

South Dakota DOT – Responses to State Report Questions

Questions for State Reports

1. Has your state built concrete overlays? - YES: unbonded overlay of concrete, Bonded overlay of asphalt (thin whitetoppings), Unbonded overlay of asphalt (thick whitetoppings), and many years ago tried a research section of bonded overlay of concrete.
2. If yes:
 - a. What bid items were used?
 - Asphalt for bondbreaker (tons)
 - PCCP inches (yd²)
 - Dowels per each
 - b. What efforts were made to re-establish a profile grade?
 - Used Asphalt bondbreaker
 - c. What has been your experience with overruns in concrete mix quantities?
 - Since SD has not used any pay by the yd³ its hard to know for sure.
 - When looking at end of day yield numbers for yd² it's close to normal construction typically, some rutting of asphalt on whitetopping projects may have contributed to poor yield on a project.
 - d. How do you typically manage traffic on two-lane and four-lane roadways?
(Please furnish typical sections if possible.)
 - 2 lane: pilot car & flaggers as needed with shoulder strengthening on some projects.
 - 4 lane: switched traffic head to head on other lanes.
 - e. How do you design the overlay thickness?
 - AASHTO 1993 basically but we used some CP Tech center options for the last one.
 - f. Is your state applying an alternate bidding approach to concrete and HMA overlays?
 - No
3. If no:
 - a. What are the barriers to trying a concrete overlay?
 - Determining acceptable equivalency factors for both industries. Design methodologies are not equivalent either, more design effort is likely put into a concrete overlay.
 - b. What would help to address those barriers?
 - Unsure.