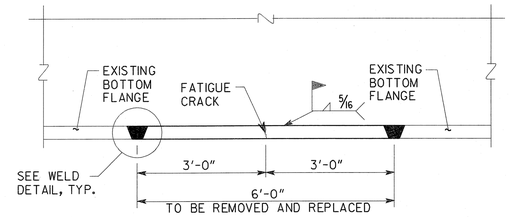
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSNHS-M000-00(331)	43	92

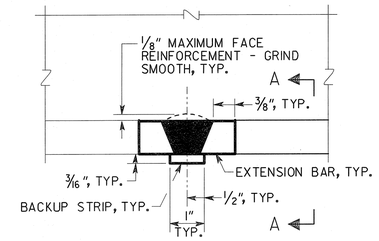
ITEM	DAMAGE	METHOD OF REPAIR
1	BOTTOM SWAYBRACE IN DIAPHRAGM MISSING	REPLACE MEMBER
2	IMPACT DAMAGE	HEAT STRAIGHTEN
3	CRACK IN FLANGE	REPLACE BOTTOM FLANGE
4	STIFFENER PULLED AWAY FROM WEB	STRAIGHTEN AND RE-WELD
5	CRACK IN STIFFENER	RE-WELD
6	BROKEN WELD	RE-WELD

NOTES:

1. DETAILS ARE SYMMETRICAL ABOUT ℄ BEAM UNLESS NOTED.
2. WORK SHALL BE PROTECTED FROM MOISTURE DURING WELDING AND UNTIL PARTS WELDED HAVE COOLED TO ATMOSPHERIC TEMPERATURE.
3. WHEN WELDING ASTM A 588 (WEATHERING STEEL) AND ASTM A709 GRADE 50W, WELDING SHALL BE DONE USING SPECIFICATIONS OF ASTM A709 GRADE 50W.
4. ONLY E8018-C3 ELECTRODES SHALL BE USED FOR MANUAL SHIELDED METAL ARC WELDING.
5. USE TWIN ARC TECHNIQUE ON BOTTOM FLANGE WELDS.
6. AFTER WELDING, REMOVE THE BACKUP STRIPS AND EXTENSION BARS. WELDS SHALL BE GROUND SMOOTH. GRINDING SHALL BE DONE PARALLEL TO THE LENGTH OF THE BEAM. CHIPPING WILL NOT BE ALLOWED. ANY VISUAL IMPERFECTIONS SHALL BE REPAIRED BY WELDING AND GRINDING AS STATED ABOVE.

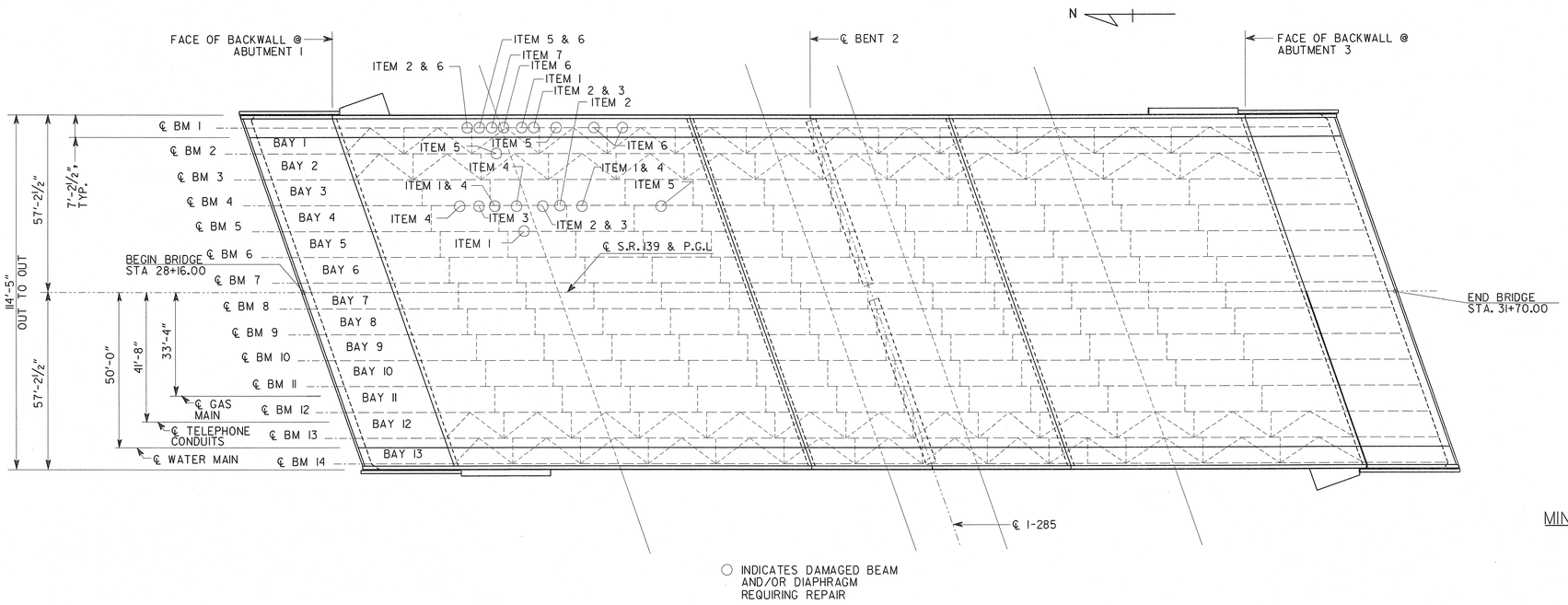


BOTTOM FLANGE REPLACEMENT DETAIL

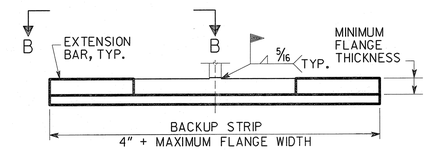


WELD DETAIL

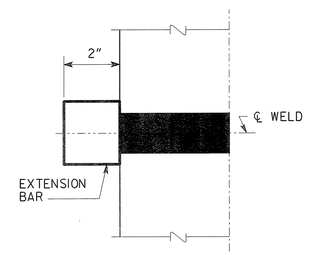
SHADED AREAS REPRESENT V-GROOVE WELDS.



○ INDICATES DAMAGED BEAM AND/OR DIAPHRAGM REQUIRING REPAIR



SECTION A-A

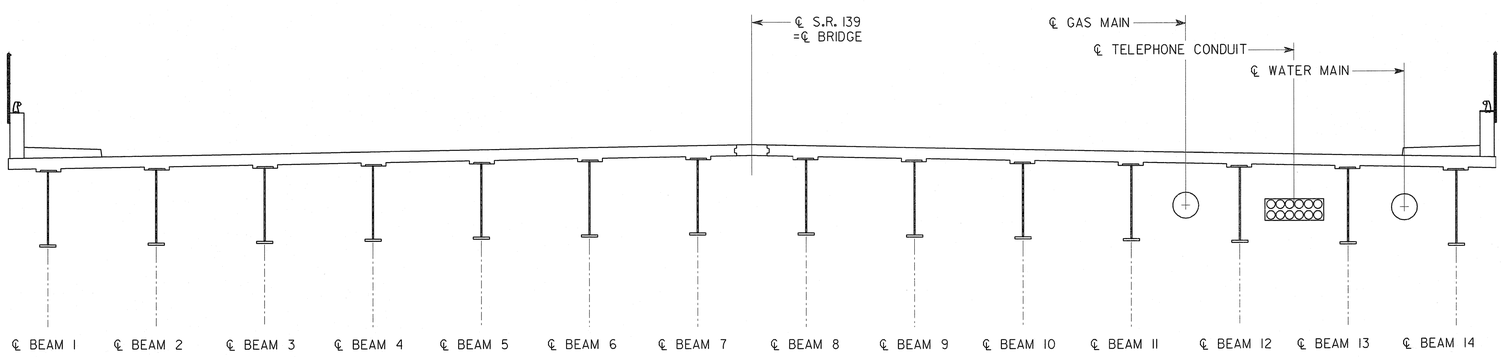


SECTION B-B

MINIMUM PREHEAT AND INTERPASS TEMPERATURE

THICKNESS OF THICKEST PART AT POINT OF WELDING

THICKNESS	TEMPERATURE ASTM A 709 GRADE 36	TEMPERATURE ASTM A 709 GRADE 50
ZERO TO 3/4" INCLUSIVE	NONE	NONE
OVER 3/4" TO 1 1/2" INCLUSIVE	150° F	50° F
OVER 1 1/2" TO 2 1/2" INCLUSIVE	225° F	150° F
OVER 2 1/2" TO 4" INCLUSIVE	300° F	225° F



DECK SECTION

LOOKING AHEAD
NO SCALE

BRIDGE NO. 1

Heath & Lineback Engineers INCORPORATED
2390 CANTON ROAD, BUILDING 200
MARIETTA, GEORGIA 30066

GEORGIA
DEPARTMENT OF TRANSPORTATION
OPERATIONS DIVISION - OFFICE OF MAINTENANCE

HEAT STRAIGHTENING AND BEAM REPAIR
BRIDGE REHABILITATION ON
SR 139 (RIVERDALE RD) OVER I-285
CLAYTON COUNTY CSNHS-M000-00(331)

NO SCALE FEBRUARY 2008

BRIDGE SHEET 7 OF 9

BY	REVISIONS	DATE

DESIGNED NYC CHECKED RLF / FRB REVIEWED GBL
DRAWN NYC DESIGN GROUP APPROVED

DWG NO 35-07 J:\4019\4019.331 - CLAYTON\BRIDGE\4019.331_HEATSTR.DGN