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TO: CONSULTANT STRUCTURE DESIGN STAFF

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SUBJECT: MECHANICAL ANCHORS, INSERT SHEETS

Mechanical Anchors

WisDOT Bureau of Structures (BOS) is placing a moratorium on the use of mechanical anchors. BOS has determined that mechanical anchors are not acceptable for the following reasons:

- The presence of rebar within a drilled hole has a detrimental effect on a mechanical anchor and requires the drilled hole to be abandoned
- The effectiveness of mechanical anchors are more sensitive to installation procedures
- There are a number of different types of mechanical anchors with different means and effectiveness of anchorage
- Some types of mechanical anchors can only be used once, making it impossible to remove and replace railings/fence in the future
- Spacing and edge distance requirements are more restrictive for mechanical anchors
- Mechanical anchors are more susceptible to corrosion and the drilled holes are more susceptible to spalling due to the collection of salt water within the hole

The moratorium will become permanent policy unless further investigation addresses the concerns listed above.

Insert Sheets

The following bridge insert sheets have been updated and posted:

SS32APP.DGN

- Removed R511 bar bend dimension and length from "Bill of Bars". To be determined by the engineer.

SS36APP.DGN

- Corrected R509 bar length in "Outside Elevation" Detail
- Removed R514 bar bend dimension and length from "Bill of Bars". To be determined by the engineer.

SS42APP.DGN

- Corrected R502, R505, R506 & R509 bar lengths in "Bill of Bars"
- Corrected R503, R505 bar quantities
- Added "Bar Series Table" for transition section
- Removed R514 bar bend dimension and length from "Bill of Bars". To be determined by the engineer.

SS56APP.DGN

- Corrected R502 bar length in "Bill of Bars"
- Corrected R501 & R502 bar bend diagram lengths
- Removed R505 bar bend dimension and length from "Bill of Bars". To be determined by the engineer.

Note: The levels for Expansion Abutments on these insert sheets (SS32APP, SS36APP, SS42APP SS56APP) have not yet been updated for a 1'-0" wide paving notch and 1'-8" paving block. Always go to our website for the latest version.