

BR-43-88

DESIGN SPECIFICATIONS

THIS IMPROVEMENT CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS, 1983, INCLUDING 1984, 1985 AND 1986 INTERIM SPECIFICATIONS AND THE OHIO SUPPLEMENT TO THESE SPECIFICATIONS.

THE DESIGN DATA IS AS FOLLOWS:

DESIGN LOADING - HS20-44 CASE II AND THE ALTERNATE MILITARY LOADING.

STRUCTURAL STEEL - ASTM A36, YIELD STRESS 36,000 PSI

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT

THE CLEVELAND ELECTRIC ILLUMINATING CO.
55 PUBLIC SQUARE
CLEVELAND, OHIO 44101
PH. 216-623-1350

OHIO BELL TELEPHONE COMPANY
820 WEST SUPERIOR AVENUE
CLEVELAND, OHIO 44113
PH. 216-822-6241

CONTINENTAL CABLEVISION
77 NORTH ST. CLAIR STREET
PAINESVILLE, OHIO 44077
PH. 216-354-0454

CITY OF PAINESVILLE
SERVICE DEPARTMENT
459 STORRS STREET
PAINESVILLE, OHIO 44077

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.5, 105.2, AND 501.02.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

PLANS OF EXISTING STRUCTURES ARE AVAILABLE FOR EXAMINATION AT THE OHIO DEPARTMENT OF TRANSPORTATION; DISTRICT 12 OFFICE; 10100 BROADWAY AVENUE, GARFIELD HTS, OHIO.

DISPOSAL OF REMOVED MATERIAL

ALL MATERIAL REMOVED FROM THE STRUCTURE, UNLESS OTHERWISE SPECIFIED, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY HIM FROM THE SITE. ANY MATERIAL FALLING INTO THE STREAM RESULTING FROM THE STRUCTURAL REMOVAL SHALL BE REMOVED PROMPTLY AND NOT ALLOWED TO ACCUMULATE IN THE WATER. THE CONTRACTOR SHALL SUBMIT DETAILS OF THE METHOD HE PROPOSES TO USE TO RETRIEVE SUCH FALLEN MATERIAL, TO THE ENGINEER, FOR APPROVAL.

UNDER NO CIRCUMSTANCES SHALL ANY REMOVED MATERIAL BE PERMITTED TO REMAIN ON THE PREMISES, RIGHT OF WAY OR STREETS PENDING DISPOSAL OF SAME OR FOR ANY OTHER PURPOSES, UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.

LIMITATION OF OPERATIONS

THE CONTRACTOR'S ACTIVITIES AND WORK SCHEDULE SHALL BE CONSTRAINED BY THE FOLLOWING SPECIAL LIMITATIONS:

- 1) FOR TRAFFIC RESTRICTIONS SEE MAINTENANCE OF TRAFFIC SHEET 777.
- 2) EACH ABUTMENT STRINGER SHALL BE REMOVED AND REPLACED, INCLUDING GROUTING IN ONE WORK DAY. SEE SHEET 577 FOR REPAIR SEQUENCE AND DETAILS.

ITEM 514 - FIELD PAINTING OF NEW STEEL SYSTEM B, AS PER PLAN.

1. ALL NEW STRUCTURAL STEEL SHALL BE CLEANED AND COATED WITH PAINT, SYSTEM B, AS PER 514.05 OF THE CMS, EXCEPT *that all coats of paint shall be applied in the shop to insure that minimum painting temperatures can be maintained. This item will include complete coat prime and complete coat finish. Minor touch-up of damaged areas will be allowed in the field without temperature restrictions.*
2. *ALL EXISTING STRUCTURAL STEEL SURFACES THAT ARE DAMAGED DURING CONSTRUCTION SHALL ALSO BE CLEANED AND COATED WITH THE SAME PAINT SYSTEM AS THE NEW STRUCTURAL STEEL IS RECEIVING.*
3. THE TOTAL WEIGHT OF STRUCTURAL STEEL TO BE COATED IS APPROXIMATELY 13,000 POUNDS.

ITEM SPECIAL - STRINGER REPAIR

THIS ITEM SHALL INCLUDE ALL MATERIAL, EQUIPMENT, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE PLACING OF AUXILIARY STRINGERS AT THE PIERS AND REPLACING THE EXISTING STRINGERS AT THE ABUTMENTS, INCLUDING THE REMOVAL OF THE EXISTING STRINGERS, THEN INSTALLING THE NEW STRINGERS, THE BASE PLATES, THE CONNECTING ANGLES, BOLTS AND GROUT, AS SHOWN IN THESE PLANS.

A. MATERIAL

ALL STEEL SHALL BE A 36 STEEL CONFORMING TO THE REQUIREMENTS OF ITEM 513 (AISC CERTIFICATION NOT REQUIRED), OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS). STRUCTURAL STEEL UNDER THIS ITEM WILL NOT REQUIRE SHOP DRAWINGS PRIOR TO FABRICATION. THE CONTRACTOR SHALL MAKE NECESSARY MEASUREMENTS AND PREPARE SKETCHES, DRAWINGS, TABLES, ETC. THE ENGINEER SHALL HAVE AUTHORITY AND RESPONSIBILITY FOR ENSURING THAT THE FABRICATED STEEL IS ACCEPTABLE.

TECHNICAL ASSISTANCE WILL BE PROVIDED ON REQUEST BY THE BUREAU OF BRIDGES. MILL TEST REPORTS AND SHIPPING DOCUMENTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INCORPORATION OF STEEL ITEMS INTO THE WORK, AS REQUIRED BY 501.07. AFTER FABRICATION THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL TO ENSURE THAT THE DRAWINGS DEPICT THE STEEL AS ACTUALLY INCORPORATED INTO THE WORK. THE ENGINEER WILL THEN SEND ONE APPROVED SET TO THE BUREAU OF BRIDGES FOR INFORMATION. PAY WEIGHTS SHALL BE COMPUTED IN COMPLIANCE WITH 513 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SUBMITTED TO THE ENGINEER FOR HIS REVIEW AND APPROVAL. THE FABRICATOR SHALL FURNISH A 35 MILLIMETER MICROFILM COPY OF EACH SHOP DRAWING, WHICH SHALL BE MOUNTED ON AN APERTURE CARD AS SPECIFIED IN 501.05.

B. CONNECTIONS

ALL BOLTS SHALL BE 7/8" DIAMETER A-325 *galvanized unless otherwise noted. Connections* SHALL BE IN ACCORDANCE TO ITEM 513.15 OF THE CMS.

C. QUANTITIES

THE APPROXIMATE WEIGHT OF STEEL TO BE SUPPLIED IS 13,000 POUNDS.

D. PAYMENT

PAYMENT SHALL BE INCLUSIVE OF ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS TO REPAIR THE STRINGERS.

GROUT


THE GROUTING MATERIAL TO BE USED SHALL BE FIVE STAR HIGHWAY PATCH AS MANUFACTURED BY U.S. GROUT CORPORATION, 401 STILLSON ROAD, FAIRFIELD, CONNECTICUT 06430, PHONE (203) 336-7900.

ALL MATERIALS SHALL BE INCORPORATED INTO THE WORK AS RECOMMENDED BY THE MANUFACTURER. A MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT AT THE JOB SITE UNTIL SUCH TIME AS HE AND THE ENGINEER ARE SURE THAT THE CONTRACTOR IS QUALIFIED IN ALL ASPECTS OF THE GROUTING OPERATION.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL HIS PROCEDURE FOR GROUTING PRIOR TO PLACEMENT.

THE TRAFFIC LANE ABOVE THE AREA TO BE GROUTED SHALL BE CLOSED TO TRAFFIC AND SHALL NOT BE REOPENED TO TRAFFIC UNTIL ALL PLACED GROUT HAS CURED FOR AT LEAST 2 HOURS AT A TEMPERATURE ABOVE 70° F. LONGER HOURS WILL BE NECESSARY WHEN TEMPERATURE IS BELOW 70° F. 1000 PSI COMPRESSIVE STRENGTH MUST BE DEVELOPED.

PAYMENT SHALL BE INCLUSIVE OF ALL MATERIALS, EQUIPMENT, LABOR AND INCIDENTALS AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE BID FOR ITEM SPECIAL - STRINGER REPAIR.

 CT Consultants, Inc. Engineers • Architects • Planners <small>Willoughby • Mentor • North Canton • Steubenville • Lorain</small>						2 / 5
GENERAL NOTES BRIDGE NO. LAK-84-1888 OVER GRAND RIVER LAKE COUNTY						
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED	
JEA	R.L.B.	R.L.B.	J.P.R.	RJC 10/4/88	DWL 10-14-88	

Revision 11-21-88 JEA