

# Revision Summaries

## Section A

**Standard Plan A-30.30-01 Wire Mesh Slope Protection** – Revised to add 11 gage to the High Tensile steel fasteners callouts (occurs in 2 places on the plan). Add note 4 “All wire loops shall include a standard weight thimble.

**Standard Plan A-40.10-02 Cement Concrete Pavement Joints** – HMA Transition detail added and Existing Approach Slab Transition detail has been added.

**Standard Plan A-40.50-01 Bridge Approach Slab** – Bridge and Structures office initiated this change to modify and add detailing to the structural requirements.

**Standard Plan A-60.20-02 Dowel Bar Retrofit for Cement Concrete Pavement** – Dimension 2” MIN. is revised to 1” MIN. (revised in 2 places).

**Standard Plan A-70.10-00 Median Crossovers** – Standard requirements for median crossovers for authorized vehicle turnarounds.

## Section B

**Standard Plan B-5.20-01 Catch Basin Type 1** – Rectangular Adjustment Section, dimension 6” or 12” is revised to 2”, 4”, 6”, 12” or 24”. Callout “One #3 Bar Hoop for 6” Height , Two #3 Bar Hoops for 12” Height. Is revised to read ; “1 #3 Bar for each 6” height increment, spaced equally” Note 4 “The frame and grate may be installed with the flange up or down. The frame may be cast into the Adjustment Section.” Is revised to read; “The frame and grate may be installed with the flange down, or integrally cast into the Adjustment section with the flange up.”

**Standard Plan B-5.40-01 Catch Basin Type 1L** – Rectangular Adjustment Section, dimension 6” or 12” is revised to 2”, 4”, 6”, 12” or 24”. Callout “One #3 Bar Hoop for 6” Height , Two #3 Bar Hoops for 12” Height. Is revised to read ; “1 #3 Bar for each 6” height increment, spaced equally” Note 4 “The frame and grate may be installed with the flange up or down. The frame may be cast into the Adjustment Section.” Is revised to read; “The frame and grate may be installed with the flange down, or integrally cast into the Adjustment section with the flange up.” Precast Base Section, dimension 12” is revised to 16” Min.

**Standard Plan B-5.60-01 Catch Basin Type 1P (For Parking Lot)** – Rectangular Adjustment Section, dimension 6” or 12” is revised to 2”, 4”, 6”, 12” or 24”. Callout “One #3 Bar Hoop for 6” Height , Two #3 Bar Hoops for 12” Height. Is revised to read ; “1 #3 Bar for each 6” height increment, spaced equally” Note 4 “The frame and grate may be installed with the flange up or down. The frame may be cast into the Adjustment Section.” Is revised to read; “The frame and grate may be installed with the flange down, or integrally cast into the Adjustment section with the flange up.”

**Standard Plan B-30.70-02 Circular Frame (Ring) and Cover** – Note 4 is revised to read; “In Lieu of a Blind Pick Notch for Storm Sewer Manhole covers a 1” Pick Hole is acceptable. Hole Location and number of Holes may vary by manufacturer.”

## Section C

**Standard Plan C-1 Beam Guardrail Types 1~4 (W-Beam)** – Revisions required to the notes (Note 6) to allow the plan to be used for all guardrail types. Also, added clarification for marking steel posts.

**Standard Plan C-1b Beam Guardrail Posts and Blocks** – Revisions required to the notes (Note 5) to allow the plan to be used for all guardrail types. Also, added clarification for marking steel posts.

**Standard Plan C-3 Beam Guardrail Transition Sections (Types 1, 1A & 1B)** – Revision required to the note (Note 1), reference to Standard plan F-2b is revised to F-10.40.

**Standard Plan C-3b Beam Guardrail Transition Sections (Types 10 ~ 15)** – Revision required to the notes (Note 2), reference to Standard plan F-2b is revised to F-10.40.

**Standard Plan C-3c Beam Guardrail Transition Sections (Types 16, 17 & 18)** – Revision required to the notes (Note 3), reference to Standard plan F-2b is revised to F-10.40.

**Standard Plan C-4f Beam Guardrail Bull Nose Terminal** – Revised to depict steel posts (where appropriate) per WSDOT policy.

**Standard Plan C-5 Guardrail Connection to Bridge Rail or Concrete Barrier** – Revision required to the notes (Note 1), removal of the term “high strength” from the note to clarify the specification referenced.

**Standard Plan C-7 Beam Guardrail End Sections** – Revision required to the notes (Note 2), removal of the term “high strength” from the note to clarify the specification referenced.

**Standard Plan C-7a Thrie Beam End Sections** – Revision required to the notes (Note 1), removal of the term “high strength” from the note to clarify the specification referenced.

**Standard Plan C-8b Concrete Barrier Light Standard Section** – Revised the Anchor Bolt assemblies to require two anchor plates to ensure bolts remain vertical following concrete pour. Added grounding requirements.

**Standard Plan C-20.40-02 Beam Guardrail Type 31 Placement 12'-6”, 18'-9” or 25'-0” Span** – Revision required to the dimension/callout for the span to remove the references to the case names to align with WSDOT policy. In lieu of case names, posts omitted has been added. Clarification has been added to use wooden CRT posts. Callout for single rail element (at span) has been added for clarification.

**Standard Plan C-20.42-02 Guardrail Placement Strong Post ~ Type 31 Intersection Design** – Revision required to the notes (Note 3) to clarify reference for Type 31 details. All plan views have been revised to depict steel posts per WSDOT policy.

**Standard Plan C-20.45-00 (formerly TB-29) Beam Guardrail Type 31 DS (Double Sided) (W-Beam)** – Plan provides requirements and details for a Double Sided Type 31 guardrail system.

**Standard Plan C-22.14-02 Beam Guardrail Type 1 Buried Terminal Type 2** – Plan is revised to depict Steel Posts throughout the guardrail run. This revision is to align with current WSDOT guardrail policy.

**Standard Plan C-22.16-02 Beam Guardrail Type 31 Buried Terminal Type 2** – Plan is revised to depict Steel Posts throughout the guardrail run. This revision is to align with current WSDOT guardrail policy.

**Standard Plan C-22.45-00 Beam Guardrail Type 31 Non-Flared Terminal Steel Posts (Posted Speed ~ 40 mph and Below)** – New plan offers a Type 31 Non-Flared Terminal for roadways with posted speeds 40 mph and lower. This may be an option if the project has space limitations and the speed criteria is not a factor. These are sole source proprietary systems.

**Standard Plan C-25.18-02 Beam Guardrail Type 31 Transition Section Type 20** – All views have been revised to depict steel posts per WSDOT policy.

**Standard Plan C-28.40-01 Beam Guardrail Type 31** – All views have been revised to depict steel posts per WSDOT policy.

**Standard Plan C-85.14-00 (formerly C-14h) Single Slope Concrete Barrier Light Standard Foundation** – Plan content remains unchanged, update to serial numbering system is required.

**Standard Plan C-85.15-00 (new) Single Slope Concrete Barrier (42”) Light Standard Foundation** – Plan provides requirements and details for providing a Light Standard section of barrier for the 42” high barrier system.

**Standard Plan C-85.16-00 (formerly C-14i) Single Slope Concrete Barrier Sign Bridge Foundation** – Plan content remains unchanged, update to serial numbering system is required.

**Standard Plan C-85.18-00 (formerly C-14j) Single Slope Concrete Barrier Transition for Monotube Support** – Plan content remains unchanged, update to serial numbering system is required.

**Standard Plan C-85.20-00 (formerly C-14k) Single Slope Concrete Barrier Truss-Type Sign Foundation** – Plan content remains unchanged, update to serial numbering system is required.

## **Section D**

**Standard Plan D-3 Permanent Geosynthetic Wall** – The references to Standard Plans D-3b and D-3c are revised to D-3.15 and D-3.16.

**Standard Plan D-3.15-00 (formerly D-3b) Permanent Geosynthetic Wall Single Slope Barrier** – The drawing number has changed, Also, the reference in Key Note 7 is revised from D-3a to D-3.10.

**Standard Plan D-3.16-00 (formerly D-3c) Permanent Geosynthetic Wall F-Shape Barrier** – The drawing number has changed, Also, the reference in Key Note 7 is revised from D-3a to D-3.10.

**Standard Plan D-3.17-00 (new plan) Permanent Geosynthetic Wall Expansion Joint Details** – Details for Expansion Joint.

**Standard Plan D-15.20-02 Traffic Barrier Details for Reinforced Concrete Retaining Walls** – Reinforcing Steel Bending Diagram is revised, to clarify where the two versions of W1 and W2 are used, more descriptive titles have been added. W2 bar used with a Sloped Front Face of a Retaining Wall has been revised, Dimension from the Construction Joint to bend in the reinforcing bar has been revised from 10¼" to 7". Section A & B dimension has been added from the top of the roadway to the top of the retaining wall (H) dimension.

## **Section F**

**Standard Plan F-10.12-02 Cement Concrete Curb** – Plan is revised to remove Roundabout Curb details.

**Standard Plan F-10.18-00 Roundabout Cement Concrete Curbs** – Plan provides requirements and details for Roundabout curbing.

## **Section G**

**Standard Plan G-24.60-01 Steel Sign Support, Types TP-A & TP-B Installation Details** – Callout for steel post sizes has been modified to clarify usage.

**Standard Plan G-25.10-02 Steel Sign Support Foundation Details** – Concrete Class 3000 is revised to 4000P.

**Standard Plan G-30.10-01 Sign Installation on Signal and Light Standards** – Revised to add spacing requirements between signs and the standard or traffic signal.

**Standard Plan G-60.10-01 Cantilever Sign Structure (Truss-Type)** – Added (30' – 0" MAX.) to the "H" dimension located within the Elevation on sheet 2.

**Standard Plan G-60.20-01 Cantilever Sign Structure (Truss-Type) Foundation Type 1** – Revised the Anchor Bolt assemblies to require two anchor plates to ensure bolts remain vertical following concrete pour. Anchor Plate is revised from 3/4" to 1/2" thick. Revise Concrete Class 3000 callout to Concrete Class 4000P in the Material Specification table.

**Standard Plan G-60.30-01 Cantilever Sign Structure (Truss-Type) Foundation Types 2 & 3** – Revised Concrete Class 4000 to Concrete Class 4000P in the Material Specifications table. Revised the Anchor Bolt assemblies to require two anchor plates to ensure bolts remain vertical following concrete pour.

**Standard Plan G-70.10-01 Sign Bridge (Truss-Type)** – Added (30' – 0" MAX.) to the "H" dimension located within the END View on sheet 1.

**Standard Plan G-70.20-01 Sign Bridge (Truss-Type) Foundation Type 1** – Revise Concrete Class 3000 callout to Concrete Class 4000P in the Material Specification table. Revised the Anchor Bolt assemblies to require two anchor plates to ensure bolts remain vertical following concrete pour. Anchor Plate is revised from 5/8" to 1/2" thick.

**Standard Plan G-70.30-01 Sign Bridge (Truss-Type) Foundation Types 2 & 3** – Revise Concrete Class 4000 callout to Concrete Class 4000P in the Material Specification table. Revised the Anchor Bolt assemblies to require two anchor plates to ensure bolts remain vertical following concrete pour. Anchor Plate is revised from 5/8" to 1/2" thick.

**Standard Plan G-90.10-01 Overhead Sign Bracing and Lighting Placement** – Sign Lighting Bracing spacing requires adjustment to better illuminate signage.

**Standard Plan G-90.20-01 Overhead Sign Mounting (Monotube Structure)** – Plan is revised to clarify hardware callout for suspending the monotube. General Note 5 is added to provide requirements for hand holes. General Note 6 is added to provide a sizing option for the vertical bracing members. Note 7 provides the maximum spacing requirement for vertical bracing for walk-in cabinet type VMS installations.

**Standard Plan G-90.30-01 Overhead Sign Mounting (Truss Structure)** – Revised to add General Notes 4 and 5. Note 4 provides a sizing option for the vertical bracing members. Note 5 provides the maximum spacing requirement for vertical bracing for walk-in cabinet type VMS installations.

**Standard Plan G-95.10-01 Maintenance Walkway for Sign Bridges** – Revised to add callout to ensure coordination is exercised for proper fit-up in regards to the maintenance walkway and the VMS door opening.

**Standard Plan G-95.20-02 Maintenance Walkway Mounting for Monotube Sign Bridge** – Revised to add callouts/note (Note 5) to ensure coordination is exercised for proper fit-up in regards to the maintenance walkway and the VMS door opening. Added Allowable Alternate Material option to the Material Specification Table for Wire Rope.

**Standard Plan G-95.30-02 Maintenance Walkway Mounting for Monotube Sign Bridge** – Revised to add callouts/note (Note 5) to ensure coordination is exercised for proper fit-up in regards to the maintenance walkway and the VMS door opening. Added Allowable Alternate Material option to the Material Specification Table for Wire Rope.

## **Section J**

**Standard Plan J-10.10-01 Cabinet Orientation, Conduit Layout and Foundation Detail** – Note 11 is being revised. The Detail referenced is no longer available. The note has been revised to contact Bridge if stairway design is needed.

**Standard Plan J-21.10-02 Type PS, Type 1 RM & FB Signal Standard Foundation Details** – All grout pad depictions have been revised to show vertical sides. Anchor Bolt Template has been revised to a round shape in lieu of a square with rounded corners.

**Standard Plan J-26.10-01 Signal Standard Foundation Plan** – Revise Concrete Class 3000 callouts to Concrete Class 4000P.

**Standard Plan J-28.10-01 Steel Light Standard** – Reference to Standard Plan C-14h is updated to C-85.14

**Standard Plan J-28.30-02 Steel Light Standard Foundation Types A & B** – Add Concrete Class 4000P callouts to the Elevation View.

**Standard Plan J-28.45-01 Steel Light Standard Elbow Mounting on Bridge & Retaining Wall** – Size and material callout for the elbow have been revised. The bolt callout has added a material spec. option. Callouts have been added to View A and Section B, 1 5/8" Plate (ASTM A36). Material spec. is added to the lock washer and nut callout.

**Standard Plan J-28.50-02 Steel Light Standard Pole Base and Hand Hole Details** – Reference to Standard Plan C-14h is updated to C-85.14

**Standard Plan J-28.60-01 Steel Light Standard Barrier Mounted Base** – Reference to Standard Plan C-14h is updated to C-85.14

**Standard Plan J-28.70-01 Steel Light Standard Wiring Details** – Reference to Standard Plan J-9a is updated to J-60.05

**Standard Plan J-29.10-00 Camera Pole Foundation Details, Standard Plan J-29.15-00 Camera Pole Standard, Standard Plan J-29.16-00 Camera Pole Standard Details** - A Camera Pole plan has been available in our Plan Sheet Library since 2006 (IT-1 ~ IT-3). The Design Standards unit working with Bridge and the HQ Traffic Design office has developed these plans. Using the details in the library as a base, and drawing on experience gained over the years providing cameras on projects, these plans are the result of our efforts.

**Standard Plan J-40.10-02 Locking Lid Standard Junction Box Types 1 & 2 (IS-3)** - Revised to add the ADA requirement for slip resistant surfaces if located in the pedestrian facilities.

**Standard Plan J-40.20-00 (formerly J-11b) Heavy Duty Junction Box Types 4, 5, & 6 (IS-4)** – Revised bonding and grounding details and names. Clarified that these boxes are to be placed only in the traveled way or in the shoulder.

**Standard Plan J-40.30-02 Heavy Duty Junction Box Type 8 (IS-5)** - Revised to add the ADA requirement for slip resistant surfaces if located in the pedestrian facilities.

**Standard Plan J-40.38-00 Top Entry Nema 4X Surface Mount Junction Box (new plan)** – Requirements for providing a surface mount junction box.

**Standard Plan J-50.10-00 (formerly J-8a) Type 1 Induction Loop** – Plan view, wiring diagram and details for providing Type 1 Stop Line Loops.

**Standard Plan J-50.11-00 (formerly J-8b) Type 2 Induction Loop** – Plan view, wiring diagram and details for providing Type 2 Stop Line Loops.

**Standard Plan J-50.12-00 (formerly J-8c) Type 3 Induction Loop** – Plan view, wiring diagram and details for providing Type 3 Stop Line Loops.

**Standard Plan J-50.15-00 (formerly J-8d) Induction Loop Details** – Details for installation of Induction Loops.

**Standard Plan J-50.16-00 Preformed Induction Loop Details** – Details for installation of Preformed Induction Loops.

**Standard Plan J-50.20-00 (formerly J-18) Permanent Traffic Recorder Site Installations** – Details for the installation of Permanent Traffic Recorders.

**Standard Plan J-50.25-00 (formerly J-19) Weigh-In Motion Site Installation** – Details for the installation of Weigh-In Motion systems.

**Standard Plan J-50.30-00 (formerly J-20) Permanent Traffic Recorder & Weigh-In Motion Details** – Details for the installation of Permanent Traffic Recorders and Weigh-In Motion systems.

**Standard Plan J-60.05-00 Typical Grounding Details (formerly J-9a)** – Details for providing grounding requirements for electrical equipment.

**Standard Plan J-75.10-01 Signal Head Mounting Details Pole and Post Top Mountings** – Plan is revised to add requirements for the Signal Head Backplate.

**Standard Plan J-75.30-01 Miscellaneous Signal Details** – Plan is revised to add views of Visors used with signals.

**Standard Plan J-90.10-01 Pull Box** – Revised to add grounding requirements.

**Standard Plan J-90.20-01 Cable Vault** – Revised to add grounding requirements.

## **Section L**

**Standard Plan L-10.10-01 Wire Fence Types 1 & 2, and Wire Gates** – Add table showing Post and Rail sizing requirements.

**Standard Plan L-20.10-01 Chain Link Fence Types 3 and 4** – Revised to replace all references to tension cables with tension wires. Add clarification to Post sizing column in table. Add callout to provide knuckled selvage at top edge of fence fabric.

**Standard Plan L-30.10-01 Chain Link Gate** – Revised to replace all references to tension cables with tension wires.

**Standard Plan L-40.10-01 Glare Screen Type 1 Design A** – Revised to replace all references to tension cables with tension wires.

**Standard Plan L-40.15-01 Glare Screen Type 1 Design B** – Revised to replace all references to tension cables with tension wires.

**Standard Plan L-40.20-01 Glare Screen Type 2 (Chain Link with Slats)** – Revised to replace all references to tension cables with tension wires.

## **Section M**

Below is a portion of the summary composed by Ed Lagergren to accompany his distribution of these plans to a group of subject matter experts for a peer review;

“The main set of striping changes are to the on-connections. The on-connections now have a wide lane line on both sides of the neutral area and a dotted lane line that continues the wide lane line on the through lane right edge line. I did not show the optional normal width dotted extension of the right-hand edge line. I determined from the *Design Manual* and *Standard Plans* that the end of the wide lines is always greater than the 0.5B minimum on the 2009 MUTCD Figure 3B-9 C-Tapered Acceleration Lane. I would appreciate someone checking me on this. The dotted lane line ends at the theoretical gore or the last point at which you have the full ramp width. The dotted lane line on the parallel on connection M-1.80 also ends at the last point at which you have the full ramp width. ( It is extended from the previous version of the Standard Plan to make the end of the dotted lane consistent. )

The main change on the set of channelization plans is, I added the “Dotted Extension Line” across the entrance to the turn storage lane. Should I have not shown this also? I also revised the notes to align with the recent review of M-3.40-03.

The dotted line for Lane Drop Markings (WSDOT Drop Lane Line) was renamed Dotted Lane Line. We have had a WAC that changed the pattern of this line. I am now recommending we change to the MUTCD dimensions and discontinue the WAC.

Below is a list of the plans in this group.

**Standard Plan M-1.20-02 Ramp Channelization: Single Lane** – see summary

**Standard Plan M-1.40-02 Ramp Channelization: Two Lane** – see summary

**Standard Plan M-1.60-02 Ramp Channelization: Collector Distributor Road** – see summary

**Standard Plan M-1.80-03 Ramp Channelization: Parallel On & Weaving Section** – see summary

**Standard Plan M-2.20-02 Gore Area Marking Layouts** – see summary

**Standard Plan M-3.10-03 Left Turn Channelization** – see summary

**Standard Plan M-3.20-02 Left Turn Channelization: Reduced Tapers** – see summary

**Standard Plan M-3.30-03 Left Turn Channelization, Tee Intersection and Back-to-back Turn Lanes** – see summary

**Standard Plan M-3.40-03 Two-way Left Turn and Median Channelization** – see summary

**Standard Plan M-3.50-02 Double Left Turn Channelization** – see summary

**Standard Plan M-5.10-02 Right Turn Channelization** – see summary

**Standard Plan M-20.10-02 Longitudinal Marking Patterns** – see summary

**Standard Plan M-20.40-02 Longitudinal Marking Supplement with RPMs ~ Turn Lanes** – see summary

**Standard Plan M-20.50-02 Longitudinal Marking Substitution with Raised Pavement Markers** – see summary

**Standard Plan M-40.10-02 Guide Posts and Barrier Delineators** – Clarifications to notes required.

**Standard Plan M-24.50-00 Camera Pole Standard Details** - A drawing with details of pavement markings for directional traffic arrows for roundabouts has been available in our Plan Sheet Library since 2006. [Roundabout Traffic Arrows \(PM-3\)](#) The Design Standards unit working with the HQ Traffic Design office has developed this Standard Plan.

**Standard Plan M-24.60-03 Symbol Markings: Miscellaneous** – Revision is required to provide size/spacing requirements for Yield Line symbols based on use and speed. In addition, we added a new pavement marking symbol for locating electrical equipment (junction boxes, cable vaults, etc.) for locating purposes.

**Standard Plan M-60.10-01 Shoulder Rumble Strip Type 1 for Divided Highways** – revisions needed to align with MUTCD revisions to other plans.

**Standard Plan M-60.20-02 Shoulder Rumble Strip Types 2, 3, and 4 for Undivided Highways** – Plan has been revised to clarify the distance/quantity requirements shown in plan views for Types 2, 3, and 4.

**Standard Plan M-65.10-02 Center Line Rumble Strip** – The dimension shown above the traveled way on the left has been duplicated on the right side to depict this requirement is for both lanes.

**Standard Plan M-80.10-01 Traffic Letter and Numeral Applications** – delete redundancy of arrows in details.