PORTABLE CONCRETE MEDIAN BARRIER TRANSITION

SWC09 WITH 1 FRS01 PER SIDE

SWC09 WITH 2 FRS01 PER SIDE

SWC09 WITH 3 FRS01 PER SIDE

12" [305] MIN ASPHALT PAD
24" [610] MIN BACKSIDE

64'-6 7/8" [19682]

TRAFFIC FLOW

TOP VIEW

TRAFFIC FLOW

ELEVATION VIEW

PERMANENT CONCRETE MEDIAN BARRIER

2" [51] MIN ASPHALT PAD
INTENDED USE

The Portable Concrete Median Barrier Transition system should be used where an F-shape portable concrete barrier system, placed on a 2” [51] min. thick asphalt pad, is placed adjacent and end-on to a permanent concrete median barrier system and where a transition is needed. The maximum dynamic deflection of this transition is 2.6 in. [67] with a working width of 24 7/8 in. [632]. The portable barriers should be anchored with 6 FRS01 driven pins in the first two portable barriers closest to the permanent barrier system, 4 FRS01 driven pins in the third portable barrier placed in the upstream and downstream holes, and 2 FRS01 driven pins in the fourth portable barrier placed on the upstream end of the portable barrier. The Portable Concrete Median Barrier Transition has been crash tested under TL-3 conditions using test designation 3-11, and its safety performance was found acceptable according to the MASH criteria.

COMPONENTS

Unit Length = 64'-6 7/8" [19682]

<table>
<thead>
<tr>
<th>DESIGNATOR</th>
<th>COMPONENT</th>
<th>NUMBER</th>
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<tbody>
<tr>
<td>-----</td>
<td>Permanent Concrete Barrier</td>
<td>-</td>
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<tr>
<td>FRS01</td>
<td>Driven Pins</td>
<td>18</td>
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<tr>
<td>RTE01b</td>
<td>Thrie-Beam Terminal Connector</td>
<td>4</td>
</tr>
<tr>
<td>FMW02</td>
<td>Portable Concrete Barrier Connector Pin</td>
<td>3</td>
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<tr>
<td>RTM02a</td>
<td>Thrie Beam 12.5 ft long-12 Gauge</td>
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<tr>
<td>FBB01</td>
<td>D5/8&quot; [16] x 1 1/2 [38] long Guardrail Bolt and Nut</td>
<td>48</td>
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<tr>
<td>PDB19</td>
<td>TCBT Blockout</td>
<td>1</td>
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<tr>
<td>FMM08</td>
<td>RedHead Multi-Set II Drop-In Anchor D3/4&quot; [19]</td>
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<tr>
<td>FBX20a</td>
<td>Hex Bolt D3/4&quot; [19]-10x5 1/2&quot; [140]x1 3/8&quot; [35]</td>
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<tr>
<td>FBX01</td>
<td>Powers Fasteners Wedge-Bolt D5/8&quot; [16]x4&quot; [102] long</td>
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<tr>
<td>RET01</td>
<td>TCBT Cap</td>
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<tr>
<td>FWC20a</td>
<td>Plain Round Washer D7/8&quot; [22]</td>
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<tr>
<td>SWC09</td>
<td>Portable F-Shape Concrete Barrier Element</td>
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</tbody>
</table>

ACCEPTANCE

PORTABLE CONCRETE MEDIAN BARRIER TRANSITION

FBX20a-1 3/4" LONG WITH FWC20a AND FMM08 (TYP)

DETAIL A

FRS01 (TYP)
ASPHALT PAD

FMW02

RTM02a

RET01

86 3/4" [2204]

4" [102]
FRONT VIEW

FBX02-6" [152] LONG (TYP)

12 FBB01 (TYP)
PDB19

RTE01b

FMW02

RTM02a

31" [785]

71 1/2" [1816]
BACK VIEW

FBX20a-5 1/2" [140] LONG WITH FWC20a AND FMM08 (TYP)

DETAIL B

MwRSF

SWC16

SHEET NO. DATE:
3 of 7 8/14/2012
REFERENCES


CONTACT INFORMATION
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PORTABLE CONCRETE MEDIAN BARRIER TRANSITION

SWC16

MwRSF
NOTE: THE 32" [813] TEMPORARY F-SHAPED BARRIER IS SHOWN AS THE FRONT BARRIER.
Guidelines for attaching to permanent concrete median barriers besides the CA single-slope median barrier:

1. If the permanent median barrier is 32 in. (813 mm) high, the sloped, steel transition cap is not required for the transition. For barriers with heights greater than 32 in. (813 mm), the steel transition cap is required. The cap design can be adjusted for different height and shape barriers as long as adjusted cap provides equivalent slope, permanent barrier coverage, barrier overlap, structural capacity, and anchorage as the original design.

2. Alignment of the temporary barrier system with the permanent barrier may also change when the transition is applied to different permanent barrier geometries. When attaching to a single-slope barrier profile, the slope break point between the toe of the barrier and the main face of the barrier should be aligned flush with the oncoming traffic side of the single-slope barrier. For safety shape barriers, the toe of the temporary barrier should be aligned flush with the toe of the oncoming traffic side of the median barrier. Vertical median barriers require that the toe of the temporary barrier segments on the reverse direction traffic side be aligned with the base of the permanent barrier on the reverse direction traffic side. These alignments will prevent vehicle snag for oncoming traffic on the permanent median barrier while preventing snag on the toe of the barrier for reverse direction impacts.

3. The thrie beam sections that span the gap between the end of the temporary barrier and the permanent median barrier should be used in all instances except when the transition leads into the bolt-through tie-down system or the asphalt pin tie-down system are applied.