minor revisions to notes 2, 6, and 7. Deleted note 4 and renumbered the remaining notes. Corrected note references based on new note numbering.</p>
B11-206	<p>Elevation:---Multiple revisions to this detail.</p> <p>Plan - Approach End Block Detail:---Removed "Transition" from detail title and revised the callout for " Thrie Beam Element, see RSP A79B2" to "Transition Railing (Type AGT), see Standard Plan A79B2 for connection detail FF".</p> <p>Plan - Departure End Block Detail - Plan:---Revised the callout for "MGS, see RSP A79B2" to "MGS, see Standard Plan A79B2 for connection detail GG". Deleted "2' - 6" lap, typ" from the callout for #5 bar.</p> <p>Revised notes 3, 4, 5, and 7.</p>
B11-207	<p>Various detail titles:---Removed "Transition" from detail titles.</p> <p>Approach End Block Details - Plan, Elevation:---Deleted "2' - 6" lap, typ" from the callout for #5 bar.</p> <p>Elevation:---Added "see section C-C on Standard Plan B11-206" at the end of callout for sidewall, wingwall, and curb vertical reinforcement.</p> <p>Section D-D:---Added the 3/4" chamfer.</p> <p>View E-E:---Deleted the callout for 1" chamfer. Added 3/4" chamfer.</p> <p>Revised note 1 by deleting "transition" between "clearance typical in" and "end block".</p>
B11-210	<p>Section A-A:---Added "or finish grade" to the callout for "top of curb".</p> <p>Typical Section:---Added " Bridge deck longitudinal reinforcement not shown for clarity" to the notes under the detail title.</p> <p>Rail Section at Post:---Revised the callout for stud bolt by adding "tot 2' at the end.</p> <p>Minor revision to note 1.</p>
B11-211	<p>Plan - Departure End Block Detail:---Replaced callout for "MGS, See RSP A79B1" with "MGS, see Standard Plan A79B1 connection detail BB". Deleted "2' - 6" lap, typ" from the callout for #5 bar.</p> <p>Plan - Approach End Block Detail:---Replaced callout for "Thrie Beam Element, See RSP A79B1" with "Transition Railing (Type AGT), see Standard Plan A79B1 connection detail AA".</p> <p>Elevation:---Multiple revisions to the detail.</p> <p>ST-76B:---Added a callout for "See Type 2 anchor bar detail".</p> <p>Revised notes 3, 5, and 6.</p>
B11-212	<p>Various detail titles:---Removed "Transition" from detail titles.</p> <p>Plan, Elevation:---Deleted "2' - 6" lap, typ" from the callouts for #5 bar.</p> <p>Elevation:---Revised the callout for Wingwall and curb vertical reinforcement.</p> <p>Sections D-D, Section F-F, View E-E:---Revised the chamfers in these details.</p> <p>View E-E:---Deleted the callout for "1" Chamfer, typ for curb".</p> <p>Section D-D for ST-76B on Trench Footing, Section F-F:---Added a dimension for "1" clr" between footing and edge of barrier.</p> <p>Revised note 1 to remove "transition" between "typical in" and "end blocks".</p>

B11-215	<p>Revised notes 2, 6, and 7. Deleted note 4 and renumbered the remaining notes. Corrected the note references based on revised note numbering.</p> <p>Rail Section at Post:---Revised the callout for stud bolt by adding 'tot 2" to end.</p> <p>Typical Section:---Added a callout for "duct, conduit, or 4" round opening for future utilities". Added note for "Bridge deck longitudinal reinf not shown for clarity" at the end of notes under the detail title.</p> <p>Section A-A:---Added "or finish grade" to the end of callout for "top of curb".</p>
B11-216	<p>Plan - Departure End Block Detail:---Replaced the callout for "MGS, see RSP A79B2" with "MGS, see Standard Plan A79B2 for connection detail GG". Deleted "2' - 6" lap, typ" from the callout for #5 bar.</p> <p>Plan - Approach End Block Detail:---Replaced the callout for "Thrie Beam Element, see RSP A79B2" with "Transition Railing (Type AGT), see Standard Plan A79B2 for connection detail FF". Deleted "transition" from the detail title.</p> <p>Elevation:---Multiple revisions to the detail.</p> <p>Revised notes 3, 4, and 5. Deleted note 8 and renumbered note 9?</p>
B11-217	<p>Various detail titles:---Removed "Transition" from detail titles.</p> <p>Approach End Block Details - Plan, Elevation:---Deleted "2' - 6" lap, typ" from the callout for #5 bar.</p> <p>Elevation:---Revised the callout for wingwall, sidewalk and curb vertical reinforcement.</p> <p>Sections R-R, View S-S:---Revised the chamfers in these details.</p> <p>Revised note 1 to remove "transition" between "typical in" and "end blocks".</p>
B11-221	<p>Sleeve Details:---Added a callout for "CL sleeve and slots, typ".</p> <p>Revised notes 3, 5, and 6. Deleted note 4 and renumbered existing notes 5 and 6 to be 4 and 5 respectively. Corrected the references to new note numbering.</p>
B15-7	<p>Elevation - Midwest Guardrail system anchorage:---Revised the callout for "Transition Railing (Type WB-31)" to "MGS" at the departure end. Revised the callout for "Thrie Beam Element" to "Transition Railing (Type AGT)" at the approach end.</p>
S100	<p>Revised the values for CMS Loading, replaced the CMS Models with Case 1 and Case 2, and moved the values into a table for CMS Loading. Revised note 4 accordingly.</p>
S115	<p>Walkway with CMS 500, 700, 710:---Revised the title of the detail to "Walkway with CMS".</p>
S123	<p>Aluminum Z Bar Spacing Model 500:---Deleted the detail.</p> <p>Aluminum Z Bar Spacing Model 700:---Revised the detail title to "Aluminum Z Bar Spacing CMS Load Case 1", replaced "1' - 8"" dimension with "Equal Space", and made some other revisions to the expanded detail at aluminum z bar.</p> <p>Aluminum Z Bar Spacing Model 710:---Revised the detail title to "Aluminum Z Bar Spacing CMS Load Case 2" and replaced "1' - 8"" dimension with "Equal Space"</p> <p>Revised note 2 by deleting the CMS model numbers.</p>
ES-1B	<p>Signal Equipment:---Added "(Typical)" at the end of description for "Vehicle Signal Head Consisting of Red, Yellow, and Green Left Arrow Sections".</p>
ES-4A	<p>SV-2-TC, SV-2-TD:---Rotated the drawings by 180 degrees.</p>
ES-4C	<p>Ramp Metering Type TS Standard:---Added new detail.</p> <p>Ramp Metering Type 1 Standard:---Added new detail.</p>
ES-4E	<p>Type MAT, Type MAS, Type MAS-4A, Type MAS-4B, Type MAS-4C:---Revised these details.</p> <p>SV-1-T with 5 Signal Sections, Side View - SV-2-TD:---Revised these details.</p> <p>Type MAS-RM, Type MAT-RM:---Added new details.</p>
ES-5E	<p>Trench In Pavement:---Revised this detail.</p> <p>Piezoelectric Axle Sensors - Top View, Section A-A:---Added new details.</p> <p>Title:---Revised the title to "Electrical Systems (Trench in Pavement and Piezoelectric Axle Sensors Details).</p>
ES-6B	<p>Grouting at Electrolier - Detail N:---Revised the mortar thickness from "2" min to 3" max" to "Var 1.5x to 2x Bolt Diameter".</p>
ES-7B	<p>Type 1-A standard - Detail A-1, Type 1-B Standard - Detail A-3, Type 1-D Standard - Detail A-6:---Revised the thread length for anchor bolt at base plate from 6 inches to 12 inches.</p> <p>Anchor Bolt with Coupling nuts - Detail C:---Revised the mortar thickness from "2" min to 3" max" to "1.5x to 2x Bolt Diameter".</p>

	Note 5:---Added note for locating handholes.
ES-7J	Note 2:---Added note regarding base plate and foundation details for Type 15-FBS. Note 3:---Added note for locating handholes.
ES-7M	Handhole and Anchorage - Detail A:---Revised the detail. Double Side Tenon - Detail S-2:---Added new detail. Deleted note 5 and renumbered remaining notes.
ES-7R	Multiple locations:---Replace "coupling, watertight, 1" dia (max)" with "1/2 NPS coupling", "hybrid Cable" with "cable", and "miscellaneous attachment" with "attachment". Signal Mast Arm Mount - Detail A:---Revised the callout for note reference to "See Notes 6, 9, and 10" and deleted the callout for "25 lb max". Luminaire Mast Arm Mount - Detail B:---Revised the maximum attachment weight to "25 lb" from "10 lb". Luminaire Mast Arm Mount - Detail C:---Revised the maximum attachment weight to "45 lb" from "25 lb". Signal Pole Mount - Detail D:---Revised the maximum attachment weight to "45 lb" from "25 lb" and added the 45 lb max weight for the second attachment. Revised note 6 and added notes 10 and 11.
ES-8A	Non-Traffic Pull Box - Detail A - Section A-A:---Deleted the callouts for ground clamp, grounding electrode, and deleted associated elements.
ES-8B	Traffic Pull Box - Detail A - Section A-A:---Deleted callouts for "bushing" and "bonding nut with brass bolt" and deleted associated elements.
ES-9B	Conduit Riser Connection - Detail R:---In the callout, replace "No. 6 bonding strap" with "No. 6 bonding copper wire." Conduit Riser Connection at Column, Abutment or Structure Wing Wall - Detail U:---Revised multiple callouts. Conduit Expansion Fitting - Detail X:---Deleted multiple callouts associated with expansion fittings and deleted the dashed rectangle and X. Combination Expansion Deflection Fittings Metallic Conduit Installation - Detail XY:---Deleted the callout for "teeth to grip neoprene" and revised multiple callouts. Deleted the dashed rectangle and X. Conduit Deflection Fitting - Detail Y:---Revised multiple callouts.
ES-11	Foundations in sidewalk, median and island areas - Detail B:---Revised the titles of Details B-1 and B-2, delineated the edge of base plate, and added a callout for "min 48" sidewalk" to Detail B-1. Deleted 10" dimension for centerline of pole to edge of sidewalk.
ES-18A	In the table for "Diameter and self weight of overhead conductors", delete the row for "28 Conductor Signal Cable (28CSC)."

GENERAL

The Standard Plans listed below are canceled and are not included in the 2024 Standard Plans edition.

PLAN SPECIFIC

<b>PLAN NO.</b>	<b>CANCELLATIONS</b>
A76H	Canceled 2023 Standard Plan A76H. The details were incorporated in Standard Plan A76HA
A77U1	2023 Standard Plans canceled by Errata 1 dated 1/22/24. These sheets were canceled and replaced by new sheets for MASH Compliant Safety devices, and included in Errata 1.
A77U2	
A77U3A	
A77U3B	
A77U4	
A77U5	
A77V1	
A77V2	
A78A	
A78B	
A78C1	
A78C2	
A78D1	
A78D2	
A78E1	
A78E2	
A78E3	
A78F1	
A78F2	
A78GA	
A78GB	
A78H	
A78J	
A78K	