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PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN (CONT.):

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PLAN FOR THE REMOVAL AND REHABILITATION OF THE STRUCTURAL TIMBER MEMBERS INCLUDING TEMPORARY STRUCTURAL SUPPORTS AND TEMPORARY MEMBER REINFORCEMENT. THREE (3) SETS OF THE REMOVAL AND REHABILITATION PLAN, WHICH SHALL INCLUDE THE INFORMATION DESCRIBED IN THIS NOTE, SHALL BE SUBMITTED TO THE COMMISSIONERS FOR APPROVAL AT LEAST (30) DAYS BEFORE THE ACTUAL WORK IS TO BEGIN. THE REMOVAL AND REHABILITATION PLAN SHALL BE APPROVED PRIOR TO PERFORMING ANY WORK ON THE BRIDGE. THE PLANS SHALL BE PREPARED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER.

THE EXISTING STEEL BEAMS CURRENTLY USED TO SHORE SPAN 3 ARE THE PROPERTY OF MONROE COUNTY. THE EXISTING TRUSS MEMBERS NOT FOR REUSE SHALL ALSO BE THE PROPERTY OF MONROE COUNTY. THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE THE BEAMS AND TRUSS MEMBERS DURING CONSTRUCTION AND SHALL DELIVER THE BEAMS AND TRUSS MEMBERS TO THE COUNTY AT OR BEFORE COMPLETION OF THE WORK. THE CONTRACTOR SHALL COORDINATE THE TIME AND LOCATION OF DELIVERY WITH THE COUNTY.

PLANS FOR REMOVAL AND SUPPORT SUBMITTALS SHALL INCLUDE AT LEAST THE FOLLOWING:

1. THE SIGNATURE, NUMBER, AND SEAL OF THE OHIO REGISTERED PROFESSIONAL ENGINEER WHO PREPARED THE SUBMITTAL.
2. CALCULATION AND ANALYSIS OF THE STRUCTURAL TIMBER TRUSS MEMBERS TO DETERMINE AND DEFINE THE ACTUAL LOADING APPLIED TO THE MEMBERS BY THE CONTRACTOR'S OPERATIONS.
3. DRAWINGS SHOWING THE PHYSICAL AND DIMENSIONAL POSITION OF LIFT AND SUPPORT LOCATIONS AND LOCATIONS OF TEMPORARY STRUCTURAL TIMBER MEMBER SUPPORTS AND TEMPORARY MEMBER REINFORCEMENT FOR THE REMOVAL AND REHABILITATION OF THE STRUCTURAL TIMBER TRUSS MEMBERS.
4. DRAWINGS OF METHODS OF ATTACHMENT TO THE STRUCTURAL TIMBER MEMBER. ADDING HOLES TO THE STRUCTURAL TIMBER MEMBER TO BE REUSED WILL NOT BE PERMITTED.

THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL NECESSARY TOOLS, LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 202, AND TO THE SATISFACTION OF THE COMMISSIONERS. THE BRIDGE SHALL BE SUPPORTED SUCH THAT POSITIVE CAMBER IS PROVIDED AT THE MIDSPAN OF SPAN 1 AND SPAN 3 IN THE MAGNITUDE OF 3 1/2" AND MIDSPAN OF SPAN 2 IN THE MAGNITUDE OF 4".

REPLACEMENT MEMBER DIMENSIONS:

WHEN APPLICABLE, PRIOR TO MANUFACTURE OF EACH REPLACEMENT MEMBER, THE CONTRACTOR SHALL MEASURE THE STRUCTURE TO DETERMINE THE REQUIRED DIMENSIONS FOR THE MEMBER IN THE FINAL STRUCTURE. MEASUREMENT OF JUST THE EXISTING MEMBER MAY NOT PROVIDE THE REQUIRED DIMENSION DUE TO SHRINKAGE, DAMAGE, RETROFIT, OR OTHER CAUSES. THE DIMENSIONS OF THE REPLACEMENT MEMBERS SHALL BE RECORDED AND SUBMITTED TO THE ENGINEER.

REPLACEMENT MEMBERS SHALL BE SIZED AND MANUFACTURED TO ACCOUNT FOR SHRINKAGE OF THE MEMBERS ON THE FINAL STRUCTURE.

COUNTY SUPPLIED TIMBER

COUNTY OWNED TIMBER HAS BEEN IDENTIFIED AND MARKED BY A PROFESSIONAL CONSULTANT AND DETERMINED TO BE THE ACCEPTABLE SOURCE FOR THIS PROJECT. DUE TO THE VALUE OF THE TIMBER IN ITS UNMILLED STATE, THE CONTRACTOR SHALL BE AWARDED THE PROJECT PRIOR TO THE FELLING OF LOGS AND SHALL BE AFFORDED THE OPPORTUNITY TO WORK WITH THE COUNTY SUPPLIED AND FINANCED TIMBER CONSULTANT, LOGGER, AND SAWYER IN THE PROCESS OF PROCURING ALL WHITE OAK AND POPLAR TIMBER MATERIALS NEEDED FOR THIS PROJECT. DUE TO THE NEED TO FELL WHITE OAK TIMBER IN WINTER MONTHS, WHEN ITS MOISTURE LEVELS ARE FAVORABLE, THE COUNTY SHALL NOT CUT WHITE OAK TIMBERS BEFORE DECEMBER 1, 2022.

COUNTY SUPPLIED TIMBER (CONT.):

ALL WHITE OAK TIMBER MEMBERS PRESCRIBED FOR THE PROJECT WILL BE AVAILABLE TO THE CONTRACTOR FOR THE FABRICATION PHASE BY FEBRUARY 28, 2023 UNLESS DIRECTED OTHERWISE BY THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A SCHEDULE FOR WHEN POPLAR TIMBER MATERIALS NEED TO BE AVAILABLE FOR FABRICATION.

A LIMITED NUMBER OF MEMBERS WERE SALVAGED FROM SPAN 1. SALVAGED MEMBERS SHALL BE INSPECTED AND REUSED IN SPAN 1 IF SUITABLE, PRIOR TO CUTTING A NEW MEMBER. THE CONTRACTOR SHALL CONTACT THE COUNTY TO ACQUIRE THE LOCATION OF THE SALVAGED MEMBERS.

ITEM SPECIAL - STRUCTURE, MISC.: MISCELLANEOUS FRAMING

INSTALL 6" X 17" WHITE OAK ROUGH FULL SAWN END BLOCKS AT THE ENDS OF THE LOWER CHORDS.

INSTALL 4" X 8" WHITE OAK ROUGH FULL SAWN BEARING BLOCKS AT THE ABUTMENT ENDS OF THE SPAN 1 AND SPAN 3 LOWER CHORDS, AND 6" X 8" WHITE OAK ROUGH FULL SAWN BEARING BLOCKS AT THE ENDS OF THE SPAN 2 LOWER CHORDS. SHIM AS NECESSARY THE SPAN 1 AND SPAN 3 LOWER CHORDS WHICH SIT ON THE SPAN 2 LOWER CHORDS TO PROVIDE A LEVEL FLOOR TOP SURFACE BETWEEN SPANS.

REPLACE KNEE BRACES AT SPECIFIED LOCATIONS. REPLACEMENT KNEE BRACES SHALL BE ROUGH SAWN TO FIT THE SPECIFIC LOCATION. NEW VERTICALS AND UPPER LATERALS SHALL BE NOTCHED TO ACCEPT KNEE BRACE IN A MANNER SIMILAR TO ORIGINAL.

REPLACE CROSS BRACING AT SPECIFIED LOCATIONS. REPLACEMENT BRACING SHALL BE ROUGH SAWN TO FIT THE SPECIFIC LOCATION. NEW CHORDS SHALL BE NOTCHED TO ACCEPT KNEE BRACE IN A MANNER SIMILAR TO ORIGINAL.

KNEE BRACE, RAILING, LOWER CROSS BRACING, END AND BEARING BLOCKS SHALL BE MADE FROM WHITE OAK, GRADE NO. 2 OR BETTER.

TIMBER FOR THIS ITEM SHALL BE SUPPLIED BY THE COUNTY; REFER TO COUNTY SUPPLIED TIMBER NOTE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT THOUSAND FEET BOARD MEASURE, MFBM, UNIT PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS (OTHER THAN TIMBER MEMBERS), TRANSPORT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 516, AND TO THE SATISFACTION OF THE COMMISSIONERS.

ITEM SPECIAL - STRUCTURE, MISC.: RESTORATION OF TIMBER TRUSS

RESTORE THE EXISTING SPAN 3 TRUSS TO ITS ORIGINAL AS BUILT CONDITION BY REPLACING ALL FRACTURED OR DETERIORATED TIMBER MEMBERS AS REQUIRED, INCLUDING SPLICE BLOCKS. EACH MEMBER TO BE REPLACED, SHALL BE THOROUGHLY MEASURED AND DOCUMENTED. THE REPLACEMENT MEMBER SHALL MATCH THE REPLACED MEMBER DIMENSIONALLY WITH ADJUSTMENTS TO FIT THE OVERALL TRUSS DIMENSIONS UNLESS SPECIFIED OTHERWISE ON SHEET 27/28.

NEW TIMBER MEMBERS SHALL BE MADE FROM AIR DRIED ROUGH CUT WHITE OAK, GRADE NO. 1 OR BETTER WITH FOUR SOUND CORNERS FIELD CUT TO MATCH THE ORIGINAL TIMBER MEMBER THAT IT REPLACES. REPLACEMENT MEMBERS SHALL BE SIZED TO ACCOUNT FOR SHRINKAGE OF THE NEW TIMBER MEMBER IN THE FINAL STRUCTURE.

PRIOR TO CUTTING AND SHAPING OF A REPLACEMENT MEMBER, THE CONTRACTOR SHALL MEASURE THE STRUCTURE TO DETERMINE THE DIMENSIONS AND DETAILS FOR THE REPLACEMENT MEMBER ON THE FINAL STRUCTURE. MEASUREMENT OF JUST THE MEMBER BEING REPLACED MAY NOT PROVIDE THE REQUIRED DIMENSIONS AND DETAILS DUE TO SHRINKAGE, DAMAGE, PREVIOUS REPAIRS, OR OTHER CAUSES. THE DIMENSIONS AND DETAILS SHALL BE RECORDED ON THE WORKING DRAWINGS.

THE CONTRACTOR SHALL SUBMIT THE WORKING DRAWINGS FOR REPLACEMENT TIMBER MEMBERS WITH DIMENSIONS AND DETAILS OF EXISTING AND PROPOSED TIMBER MEMBERS TO THE COMMISSIONERS FOR ACCEPTANCE BEFORE THE REPLACEMENT TIMBER MEMBERS ARE CUT AND SHAPED.

EXISTING BOLTS AND HARDWARE FOR THE TRUSS TIMBER MEMBER CONNECTIONS SHALL BE REUSED WHEN POSSIBLE. ALL REPLACEMENT AND NEW BOLTS, NUTS, WASHERS, STEEL PLATES, AND MISCELLANEOUS HARDWARE REQUIRED FOR THE RESTORATION OF THE WOOD TRUSS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

ITEM SPECIAL - STRUCTURE, MISC.: RESTORATION OF TIMBER TRUSS (CONT.)

THE ABOVE WORK SHALL BE MEASURED FOR PAYMENT AS THE ACTUAL THOUSAND FEET BOARD MEASURE OF TIMBER USED FOR THE RESTORATION OF THE TIMBER TRUSS, OBTAINED USING ACTUAL SIZES AND ACTUAL LENGTHS OF TIMBER MEMBERS REPLACED.

TIMBER FOR THIS ITEM SHALL BE SUPPLIED BY THE COUNTY; REFER TO COUNTY SUPPLIED TIMBER NOTE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT THOUSAND FEET BOARD MEASURE, MFBM, UNIT PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS (OTHER THAN TIMBER MEMBERS), TRANSPORT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 516, AND TO THE SATISFACTION OF THE COMMISSIONERS.

ITEM SPECIAL - STRUCTURE, MISC.: RECONSTRUCTION OF TIMBER TRUSSES AND ARCH

RECONSTRUCT SPANS 1 AND 2 ACCORDING TO THE DESIGN DETAILS AS SPECIFIED IN THESE PLANS. EACH MEMBER TO BE PLACED, SHALL BE THOROUGHLY MEASURED AND DOCUMENTED. THE PROPOSED MEMBER SHALL MATCH THE SPECIFIED MEMBER DIMENSIONALLY WITH ADJUSTMENTS TO FIT THE OVERALL TRUSS DIMENSIONS UNLESS SPECIFIED OTHERWISE ON SHEETS 25/28 AND 26/28.

NEW TIMBER MEMBERS SHALL BE MADE FROM AIR DRIED ROUGH CUT WHITE OAK, GRADE NO. 1 OR BETTER OR SELECT STRUCTURAL (ARCH MEMBERS) WITH FOUR SOUND CORNERS FIELD CUT TO MATCH THE ORIGINAL TIMBER MEMBER THAT IT REPLACES. REPLACEMENT MEMBERS SHALL BE SIZED TO ACCOUNT FOR SHRINKAGE OF THE NEW TIMBER MEMBER IN THE FINAL STRUCTURE.

PRIOR TO CUTTING AND SHAPING OF A PROPOSED MEMBER, THE CONTRACTOR SHALL MEASURE THE STRUCTURE TO DETERMINE THE DIMENSIONS AND DETAILS FOR THE MEMBER ON THE FINAL STRUCTURE. MEASUREMENT OF JUST THE MEMBER BEING PLACED MAY NOT PROVIDE THE REQUIRED DIMENSIONS AND DETAILS DUE TO SHRINKAGE, DAMAGE, PREVIOUS REPAIRS, OR OTHER CAUSES. THE DIMENSIONS AND DETAILS SHALL BE RECORDED ON THE WORKING DRAWINGS.

THE CONTRACTOR SHALL SUBMIT THE WORKING DRAWINGS FOR TIMBER MEMBERS WITH DIMENSIONS AND DETAILS OF PROPOSED TIMBER MEMBERS TO THE COMMISSIONERS FOR ACCEPTANCE BEFORE THE PROPOSED TIMBER MEMBERS ARE CUT AND SHAPED.

ALL NEW BOLTS, NUTS, WASHERS, STEEL PLATES, AND MISCELLANEOUS HARDWARE REQUIRED FOR THE RECONSTRUCTION OF THE WOOD TRUSS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN.

THE ABOVE WORK SHALL BE MEASURED FOR PAYMENT AS THE ACTUAL THOUSAND FEET BOARD MEASURE OF TIMBER USED FOR THE RECONSTRUCTION OF THE TIMBER TRUSS, OBTAINED USING ACTUAL SIZES AND ACTUAL LENGTHS OF TIMBER MEMBERS SPECIFIED IN THESE PLANS.

TIMBER FOR THIS ITEM SHALL BE SUPPLIED BY THE COUNTY; REFER TO COUNTY SUPPLIED TIMBER NOTE. THIS WORK SHALL BE PAID FOR AT THE CONTRACT THOUSAND FEET BOARD MEASURE, MFBM, UNIT PRICE BID, WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, EQUIPMENT, MATERIALS (OTHER THAN TIMBER MEMBERS), TRANSPORT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK IN CONFORMANCE WITH THESE REQUIREMENTS, WITH PERTINENT PROVISIONS OF 516, AND TO THE SATISFACTION OF THE COMMISSIONERS.

SALVAGED MEMBERS FROM SPAN 1 ARE AVAILABLE FOR USE. TIMBER FRAMER SHALL INSPECT AS DIRECTED IN ORDER TO DETERMINE QUANTITY OF MEMBERS FOR REUSE. CONTRACTOR SHALL COORDINATE PROCESS WITH COMMISSIONERS.

1 07/22/2022 COUNTY SUPPLIED TIMBER NOTE UPDATED

DESIGN AGENCY WOLPERT DESIGN ENGINEERING INCORPORATED	DATE	07/2021
	FILE NUMBER	5634652
REVIEWED	CKM	5634652
DRAWN	CMV	
DESIGNED	CMV	
CHECKED	TML	
STRUCTURE GENERAL NOTES		
BRIDGE NO. MOE-384-0.30		
KNOWLTON COVERED BRIDGE OVER THE LITTLE MUSKINGUM RIVER		
MOE-384-0.30	PID No. 104020	
8/27	9/28	