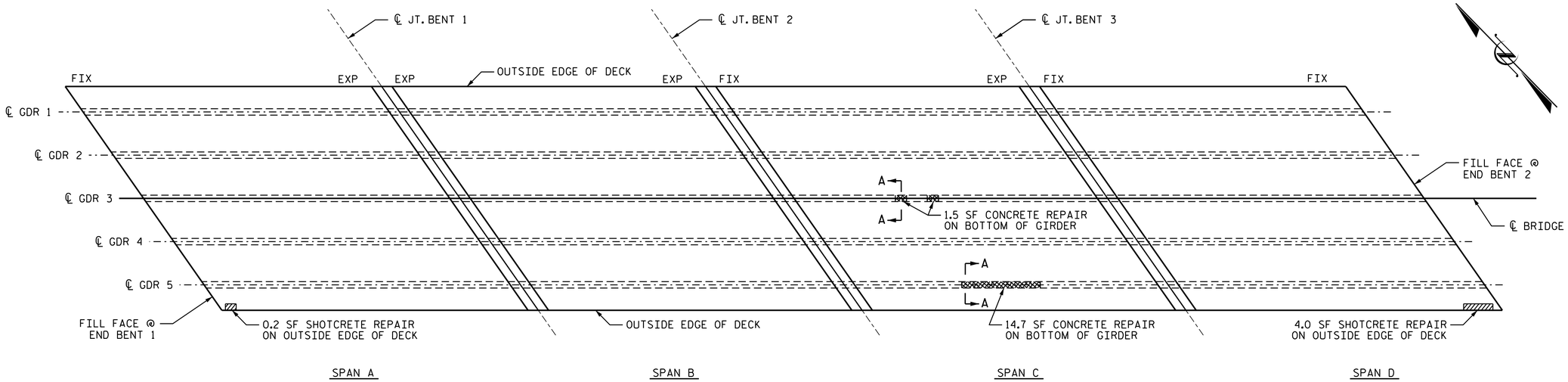


CONCRETE REPAIR

SHOTCRETE REPAIR

PLAN VIEW

(UNDERSIDE)

NOTES:

REPAIR LOCATIONS AND ESTIMATE OF QUANTITIES ARE GIVEN WITH THE BEST INFORMATION AVAILABLE. IF ADDITIONAL REPAIRS NOT SHOWN ON THE DRAWINGS ARE DEEMED NECESSARY BY THE ENGINEER, THE ENGINEER SHALL NOTE ON THE DRAWINGS THE APPROXIMATE LOCATION AND DESCRIPTION OF THE REPAIRS AND ADJUST THE ACTUAL QUANTITIES ENTERED INTO THE REPAIR QUANTITY TABLE.

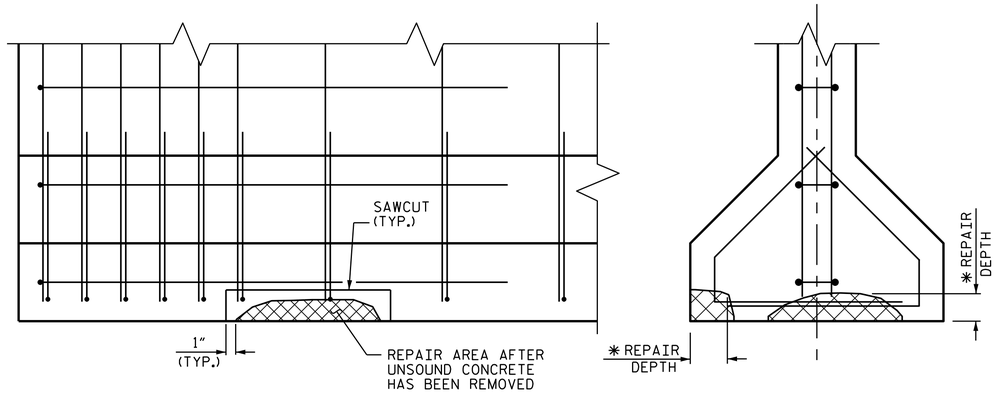
AROUND THE PERIMETER OF THE REPAIR AREA, AS INDICATED, THE CONTRACTOR SHALL SAW CUT TO A MINIMUM DEPTH OF ½" BUT REINFORCING STEEL AND PRESTRESSING STRANDS SHALL NOT BE DAMAGED.

THE CONTRACTOR SHALL REMOVE SURFACE CONCRETE TO VERIFY THAT SAW CUT DEPTH WILL NOT DAMAGE EXISTING REINFORCING STEEL AND PRESTRESSING STRANDS.

AFTER REMOVAL OF SOUND AND UNSOUND CONCRETE WITHIN THE SAWCUT AREA, TO A MINIMUM DEPTH OF ½", CLEAN AND REMOVE RUST FROM ALL REINFORCING STEEL AND PRESTRESSING STRANDS.

MAXIMUM AGGREGATE SIZE FOR REPAIR MATERIAL SHALL NOT EXCEED 2/3 THE MINIMUM REPAIR DEPTH.

REPAIR PRESTRESSED CONCRETE GIRDERS AND SHOTCRETE REPAIR OUTSIDE EDGE OF DECK AS DIRECTED BY THE ENGINEER.



ELEVATION

SECTION

SECTION A-A GIRDER REPAIR DETAILS

EXISTING REINFORCING STEEL LOCATIONS ARE FROM BEST INFORMATION AVAILABLE.

BILL OF MATERIAL

REPAIRS SPANS A THRU D	QUANTITIES			
	ESTIMATE		ACTUAL	
SHOTCRETE REPAIRS	AREA SF	VOLUME CF	AREA SF	VOLUME CF
DIAPHRAGMS	0.0	0.0		
GIRDERS	0.0	0.0		
UNDERSIDE OF DECK & OVERHANGS	4.2	1.1		
CONCRETE REPAIR	16.2	4.1		
EPOXY RESIN INJECTION		LN. FT		LN. FT
DIAPHRAGMS		0.0		
GIRDERS		0.0		
UNDERSIDE OF DECK & OVERHANGS		0.0		

VALUES IN CHART REPRESENT ESTIMATED REPAIR TOTALS AFTER REMOVAL OF LOOSE CONCRETE, MIN. OF 1" BEHIND REBARS. SEE GIRDER FLANGE REPAIR DETAILS.

* REPAIR DEPTH:

IF REMOVAL OF UNSOUND CONCRETE RESULTS IN EXPOSING MORE THAN HALF THE DEPTH OF A REINFORCING BAR OR PRESTRESSING STRAND, REMOVE ADDITIONAL CONCRETE TO 1" BEHIND THE BAR OR STRAND WITHOUT DAMAGE TO REINFORCING BAR OR PRESTRESSING STRAND. ALTERNATIVELY, AS DIRECTED BY THE ENGINEER, INSTALL ¼" DIAMETER X 2" LONG (MAX.) ADHESIVE ANCHORS IN REPAIR AREAS WITH MINIMUM DEPTH OF 1½" WITHOUT DAMAGE TO REINFORCING BAR OR PRESTRESSING STRAND.

PROJECT NO. I-0914BB

WARREN COUNTY

BRIDGE NO.: 51

NORTH CAROLINA PROFESSIONAL SEAL 16301 ENGINEER TING HSIUNG FANG

DocuSigned by: Tay H. Fang E72088400997435

12/18/2014

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE AND PRESTRESSED CONCRETE GIRDER REPAIRS

REVISIONS								SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:			SP-22
1			3					TOTAL SHEETS
2			4					28

DRAWN BY : T. J. KIRSCHBAUM DATE : 11/2013

CHECKED BY : T.H. FANG DATE : 11/2013

17-DEC-2014 10:05
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