

MDOT BRIDGE DECK OVERLAY CONSTRUCTION INSPECTION CHECKLIST

Control Section	Project No.	Date
Structure No.	Structure Location:	
Contractor:		Concrete Supplier:
Inspector:		Engineer:

A. Prior to Hydrodemolition Initials

- Contractor submit Hydrodemolition pH Control Plan _____
- Contractor furnish engineer a copy of MDEQ Groundwater Discharge Permit _____
- Review Hydrodemolition pH Control Plan and Checklist _____
- Scarify bridge deck surface as shown on the plans _____
- Place environmental controls (deck drains covered, downspouts plugged) _____

B. During Hydrodemolition

- Calibrate Hydrodemolisher per Section 712 of the Construction Manual _____
- Ensure contractor following pH Control Plan _____
- Ensure contractor performing pH sampling, testing _____
- Ensure contractor neutralizing hydrodemolition runoff if necessary _____
- Ensure contractor submitting samples for laboratory testing _____
- Ensure contractor recording test results on the Hydrodemolition Log form _____
- No vacuum trucks running on deep hydro areas _____
- Contractor cleaning up debris _____
- Sound deck prior to second pass _____
- Contractor performing second pass _____

C. Silica Fume Modified Concrete (SFMC)

- Contractor submitted concrete QC plan per subsection 701.03.F.1 _____
- Concrete supplier and contractor concrete testing personnel identified _____
- Approved concrete mix design(s) submitted, including aggregate correction factor _____
- Approved 4 cyd for silica fume modified concrete trial batch _____

D. Latex Modified Concrete

- Calibrated mobile mixer for latex modified concrete _____
- Approved mix design for latex modified concrete overlay mixture _____
- Approved materials for latex modified concrete _____

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E. Prior to Pour

Initials

- Contractor to submit for approval of equipment to be used to determine relative humidity and wind velocity at site per subsection 706.03.H.2 _____
- Ensure the contractor furnishes adequate fogging equipment that is on site and working properly _____
- Inspect forms and check for grade, straightness, tightness, and location _____
- Ensure epoxy coated steel reinforcement is properly stored and covered prior to placement to prevent damage from sunlight _____
- Inspect steel reinforcement, including bar chair location and spacing _____
- Verify bar size, quantity, location, spacing, clear cover laps, and ties of transverse, longitudinal and vertical steel reinforcement. Record quantities on *Form 1138, Bridge Reinforcing Computations* _____
- Repair epoxy coating resteel per subsection 706.03.E. 8. Verify product on the qualified product list per subsection 905.03. Record product on IDR _____
- Ensure the bulkheads for construction joints are in place, secure, and at the correct elevation. Check contractor's grades and verify during the dry run. _____
- Perform dry run per subsection 706.03.M.1 and record depth measurements on *Form 1131, Bridge Decks Concrete Depth Measurement*. Note locations. _____
- Ensure vibrators have rubber-coated heads per subsection 706.03.H.1 _____
- Ensure contractor furnishes a 10 foot straightedge per subsection 706.03.M.1 _____
- Ensure the burlap has been soaking a minimum of 12 hours before the pour, per subsection 706.03. N.b., and excess water has been removed. _____
- Ensure the equipment to determine relative humidity, temperature, and wind velocity is on site and working properly. Record evaporation rate on *Form 1174A, Inspector's Report of Concrete Placed* _____
- Ensure the bridge deck is free from debris per subsection 706.03.H.1 _____
- Wet the deck surface one hour before placing the overlay mixture. _____
- Ensure air temp and existing concrete deck are at least 40 degrees and rising _____
- Issue *Form 1125, Permit to Place* _____

F. During the Pour

- For latex modified concrete, brush the initial layer of mixture onto the wetted prepared surface _____
- Complete *Form 1174A, Inspector's Report of Concrete Placed* including Aggregate Correction Factor _____
- Ensure contractor is performing QC testing, including yield tests _____
- For silica fume, verify concrete delivery tickets match the concrete mix design _____
- Perform concrete QA testing _____
- Test silica fume modified concrete at the pump discharge and correlate to testing at the concrete truck, according to MTM 207 _____
- Record elapsed time interval on every delivery ticket between charging the mixer and the placement of the concrete. Sign the concrete delivery tickets. _____
- Vibrator with rubber coated heads being used within 15 minutes of placement. _____
- Ensure contractor does not over vibrate or over finish the concrete. _____
- Ensure the concrete does not freefall more than 6 inches above the resteel _____

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F.	<u>During the Pour (continued)</u>	<u>Initials</u>
•	Ensure contractor checks deck tolerance with a 10 foot straightedge both longitudinally and transversely	_____
•	Ensure the contractor is fogging during placement of silica fume modified concrete	_____
•	Inspect texturing per subsection 706.03.M.	_____
•	Verify the wet cure (burlap, soaker hoses, polyethylene) is being applied at the appropriate time	_____
•	Verify the low temperature protection was applied as necessary per 706.03.J2.b.	_____
G.	<u>After the Deck Pour</u>	
•	For silica fume modified concrete, verify the wet cure is maintained for seven days. Check deck to verify soaker hoses are working and covering the entire deck.	_____
•	For latex modified concrete, verify the wet cure is maintained for two days and two days dry. Check deck to verify soaker hoses are working.	_____
•	Ensure that contractor waits a minimum of 15 hours to strip bulkheads after completion of the pour.	_____
•	Inspect deck tolerance 1/8 inch in 10 foot with 10 foot straightedge prior to acceptance.	_____