



Jim McMillan, PE

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

MEMORANDUM TO: Roadway Design Project Engineers
Roadway Design Project Design Engineers
Division Design Construction Engineers

FROM: Jay A. Bennett, PE
State Roadway Design Engineer

SUBJECT: Bridge Approach Fill Details
(Cored Slab Bridge & Box Beam Bridges – Subregional Tier)

DATE: July 1, 2008

In accordance with the Subregional Tier Guidelines for Bridge Projects the following guidelines will be followed for approach fill under bridge approach slabs.

A new detail in lieu of standard (442D11) for constructing approach fills under bridge approach slabs has been developed. This detail will be used for subregional tier bridges in the Mountain and Piedmont regions. (An occasional subregional tier project in these regions may still require the use of the current standard drawing for reinforced bridge approach fills (422.10)). All subregional tier Coastal Plain projects will use the current standard for reinforced bridge approach fills (422.10). If you have any questions about which type of approach fill to use, please contact Gichuru Muchane, Structure Design Unit, at 919-250-4048.

There is a new pay item and special provision. The new pay item, Bridge Approach Fill – Sub Regional Tier, Sta. ___ - LS, has been added to the pay item list. The pay item is Lump Sum. Project Services has the special provision ready for inclusion on the appropriate projects.

The use of the detail in lieu of standard (442D11) is effective with the November 18, 2008 letting. Please review and coordinate the Bridge Approach Fill/Reinforced Bridge Approach Fill requirements and pay items with the Structure Design Squad Leaders.

If you have any question regarding this information, please contact Jay A. Bennett, PE at 919-250-4016.

JAB
Attachments
cc: w/attachment

Art McMillan, PE
Jon Nance, PE
Greg Perfetti, PE
Njoroge Wainaina, PE
Ron Allen, PE

Norma Smith
Scott Blevins, PE
Dwayne Sykes, PE
Cynthia Perry, PE
Joel Howerton, PE

Gichuru Muchane, PE
Tom Drda, PE, FHWA
Mike Robinson, PE
Dan Holderman, PE
Randy Garris, PE



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

MEMORANDUM TO: Project Engineers
Project Design Engineers

FROM: G. R. Perfetti, P.E.
State Bridge Design Engineer

DATE: May 1, 2008

SUBJECT: Sub-Regional Tier Bridge Approach Slabs and Approach Fills

STRUCTURES

ROADWAY DESIGN UNIT

MAY 01 2008

<input checked="" type="checkbox"/> ALLEN	<input checked="" type="checkbox"/> BLUMS	<input checked="" type="checkbox"/> SYKES
<input checked="" type="checkbox"/> BREW	<input checked="" type="checkbox"/> CHOUER	<input checked="" type="checkbox"/> HOUSER
<input checked="" type="checkbox"/> LOVERING	<input checked="" type="checkbox"/> D. TAYLOR	<input checked="" type="checkbox"/> GOODNIGHT
<input checked="" type="checkbox"/> J. MOORE	<input checked="" type="checkbox"/> WARE	<input checked="" type="checkbox"/> BEER
<input checked="" type="checkbox"/> B. MOORE	<input checked="" type="checkbox"/> SECRETARY	<input checked="" type="checkbox"/> THOMAS
<input checked="" type="checkbox"/> BLUMFORD	<input checked="" type="checkbox"/> TIPPETT	<input checked="" type="checkbox"/> BILLS
_____ DEPARTMENT		
_____ PREPARED BY		_____ SIGNATURE
<input checked="" type="checkbox"/> FYI		
REVIEWED WITH _____		

cc:

GRP/GM

In accordance with the *Sub-Regional Tier Design Guidelines for Bridge Projects* the following guidelines shall be used for approach slabs and approach fills for bridges with this functional classification.

Detail 12'-0" (3.66m) approach slabs with stone backfill on plans for sub-regional tier bridges that are in the Mountain and Piedmont regions, i.e. not in the Coastal Plain. For sub-regional tier bridges in the Coastal Plain, detail 12'-0" (3.66m) approach slabs with standard reinforced bridge approach fills. The Coastal Plain is defined in Section 1018-2(B) of the 2006 Standard Specifications.

A new standard drawing, showing the stone backfill under the approach slab, is available for use in developing plans.

- BAS 13 -- Bridge Approach Slab for Prestressed Concrete Cored Slab Unit (Sub-Regional Tier)

The standard drawing is available via the network drive and Structure Design's web site. The Design Manual will be revised at a later date.

This policy is effective with the November 2008 letting.

GRP/GM

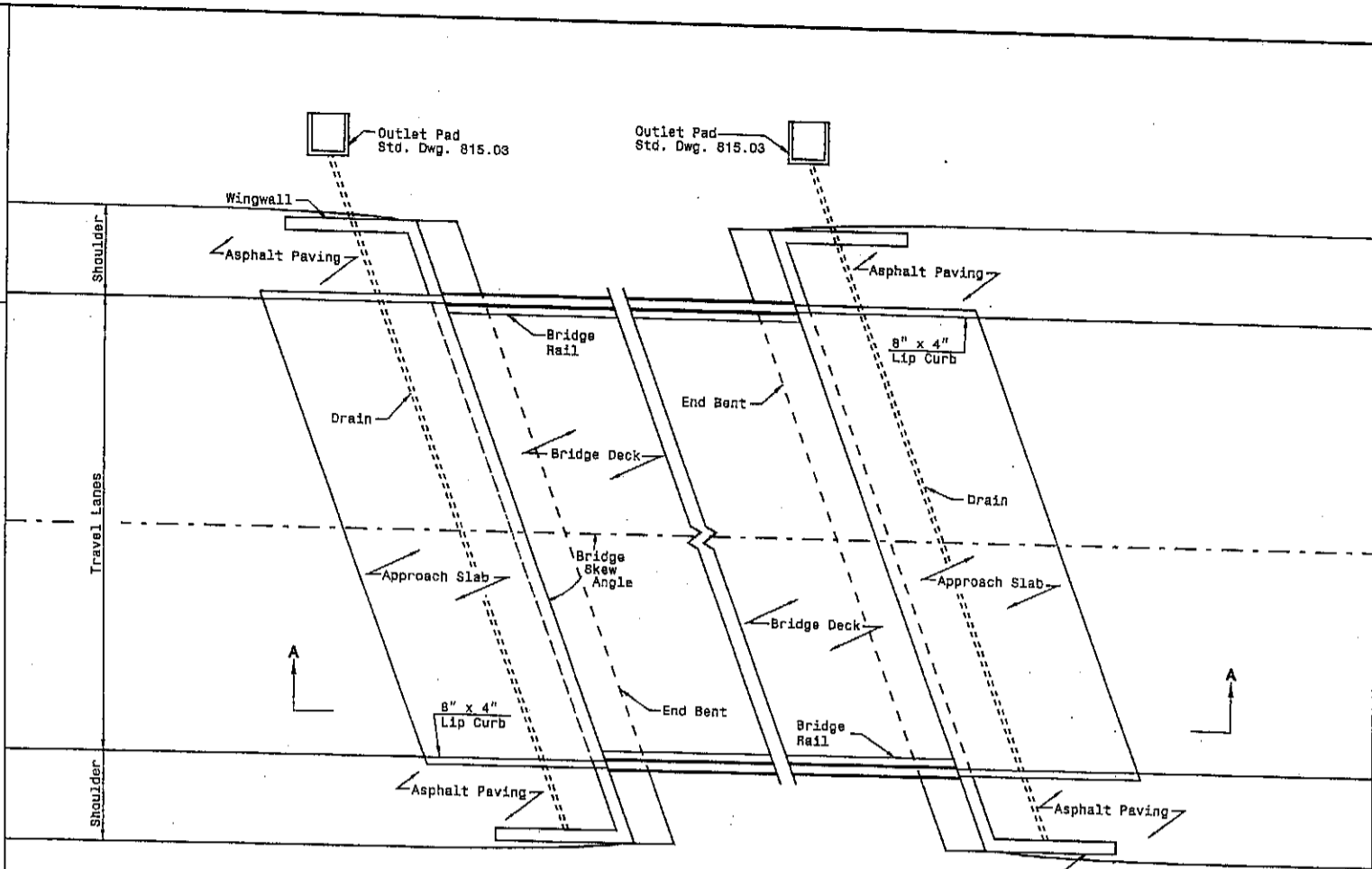
cc: T. K. Koch, P.E.
A. Raynor, P.E.
E. C. Powell, Jr., P.E., Attn: M.S. Robinson, P.E.
D. Holderman, P.E.
J. A. Bennett, P.E.
N. Wainaina, P.E.
R. D. Rochelle, P.E.
T. S. Drda, P.E., FHWA

***** SYSTEM *****
 ***** USER NAME *****

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
BRIDGE APPROACH FILLS
 CORED SLAB & BOX BEAM BRIDGES
 SUB REGIONAL TIER

SHEET 1 OF 2
422D11



PLAN VIEW
12' APPROACH SLAB

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

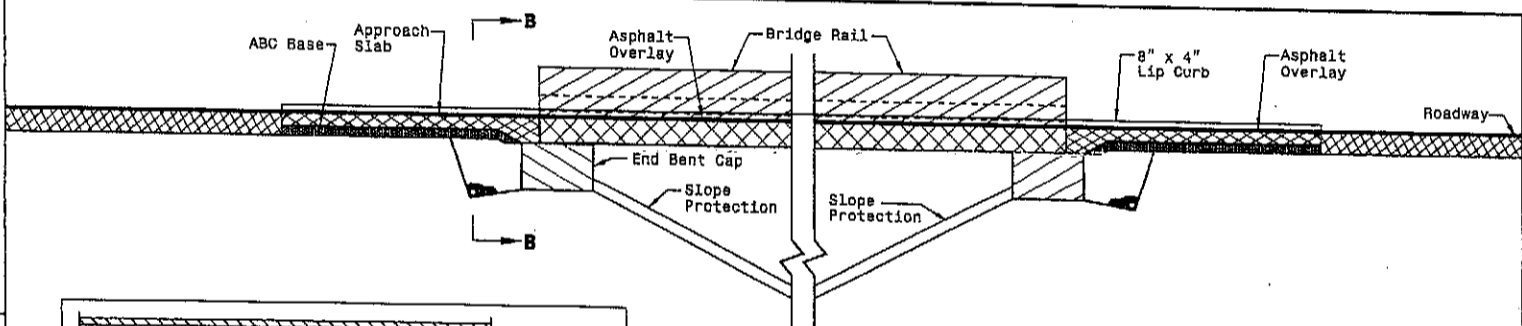
ENGLISH DETAIL DRAWING FOR
REINFORCED BRIDGE APPROACH FILLS
 CORED SLAB & BOX BEAM BRIDGES
 SUB REGIONAL TIER

SHEET 1 OF 2
422D11

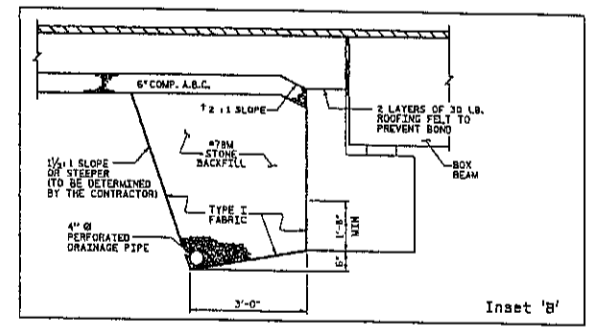
STATE OF NORTH CAROLINA
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 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
BRIDGE APPROACH FILLS
 CORED SLAB & BOX BEAM BRIDGES
 SUB REGIONAL TIER

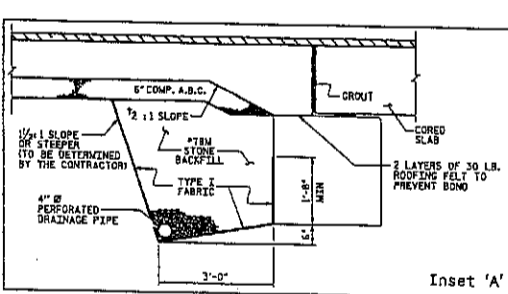
SHEET 2 OF 2
422D11



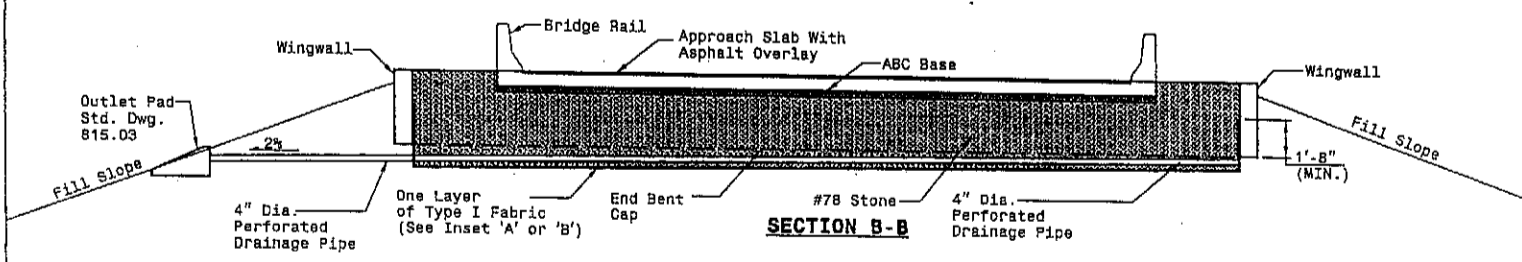
SECTION A-A



Inset 'b'



Inset 'a'



SECTION B-B

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
BRIDGE APPROACH FILLS
 CORED SLAB & BOX BEAM BRIDGES
 SUB REGIONAL TIER

SHEET 2 OF 2
422D11

PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
 OFFICE 819-250-4128 FAX 819-250-4119
BRIDGE APPROACH FILLS
 CORED SLAB & BOX BEAM BRIDGES
 SUB REGIONAL TIER
 ORIGINAL BY: K. A. Kempf DATE: 6-10-08
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.: Kempf\landish\bridge approach fills.dgn

PROJECT REFERENCE NO. SHEET NO.