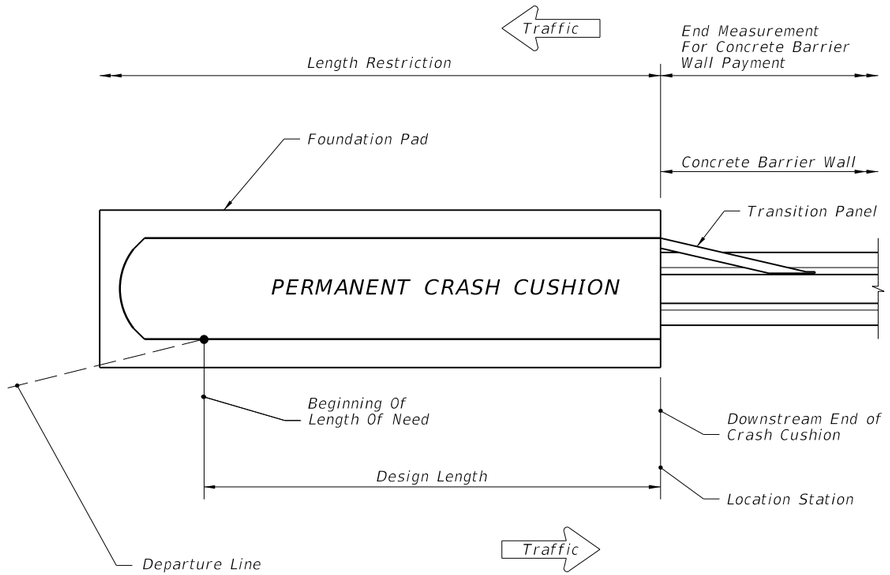

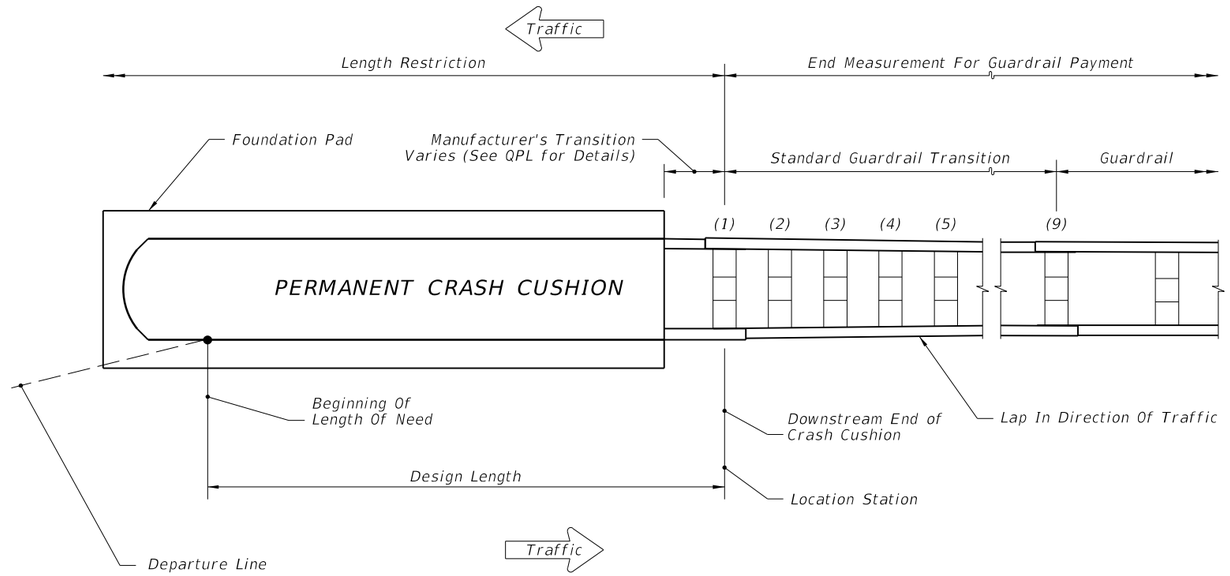

Concrete Barrier Wall Applications		
Design Length (ft.)	Design Speed (mph)	Crash Test Level
6.00	35	TL-2
6.00	40	
6.00	45	
9.00	50	TL-3
12.00	55	
15.00	≥ 60	

GENERAL NOTES

1. Index 430 is applicable for permanent crash cushion installations that shield the ends of Concrete Barrier Wall or Guardrail, only.
2. Design Length is based on a given design speed and the shortest Crash Cushion available on the Qualified Products List (QPL).
3. For High Speed Facilities with a Design Speed greater than 60 mph, use a TL-3 Crash Cushion.
4. Assemble and install Crash Cushions according to the limitations noted on the Qualified Products List (QPL) webpage, the manufacturer's specifications, and the applicable crash cushion drawings posted on the QPL.
5. When subjected to reverse direction hits, construct Transition Panels from Concrete Barrier Walls to Crash Cushions; for additional details refer to the applicable crash cushion drawings on the QPL.
6. Galvanize metallic components to meet the requirements for Steel Guardrail, Section 967 of the Standard Specifications for Road and Bridge Construction.
7. For Guardrail Applications, construct the Manufacturer's Transition between the Permanent Crash Cushion and the Standard Guardrail Transition; refer to all Standard Guardrail Transition details of this index.
8. For additional information on the End Measurement for Guardrail Payment, refer to the Standard Specifications for Road and Bridge Construction, Section 536.
9. A yellow Type I Object Marker shall be centered 3' in front of the crash cushion nose. Mounting hardware shall be in conformance with Section 993 of the Standard Specifications for Road and Bridge Construction.

   As an option, the contractor may install reflective sheeting on the nose of the crash cushion. The sheeting to be used must be solid yellow, Type III or better and must be a product listed on the Department's Qualified Products List (QPL). The sheeting to be applied to the nose of the crash cushion shall be a minimum of 360 square inches with a minimum height of 15 inches.

Guardrail Applications		
Design Length (ft.)	Design Speed (mph)	Crash Test Level
8.75	35	TL-2
11.50	40	
11.50	45	
14.25	50	TL-3
18.75	55	
18.75	≥ 60	

PERMANENT CRASH CUSHION APPLICATIONS

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