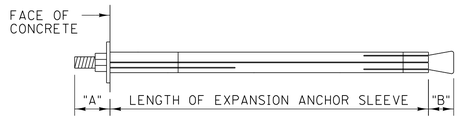
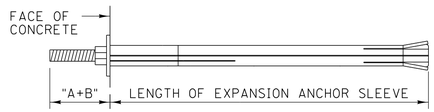


INITIAL POSITION



SET POSITION

PROCEDURE FOR INSTALLATION OF ANCHOR BOLTS

(¾" DIAMETER DRILLCO MAXI-BOLT OR WILLIAMS BOLTS) (UNDERCUTTING REQUIRED)

1. LOCATE PLACEMENT OF EXISTING REBAR IN VICINITY OF ANCHORS WITH A REBAR LOCATING DEVICE AND MAKE NECESSARY CORRECTIONS IN LOCATIONS OF ANCHORS ON CONCRETE. ANCHOR LOCATION MAY VARY PLUS OR MINUS THREE (3) INCHES IN ANY DIRECTION BUT THE HOLE SHALL BE DRILLED WITHIN SIX (6) DEGREES OF PERPENDICULAR TO THE NOMINAL CONCRETE SURFACE. CUTTING OF REBAR WILL BE ALLOWED.
2. HOLES SHALL BE DRILLED WITH A CARBIDE PERCUSSION DRILL BIT, A "REBAR EATER" BIT OR A DIAMOND CORE BIT.
3. THE DRILL BIT DIAMETER AND HOLE DEPTHS SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS.
4. IF AN ANCHOR MUST BE RELOCATED AND A NEW HOLE DRILLED, THE OLD HOLE SHALL BE REPAIRED WITH A NON SHRINKAGE PACK GROUT.
5. UNDERCUT IN PRIMARY HOLE SHALL BE AS SPECIFIED BY THE MANUFACTURER OF THE UNDERCUTTING TOOL.
6. CLEAN THE HOLE OF CONCRETE DUST AND DEBRIS USING OIL FREE COMPRESSED AIR OR BY VACUUMING. PLACE BEARING SLEEVE FLUSH WITH THE CONCRETE SURFACE.
7. THE EXPANSION SLEEVE IS TO EXPAND INTO THE UNDERCUT CREATED BY THE UNDERCUTTING TOOL, THEREFORE THE ANCHOR TUBE MUST TERMINATE AT THE BASE OF THE UNDERCUT SECTION.
8. TO SET THE ANCHOR, IT IS NECESSARY TO DRAW THE CONICAL NUT OF THE STUD BOLT INTO THE ANCHOR SLEEVE. AFTER THE ASSEMBLY IS INSERTED INTO THE DRILLED HOLE, THE ANCHOR WILL BE CONSIDERED SET WHEN THE DIMENSION "A" (SEE ANCHOR SETTING DETAILS) HAS INCREASED BY AN AMOUNT EQUAL TO DIMENSION "B". AFTER THE STEEL PLATES ARE IN PLACE. TIGHTEN AS MUCH AS POSSIBLE AND THEN TIGHTEN A SECOND NUT AGAINST THE FIRST TO ENSURE NO LOOSENING TAKES PLACE.
9. BECAUSE OF CLOSE TOLERANCE BETWEEN CONICAL NUT O.D. AND HOLE I.D. IT MAY BE NECESSARY TO LIGHTLY HAMMER THE ANCHOR INTO THE HOLE. IF HAMMERING IS NECESSARY, STEPS SHALL BE EMPLOYED WHICH WILL PREVENT DAMAGE TO THE STUD BOLT THREADS.
10. INSTALLATION PROCEDURES REQUIRED BY THE ANCHOR MANUFACTURER IN ADDITION TO THE INSTRUCTIONS LISTED ABOVE SHALL BE FOLLOWED.
11. BENT PLATES SHALL BE ASTM A709 (GRADE 36) MATERIAL GALVANIZED TO ASTM A123 STANDARD.
12. POSITION OF PLATE OR ANGLE OF BEAM:

    ABUTMENTS AND PIERS: THE PLATE OR ANGLE SHALL BE POSITIONED ON THE BEAM WITH CABLE IN THE FULL EXTENDED POSITION AND THE ANCHOR BOLT LOCATIONS MARKED THROUGH THE PLATE OR ANGLE ANCHOR HOLES.

26.74

27.25

GARVER

DESIGNED BY J. L. HALBROOK DATE APR 2015
DRAWN BY C. W. THOMAS DATE APR 2015
SUPERVISED BY J. H. RUDDELL DATE APR 2015
CHECKED BY A. J. KHAIRI DATE APR 2015

TN D.O.T. ENGINEERING SUPERVISOR M. LAWSON

JLHalbrook 4/27/2015 10:41:17 AM
WORKSPACE: TDOT Bridge
L:\2015\5007002 - Repair Five Bridges Shelby County\Drawings\BRG\03 - Final\BR-118-216.dgn

PROJECT NO.	YEAR	SHEET NO.
79224-4205-04	2015	

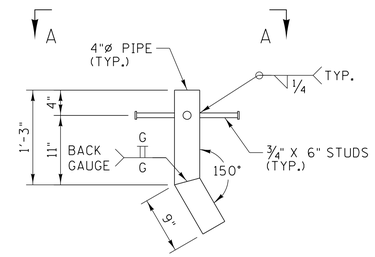
REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

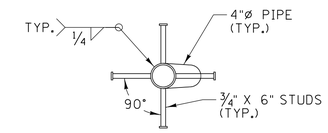
NOTE:

DEPRESS TOP OF PIPE ½" BELOW TOP OF SLAB.

EDGE OF DRAIN PIPE SHOULD BE PLACED 1" FROM EDGE OF ROADWAY.



DETAIL A
SCALE: 1" = 1'-0"



SECTION A-A
SCALE: 1" = 1'-0"

NEW DECK DRAIN DETAIL

(50 DECK DRAINS REQ'D.)

NOTES:

COST OF NEW DECK DRAINS SHALL BE INCLUDED UNDER ITEM NO. 604-10.09, CONCRETE, C.Y.

FOR LOCATIONS, SEE DWG. NOS. BR-118-211 AND BR-118-212.

26.74

27.25

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIR DETAILS

STATE ROUTE 14
BRIDGE NO. 79-SR14-26.74
BRIDGE NO. 79-SR14-27.25

SHELBY COUNTY
2015

AMJAD S. KHAIRI
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
NO. 106650
STATE OF TENNESSEE
04/27/15

BR-118-216