

WOOD NOTES (CONTINUED FROM SHEET 27):

- W-14. THE WOOD CURB BLOCKING, CURB, DECKING, SLEEPER BEAMS, FLOOR BEAMS AND PORTAL TRIM LUMBER TREATMENT SHALL COMPLY WITH STANDARD SPECIFICATION 726.01 TYPE III PENTACHLOROPHENOL TYPE C.
- W-15. ALL LAG BOLTS AND NUTS FOR THROUGH BOLTS SHALL BE TIGHTENED SNUGLY BUT NOT SO TIGHTLY AS TO CAUSE CRUSHING OF THE WOOD UNDER THE WASHER OR PLATE.
- W-16. DECKING SHALL BE SURFACED FOUR SIDES (S4S). NEW LATTICE AND CHORD MEMBERS SHALL BE SURFACED ONE SIDE (S1S) (WIDE FACE). ALL OTHER NEW LUMBER AND TIMBER SHALL BE ROUGH SURFACED.
- W-17. DIMENSIONS OF ALL LUMBER AND TIMBER MEMBERS SHOWN IN THESE PLANS ARE THE ACTUAL SIZES AFTER SEASONING UNLESS NOTED OTHERWISE IN THE CONTRACT DOCUMENTS. THE DIMENSIONS OF NARROW FACES OF NEW CHORD AND LATTICE MEMBERS SHALL BE THE ACTUAL DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. FOR ALL NEW LATTICE AND CHORD MEMBERS' WIDE FACES AND ALL OTHER MEMBERS THAT ARE NOT SURFACED S4S, CROSS-SECTIONAL DIMENSION VARIATIONS OF UP TO 1/8" WILL BE ALLOWED.

SIDING REPLACEMENT NOTES:

- SD-1. THE ENTIRE SIDING AND PORTAL SIDING SHALL BE REMOVED FROM THE BRIDGE. PORTAL AND END RETURN SIDING WHICH IS PAINTED RED SHALL BE DISPOSED OF BY THE CONTRACTOR AND SHALL NOT BE SALVAGED. A PORTION OF THE SIDING THAT IS TO BE REUSED AS SHOWN IN THE PLANS SHALL BE STORED UNDER COVER UNTIL IT IS REINSTALLED. ALL PROTRUDING NAILS REMAINING IN THE SIDING SUPPORTS SHALL BE CAREFULLY REMOVED AFTER SIDING REMOVAL. REINSTALLATION OF SALVAGED SIDING IS PAID UNDER ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).
- SD-2. NEW SIDING SHALL BE INSTALLED ON THE INTERIOR LAYER FOR THE ENTIRE LENGTH OF THE UPSTREAM AND DOWNSTREAM OUTSIDES, PORTAL SECTIONS AND END RETURNS AT EACH QUADRANT OF THE BRIDGE UTILIZING EXISTING AND NEW SIDING SUPPORTS AS INDICATED ON THE PLANS. THE EXTERIOR SURFACE OF PORTAL AND END RETURN SIDING SHALL BE PAINTED WHITE. SEE SPECIAL PROVISIONS OF ITEM 900.645, SPECIAL PROVISION (TIMBER PAINTING, FIRE RETARDANT) FOR MORE INFORMATION.
- SD-3. THE EXISTING SALVAGED SIDING SHALL MEET THE FOLLOWING REQUIREMENTS: BE FREE OF LOOSE OR MISSING KNOTS, BE A CONTINUOUS FULL HEIGHT PIECE, FREE OF CUP SPLITS AND BREAKS.

CONCRETE AND REINFORCING STEEL NOTES:

- C-1. REINFORCING STEEL SHALL CONFORM TO SECTION 507 OF STANDARD SPECIFICATIONS AND DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE" (CRSI).
- C-2. WHEN EPOXY COATED REINFORCING IS CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF EPOXY COATED REINFORCING STEEL IS NOT PERMITTED.
- C-3. THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT; ANY DOWNWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE ABOVE THE JOINT.
- C-4. REINFORCING PLACEMENT TOLERANCES SHALL BE:
SPACING +/- 1"
CLEARANCE +/- 1/4"
- C-5. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE TWO (2) INCHES ALONG THE BACK FACES OF WALLS AGAINST EARTH AND THREE (3) INCHES ELSEWHERE, UNLESS NOTED OTHERWISE.
- C-6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x 1" UNLESS NOTED OTHERWISE.
- C-7. TOP SURFACES OF TRUSS AND FLOOR BEAM PEDESTALS SHALL BE LEVEL.
- C-8. THE CONCRETE IN BACKWALLS, PADS, TRUSS AND FLOOR BEAM PEDESTALS SHALL BE HIGH PERFORMANCE CONCRETE CLASS A AND PAID UNDER ITEM 501.33, CONCRETE, HIGH PERFORMANCE CLASS A. ALL OTHER CONCRETE (INCLUDING SUBFOOTING CONCRETE) SHALL BE HIGH PERFORMANCE CONCRETE CLASS B AND PAID UNDER ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B.
- C-9. ALL NEW AND EXISTING EXPOSED CONCRETE SURFACES SHALL BE SEALED AND STAINED. PAYMENT WILL BE MADE UNDER ITEM 900.625, SPECIAL PROVISION (CONCRETE STAINING AND SEALING).

C-10. ASHLAR STONE FORM LINER IS TO BE PROVIDED AT THE EXPOSED FACES OF NEW WINGWALLS. SEE NOTE 4 ON SHEET 30 FOR MORE INFORMATION.

LEDGE NOTES:

- L-1. BORINGS WERE TAKEN ON THIS PROJECT; SUBSURFACE CONDITIONS MAY VARY FROM THE CONDITIONS ASSUMED FOR DESIGN.
- L-2. IF LEDGE IS ENCOUNTERED HIGHER THAN BOTTOM OF FOOTING OR MORE THAN (2) FEET BELOW THE INDICATED BOTTOM OF FOOTING ELEVATIONS AS SHOWN ON THE PLANS, THE STRUCTURES SECTION SHALL BE CONTACTED. PROFILES OF THE LEDGE MAY BE REQUIRED TO ADJUST THE FOOTING ELEVATIONS AND SIZE. NO FURTHER WORK SHALL BE DONE ON THE FOOTINGS UNTIL A REPLY IS RECEIVED FROM THE STRUCTURES SECTION.
- L-3. FOOTINGS SHALL BE PLACED ON SOUND AND COMPETENT LEDGE WHICH SHALL BE CLEANED OF ALL LOOSE ROCK AND DEBRIS. THE LEDGE SHALL NOT BE EXCAVATED FOR STONE FILL PLACEMENT. LEDGE IN THE AREA OF THE NEW CONCRETE SUBFOOTING OF WINGWALL NO.2 IS NOT EXPECTED TO BE REMOVED, HOWEVER IT SHALL BE CLEANED OF ALL LOOSE ROCK AND DEBRIS.
- L-4. A MAXIMUM OF 6" OVERBREAKAGE WILL BE REPLACED WITH ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B. OVERBREAKAGE BEYOND 6" SHALL BE REPLACED WITH HIGH PERFORMANCE CLASS B CONCRETE AT THE EXPENSE OF THE CONTRACTOR.
- L-5. #8 DOWELS SHALL BE DRILLED AND GROUTED INTO THE LEDGE AS SHOWN ON THE PLANS. THE DOWELS SHALL HAVE A MINIMUM 2'-0" EMBEDMENT INTO THE LEDGE AND SHALL EXTEND INTO THE SUBFOOTING A MINIMUM OF 1'-6". THE DRILLING AND GROUTING SHALL BE PAID FOR UNDER THE ITEM 507.16, DRILLING AND GROUTING DOWELS, WHILE THE DOWELS SHALL BE PAID FOR UNDER ITEM 507.15, REINFORCING STEEL.

ENVIRONMENTAL PROTECTION NOTES:

- E-1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO PREVENT OR REDUCE TO A MINIMUM ANY DAMAGE TO ANY STREAM FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR SUCH STREAMS. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO A STREAM ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT, CEMENT, OIL, OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM A STREAM, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM REQUIRED TO PROTECT AND SUSTAIN AQUATIC LIFE.
- E-2. CONSTRUCTION ACTIVITIES SHALL ADHERE TO THE PERMIT REQUIREMENTS ISSUED FROM THE AGENCY OF NATURAL RESOURCES.

WOOD MATERIALS LIST			
COMPONENT	EXISTING (AVERAGE SIZE IN INCHES)	PROPOSED (ACTUAL SIZE IN INCHES)	PROPOSED SPECIES & GRADE
BEARING BLOCKS	---	4" THICK	WHITE OAK NO. 1
CROSS BEAMS	7 3/4 x 7 3/4	7 3/4 x 7 3/4	DOUGLAS FIR NO. 1
SLEEPER BEAMS	---	6x9	P. T. DOUGLAS FIR NO. 1
FLOOR BEAMS	7 1/2 x 9	8x12	P. T. DOUGLAS FIR SEL. STR.
FLOOR DECKING	3" THICK	3 1/2" THICK	P. T. DOUGLAS FIR NO. 1
KNEE BRACING	4x4	4x4	DOUGLAS FIR NO. 1
RAFTERS	3x4	3x4	SPRUCE FIR NO. 1
RIDGE POST BRACE	4x4	4x4	DOUGLAS FIR NO. 1
NEW SIDING	1" THICK	1" THICK	EASTERN WHITE PINE COMMON PREMIUM
TRUSS CHORD	VARIES	3x11	DOUGLAS FIR SEL. STR.
TRUSS LATTICE	3x10 1/2	3x10 1/2	DOUGLAS FIR SEL. STR.
UPPER LATERAL BRACING	4x6	4x6	DOUGLAS FIR NO. 1
WOOD CURB	---	5 1/2 x 11 1/2	P. T. DOUGLAS FIR NO. 1
WOOD CURB BLOCKING	---	5 1/2 x 11 1/2	P. T. DOUGLAS FIR NO. 1

MINIMUM ALLOWABLE WOOD STRESSES									
SPECIES	SIZE	GRADE	F _D (PSI)	F _T (PSI)	F _V (PSI)	F _C (PSI)	F _C + (PSI)	E (10 ⁶ PSI)	
DOUGLAS FIR	2"-4" THICK	NO. 1	1000	675	180	1500	625	1.7	
DOUGLAS FIR	BEAMS & STRINGERS*	NO. 1	1350	675	170	925	625	1.6	
DOUGLAS FIR	BEAMS & STRINGERS*	SEL. STR.	1600	950	170	1100	625	1.6	
DOUGLAS FIR	POST & TIMBERS**	NO. 1	1200	825	170	1000	625	1.6	
SPRUCE FIR	2"-4" THICK	NO. 1	875	450	135	1150	425	1.4	
SPRUCE FIR	BEAMS & STRINGERS*	NO. 1	900	450	125	625	425	1.3	
WHITE OAK	2"-4" THICK	NO. 1	875	500	220	900	800	1.0	

LEGEND:

- P. T. PRESSURE TREATED
- * 5" & THICKER AND MORE THAN 2 IN. GREATER THAN THICKNESS (E. G. 4 1/2 x 8 3/8)
- ** 5" & THICKER AND NOT MORE THAN 2 IN. GREATER THAN THICKNESS (E. G. 8 3/4 x 8)

MODEL
det2
HTA PROJECT NO.
904214

Hoyle, Tanner & Associates, Inc.

PROJECT NAME: MONTGOMERY	PROJECT NUMBER: BHO 1448(23)
FILE NAME: Z96J302notes2.dgn	PLOT DATE: 8/1/2008
PROJECT LEADER: J.H.WEAVER	DRAWN BY: J.B.McQUAID
DESIGNED BY: J.BICJA	CHECKED BY: S.T.JAMES
GENERAL NOTES SHEET (2 OF 2)	SHEET 28 OF 54