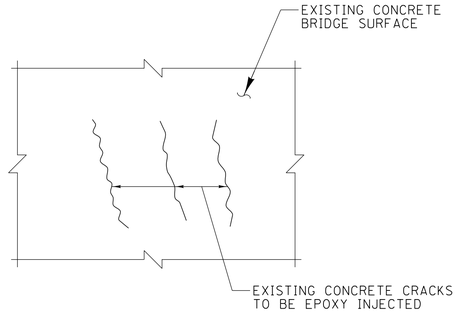


EPOXY INJECTION REPAIR

NOTES:

ALL CRACKS SMALLER THAN 1/4" SHALL BE INJECTED WITH AN APPROVED EPOXY RESIN ADHESIVE. ALL CRACKS 1/4" OR LARGER SHALL BE INJECTED WITH AN APPROVED EPOXY RESIN ADHESIVE OF THE GEL TYPE.

EXTREME CAUTION SHALL BE TAKEN WHEN SELECTING A PRESSURE NECESSARY TO COMPLETE THE EPOXY INJECTION CRACK REPAIR SO AS NOT TO DAMAGE THE STRUCTURE BY CAUSING ADDITIONAL CRACKING. IF ADDITIONAL DAMAGE OCCURS, THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY. ALL EPOXY INJECTION WORK SHALL MEET THE FULL APPROVAL OF THE ENGINEER.

ALL EPOXY INJECTION CONTRACTORS AND/OR SUBCONTRACTORS SHALL BE APPROVED BY THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS.

AFTER EPOXY INJECTION IS COMPLETE, ALL INJECTION PORTS SHALL BE REMOVED AND ALL EXCESS SEALING MATERIAL AND EPOXY SHALL BE REMOVED FLUSH WITH THE SURROUNDING CONCRETE SURFACES.

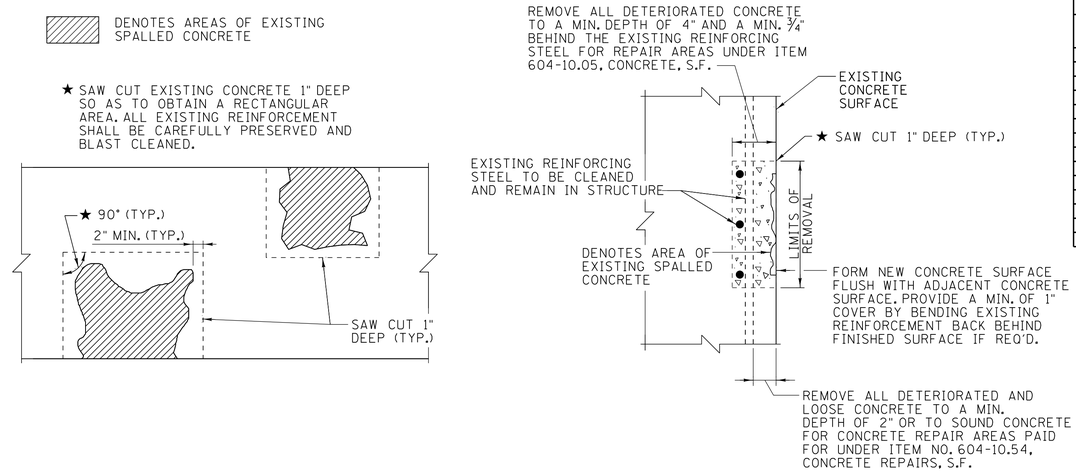
THE ENGINEER FROM THE STRUCTURES DIVISION, BRIDGE INSPECTION AND REPAIR WILL DESIGNATE EXACT CRACK LOCATIONS TO RECEIVE EPOXY INJECTION.

THE ENGINEER SHALL COLLECT RANDOM SAMPLES OF THE EPOXY RESIN FOR EVALUATION BY THE MATERIALS AND TEST DEPARTMENT, DEPARTMENT OF TRANSPORTATION, FOR VERIFICATION OF THE STRENGTH AND QUALITY OF THE MATERIAL.

IF THE CRACKS ARE NOT FULLY SEALED OR THE STRENGTH REQUIREMENTS ARE NOT MET, THEN REDUCTION IN PAYMENT DETERMINED BY THE ENGINEER WILL BE MADE TO THE CONTRACTORS BID PRICE OF ITEM NO. 604-10.62, EPOXY INJECTION REPAIRS (COMPLETE AND IN PLACE), L.F.

THE ENGINEER FROM THE STRUCTURES DIVISION, BRIDGE INSPECTION AND REPAIR OFFICE SHALL DESIGNATE FOUR (4) RANDOM LOCATIONS WERE THE CRACKS HAVE BEEN EPOXY INJECTED FOR THE CONTRACTOR TO CORE. THE ONE (1) INCH DIAMETER CORES WILL BE IMMEDIATELY TURNED OVER TO THE ENGINEER FOR INSPECTION AND TO VERIFY FULL SEALING OF THE CRACKS. COST OF CORING AND FILLING CORE HOLES WITH AN APPROVED GROUT SHALL BE INCLUDED IN ITEM NO. 604-10.62, EPOXY INJECTION REPAIRS (COMPLETE AND IN PLACE), L.F.

COST OF ALL LABOR AND MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE EPOXY INJECTION REPAIRS TO EXISTING CONCRETE CRACKS SHALL BE INCLUDED UNDER ITEM NO. 604-10.62, EPOXY INJECTION REPAIRS (COMPLETE AND IN PLACE), L.F. ITEM NO. 604-10.62 SHALL BE BID SUCH THAT THIS ITEM MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.



PROJECT NO.	YEAR	SHEET NO.
79005-4167-04	2014	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION

SPALL SURFACE REPAIR DETAILS

N.T.S.

NOTES FOR ITEM NO. 604-10.54:

THE COST OF SAW CUTTING, REMOVING SPALLED OR CRACKED CONCRETE CLEANING EXPOSED REINFORCING STEEL, PATCHING MATERIAL, LABOR AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN SHALL BE INCLUDED IN ITEM NO. 604-10.54, CONCRETE REPAIRS, S.F.

PATCHING MATERIAL SHALL BE A POLYMER-MODIFIED CEMENTITIOUS STRUCTURAL PATCHING VERTICAL AND OVERHEAD MATERIAL. SEE T.D.O.T. QUALIFIED PRODUCTS LIST 13, SPEC. CATEGORY J, SUBLIST F FOR ACCEPTABLE PATCHING MATERIALS.

AFTER CONCRETE REMOVAL OF THE 2" DEPTH HAS TAKEN PLACE, THE ENGINEER SHALL HAVE THE OPTION TO REMOVE ADDITIONAL CONCRETE DEPTH AND SHALL DESIGNATE THIS AREA TO BE REPAIRED AND PAID FOR UNDER ITEM NO. 604-10.05 INSTEAD OF UNDER ITEM NO. 604-10.54.

ITEM NO. 604-10.54 SHALL BE BID SUCH THAT THIS ITEM MAY BE INCREASED, DECREASED, OR ELIMINATED AS DIRECTED BY THE ENGINEER.

☞ ALL AREAS TO BE REPAIRED ARE TO BE MARKED BY THE ENGINEER FROM THE BRIDGE INSPECTION AND REPAIR OFFICE.

NOTES FOR ITEM NO. 604-10.05:

COST OF CUTTING, REMOVING SPALLED OR CRACKED CONCRETE, CLEANING EXPOSED REINFORCING STEEL, CONCRETE, LABOR AND ANY MISCELLANEOUS MATERIALS NECESSARY TO COMPLETE THE REPAIRS AS SHOWN SHALL BE INCLUDED IN ITEM NO. 604-10.05, CONCRETE S.F.

CONCRETE SHALL BE HIGH EARLY STRENGTH CONCRETE, F'C = 3500 PSI AT 28 DAY STRENGTH.

ITEM NO. 604-10.05 SHALL BE BID SUCH THAT THIS ITEM MAY BE INCREASED, DECREASED OR ELIMINATED AS DIRECTED BY ENGINEER.

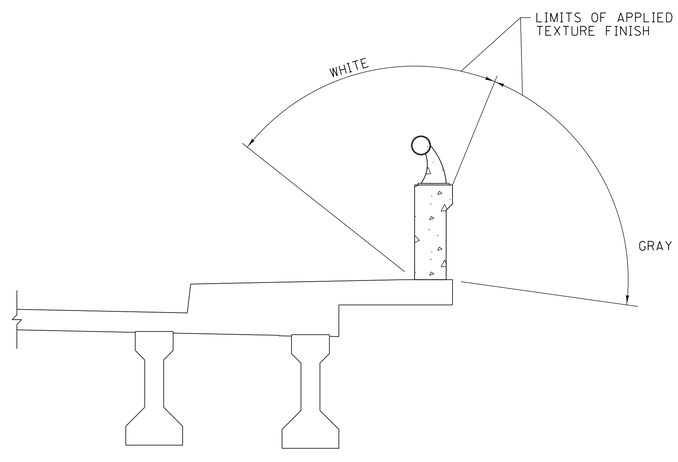
NOTES:

THE CONTRACTOR SHALL CLEAN ALL SURFACES TO RECEIVE APPLIED TEXTURE COATING. ALL CLEANING SHALL BE SATISFACTORY TO THE ENGINEER PRIOR TO APPLYING THE TEXTURE COATING.

THE APPLIED TEXTURE FINISH SHALL BE EITHER MOUNTAIN GRAY, FEDERAL SPECIFICATION NO. 36440, FEDERAL COLOR STANDARD 595A, OR WHITE, FEDERAL SPECIFICATION NO. 37886. A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. A LIST OF APPROVED TEXTURE COATINGS MAY BE OBTAINED FROM THE TENNESSEE DEPARTMENT OF TRANSPORTATION, DIVISION OF MATERIALS AND TESTS.

COSTS ASSOCIATED WITH CLEANING, FURNISHING, AND APPLYING TEXTURE COATING AND ALL LABOR AND NECESSARY MATERIALS SHALL BE INCLUDED IN ITEM NO. 604-04.02, APPLIED TEXTURE FINISH (EXISTING STRUCTURES), S.Y.

THE NEW END POSTS SHALL RECEIVE APPLIED TEXTURE FINISH (4 LOCATIONS).



APPLIED TEXTURE FINISH

SCALE: 1" = 1'-0"

0.00

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

BRIDGE REPAIRS DETAILS

SOUTH PARKWAY WEST
OVER INTERSTATE 55
BRIDGE NO. 79-02807-0.00

SHELBY COUNTY
2014

AMJAD S. KHAIRI
REGISTERED ENGINEER
No. 106650
01/21/14
STATE OF TENNESSEE

GARVER

DESIGNED BY	L. I. COBOS	DATE	JULY 2013
DRAWN BY	C. W. THOMAS	DATE	JULY 2013
SUPERVISED BY	A. J. KHAIRI	DATE	JULY 2013
CHECKED BY	A. J. KHAIRI	DATE	JULY 2013

TN D.O.T. ENGINEERING SUPERVISOR _____

BR-115-56

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WORKSPACE: TDOT Bridge
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