

# SANDUSKY COUNTY, OHIO

## SAN-TR 209-0.05 TINDALL BRIDGE

### OVER THE SANDUSKY RIVER

#### BALLVILLE TOWNSHIP

#### 2012

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### DESIGN DESIGNATION

CURRENT ADT (2010) . . . . .	496
DESIGN YEAR ADT (2030) . . . . .	546
DESIGN SPEED . . . . .	25 M.P.H
FUNCTIONAL CLASSIFICATION . . . . .	URBAN LOCAL

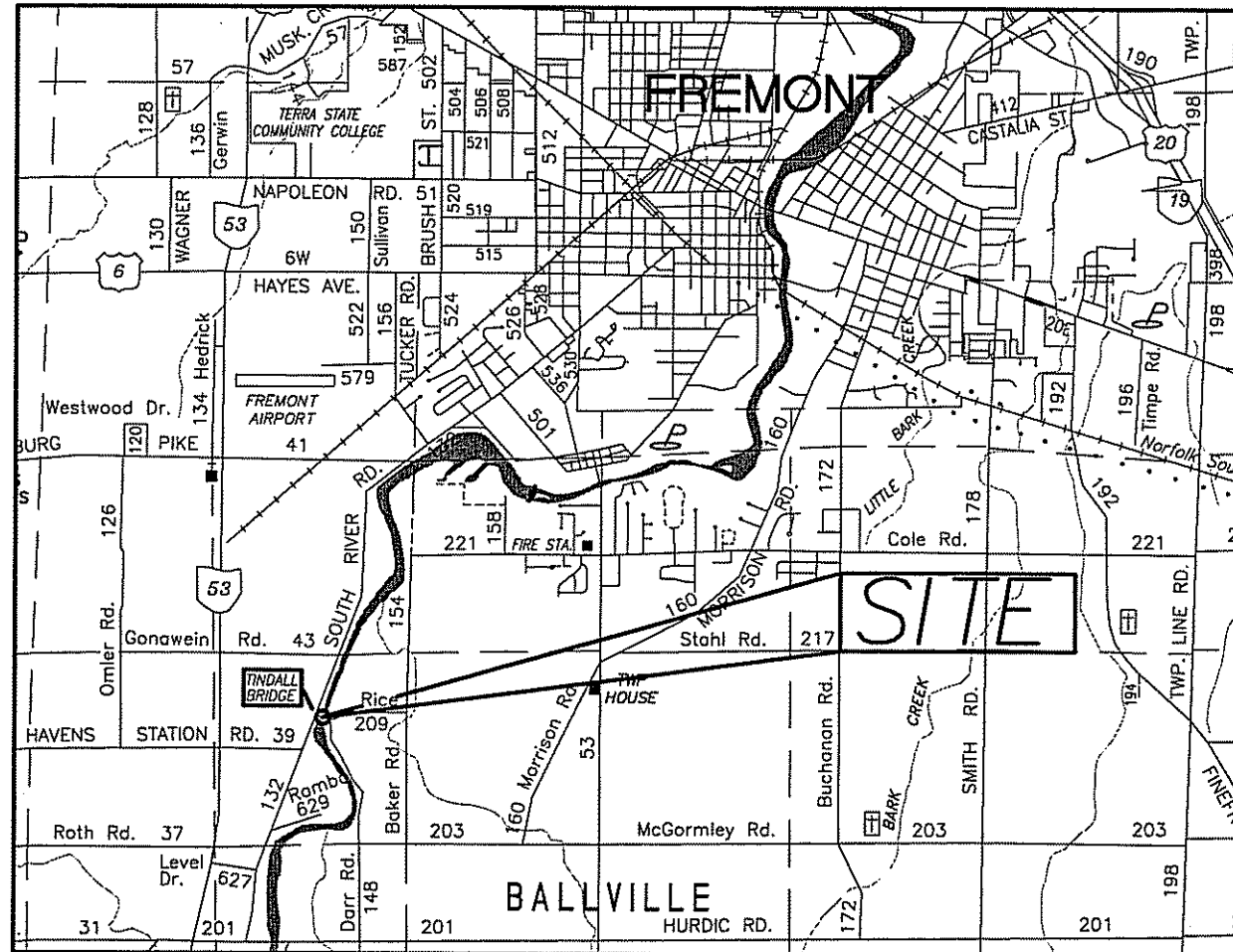
### UNDERGROUND UTILITIES

TWO (2) WORKING DAYS

### BEFORE YOU DIG

Call 1-800-362-2764 (TOLL FREE) OHIO UTILITIES  
PROTECTION SERVICE NON-MEMBERS MUST BE  
CALLED DIRECTLY  
-AND-

CALL 1-800-925-0988 (TOLL FREE)  
OHIO OIL & GAS PRODUCERS UNDERGROUND  
PROTECTION SERVICE



LOCATION MAP



### PROJECT DESCRIPTION

TINDALL BRIDGE IS A TWO (2) SPAN THROUGH TRUSS BRIDGE BUILT IN 1915 WITH AN OVERALL LENGTH OF 334 FEET AND A WIDTH OF 16 FEET. TINDALL BRIDGE IT'S A ONE LANE BRIDGE WITH A POSTED WEIGHT LIMIT OF 25 TONS. THE PROJECT CONSISTS OF THE COMPLETE PAINTING OF THE STRUCTURAL STEEL USING ODOT'S ITEM 514 SPECIFICATIONS.

### SPECIFICATIONS

THE 2010 STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, SHALL GOVERN THIS IMPROVEMENT EXCEPT WHEN MODIFIED BY THE PLANS, SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS OR PROPOSAL NOTES.

STANDARD CONSTRUCTION DRAWINGS				SUPPLEMENTAL SPECIFICATIONS		ENGINEERS SEAL:
NUMBER	DATE	NUMBER	DATE	NUMBER	DATE	
MT-101.60	04-17-09	TC-41.20	01-19-01	800	10-21-11	
MT-105.10	01-16-09	TC-42.20	01-21-11	832	05-05-09	
		TC-52.10	01-19-07			
		TC-52.20	01-19-07			

PLANS PREPARED BY:  
SANDUSKY COUNTY ENGINEER  
2500 WEST STATE ST.  
FREMONT, OHIO 43420  
TEL. (419) 334-9731  
FAX. (419) 334-9733

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND SPECIFICATIONS.

*James R. Moyer* 12-14-11  
SANDUSKY COUNTY ENGINEER DATE

FEDERAL PROJECT NO.

PID NO.

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT

SAN-TR 209.05  
TINDALL BRIDGE

1  
5

90411

NONE

## STANDARD SPECIFICATIONS

THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, DATED JANUARY 1, 2010 SHALL GOVERN THE MAKING OF THIS IMPROVEMENT.

## DEFINITIONS AND TERMS

WHEREVER THERE APPEARS IN THE STANDARD SPECIFICATIONS (ODOT ITEMIZED CMS), SUPPLEMENTAL SPECIFICATIONS OR PROPOSAL NOTES, THE TERMS: "THE STATE", "DIRECTOR OF TRANSPORTATION", "DEPARTMENT", "DISTRICT CONSTRUCTION ENGINEER (DCE)", "ENGINEER", OR ANY OTHER TERM DESIGNATING ANY REPRESENTATIVE OR EMPLOYEE OF THE STATE OR ITS DEPARTMENT OF TRANSPORTATION, SUCH TERM SHALL, FOR THE PURPOSE OF THIS CONTRACT, BE CONSIDERED AND TAKEN AS MEANING AND DESIGNATING THE RESPECTIVE BOARD OFFICER OR EMPLOYEE OF SANDUSKY COUNTY WHOSE DUTY OR FUNCTION IT IS TO DEAL WITH THE SUBJECT MATTER IN CONNECTION WITH WHICH SUCH TERM IS USED AND SPECIFICALLY:

THE STATE DEPARTMENT	- SHALL MEAN SANDUSKY COUNTY - SHALL MEAN THE SANDUSKY COUNTY ENGINEER'S OFFICE
DIRECTOR	- SHALL MEAN THE SANDUSKY COUNTY ENGINEER, HIS DEPUTIES OR ANY ENGINEER DESIGNATED AS THE COUNTY ENGINEER'S REPRESENTATIVE
DISTRICT CONSTRUCTION	- SHALL MEAN THE DULY AUTHORIZED AGENT OR REPRESENTATIVE OF THE SANDUSKY COUNTY ENGINEER'S OFFICE ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY FOR THE PURPOSES OF ENGINEERING, CONSTRUCTION, AND ADMINISTRATION OF THE CONTRACT
LABORATORY	- SHALL MEAN ANY LABORATORY DESIGNATED BY THE COUNTY

## 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 FIELD MEASUREMENTS. THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05 AND 105.02.

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

1997 NONDESTRUCTIVE CONDITION ASSESSMENT, A 1983 PHYSICAL CONDITIONS REPORT, AND 2011 LOAD RATING ANALYSIS ARE ON FILE AT THE SANDUSKY COUNTY ENGINEER'S OFFICE, 2500 W. STATE STREET FREMONT, OHIO, 43420.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH ALL PERTINENT EXISTING DRAWINGS AND DETAILS RELEVANT TO THE PROJECT.

## WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

## UTILITIES

THE CONTRACTOR SHALL BE AWARE THAT WITHIN THE PROJECT LIMITS THERE ARE TWO WATER QUALITY AND CONTROL MONITORING STATIONS. ONE OWNED AND OPERATED BY THE E.P.A & NATIONAL CENTER FOR WATER QUALITY RESEARCH. AND THE OTHER OWNED AND OPERATED BY THE U.S.G.S.

OHIO WATER SCIENCE CENTER  
USGS BUILDING  
6480 DOUBLETREE AVE.  
COLUMBUS, OH 43229-1111  
(614) 430-7700

ODNR-OHIO STREAM MONITORING  
2045 MORSE ROAD  
BUILDING C-3  
COLUMBUS, OH 43229-6693  
(614) 265-6453

CALL OHIO UTILITIES PROTECTION SERVICE TWO (2) WORKING DAYS BEFORE YOU DIG, TOLL FREE 1-800-362-2764 (NON-MEMBERS MUST BE CALLED DIRECTLY).

CALL OHIO OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE (OGPUPS) TOLL FREE 1-800-925-0988.

## COOPERATION OF CONTRACTOR

IF, DURING THE CLEANING OPERATIONS ANY STRUCTURE MEMBER IS FOUND TO BE SEVERELY CORRODED OR CONTAIN A VISIBLE CRACK, THE ENGINEER SHALL BE NOTIFIED AND THE MEMBER INSPECTED BEFORE PAINTING OF THE MEMBER IS PERMITTED.

## PROTECTION OF PERSONS AND PROPERTY

THE CONTRACTOR SHALL COLLECT, REMOVE, AND DISPOSE OF ALL DISCARDED MATERIALS AND SHALL LEAVE THE JOB SITE IN A CLEAN MANNER AND CONDITION. WHEN OR WHERE ANY DIRECT OR INDIRECT DAMAGE OR INJURY IS DONE TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR SHALL RESTORE, AT HIS OWN EXPENSE, SUCH PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE OR INJURY WAS DONE. SEE GENERAL NOTE CONTAINMENT REQUIREMENTS. (UNDER ITEM 514-ADDITIONAL REQUIREMENTS)

## PRIOR INSPECTION OF WORK

PROSPECTIVE BIDDERS ARE REQUIRED TO MAKE AN INSPECTION OF THE BRIDGE IN THE FIELD AND TO REVIEW THE PLANS AND SPECIFICATIONS BEFORE SUBMITTING BIDS. SEE SECTION 102.05 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

## PROJECT PROGRESS MEETINGS

PROGRESS MEETINGS WILL BE HELD EVERY FOUR (4) WEEKS OR AS NEEDED AT A LOCATION DESIGNATED BY THE COUNTY ENGINEER, AND WILL BE ATTENDED BY COUNTY, STATE, AND CONTRACTOR DECISION MAKING PERSONNEL.

THE PURPOSE OF THESE MEETINGS IS TO DISCUSS CRITICAL OPERATIONS AND POTENTIAL PROBLEMS. ALSO, THE CONTRACTOR WILL CONFIRM PROJECT SCHEDULE, AND SPECIFIC PORTIONS OF THE WORK TO BE PERFORMED DURING THE WEEKS FOLLOWING THE MEETING.

## CLOSURE OF TINDALL BRIDGE

SANDUSKY COUNTY WILL ALLOW THE CONTRACTOR TO CLOSE TINDALL BRIDGE FOR A MAXIMUM PERIOD OF NINETY (90) CONSECUTIVE DAYS. TIME EXTENSIONS WILL ONLY BE CONSIDERED WHEN CONTROLLING ITEMS OF WORK ON THE APPROVED PROGRESS SCHEDULE ARE AFFECTED DUE TO NO FAULT OF THE CONTRACTOR.

WHEN ADDITIONAL WORK IS REQUIRED, TIME EXTENSIONS WILL ONLY BE GRANTED FOR CONTROLLING ITEMS ON THE PROGRESS SCHEDULE.

## PRELIMINARY WALK-THROUGH

PRIOR TO COMMENCING WORK ON THE PROJECT, THE CONTRACTOR, PROJECT ENGINEER AND/OR COUNTY REPRESENTATIVE SHALL HAVE A FIELD REVIEW OF THE PROJECT SITE. THE CONTRACTOR SHALL DOCUMENT THE EXISTING CONDITION OF THE STRUCTURE BEFORE ALL CONSTRUCTION WORK BEGINS. DOCUMENTATION OF THE STRUCTURE SHALL INCLUDE WRITTEN TEXT, PHOTOGRAPHS AND DVD RECORDING IF NECESSARY. A COPY OF ALL DOCUMENTATION SHALL BE GIVEN TO THE PROJECT ENGINEER AND CONTRACTOR. THE OVERALL EXISTING CONDITION OF THE STRUCTURE SHALL BE FORMALLY AGREED UPON BY ALL PARTIES.

## CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL SUBSIDIARY AGREEMENT GOVERNING COMPLETION OF THIS PROJECT.

## ITEM 514 - ADDITIONAL REQUIREMENTS

IN ADDITION TO THE REQUIREMENTS OF CMS 514, THE CONTRACTOR SHALL FOLLOW THE PROVISIONS SET FORTH BELOW FOR THE SURFACE PREPARATION AND FIELD PAINTING OF EXISTING STRUCTURAL STEEL UNDER THIS CONTRACT.

### GENERAL

THE COLOR OF THE FINISH COAT FOR ALL STRUCTURAL STEEL SHALL BE AGREED UPON BETWEEN THE CONTRACTOR AND THE COUNTY PRIOR TO BEGINNING OF CONSTRUCTION.

THE WORK SHALL INCLUDE THE REPAIR AND CLEANING OF PACK-RUSTED AREAS AND THE CAULKING OF JOINTS BETWEEN ADJACENT STEEL PIECES OF BUILT-UP MEMBERS AND JOINTS AS DIRECTED BY THE ENGINEER. PACK-RUSTED AREAS ARE DEFINED AS THOSE LOCATIONS WHERE ADJACENT STEEL PLATES ARE RUSTED APART MORE THAN 1/8".

### 514.13 SURFACE PREPARATION

THE LIMITS AND QUALITY OF SURFACE PREPARATION AND PRIME COAT APPLICATION UNDER THIS ITEM INCLUDE THE FOLLOWING:

#### A. SOLVENT CLEANING (QCP#1)

AFTER SOLVENT CLEANING AREAS OF THE STRUCTURAL STEEL ON THE BRIDGE IN ACCORDANCE WITH THE REQUIREMENTS OF CMS 514.13, BUT PRIOR TO ABRASIVE BLASTING AND OTHER SURFACE PREPARATION OPERATIONS PRECEDING PRIME COAT APPLICATION, THE CONTRACTOR SHALL WASH ALL THE STRINGERS AND FLOOR BEAMS STEEL SURFACES WITH A WASHING SOLUTION COMPRISED OF CLEAN, POTABLE WATER AND A CHEMICAL ADDITIVE CAPABLE OF COMPLETELY REMOVING CHLORIDES, SULFATES AND SALTS PRESENT ON THE STEEL SURFACES.

SURFACE WASHING SHALL BE CONDUCTED USING EQUIPMENT CAPABLE OF DELIVERING THE WASHING SOLUTION WITH A MINIMUM NOZZLE PRESSURE OF 3,000 POUNDS PER SQUARE INCH AND AT A RATE OF NOT LESS THAN 4 GALLONS PER MINUTE. THE USE OF THIS CHEMICAL ADDITIVE SHALL BE IN ACCORDANCE WITH THE MANUFACTURE'S DATA SHEET RECOMMENDATIONS. IN ADDITION, THE CONTRACTOR SHALL PROVIDE GAUGES ON THE EQUIPMENT TO VERIFY THE PRESSURE DURING OPERATION. THE WASHING SOLUTION SHALL BE SPRAYED ON THE STRUCTURE WHILE HOLDING THE NOZZLE A MINIMUM OF 12" FROM THE SURFACE BEING WASHED.

(CONTINUED ON NEXT PAGE)

GENERAL NOTES

SAN-TR 209.05  
TINDALL BRIDGE

2  
5

CALCULATED  
CAB  
CHECKED  
JPM

GENERAL NOTES

SAN-TR 209.05  
TINDALL BRIDGE

3  
5

**ITEM 514-ADDITIONAL REQ. (CONTINUED)**

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER ALL EQUIPMENT SPECIFICATIONS VERIFYING BOTH THE DELIVERY RATE AND PRESSURE. IN ADDITION, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER FOR ACCEPTANCE THE PROPOSED CHEMICAL ADDITIVE PRODUCT DATA A MINIMUM OF 15 DAYS PRIOR TO THE COMMENCEMENT OF SURFACE WASHING.

**C. ABRASIVE BLASTING**

PORTIONS OF JOINTS THAT HAVE PACK RUST SHALL RECEIVE PREPARATION IN ADDITION TO THE ABRASIVE BLASTING REQUIRED. PACK RUST SHALL BE REMOVED FROM JOINTS RUSTED APART MORE THAN A 1/4" BY CHIPPING, HEATING, HAMMERING, PUNCHING, CHISELING, OR BY ANY OTHER SUITABLE MEANS, TO A DEPTH AT LEAST EQUAL TO THE WIDTH OF THE GAP. PRIOR TO THE SURFACE PREPARATION REQUIRED BY THESE SPECIFICATIONS, MAKE SURE THAT THE AREAS WITH GAPS FROM 1/8" TO 1/4" ARE CLEANED TO A DEPTH AT LEAST EQUAL TO THE GAP WIDTH. ALL JOINTS SHALL THEN BE VACUUMED WITH A COMMERCIAL VACUUM CLEANER HAVING A NOZZLE OPENING OF 1" TO 1-1/2" OR AIR BLOWN SUCH THAT ALL DUST AND DEBRIS ARE REMOVED TO THE SATISFACTION OF THE ENGINEER. THE PRIME COAT SHALL BE APPLIED IN ACCORDANCE WITH THESE SPECIFICATIONS.

**D. CONTAINMENT/WASTE DISPOSAL (QCP#4)**

**CONTAINMENT REQUIREMENTS**

THE CONTRACTOR SHALL INSTALL AND MAINTAIN CONTAINMENT SYSTEMS SURROUNDING THE WORK FOR THE PURPOSE OF CONTROLLING EMISSIONS OF DUST AND DEBRIS IN ACCORDANCE WITH THE REQUIREMENTS OF CMS 514. WORKING PLATFORMS AND CONTAINMENT MATERIALS THAT ARE USED SHALL BE FIRM AND STABLE AND PLATFORMS SHALL BE DESIGNED TO SUPPORT THE WORKERS, INSPECTORS, SPENT SURFACE PREPARATION MEDIA (e.g., ABRASIVES, ETC.) AND EQUIPMENT DURING ALL PHASES OF SURFACE PREPARATION AND PAINTING. PLATFORMS, CABLES AND OTHER SUPPORTING STRUCTURES SHALL BE DESIGNED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE OHIO INDUSTRIAL COMMISSION AND OSHA. INSPECTION ACCESS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CMS 514.10.

IF CONTAINMENT IS PROPOSED TO BE ATTACHED TO THE STRUCTURE, THE CONTAINMENT SHALL BE ATTACHED BY BOLTING, CLAMPING OR SIMILAR MEANS. WELDING ONTO OR DRILLING INTO THE STRUCTURE IS PROHIBITED UNLESS APPROVED BY THE ENGINEER IN WRITING. THE CONTRACTOR SHALL PROVIDE DRAWINGS SHOWING THE CONTAINMENT SYSTEM AND INDICATING THE METHOD(S) OF SUPPORTING THE WORKING PLATFORMS AND CONTAINMENT MATERIALS.

IN THE UNLIKELY EVENT OF SUSTAINED WINDS OF 40 MPH OR GREATER, THE CONTAINMENT SHALL BE DROPPED AND ALL MATERIALS AND EQUIPMENT SHALL BE SECURED TO AVOID OVERSTRESSING AND/OR DAMAGING THE BRIDGE STRUCTURE. DELAYS TO THE PROGRESS SCHEDULE BY WEATHER ARE ADDRESSED IN CMS 108.06.

THE CONTRACTOR SHALL SUBMIT CALCULATIONS AND DRAWINGS SIGNED AND SEALED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER, ASSURING THE STRUCTURAL INTEGRITY OF THE BRIDGE UNDER THE LIVE AND DEAD LOADS IMPOSED, INCLUDING THE DESIGN WIND LOAD. DESIGN SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE MOST CURRENT VERSIONS OF AASHTO'S "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" AND THE ODOT BRIDGE DESIGN MANUAL.

**CONTAINMENT PLANS**

THE CONTRACTOR SHALL SUBMIT CONTAINMENT PLANS AND CALCULATIONS IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF CMS 501.05 AND AS SET FORTH BELOW.

THE CONTAINMENT PLANS SHALL INCLUDE DRAWINGS, EQUIPMENT SPECIFICATIONS AND CALCULATIONS (e.g., WIND LOAD). THE PLANS SHALL INCLUDE COPIES OF THE MANUFACTURER'S SPECIFICATIONS FOR THE CONTAINMENT MATERIALS AND EQUIPMENT THAT WILL BE USED TO ACCOMPLISH CONTAINMENT AND VENTILATION.

THE CONTAINMENT SUBMITTAL SHALL INCLUDE CALCULATIONS THAT ASSURE STRUCTURAL INTEGRITY OF THE BRIDGE WHEN IT SUPPORTS THE CONTAINMENT. AN OHIO REGISTERED PROFESSIONAL ENGINEER SHALL PREPARE, SIGN, SEAL AND DATE EACH SUBMITTED PLAN AND SET OF CALCULATIONS. THE FOLLOWING STATEMENT SHALL BE INCLUDED ON EACH SUBMITTED PLAN AND SET OF CALCULATIONS:

"THIS DESIGN WAS PREPARED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS FOR THIS PROJECT."

ENGINEER REVIEW AND ACCEPTANCE OF THE DRAWINGS AND CALCULATIONS SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY FOR THE SAFETY OF THE WORKING PLATFORMS AND CONTAINMENT. AFTER THE WORK PLATFORMS AND CONTAINMENT MATERIALS ARE ERECTED, ADDITIONAL MEASURES MAY BE NEEDED TO ENSURE WORKER SAFETY ACCORDING TO OHIO INDUSTRIAL COMMISSION AN/OR OSHA REGULATIONS. THE CONTRACTOR SHALL INSTITUTE SUCH MEASURES AT NO ADDITIONAL COST TO THE PROJECT.

**514.17 COATING APPLICATION**

IN ADDITION TO THE REQUIREMENTS OF CMS 514, A STRIPE COATING OF THE PRIME COAT SHALL BE APPLIED TO ALL WELDS, CREVICES, RIVET HEADS, NUTS, BOLT HEADS, BOLT THREADS, AND OTHER IRREGULAR SURFACES. THE STRIPE COATING SHALL BE APPLIED TO THE SPECIFIED SURFACES BEFORE THE APPLICATION OF THE FULL PRIME COAT OVER THE SAME AREAS AND ADJACENT PREPARED SURFACES. STRIPING SHALL EXTEND A MINIMUM OF 1" FROM THE EDGES REQUIRING STRIPE COATING. THE STRIPE COATING SHALL SET TO TOUCH BEFORE APPLICATION OF THE FULL PRIME COAT OVER THE SAME AREA; HOWEVER, THE STRIPE COATING SHALL NOT BE PERMITTED TO DRY FOR A PERIOD LONG ENOUGH TO ALLOW RUSTING OF THE ADJACENT UNPRIMED STEEL SURFACES BEFORE THE FULL PRIME COAT CAN BE APPLIED TO THE AREA.

THE CONTRACTOR SHALL THOROUGHLY COAT ALL SURFACES RECEIVING A STRIPE COATING, PAYING PARTICULAR ATTENTION TO HARD-TO-REACH AREAS AND IRREGULAR SURFACES, SUCH AS LACING BARS, BOLT HEADS, LAP SPLICES, GUSSET PLATES, ETC. WHEN STRIPE COATING MULTI-PLANED SURFACE CONFIGURATIONS SUCH AS ON NUTS AND BOLT HEADS, THE CONTRACTOR SHALL APPLY THE STRIPE COATING FROM MULTIPLE DIRECTIONS TO ENSURE THE COMPLETE COVERAGE OF ALL SURFACES, CREVICES, CORNERS AND SHARP EDGES.

**514.19 CAULKING (QCP#9)**

AFTER THE INTERMEDIATE COAT HAS BEEN APPLIED IN ACCORDANCE WITH THESE SPECIFICATIONS, THE CONTRACTOR SHALL CAULK ALL GAPS OR CREVICES GREATER THAN 1/8". THE INTERMEDIATE COAT SHALL BE FREE OF CONTAMINANTS WHEN THE CAULKING IS APPLIED.

THE CAULKING SHALL BE APPLIED EVENLY TO THE JOINTS AND GAPS AS REQUIRED BY THIS SPECIFICATION. VOIDS SHALL BE COMPLETELY FILLED WITH CAULKING WHICH SHALL BE APPLIED BY TROWEL OR CAULKING GUN AND SHALL BE SPREAD SMOOTHLY USING HEAVY PRESSURE TO DISPLAY AIR BUBBLES. EXCESS MATERIAL SHALL BE REMOVED IMMEDIATELY. ALL PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF THE MANUFACTURER'S WRITTEN SPECIFICATIONS AND TO THE SATISFACTION OF THE ENGINEER.

THE CAULKING MATERIAL SHALL BE A SINGLE PACK MOISTURE CURED POLYURETHANE BASED MATERIAL, WHICH WILL NOT SHRINK OR SAG, CAPABLE OF FILLING VOIDS GREATER THAN 1/8" AND UP TO 1" WIDE. ONLY MATERIAL THAT IS LISTED ON ODOT'S QUALIFIED PRODUCT LIST WEBSITE MAY BE USED. THE COLOR OF THE CAULK SHALL CLOSELY MATCH THE COLOR OF THE FINISH PAINT COAT APPLIED TO THE STRUCTURAL STEEL.

**514.23 METHOD OF MEASUREMENT**

DUE TO THE COMPLEX NATURE OF THIS BRIDGE, PAYMENT FOR PAINTING ITEMS UNDER THIS CONTRACT IS ON A LUMP SUM BASIS. THE FOLLOWING SURFACE AREA QUANTITIES OF MAIN STRUCTURAL STEEL COMPONENTS REQUIRING PAINTING UNDER THIS CONTRACT ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. IT SHALL BE UNDERSTOOD THAT OTHER

INCIDENTAL AREAS OF THE STRUCTURE MAY REQUIRE PAINTING AS DETERMINED BY THE ENGINEER AND THE AREAS GIVEN BELOW MAY NOT ACCOUNT FOR THE TOTAL OF ALL SURFACE AREAS TO BE PREPARED AND PAINTED UNDER THIS CONTRACT:

BRIDGE COMPONENT	ESTIMATED SURFACE AREA
STRINGERS	13,360 SQ. FT.
FLOOR BEAMS	1,554 SQ. FT.
METAL PIER	945 SQ. FT.
TRUSS	26,136 SQ. FT.
MISC. STEEL	3,000 SQ. FT.

**514.24 BASIS OF PAYMENT**

IN ADDITION TO THE REQUIREMENTS OF CMS 514.24, THE FOLLOWING SHALL APPLY TO THIS CONTRACT:

PAYMENT FOR THE FOLLOWING ITEMS SHALL BE MADE FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICES BID FOR:

ITEM	UNIT	DESCRIPTION
514	LUMP SUM	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN.
514	LUMP SUM	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN.
514	LUMP SUM	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT.
514	LUMP SUM	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT.
514	MAN HOUR	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL.
514	EACH	FINAL INSPECTION REPAIR

ALL REQUIREMENTS OF THESE SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO PREPARATION OF CONTAINMENT PLANS, SOLVENT CLEANING, STRIPE COATING, PACK RUST REPAIR, AND CAULKING ARE CONSIDERED INCIDENTAL TO THE CONTRACT WORK AND SHALL BE ACCOUNTED FOR IN THE PRICES BID FOR THE PAY ITEMS LISTED ABOVE.

**ITEM 513 - STRUCTURAL STEEL**

CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE REPAIR OF DEFICIENT STRUCTURAL MEMBERS THAT MIGHT BE ENCOUNTERED DURING THE SURFACE PREPARATION PHASE PRIOR TO THE PAINTING OF THE BRIDGE. THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK UNDER THIS ITEM UNLESS AUTHORIZED BY THE ENGINEER.

**ITEM 614 - MAINTAINING TRAFFIC**

THE MAKING OF THIS IMPROVEMENT REQUIRES THAT TINDALL BRIDGE BE CLOSED TO THROUGH TRAFFIC. THE CONTRACTOR SHALL HAVE ACCESS TO THE BRIDGE FOR THE DURATION OF THE PROJECT. HOWEVER, THE CLOSURE OF THE BRIDGE TO VEHICULAR TRAFFIC, SHALL BE LIMITED TO A PERIOD NOT TO EXCEED NINETY (90) CONSECUTIVE DAYS.

ALL CONSTRUCTION TRAFFIC CONTROL DEVICES USED FOR THIS PROJECT SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR, EXCEPT AS NOTED BELOW.

THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY SAFEGUARDS, SUCH AS TYPE III BARRICADES, LIGHTING, FLAGGERS, AND SUCH OTHER TRAFFIC CONTROL DEVICES AS PROVIDED IN ITEM 614-MAINTAINING TRAFFIC, SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.

S:\Carson\Bridges\Tindall Bridge\Painting Project\PF 2012\Drawings (12-01-2012)

**ITEM 614 – MAINTAINING TRAFFIC (CONTINUED)**

ADVANCED TRAFFIC SIGNS AND SUPPORTS, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES AND SIGNS SHALL BE FURNISHED, ERECTED, MAINTAINED, AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR.

FLUORESCENT ORANGE TYPE G SIGN SHEETING SHALL BE USED FOR ALL CONSTRUCTION WARNING SIGNS.

PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614-MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

**POLLUTION CONTROL**

THE CONTRACTOR SHALL FURNISH AND INSTALL POLLUTION CONTROL DEVICES AND TAKE ALL NECESSARY PRECAUTIONS TO PREVENT WATER AND AIR POLLUTION DUE TO HIS/HER CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL ASSUME FULL AND COMPLETE RESPONSIBILITY FOR ANY DELAY IN WORK AND DAMAGES WHICH MAY OCCUR DUE TO HIS/HER NON-COMPLIANCE OF CURRENT LOCAL, STATE, AND FEDERAL WATER AND AIR POLLUTION LAWS.

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DEBRIS OR OTHER MATERIAL FROM ENTERING THE SANDUSKY RIVER. THESE PRECAUTIONS MAY INCLUDE, BUT ARE NOT LIMITED TO NETTING, FALSEWORK, AND MATS. ANY MATERIAL WHICH ACCIDENTALLY ENTERS THE SANDUSKY RIVER SHALL BE REMOVED IMMEDIATELY.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, BEFORE STARTING ANY PROJECT WORK, DETAILED PROCEDURES AND PLANS FOR THE POLLUTION CONTROL WORK WITH INFORMATION AS TO EQUIPMENT, METHODS AND MATERIALS TO BE USED. THE REVIEW AND APPROVAL BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF HIS/HER FULL RESPONSIBILITY TO EMPLOY CORRECT POLLUTION CONTROL MEASURES.

NO SEPARATE PAYMENT SHALL BE MADE FOR ANY POLLUTION CONTROL WORK AS DESCRIBED ABOVE. THE COST THEREOF SHALL BE INCLUDED IN THE COST OF OTHER PERTINENT ITEMS OF WORK FOR THIS PROJECT.

**ITEM 832 – EROSION CONTROL**

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED FOR TEMPORARY SEDIMENT AND EROSION CONTROL IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 832:

ITEM 832-EROSION CONTROL                      2,000 EACH

**GENERAL SUMMARY**

REF. NO.	ITEM	ITEM EXT.	TOTAL QUANTITY	UNIT	DESCRIPTION
1	103.05		LUMP	----	PREMIUM FOR CONTRACT PERFORMANCE BOND
2	514	00051	LUMP	----	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL, AS PER PLAN
3	514	00057	LUMP	----	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT, AS PER PLAN
4	514	00060	LUMP	----	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT
5	514	00066	LUMP	----	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT
6	514	00504	60	MAN HR.	GRINDING FINS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL
7	514	10000	40	EACH	FINAL INSPECTION REPAIR
8	513	10320	500	LBS.	STRUCTURAL STEEL MEMBERS, LEVEL 6 (CONTINGENCY)
9	614	11000	LUMP	----	MAINTAINING TRAFFIC
10	624	10000	LUMP	----	MOBILIZATION
11	832	30000	2,000	EACH	EROSION CONTROL

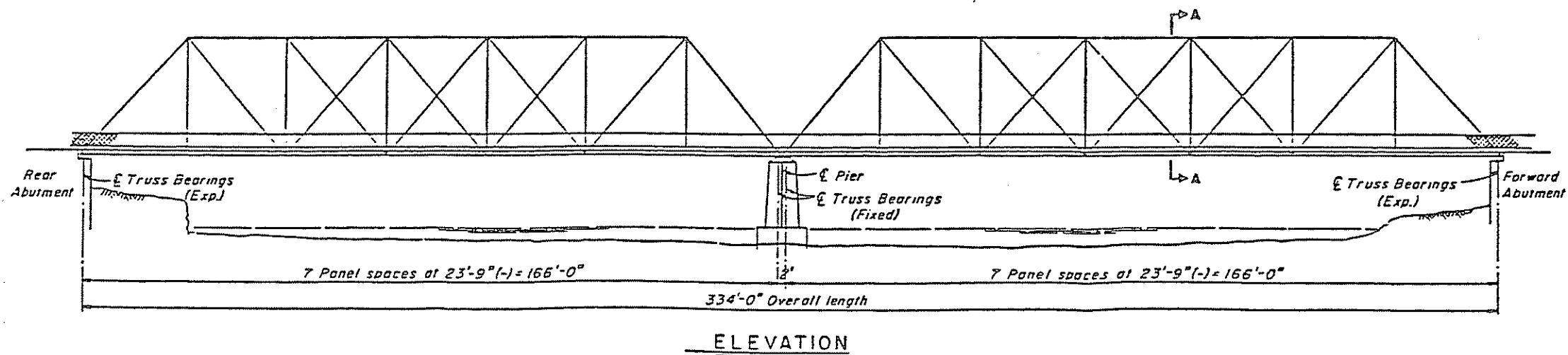
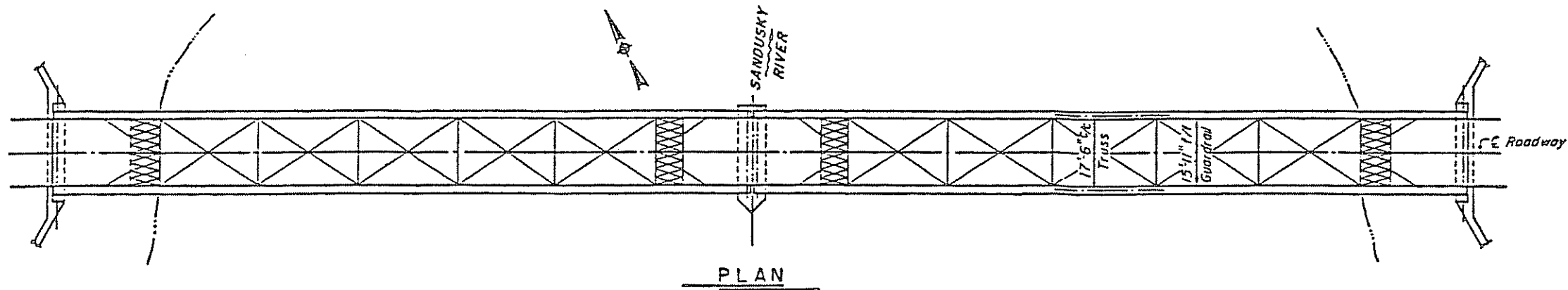
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GENERAL NOTES/GENERAL SUMMARY

SAN-TR 209.05  
TINDALL BRIDGE

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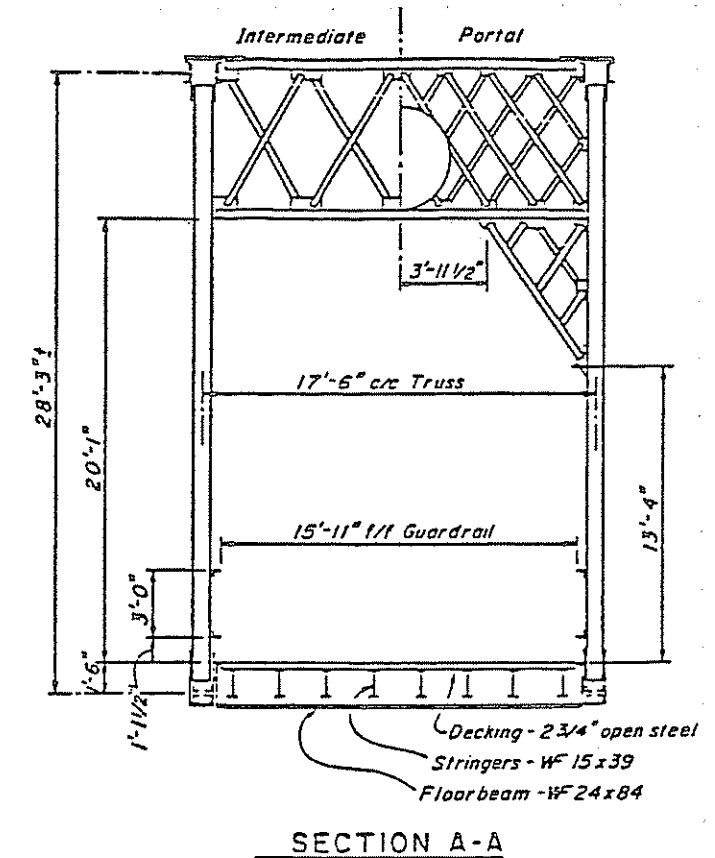


DESIGN DESIGNATION	
CURRENT ADT (2010)	= 496
DESIGN YEAR ADT (2030)	= 546
DESIGN SPEED	= 25 MPH
FUNCTIONAL CLASS	= URBAN LOCAL

EXISTING STRUCTURE	
TYPE:	RIVETED STEEL THROUGH TRUSS ON REINFORCED CONCRETE ABUTMENTS OVER A REINFORCED CONCRETE PIER.
SPANS;	TWO (2) IDENTICAL 166'-0" @/@ BEARINGS
OVERALL LENGTH:	334'-0"
ROADWAY:	15'-11" F/F GUARDRAIL
DECKING:	2 3/4" OPEN STEEL GRATE
DESIGN LOADING:	HS 20-44 (POSTED 25 TON LIMIT)
SKEW:	0°00'00"
ALIGNMENT:	TANGENT
WEARING SURFACE:	NONE
CROWN:	3/16"/FT
LATITUDE:	N 41°18'30"
LONGITUDE:	W 83°09'28"
STRUCTURAL FILE NUMBER:	7230168
DATE BUILT:	1915 CHAMPION IRON CO.
DATE REHABILITATED:	VARIOUS

**NOTES:**

1. PREPARE AND PAINT ALL STRUCTURAL STEEL ON BOTH SPANS INCLUDING STEEL ON CENTER PIER.
2. OPEN STEEL GRATE DECKING NOT TO BE PAINTED WITH THIS PROJECT.
3. AVERAGE VERTICAL CLEARANCE FROM THE BOTTOM OF THE TRUSS TO THE WATER SURFACE OF THE SANDUSKY RIVER IS: ±15 FEET.



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GENERAL ELEVATION PLAN

SAN-TR 209.05  
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