

Design Standards Letter

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Section/Plan No.: P502.00R, P504.00E, P602.00D, P606.00AN, P606.01D, P608.10K, P612.20A, P616.10AC, P620.20, P703.10E, P703.11E, P703.12E, P703.13E, P703.14E, P703.40E, P703.41E, P703.42E, P703.43E, P703.44E, P703.80E, P703.81E, P703.82E, P703.83E, P703.84E, P730.00A, P901.85A, P902.40M, P902.80F, P903.02AF, P903.03AX, P903.05G, P903.06G, P903.07G, P903.08F

Subject: Supplemental Revisions to the Missouri Standard Plans for Highway Construction

Body

Questions concerning the distribution of the Supplemental Revisions to the Missouri Standard Plans for Highway Construction should be directed to General Headquarters, Keith L. Smith (573) 751-4659 or David Silvester (573) 526-2903.

These revisions will be effective with the January 2003 bid opening and are the beginning of a new six-month lead-time policy, replacing the previous three-month lead-time. Below are the revisions to the Missouri Standard Plans for Highway Construction since April 1, 2002.

NOTE	EXPLANATION
1	The following revisions are effective with the January 2003 bid opening.
STD. PLAN NO.	DESCRIPTION OF REVISION
502.00R	This standard drawing has been deleted. Standard Drawing 502.00 was not included in the Metric Standard Plans and primarily dealt with the 61'-6" joint spacing.
M504.00E	<i>Sheet 1 of 2.</i> In the Metric version, the dimensions of the sleeper slab were corrected to 1000 mm x 500 mm.
602.00D	<i>Sheet 1 of 2.</i> Lettering size on the Location Survey Right-of-Way diagram was revised. <i>Sheet 2 of 2.</i> The diagrams on this new sheet were moved from Sheet 1 of 1. In the Typical Location diagram, the Witness Posts adjacent to the Steel

<p>606.00AN</p>	<p>Right-of-Way Marker were removed. The symbols used on this diagram were changed to coordinate with the title sheet for project plans.</p> <p><i>Sheet 3 of 10.</i> The "Part Section Showing Type E Guardrail and Transition" diagram has been retitled "Part Section Showing Type E to Type A Guardrail Transition". A note has also been added stating Type E Guardrail post spacing shall be 6' 3" unless the Type E Guardrail is connected to a bridge anchor section. These changes are to emphasize the typical 6' 3" post spacing of thrie beam (Type E Guardrail). A new bid item has been created to accommodate Type E Guardrail with 6' 3" post spacing. An errata correction in the Lateral Placement of Type E Guardrail diagram increases the minimum distance from the obstacle to the rear of the guardrail to 27" (600 mm).</p> <p><i>Sheet 4 of 10.</i> Minor errata correction.</p> <p><i>Sheet 9 of 10.</i> Minor errata correction.</p>
<p>606.01D</p> <p>608.10K</p>	<p><i>Sheet 1 of 12.</i> Minor errata correction.</p> <p><i>Sheet 2 of 2.</i> As required by the Public Rights-of-Way Access Advisory Committee, truncated domes will be incorporated into curb ramps as a detectable warning. The large diagram on the left was revised and two small diagrams were added to provide information about the truncated domes.</p>
<p>612.20A</p>	<p>As a minor clarification, one attenuator was added to the diagram.</p>
<p>616.10AC</p>	<p><i>Sheet 1 of 5.</i> Sheet's subtitle renamed "Sign Mounting Requirements". Mounting details for U-channel, wood and perforated square steel tubing posts have been moved to Standard Drawing 903.03. A new General Note was added so that Standard Drawing 903.03 can be referenced for additional post installation information.</p> <p><i>Sheet 3 of 5.</i> The diagram "Speed Limit Assembly" has been retitled "Speed Limit and Strobe Light Assembly".</p> <p><i>Sheet 5 of 5.</i> A General Note has been added pertaining to aluminum Work Zone Fine signs on portable stands.</p>
<p>620.20</p>	<p><i>Sheets 1 through 4 of 4.</i> This new Standard Drawing is a general revision of the previous special sheet for Snowplowable Raised Pavement Markers.</p>
<p>703.10E</p> <p>703.11E</p>	<p><i>Sheets 1 through 3 of 3.</i> Minor errata corrections on Sheets 1 and 3 of 3. Corrected a B2 bar dimension in "Elevation of Wing" diagram of Sheet 2 of 3.</p> <p><i>Sheets 2 and 3 of 3.</i> Corrected a B2 bar dimension in "Elevation of Wing" diagram of Sheet 2 of 3. Minor errata correction on Sheet 3 of 3.</p>

703.12E	Minor errata correction.
703.13E	<i>Sheets 2 and 3 of 3.</i> Corrected a B2 bar dimension in "Elevation of Wing" diagram of Sheet 2 of 3. Minor errata correction on Sheet 3 of 3.
703.14E	<i>Sheets 2 and 3 of 3.</i> Corrected a B2 bar dimension in "Elevation of Wing" diagram of Sheet 2 of 3. Minor errata correction on Sheet 3 of 3.
703.40E	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the D2 bar note was also revised.
703.41E	<i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.
703.42E	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the D2 bar note was also revised.
	<i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.
703.43E	<i>Sheet 2 of 2.</i> Notes pertaining to design unit stresses were added.
703.43E	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the D2 bar note was also revised. Minor errata correction.
703.44E	<i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.
	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the D2 and D4 bar notes were also revised. Minor errata corrections.
	<i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.
703.80E	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the D2 bar note was also revised.
703.81E	<i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.
	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the D2 bar note was also revised.
703.82E	<i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.
	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added.
703.83E	<i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the

703.84E	<p>D2 bar note was also revised. Minor errata correction.</p> <p><i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.</p> <p><i>Sheet 1 of 2.</i> Notes pertaining to design unit stresses were added and the D2 and D4 bar notes were also revised. Minor errata corrections.</p> <p><i>Sheet 2 of 2.</i> Corrected B1 and B2 bar dimensions in "Elevation of Exterior Wing" and "Section Near Interior Wing" diagrams.</p>
730.00A	<i>Sheet 1 of 2.</i> Minor errata correction in the English version.
901.85A	Drawing renamed "Highway Lighting Symbols".
M902.40M	<i>Sheet 3 of 3.</i> Minor errata correction in the Metric version.
902.80F	<i>Sheet 2 of 2.</i> Updated the S15 (crosswalk) signs.
903.02AF	<p><i>Sheets 1 through 23 of 23.</i> Formerly comprising ten pages, this drawing now includes 23 pages. The new pages present the signing drawings in a more readable manner.</p> <p><i>Sheet 1 of 23.</i> Revision of the L-1 note to refer to other display methods besides screen print. Background Reflective Sheeting notes no longer refer to R1, the Type I sheeting.</p> <p><i>Sheets 2 through 18 of 23.</i> Background Reflective Sheeting notes no longer refer to R1, the Type I sheeting. Other minor errata corrections.</p>
903.03AX	<p><i>Sheet 1 of 7.</i> Originally enumerated Sheet 1 of 6. Some General Notes revised to refer to steel posts. An errata correction in the seventh General Note pertaining to the distance from the top of the footing to the hinge point.</p> <p><i>Sheet 2 of 7.</i> This new sheet includes mounting details for U-channel, wood and perforated square steel tubing posts from Standard Drawing 616.10. These mounting options should be considered by designers for permanent signs.</p> <p><i>Sheets 3 through 7 of 7.</i> Originally enumerated Sheets 2 through 6 of 6.</p>
903.05G	In the Elevation diagram, the FD/Slope equation was clarified and the reinforcing steel in the footing was corrected to show reinforcement the full height of the footing. The stirrups will now be #4 bars, shape 34. The reinforcing steel quantities were modified in the Estimated Quantities Footing table.
903.06G	In the Elevation diagram of the concrete base, the FD/Slope equation was clarified and the reinforcing steel in the footing was corrected to show reinforcement the full height of the footing. The stirrups will now be #4

	bars, shape 34. The reinforcing steel quantities were modified in the Estimated Quantities of Standard Footings table.
903.07G	In the Elevation diagram of the Double Arm Cantilever, the $(FB + FD)/(2 \text{ Slope})$ equation was clarified and the reinforcing steel in the footing was corrected to show reinforcement the full height of the footing. The stirrups will now be #4 bars, shape 34. The reinforcing steel quantities were modified in the Estimated Quantities table.
903.08F	The reinforcing steel in the footing was corrected to show reinforcement the full height of the footing. The stirrups will now be #4 bars, shape 34. The reinforcing steel quantities were modified in the Estimated Quantities table.

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Attachments