



MOT QUANTITIES

- ITEM 622 - PORTABLE CONCRETE BARRIER, 32" = 712 FT (INCLUDES 400 FT. FOR ROBERTSON AVE. AND 312 FT. FOR I-71)
- ITEM 614 - WORK ZONE EDGE LINE = 1,200 FT
- ITEM 614 - WORK ZONE CENTER LINE = 600 FT
- ITEM 614 - WORK ZONE IMPACT ATTENUATOR = 4 EACH (INCLUDES 2 FOR ROBERTSON AVE. AND 2 FOR I-71)
- ITEM 614 - OBJECT MARKER, TWO-WAY = 18 EACH
- ITEM 614 - BARRIER REFLECTOR = 48 EACH
- ITEM 614 - WORK ZONE LIGHTING SYSTEM = 1 EACH
- ITEM 614 - DETOUR SIGNING = LUMP SUM

MAINTENANCE OF TRAFFIC - ROBERTSON AVE.

DESIGN AGENCY



DESIGNER
CAH

REVIEWER
GTF MM-DD-YY

PROJECT ID
115355

SHEET	TOTAL
6	22

ITEM SPECIAL STRUCTURES: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION (CONT'D)

THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.

ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL STRUCTURES: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID FOR AS FOLLOWS:

- UPON APPROVAL OF CONSULTANT 20%
- PROGRESSIVE EQUIVALENT PAYMENTS 50%
- UPON SUBMISSION OF FINAL REPORT 30%

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.

ITEM 607 - VANDAL PROTECTION FENCE REMOVED AND RESET

THIS ITEM INCLUDES TEMPORARY REMOVAL OF VANDAL FENCE POSTS, FABRIC, BASE PLATES ETC. AS NEEDED TO PERFORM STRUCTURE REPAIRS. THESE DISMANLED ITEMS SHALL BE STORED FOR RE-USE OFF OF THE GROUND AND PROTECTED FROM THEFT. ONCE REPAIRS ARE COMPLETED, THE VANDAL FENCE SHALL BE RE-ERECTED. EXISTING BASE PLATES SHALL BE RESET USING NEW ANCHOR BOLTS THAT ARE DRILLED AND DOWELED INTO THE NEW CONCRETE PARAPET PER CMS 510. SECTIONS OF FENCE FABRIC SHALL BE WEAIVED BACK TOGETHER USING WIRE MATERIAL THAT MATCHES EXISTING. EXISTING POST SPACING SHALL BE MAINTAINED. EXISTING VANDAL FENCE BASE PLATE ANCHOR BOLTS LOCATED IN AN EXISTING UNDAMAGED SECTION OF CONCRETE PARAPET MAY BE RE-USED IF DETERMINED TO BE IN SATISFACTORY CONDITION AND ANCHORED IN SOUND CONCRETE OTHERWISE THEY SHALL BE REPLACED WITH NEW GROUTED ANCHOR BOLTS.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, MATERIAL AND LABOR NECESSARY TO PERFORM THIS TASK. PAYMENT SHALL BE MADE AT THE BID PRICE PER FOOT.

ITEM 517 - RAILING, MISC.: BRIDGE RAILING REMOVED AND RESET

THIS ITEM INCLUDES TEMPORARY REMOVAL OF EXISTING PARAPET RAILING AND RAILING POSTS AS NEEDED TO PERFORM STRUCTURE REPAIRS. THESE DISMANLED ITEMS SHALL BE STORED FOR RE-USE OFF OF THE GROUND AND PROTECTED FROM THEFT. ONCE REPAIRS ARE COMPLETED, THE RAILING SHALL BE RE-ERECTED. EXISTING RAILING POSTS SHALL BE RESET USING NEW ANCHOR BOLTS THAT ARE DRILLED AND DOWELED INTO THE NEW CONCRETE PARAPET PER CMS 510. EXISTING RAIL POST ANCHOR BOLTS LOCATED IN AN EXISTING UNDAMAGED SECTION OF CONCRETE PARAPET MAY BE RE-USED IF DETERMINED TO BE IN SATISFACTORY CONDITION AND ANCHORED IN SOUND CONCRETE OTHERWISE THEY SHALL BE REPLACED WITH NEW GROUTED ANCHOR BOLTS.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, MATERIAL AND LABOR NECESSARY TO PERFORM THIS TASK. PAYMENT SHALL BE MADE AT THE BID PRICE PER FOOT.



STRUCTURE NOTES - 3
BRIDGE No: HAM-71-6.75 & HAM-71-7.31
EDMONSON RD. & ROBERTSON AVE. OVER I-71

SFN
3114813/3114902

DESIGN AGENCY



DESIGNER CHECKER
CAH GTF

REVIEWER
XXX MM-DD-YY

PROJECT ID
115355

SUBSET	TOTAL
3	3

SHEET	TOTAL
12	22

ESTIMATED QUANTITIES - STRUCTURE No.: HAM-71-6.75					(100% 01/IMS/BR FUNDING)			
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL
514	10000	1	EACH	FINAL INSPECTION REPAIR			1	
514	20001	4	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (TWO COAT)			4	
849	10000	LS	LUMP	DAMAGE ASSESSMENT			LUMP	
849	10500	LS	LUMP	SURFACE PREPARATION			LUMP	
849	10600	2	HOURS	REPAIRING DAMAGED MEMBER BY GRINDING			2	
849	10700	LS	LUMP	STRAIGHTENING DAMAGED MEMBER			LUMP	

ESTIMATED QUANTITIES - STRUCTURE No.: HAM-71-6.75 (REPAIR NOT ASSOCIATED WITH THE BRIDGE HIT)					(100% 02/IMS/BR FUNDING)			
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL
514	10000	1	EACH	FINAL INSPECTION REPAIR			1	
514	20001	4	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (TWO COAT)			4	
849	10000	LS	LUMP	DAMAGE ASSESSMENT			LUMP	
849	10500	LS	LUMP	SURFACE PREPARATION			LUMP	
849	10600	2	HOURS	REPAIRING DAMAGED MEMBER BY GRINDING			2	

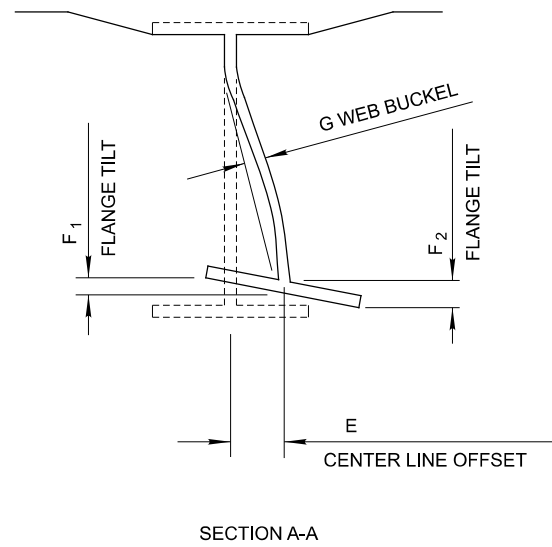
ESTIMATED QUANTITIES - STRUCTURE No.: HAM-71-7.31					(100% 01/IMS/BR FUNDING)			
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN			LUMP	
202	11501	1	EACH	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (MAIN MEMBERS)			1	
202	11501	23	EACH	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS)			23	
509	10000	5940	POUND	EPOXY COATED REINFORCING STEEL			5,940	
510	10000	338	EACH	DOWEL HOLES WITH NON-SHRINK, NON-METALIC GROUT			338	
511	21522	27	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			27	
512	10300	12	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			12	
512	74500	1200	FT	REMOVAL OF EXISTING PAVEMENT MARKING			1200	
513	10200	1700	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF			1700	
513	10280	11550	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4			11550	
513	95000	46	FT	STRUCTURAL STEEL MISC.: REPAIR OF MAIN AND SECONDARY MEMBERS, FILLET WELDING			46	
514	10000	1	EACH	FINAL INSPECTION REPAIR			1	
514	20001	826	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (TWO COAT)			826	
516	47001	LS	LUMP	JACKING AND TEMPORARY SUPPORT OF STRUCTURE, AS PER PLAN			LUMP	
517	76300	75	FT	RAILING, MISC.: BRIDGE RAILING REMOVED AND RESET			75	
690	98400	LS	LUMP	SPECIAL - STRUCTURES: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION			LUMP	
849	10000	LS	LUMP	DAMAGE ASSESSMENT			LUMP	
849	10500	LS	LUMP	SURFACE PREPARATION			LUMP	
849	10600	10	HOURS	REPAIRING DAMAGED MEMBER BY GRINDING			10	
849	10700	LS	LUMP	STRAIGHTENING DAMAGED MEMBER			LUMP	
ITEMS CARRIED TO GENERAL SUMMARY								
202	-----	75	FT	VANDAL PROTECTION FENCE REMOVED AND RESET			75	
202	-----	348	FT	REMOVAL, MISC: ASBESTOS TELECOM CONDUITS			348	
607	-----	400	FT	TEMPORARY VANDAL FENCE, TYPE B			400	
625	-----	348	FT	CONDUIT, 3 1/2", 625.04			348	

STRUCTURE QUANTITIES
 BRIDGE No.: HAM-71-6.75 & HAM-71-7.31
 EDMONSON RD. & ROBERTSON AVE. OVER I-71

SFN
3114813/3114902
DESIGN AGENCY

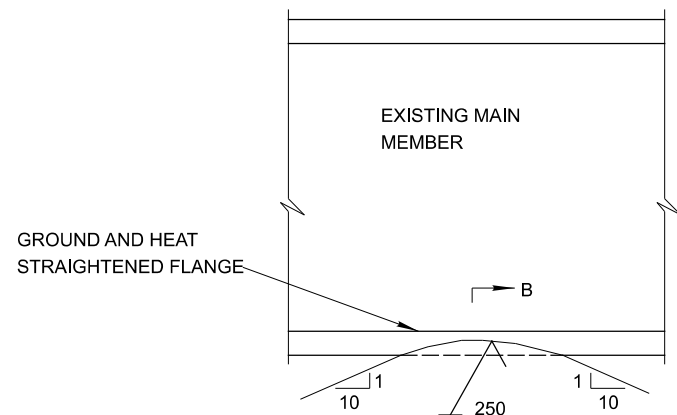
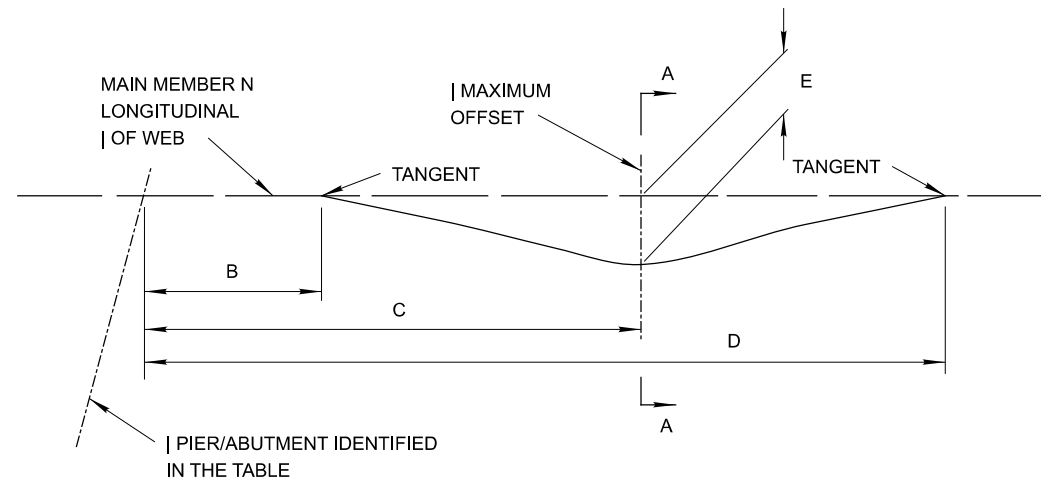


DESIGNER	CHECKER
CAH	GTF
REVIEWER	
XXX MM-DD-YY	
PROJECT ID	
115355	
SUBSET	TOTAL
1	1
SHEET	TOTAL
13	22



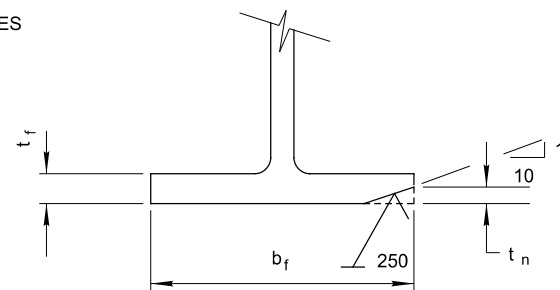
SECTION A-A
 NEGATIVE E VALUES ARE BENT LEFT
 NEGATIVE F VALUES ARE BENT DOWN
 NEGATIVE G VALUES ARE BENT LEFT

DAMAGE AREA No.	MEMBER LINE No. A	PIER OR ABUT.	B	C	D	E	F ₁	F ₂	G	H	J	K	L
D.A. #1	B7	PIER 2	50.13'	50.88'	51.63'	0	-1"	1"	0				



COLLISION REPAIR FC2-2

IF AREA (t_n, b_n) AFTER GRINDING ≤ 98% OF AREA (t, b) NOTE #3 APPLIES



SECTION B-B
 SEE NOTE 3

NOTES:

1. DETERMINE IF IMPACT NOTCH IS CRACKED USING MAGNETIC PARTICLE INSPECTION
2. IF CRACK DOES NOT EXTEND THROUGH THE FLANGE. DETERMINE DEPTH OF CRACK BY GRINDING
3. IF NOTCH OR PARTIAL DEPTH CRACK CAN BE REMOVED BY GRINDING ACCORDING TO SUPPLEMENTAL SPECIFICATION 849, REPAIR DAMAGED MEMBERS. PERFORM GRINDING ACCORDING TO SUPPLEMENTAL SPECIFICATION 849 AND AS ILLUSTRATED IN DETAIL FC2-2
4. IF NOTCH OR PARTIAL DEPTH CRACK MUST BE REPAIRED BY WELDING ACCORDING TO SUPPLEMENTAL SPECIFICATION 849 REPAIRING DAMAGED MEMBERS, AS ILLUSTRATED IN DETAIL FC2-3. PERFORM COMPLETE PENETRATION WELDING ACCORDING TO C&MS 513.21 BY ATTACHING RUN OFF TABS AND GRIND ALL WELDED SURFACES SMOOTH ACCORDING TO ANSI B46.1 OF 250 mil
5. PERFORM NDT TESTING ACCORDING TO C&MS 513.25A. MAGNETIC PARTICLE TESTING WILL BE ACCEPTED IN LIEU OF RADIOGRAPHIC TESTING.

DAMAGED AREA No.	MEMBER LINE No. A	PIER OR ABUTMENT	DIM. C	REPAIR DETAIL TYPE	DRILLING HOLES (EACH)	COPE HOLES (EACH)	STEEL MEMBER LEVEL UP (POUNDS)	CP WELD (FEET)	FILLET WELD (FEET)
D.A. #1	BEAM 7	PIER 2	50.88'	FC2					
D.A. #2	BEAM 7	PIER 2	49'.00'	FC2					

SEE PARTIAL FRAMING PLAN FOR DIMENSION C





EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES

SPANS: 50'-0", 83'-6", 82'-0", 49'-0"

ROADWAY: 48'-0" TOE/TOE OF 5'-0" WIDE SIDEWALKS

LOADING: CF 400 (57)

SKEW: 16°45'30" L.F.

WEARING SURFACE: 1.75" MICROSILICA CONCRETE OVERLAY

APPROACH SLABS: AS-1-67 (25'-0" LONG)

ALIGNMENT: 8°45'00" CURVE LEFT

CROWN: NORMAL 0.0156 FT/FT

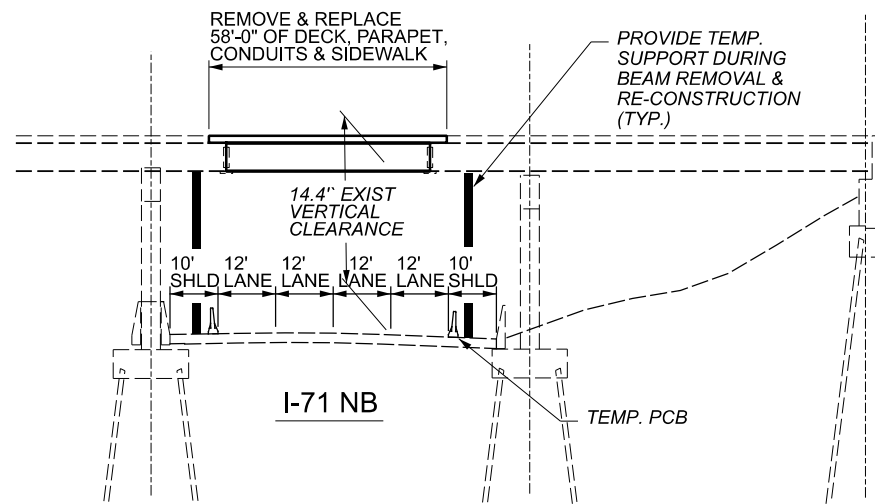
STRUCTURE FILE NUMBER: 3114092

DATE BUILT: 1968

DISPOSITION: REPAIR BRIDGE HIT

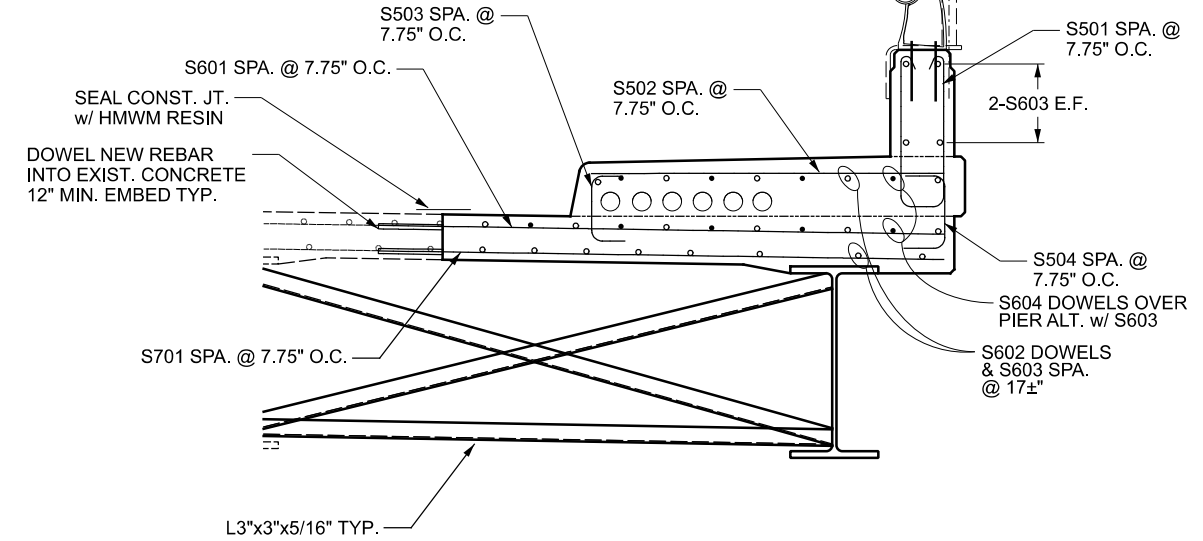
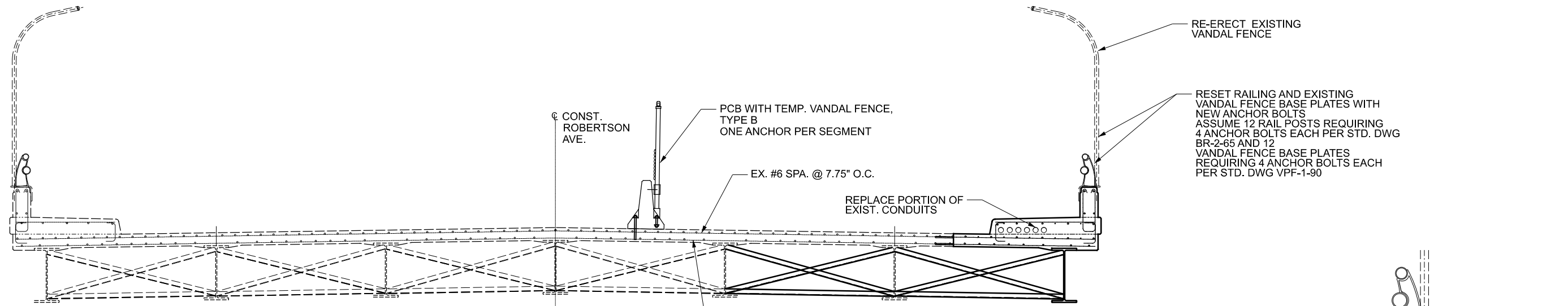
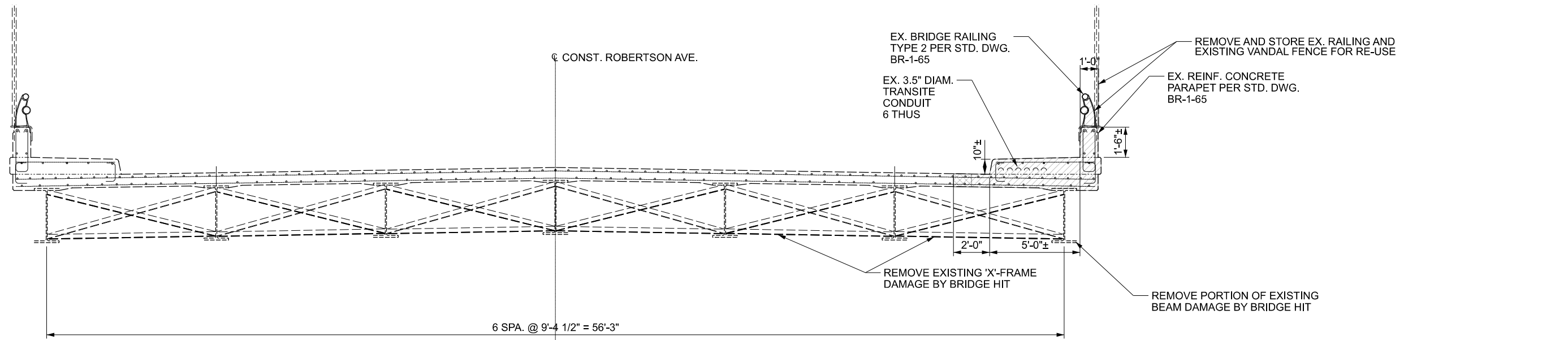
DECK AREA: 12,927 SF

COORDINATES: LATITUDE N39°9'23"
 LONGITUDE W84°26'22"



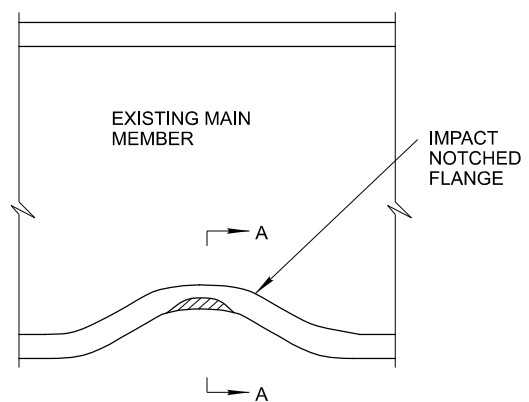
GENERAL PLAN
 BRIDGE No: HAM-71-7.31
 ROBERTSON AVE. OVER I-71

SFN	3114902
DESIGN AGENCY	
DESIGNER/CHECKER	CAH / GTF
REVIEWER	XXX MM-DD-YY
PROJECT ID	115355
SUBSET	TOTAL
1	7
SHEET	TOTAL
16	22

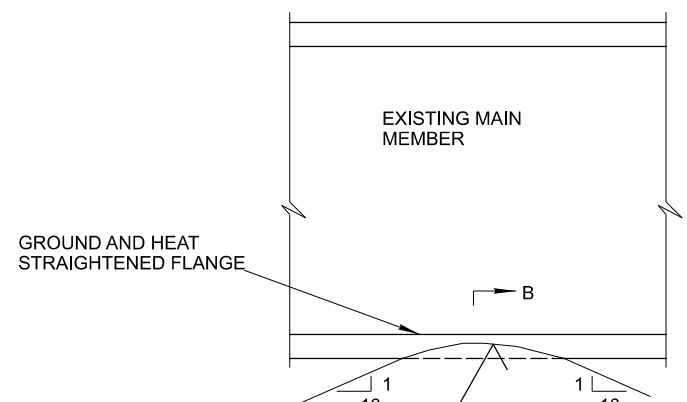


PHASE CONSTRUCTION
 BRIDGE No: HAM-71-7.31
 ROBERTSON AVE. OVER I-71

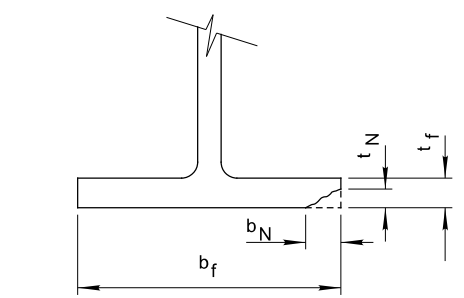
SFN 3114902	
DESIGN AGENCY	
DESIGNER	CHECKER
CAH	GTF
REVIEWER	
XXX MM-DD-YY	
PROJECT ID	
115355	
SUBSET	TOTAL
2	7
SHEET	TOTAL
17	22



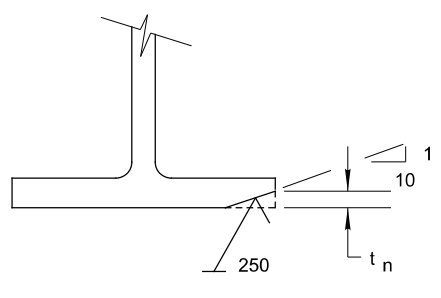
COLLISION REPAIR FC2-1
SEE NOTE 1



COLLISION REPAIR FC2-2
IF AREA (t_f, b_f) AFTER GRINDING \leq 98% OF AREA (t_f, b_f) NOTE #3 APPLIES



SECTION A-A
SEE NOTE 1 THROUGH 4
FLANGE NOT SHOWN WITH BEND FOR CLARITY



SECTION B-B
SEE NOTE 3

CROSSFRAME BAY M	PIER/ABUT.	N	1D	2D	3S	4S
BAY 4	PIER 1	3	9.46'	9.46'	9.08'	
BAY 5	PIER 1	4	9.46'	9.46'	9.08'	
BAY 6	PIER 1	2	9.46'	9.46'	9.08'	9.08'
BAY 6	PIER 1	3	9.46'	9.46'	9.08'	
BAY 6	PIER 1	4	9.46'	9.46'	9.08'	
BAY 6	PIER 1	5	9.46'	9.46'	9.08'	
BAY 6	PIER 1	6	9.46'	9.46'	9.08'	9.08'

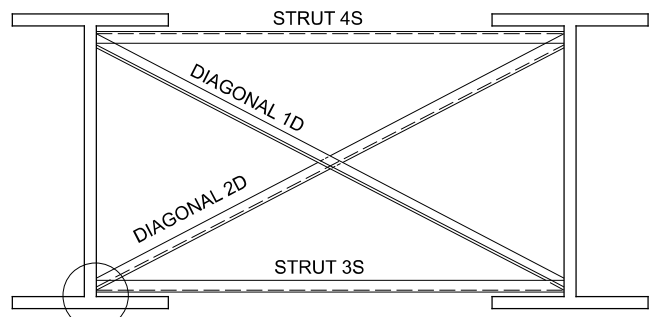
DAMAGE AREA No.	MEMBER LINE No. A	PIER OR ABUT.	B	C	D	E	F ₁	F ₂	G	H	J	K	L
1	BEAM 6	PIER 1	40.3'	41.6'	42.9'	—	-0.5"	+0.5"	—				

NOTES:

1. DETERMINE IF IMPACT NOTCH IS CRACKED USING MAGNETIC PARTICLE INSPECTION
2. IF CRACK DOES NOT EXTEND THROUGH THE FLANGE. DETERMINE DEPTH OF CRACK BY GRINDING
3. IF NOTCH OR PARTIAL DEPTH CRACK CAN BE REMOVED BY GRINDING ACCORDING TO SUPPLEMENTAL SPECIFICATION 849, REPAIR DAMAGED MEMBERS. PERFORM GRINDING ACCORDING TO SUPPLEMENTAL SPECIFICATION 849 AND AS ILLUSTRATED IN DETAIL FC2-2
4. IF NOTCH OR PARTIAL DEPTH CRACK MUST BE REPAIRED BY WELDING ACCORDING TO SUPPLEMENTAL SPECIFICATION 849 REPAIRING DAMAGED MEMBERS, AS ILLUSTRATED IN DETAIL FC2-3. PERFORM COMPLETE PENETRATION WELDING ACCORDING TO C&MS 513.21 BY ATTACHING RUN OFF TABS AND GRIND ALL WELDED SURFACES SMOOTH ACCORDING TO ANSI B46.1 OF 250 mil
5. PERFORM NDT TESTING ACCORDING TO C&MS 513.25A. MAGNETIC PARTICLE TESTING WILL BE ACCEPTED IN LIEU OF RADIOGRAPHIC TESTING.

DAMAGED AREA No.	MEMBER LINE No. A	PIER OR ABUTMENT	DIM. C	REPAIR DETAIL TYPE	DRILLING HOLES (EACH)	COPE HOLES (EACH)	STEEL MEMBER LEVEL UF (POUNDS)	CP WELD (FEET)	FILLET WELD (FEET)
1	BEAM 4	PIER 1	25.8'	FC2					
2	BEAM 5	PIER 1	27.4'	FC2					
3	BEAM 6	PIER 1	41.6'	FC2					

SEE PARTIAL FRAMING PLAN FOR DIMENSION C

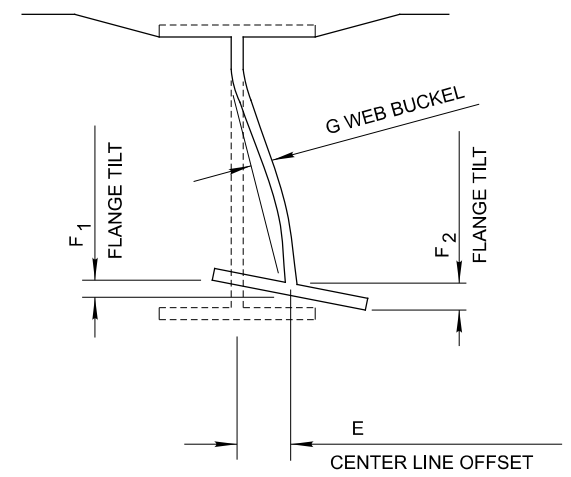


REMOVE ACCORDING TO ITEM 202-PORCTIONS OF SECONDARY MEMBERS REMOVED, AS PER PLAN. REPLACE BY MATCHING EXISTING DETAIL. SEE GSD-1-96 FOR ADDITIONAL CLARIFICATION.

MAIN AND SECONDARY MEMBER DAMAGE IS NOT SHOWN. FOR CLARITY SEE SECTION A-A

SECTION B-B
SECONDARY MEMBER BAY No. M

N- NUMBER OF CROSSFRAME BRACES COUNTED FROM THE PIER OR ABUTMENT IDENTIFIED IN TABLE



SECTION A-A
NEGATIVE E VALUES ARE BENT LEFT
NEGATIVE F VALUES ARE BENT DOWN
NEGATIVE G VALUES ARE BENT LEFT