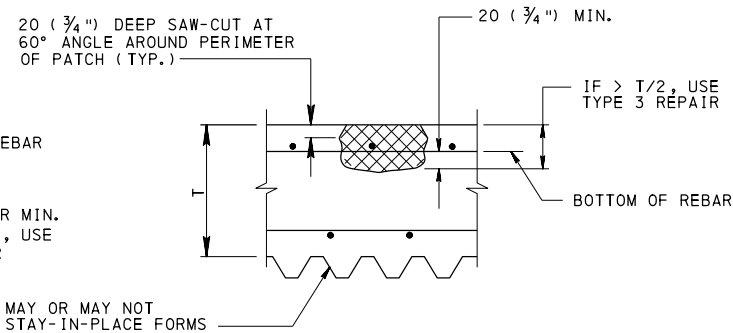


DECK REPAIR TYPE 1

** TYPE 1 REPAIR IS TO BE RARELY USED.
USE TYPE 2 REPAIRS IN MOST SITUATIONS.

DECK REPAIR TYPE 1 NOTES:

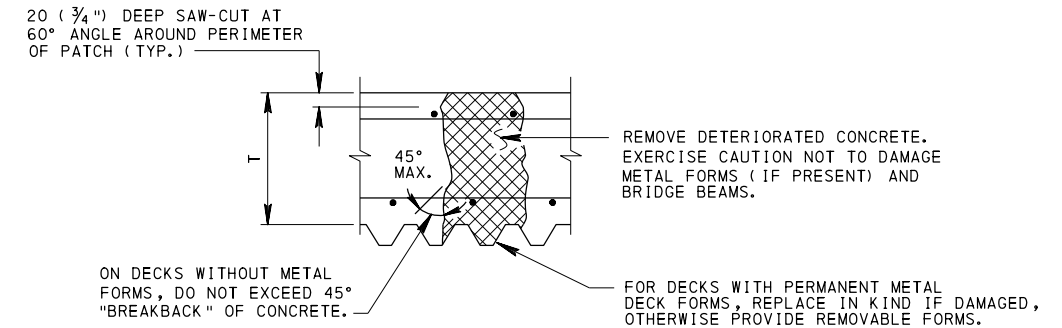
1. BRIDGE DECKS WITH A SINGLE LAYER OF REINFORCEMENT ARE SIMILAR (ADJ. BOX BEAMS).
2. DECK REPAIR TYPE 2 OR TYPE 3 MAY BE REQUIRED WITHIN THE AREA OF A DECK REPAIR TYPE 1.



DECK REPAIR TYPE 2

DECK REPAIR TYPE 2 NOTES:

1. DECK REPAIR TYPE 3 MAY BE REQUIRED
WITHIN THE AREA OF A DECK REPAIR TYPE 2.



DECK REPAIR TYPE 3

GENERAL NOTES

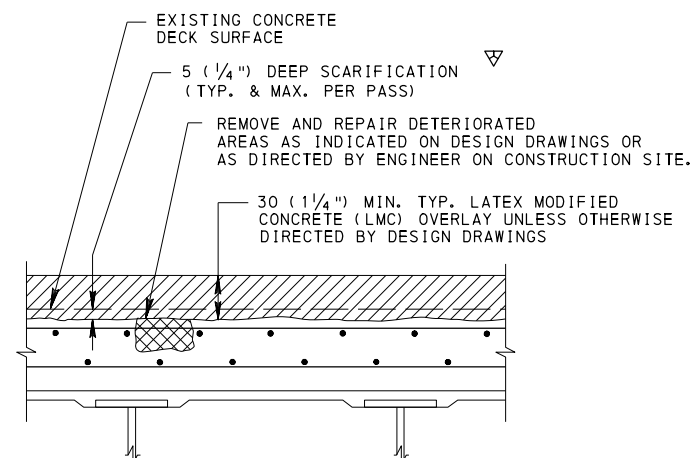
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. U.S. CUSTOMARY UNITS IN () PARENTHESES.
2. PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH PUBLICATION 408.
3. PROVIDE REINFORCEMENT BARS CONFORMING TO THE REQUIREMENTS OF ASTM A 615M, A 616M OR A 706M.
4. PROVIDE LAP SPLICE LENGTHS AND EMBEDMENT LENGTHS IN ACCORDANCE WITH BC-736M.
5. CLEAN ALL EXISTING REINFORCEMENT BARS TO BE RETAINED WITH A WIRE BRUSH OR SAND BLAST, STRAIGHTEN AND COAT WITH AN APPROVED EPOXY PAINT FOR EPOXY COATED EXISTING REINFORCEMENT STEEL OR NEAT CEMENT FOR (NON EPOXY COATED) EXISTING REINFORCEMENT STEEL.
6. PROVIDE EPOXY COATED REBARS AS REQUIRED. REMOVE AND REPLACE IN KIND (EXCEPT ALWAYS USE EPOXY COATED) ALL PORTIONS OF DAMAGED OR HEAVILY CORRODED REINFORCEMENT BARS BY SATISFACTORILY SPLICING TO THE REMAINING REINFORCEMENT BARS.
7. APPLY EPOXY BONDING COMPOUND CONFORMING TO THE REQUIREMENTS OF SECTION 1040.3(c) 5 OF PUB.408.
8. CONSTRUCTION, EQUIPMENT, SURFACE PREPARATION AND PATCHING MATERIAL FOR CONCRETE BRIDGE DECK REPAIR MUST CONFORM TO SECTION 1040 OF PUB.408.
9. CONSTRUCTION, EQUIPMENT, SURFACE PREPARATION, PLACING AND FINISHING FOR LATEX MODIFIED CONCRETE OVERLAY MUST CONFORM TO SECTION 1042 OF PUB.408.
10. TYPE OF REPAIRS DEPICTED ON THIS STANDARD ASSUME THAT THE STRUCTURAL INTEGRITY OF THE DECK IS NOT COMPROMISED BY THE EXTENT OF THE REPAIRS.
11. IF REPAIR BEAMS ARE DAMAGED DURING DECK REPAIR, BEAMS MUST BE REPAIRED OR REPLACED AT NO EXPENSE TO THE DEPARTMENT.

LEGEND

T = THICKNESS OF CONCRETE DECK SLAB.

 - REMOVE DETERIORATED CONCRETE.

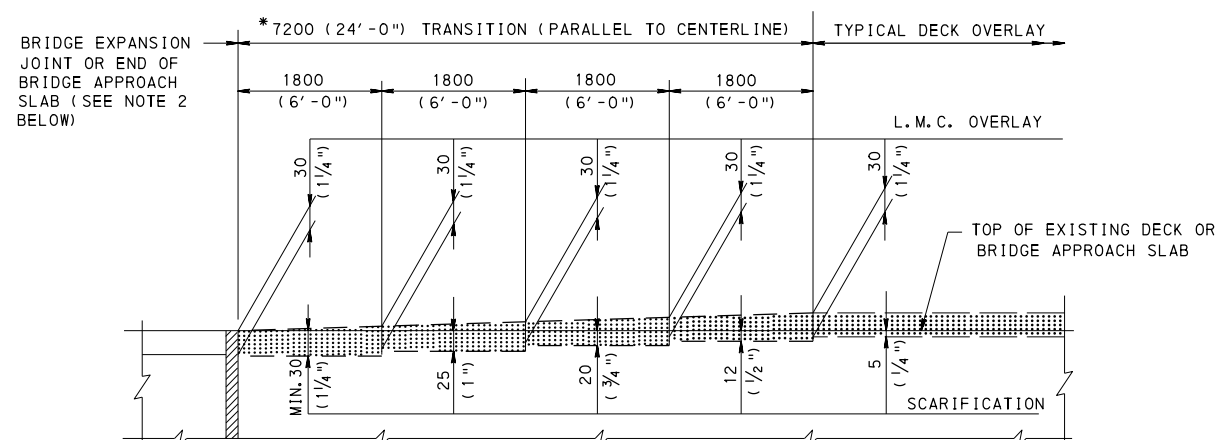
NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES
MUST BE USED ON PLANS. METRIC AND
ENGLISH VALUES SHOWN MAY NOT BE MIXED.



DETAILS FOR
LATEX MODIFIED CONCRETE OVERLAY

(TRANSVERSE SECTION)

▽ IF DEEPER SCARIFICATION IS NEEDED,
SCARIFY IN MULTIPLE PASSES.



VERTICAL TRANSITION DETAIL FOR
30 (1¼ ") LATEX MODIFIED CONCRETE BRIDGE DECK OVERLAY

(LONGITUDINAL SECTION)

(ADJUST SCARIFICATION FOR OVERLAY THICKNESS OTHER THAN 30 (1 1/4"))

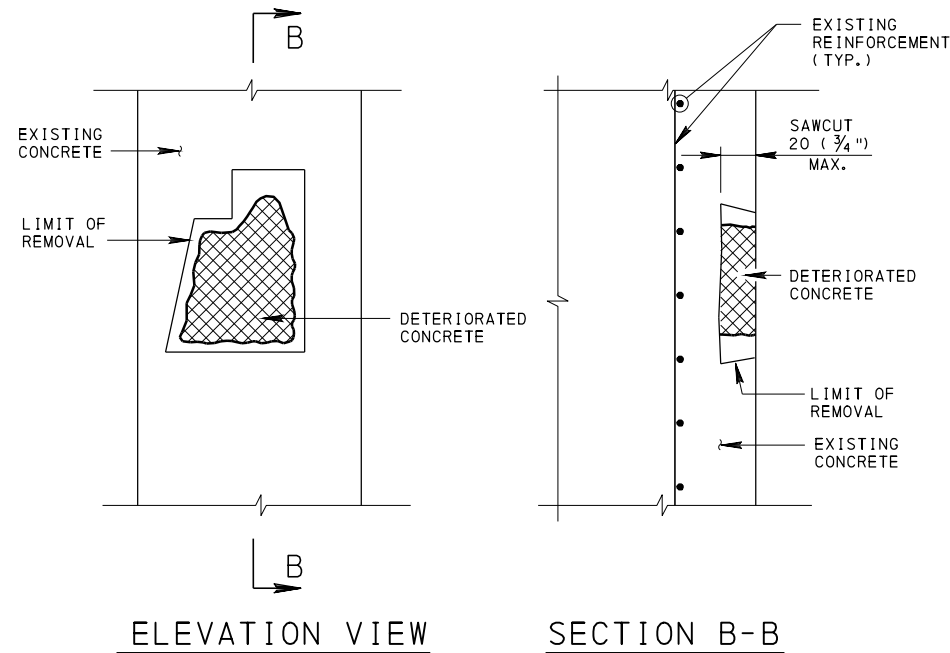
*TRANSITION LENGTH MORE THAN 7200 (24'-0") REQUIRES DISTRICT BRIDGE ENGINEER'S APPROVAL.

NOTE:

1. PROVIDE THE TRANSITION ENTIRELY ON THE BRIDGE APPROACH SLAB, IF PRESENT.
2. IF A FLEXIBLE APPROACH PAVEMENT (BITUMINOUS) EXISTS, PROVIDE ADDITIONAL BITUMINOUS WEARING SURFACE FOR A SMOOTH TRANSITION TO THE BRIDGE AND MAINTAIN CONSTANT DEPTH ON THE LATEX OVERLAY.

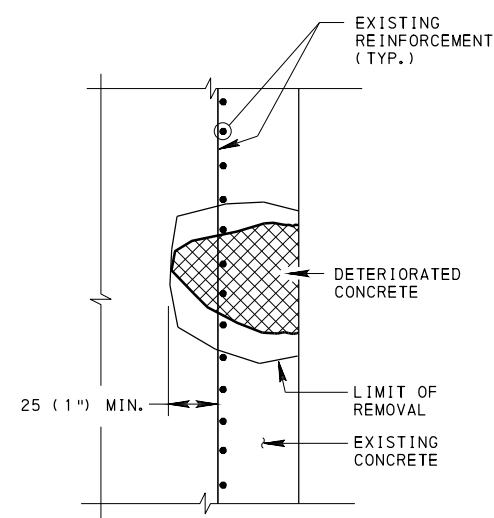
DECK REPAIRS AND LATEX MODIFIED CONCRETE OVERLAY

		RECOMMENDED OCT.26, 2010	RECOMMENDED OCT.26, 2010	SHEET 1 OF 2
BC-736M	REINFORCEMENT BAR FABRICATION DETAILS	<u>Thomas P. Maciore</u> CHIEF BRIDGE ENGINEER	<u>Brian J. Thomas</u> DIRECTOR, BUREAU OF DESIGN	BC-783M
REFERENCE DRAWINGS				



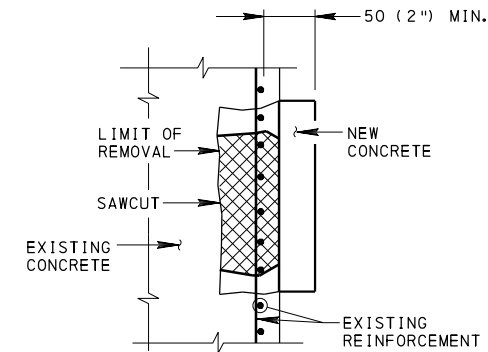
CONCRETE REPAIR TYPE 1

NOTE: REPAIR TYPE 1 IS USED WHEN DEPTH OF DETERIORATED CONCRETE IS LESS THAN OR EQUAL TO 20 (3/4").



CONCRETE REPAIR TYPE 2 EXISTING REINFORCEMENT

NOTE: CONCRETE REPAIR TYPE 2 DETAIL FOR AREAS WITH EXISTING REINFORCEMENT.



NOTE: CONCRETE REPAIR TYPE 2 DETAIL FOR AREAS WITH EXISTING REINFORCEMENT HAVING INADEQUATE COVER.

REINFORCED CONCRETE REPAIR TYPE 1 NOTES:

1. SQUARE OFF DETERIORATED CONCRETE TO SOUND CONCRETE WITH A SAWCUT OF 20 (3/4") MAXIMUM.
2. REMOVE ALL LOOSE AND DELAMINATED CONCRETE TO PROVIDE A SOUND BOND BETWEEN EXISTING CONCRETE AND EPOXY MORTAR.
3. APPLY A RAPID HARDING CONCRETE PATCHING MATERIAL FROM A MANUFACTURER LISTED IN SECTION 679.2 (e) OF PUB. 408, IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

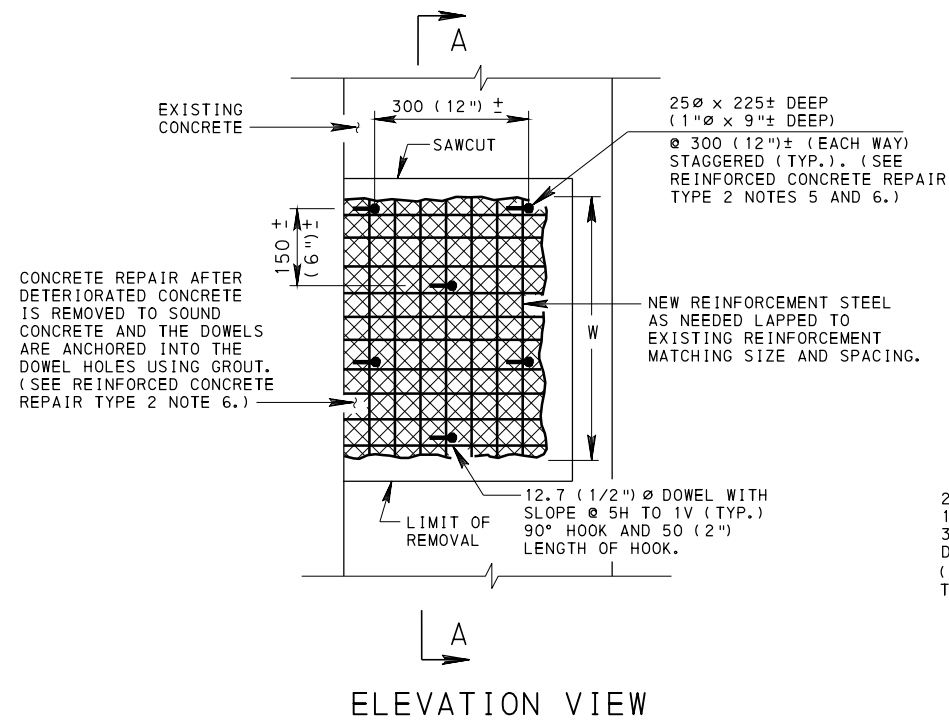
REINFORCED CONCRETE REPAIR TYPE 2 NOTES:

1. SQUARE OFF DETERIORATED CONCRETE TO SOUND CONCRETE WITH A SAWCUT OF 20 (3/4") MINIMUM BUT NOT TO THE DEPTH OF THE REINFORCEMENT STEEL.
2. REMOVE ALL LOOSE AND DELAMINATED CONCRETE TO PROVIDE A SOUND BOND BETWEEN EXISTING CONCRETE AND NEW CONCRETE.
3. IF DETERIORATED CONCRETE EXTENDS BEYOND THE PRIMARY REINFORCEMENT, REMOVE THE CONCRETE TO AT LEAST 25 (1") BELOW THE REINFORCEMENT.
4. APPLY AN EPOXY BONDING COMPOUND BETWEEN THE OLD AND THE NEW CONCRETE.
5. W REPRESENTS LEAST DIMENSION OF DETERIORATED CONCRETE.
6. USE DOWELS ONLY WHEN W DIMENSION OF DETERIORATED CONCRETE IS GREATER THAN 600 (2'-0") AND NEW OR EXISTING REINFORCEMENT CANNOT ADEQUATELY BE DEVELOPED BY LAPPING WITH EXISTING REINFORCEMENT.
7. WIRE MESH MAY BE SUBSTITUTED FOR NEW REINFORCEMENT IF INDICATED ON DESIGN DRAWINGS.

LEGEND

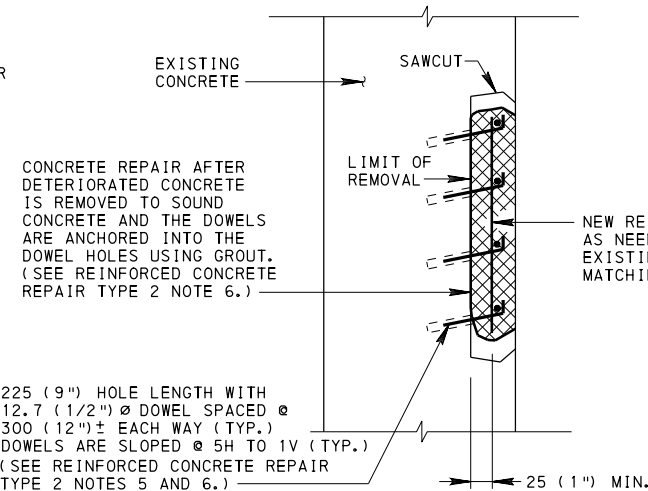
 - REMOVE DETERIORATED CONCRETE.

NOTE: EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.



CONCRETE REPAIR TYPE 2 NEW REINFORCEMENT

NOTE: REPAIR TYPE 2 IS USED WHEN DEPTH OF DETERIORATED CONCRETE IS GREATER THAN 20 (3/4").



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF DESIGN

STANDARD
REINFORCED CONCRETE REPAIR

RECOMMENDED OCT. 26, 2010
Thomas P. Macione
CHIEF BRIDGE ENGINEER

RECOMMENDED OCT. 26, 2010
Brian S. Thompson
DIRECTOR, BUREAU OF DESIGN

SHEET 2 OF 2
BC-783M