Section of Existing Parallel Wingwalls Less Than 12" Thick

Roadway Elevation of T66 Rail Retrofit

Section A-A

Showing parapet retrofit rail as an example. Other parapet rails are similar.

See appropriate concrete curb rail standard for anchorage reinforcing and placement.

1. Retained recycled tire rubber

Existing Wingwall

Clean and extend existing vertical reinforcing 10" Min into new construction.

Clean surface for painting concrete against.

Existing Wingwall

See appropriate concrete curb rail standard for anchorage reinforcing and placement.

1. Retained recycled tire rubber

Traffic Side

Reinforcing Steels

Splicing of Existing

Traffic Rail (Para

10" Dia

BARS EA1 (#5)

Showing one complete bar.

BARS EA2 (#5)

Showing one complete bar.

BARS EB (#6)

Showing one complete bar.

Minimum adhesive anchor embedment depth is 5". Anchor adhesive chosen must be able to achieve a basic bond strength in tension, tba, of 20 kips. Anchor adhesive chosen must be able to achieve a basic bond strength in tension, tba, of 20 kips. Submit signed and sealed calculations or the manufacturer's published literature showing the proposed anchor adhesive's ability to develop this load to the Engineer for approval prior to use. Anchor installation, including hole size, drilling, and clean out, must be in accordance with Item 450, "Handling".

Increase by amount of existing overtopping rail thickness, net to 2 1/2" or less at toe of rail. Install upset at a 1:10 or flatter slope with shoulder width a thickness of 2" or less at toe of rail.

Space (4) stirrups at 8" Min. (Space 3 1/2" longitudinally from spliced ends of wingwall)

See appropriate standard for reinforcing steel.

Face of rail and/or toe of rail. Location or placement of rail retrofit must match face of rail and/or toe of rail on bridge.

Space (4) bars at 8" Min. with 3" end cover, spaced at (4) stirrups.

Do not cast rails or parapet rails on top of overlays/seal coats.

Showing intersections of anchor bars in a rail retrofit condition.

See appropriate rail standard for details and notes not shown.

See TxDOT Addendum or C66 Rail Section in "Rail Retrofit Section on Concrete Slabs using Adhesive Anchors".

NOTE: This guide may not be used as a standard. It contains recommendations and guidelines for retrofits of T66 Rail and C66 Rail. It is intended to provide a general overview of the process and should not be considered as a comprehensive guide. Always consult with a qualified professional for specific project requirements.