

BRIDGE DESIGN STANDARD PRACTICES

The following standard practice has been established by the Bridge Design Standard Practices Committee. Based on the availability of new quick cure primers, and because of frequent bond failures involving sheet membrane, the following should be incorporated into all projects currently in design.

BRIDGE DECK OVERLAYS

The Department's standard system for overlaying bridge decks on both new construction and rehabilitation shall be "Membrane Waterproofing (Woven Glass Fabric)" overlaid with 25 mm (1") of "Bituminous Concrete (Class 2)" followed by 40 mm (1-1/2") of "Bituminous Concrete (Class 1)." The attached Recurring Special Provision shall be included in all projects using "Membrane Waterproofing (Woven Glass Fabric)"

The 25 mm of Class 2 pavement is durable enough to be driven on for some time before the placement of the final 40 mm of Class 1 pavement. The actual length of time depends on the amount and type of traffic, but there should be sufficient time to use the Class 2 pavement as a temporary wearing surface during stage construction projects.

Membrane Waterproofing (Sheet) shall generally not be specified but may be used when specifically requested by the Office of Construction to accommodate unusually restrictive construction schedules. Where "Membrane Waterproofing (Sheet)" is used, it shall be overlaid with 25 mm (1") of "Bituminous Concrete (Class 12)" followed by 40 mm (1-1/2") of "Bituminous Concrete (Class 1)."

It should be noted that the final Class 1 wearing surface should be placed as soon as possible since the Class 12 pavement is not designed to take direct wheel traffic.