

GENERAL NOTES:

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.
- DIMENSIONS, ANGLES, BEARINGS, AND ELEVATIONS OF THE EXISTING BRIDGE SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND LIMITED FIELD INVESTIGATION AND MAY NOT ACCURATELY REFLECT THE ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS OF ALL EXISTING STRUCTURE COMPONENTS IMPACTED BY THE NEW WORK TO ASSURE CONSISTENCY WITH THE PROPOSED MODIFICATIONS. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE ADVANCING THE WORK.
- WORKING DRAWINGS REQUIRED FOR VARIOUS ITEMS OF WORK SHALL INDICATE THE ACTUAL FIELD MEASUREMENTS AND SHALL BE SO NOTED.
- ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
- SEE PIER DETAILS SHEET 19 FOR CONCRETE REPAIR NOTES.

CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL USE CAUTION WHEN WORKING AROUND UNDERGROUND AND OVERHEAD UTILITIES.
- THE CONTRACTOR SHALL REVIEW AND UNDERSTAND ALL APPLICABLE ENVIRONMENTAL DOCUMENTS AND ENSURE THAT ALL CONSTRUCTION CONDITIONS ARE MET.
- A THOROUGH INSPECTION SHALL BE MADE OF SUBSTRUCTURE AREAS. AREAS OF CONCRETE FOUND TO BE SPALLED, DELAMINATED OR OTHERWISE UNSOUND SHALL BE REPAIRED. THE CONTRACTOR SHALL SUPPLY ANY MATERIALS REQUIRED FOR THE INSPECTION. ALL COSTS OF INSPECTION SHALL BE SUBSIDIARY TO ITEM 635.10, MOBILIZATION.
- NO BACKFILL SHALL BE PLACED AGAINST ANY STRUCTURAL ELEMENTS UNTIL THE ENGINEER HAS APPROVED THIS WORK.
- THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC EROSION/SEDIMENT CONTROL PLAN WITH A SCHEDULE OF EVENTS. THIS WORK SHALL BE PAID FOR UNDER ITEM 652.10, "EROSION AND SEDIMENT CONTROL PLAN"
- CONCRETE AND ALL OTHER CONSTRUCTION MATERIALS ARE PROHIBITED FROM BEING DISCHARGED INTO THE WATERS OF THE STATE.
- THE POST LENGTHS FOR RAILING TRANSITION POSTS AND POST #1 INCLUDED WITHIN THE BRIDGE RAIL PAY LIMITS, AND STEEL BEAM GUARDRAIL SHALL BE MODIFIED FROM 6 FEET TO 8 FEET. ALL COSTS SHALL BE INCLUDED IN ITEM 525.43, BRIDGE RAILING - HDSB/ FASCIA MOUNTED HAND RAIL (MOD. - STEEL TUBING) OR ITEM 621.21, HEAVY DUTY STEEL BEAM GUARDRAIL (MOD. - W/8" POSTS).

REMOVAL NOTES:

- ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE SHALL INCLUDE THE REMOVAL OF:
 - EXISTING BRIDGE RAILING, CONCRETE CURBS AND POSTS, CONCRETE BRIDGE DECK AND CURTAIN WALLS.
 - STRUCTURAL STEEL BEAMS AND DIAPHRAGMS.
 - BEARING DEVICES.
 - PORTIONS OF EXISTING WINGWALLS AND PIER AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
 - ERECTION, MAINTENANCE, AND REMOVAL OF TEMPORARY STRUCTURES TO PREVENT DEBRIS FROM FALLING INTO THE WATERWAY.
- REMOVAL OF EXISTING BRIDGE PAVEMENT SHALL BE PAID AS ITEM 529.10, REMOVAL OF BRIDGE PAVEMENT.
- LIMITS OF WINGWALL AND PIER REMOVAL ARE APPROXIMATE. THE ENGINEER SHALL ESTABLISH ACTUAL LIMITS AFTER A COOPERATIVE INSPECTION BY THE CONTRACTOR AND THE ENGINEER. EXISTING ELEVATIONS SHALL BE FIELD VERIFIED TO ENSURE THAT THE REMOVAL LIMITS ARE ADEQUATE TO OBTAIN THE REQUIRED DIMENSIONS AND ELEVATIONS OF THE NEW CONSTRUCTION.
- SAWCUTS SHALL BE ONE-INCH DEEP ALONG ALL EXPOSED REMOVAL LINES WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE. ALL COSTS SHALL BE INCLUDED IN ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE.
- EXISTING REINFORCING STEEL EXPOSED DURING REMOVAL OPERATIONS, WITHIN THE LIMITS OF THE NEW MASONRY, SHALL BE RETAINED AND INCORPORATED INTO THE NEW MASONRY. EXISTING REINFORCING STEEL TO BE RETAINED SHALL BE SAND BLASTED CLEAN OF ALL CONCRETE, DIRT, DETRIMENTAL SCALE, PAINT, OIL, AND OTHER FOREIGN SUBSTANCES. ALL COSTS SHALL BE INCLUDED IN ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE.
- AFTER PIER CONCRETE REMOVAL, THE EXISTING REINFORCING STEEL TO BE RETAINED SHALL BE INSPECTED BY THE RESIDENT ENGINEER. DEPENDING UPON THE EXTENT OF CORROSION OR DAMAGE TO THE EXISTING REINFORCING STEEL, THE RESIDENT ENGINEER MAY ELECT TO INCREASE THE NUMBER OF DRILL AND GROUT BARS IF APPROXIMATELY 20 PERCENT OR MORE AREA LOSS HAS OCCURRED. COSTS TO INSPECT THE REINFORCING STEEL SHALL BE INCLUDED IN ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE.
- ADDITIONAL DRILLING AND GROUTING, IF REQUIRED, SHALL BE PAID AT THE UNIT BID PRICE OF ITEM 507.17, EPOXY COATED REINFORCING STEEL AND ITEM 507.16, DRILLING AND GROUTING DOWELS.
- THE STRUCTURAL STEEL BEAMS AND DIAPHRAGMS SHALL REMAIN THE PROPERTY OF THE TOWN OF CHESTER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE TOWN OF CHESTER PRIOR TO THE REMOVAL OF THE STRUCTURAL STEEL FOR THE PROPER PROCEDURE IN SALVAGING THE BEAMS.

CONCRETE NOTES:

- CONCRETE PAYMENT AND CLASSIFICATION SHALL BE AS FOLLOWS:
 - ITEM 501.33, CONCRETE, HIGH PERFORMANCE CLASS A; DECK, CURTAIN WALLS AND CURB
 - ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B; WING WALLS AND ABUTMENT AND PIER CAPS
- ITEM 514.10, WATER REPELLENT, SHALL BE APPLIED TO ALL EXPOSED CONCRETE ON BRIDGE SUPERSTRUCTURE EXCEPT THE BOTTOM OF THE DECK BETWEEN THE DRIP NOTCHES. WATER REPELLENT SHALL ALSO BE APPLIED TO THE EXPOSED CONCRETE ON THE NEW AND EXISTING SUBSTRUCTURES.

- ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH BY 1 INCH, UNLESS OTHERWISE NOTED. A ONE-HALF INCH RADIUS SHALL BE USED ON THE TOP INSIDE CORNER OF THE CURBS.
- JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- THE KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT UNLESS OTHERWISE INDICATED. ANY UPWARD KEY SHALL BE PLACED INTEGRALLY WITH THE CONCRETE BELOW THE JOINT.
- SEE DECK DETAILS SHEET 11 FOR DECK POUR SEQUENCE NOTES.

BEARING NOTES:

- BEARINGS SHALL CONFORM TO APPLICABLE SUBSECTIONS OF SECTION 531 AND 731.
- PREFORMED BEARING PAD DESIGN CRITERIA:
 - ALLOWABLE BEARING PRESSURE ON CONCRETE = 1000 PSI
 - MINIMUM ALLOWABLE DESIGN ROTATION = 0.015 RADIANS
 - HORIZONTAL CAPACITY SHALL BE A MINIMUM OF 6% OF THE VERTICAL LOAD
 - DESIGN LOAD PER BEARING: ABUTMENTS = 90 KIPS & PIER = 150 KIPS
- SHOP DRAWINGS CONFORMING TO SUBSECTION 531.03 SHALL INCLUDE WELDING AND BONDING PROCEDURES.
- ALL STEEL FOR SOLE PLATES AND WASHERS SHALL BE AASHTO M 270/M270, GRADE 36. BOLTS AND NUTS SHALL BE PER ASTM A 449. ALL HARDWARE SHALL BE GALVANIZED PER THE SPECIFICATION AASHTO M 111M/M 111.
- DRILL AND SET ANCHOR BOLTS WITH A MINIMUM OF 15 INCHES EMBEDDED INTO CONCRETE. HOLES FOR ANCHOR BOLTS SHALL BE 3 INCHES IN DIAMETER, IF ANCHOR BOLTS ARE TO BE GROUTED WITH MORTAR, TYPE IV AND 2-1/2 INCHES IN DIAMETER IF ANCHOR BOLTS ARE TO BE INSTALLED USING EPOXY MORTAR PER STANDARD SPECIFICATION 530. ALL COSTS SHALL BE INCLUDED IN ITEM 531.10, BEARING DEVICE ASSEMBLY.
- ANCHOR BOLTS SHALL BE SWEDGED WITH 4 INCHES OF THREAD. EXPANSION BEARING NUTS ARE TO BE DRAWN UP FINGER TIGHT AND THEN BACKED OFF ONE-EIGHTH INCH. THREADS SHALL BE BURRED ABOVE NUT TO PREVENT NUT REMOVAL.
- BLANK
- EXISTING ANCHOR BOLTS THAT ARE NOT COVERED WITH A NEW BRIDGE SEAT CAP SHALL BE CUT ONE INCH MINIMUM BELOW EXISTING SUBSTRUCTURE SEATS, BLAST CLEANED AND FILLED WITH MORTAR TYPE IV. COSTS SHALL BE SUBSIDIARY TO ITEM 531.10, "BEARING DEVICE ASSEMBLY."

STRUCTURAL STEEL NOTES:

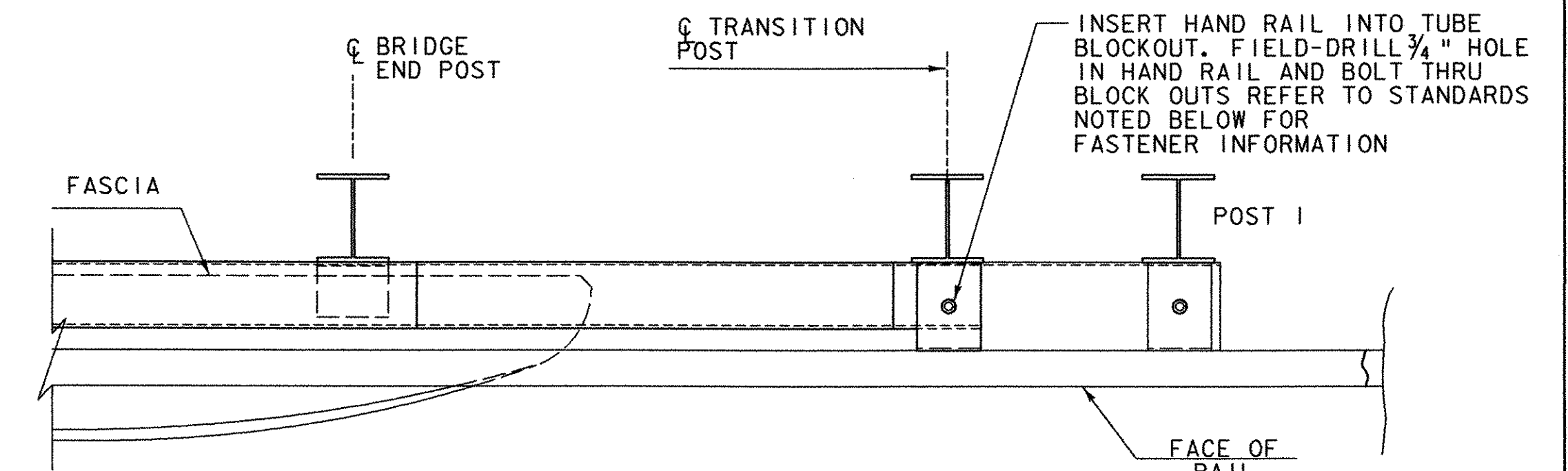
- ALL NEW STRUCTURAL STEEL SHALL BE AASHTO M270, GRADE 50W UNLESS OTHERWISE NOTED.
- BLANK
- ALL BOLTED FIELD CONNECTIONS SHALL BE MADE WITH 7/8-INCH DIAMETER HIGH STRENGTH BOLTS IN 15/16-INCH DIAMETER HOLES UNLESS OTHERWISE NOTED.
- CONNECTIONS NOT DESIGNED SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
- ALL WELDS SHALL HAVE CORROSION RESISTANCE AND WEATHERING APPEARANCE AS SPECIFIED FOR WEATHERING STEEL.
- SHEAR STUD CONNECTORS SHALL BE FIELD WELDED USING AUTOMATICALLY TIMED STUD WELDING EQUIPMENT AND SHALL BE PAID AS ITEM 508.15, SHEAR CONNECTORS.
- AFTER THE SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE BEAM SHALL BE TAKEN, AS DIRECTED BY THE ENGINEER, FOR USE IN DETERMINING THE FINAL GRADE AND HAUNCH DEPTHS.
- ANY HOLES IN FASCIA BEAM WEBS NOT OTHERWISE FILLED SHALL BE FILLED WITH BOLTS CONFORMING TO AASHTO M164 TYPE 3.
- THE ENDS OF THE BEAMS SHALL BE VERTICAL UNDER FULL DEAD LOAD DEFLECTION.

TRAFFIC CONTROL NOTES:

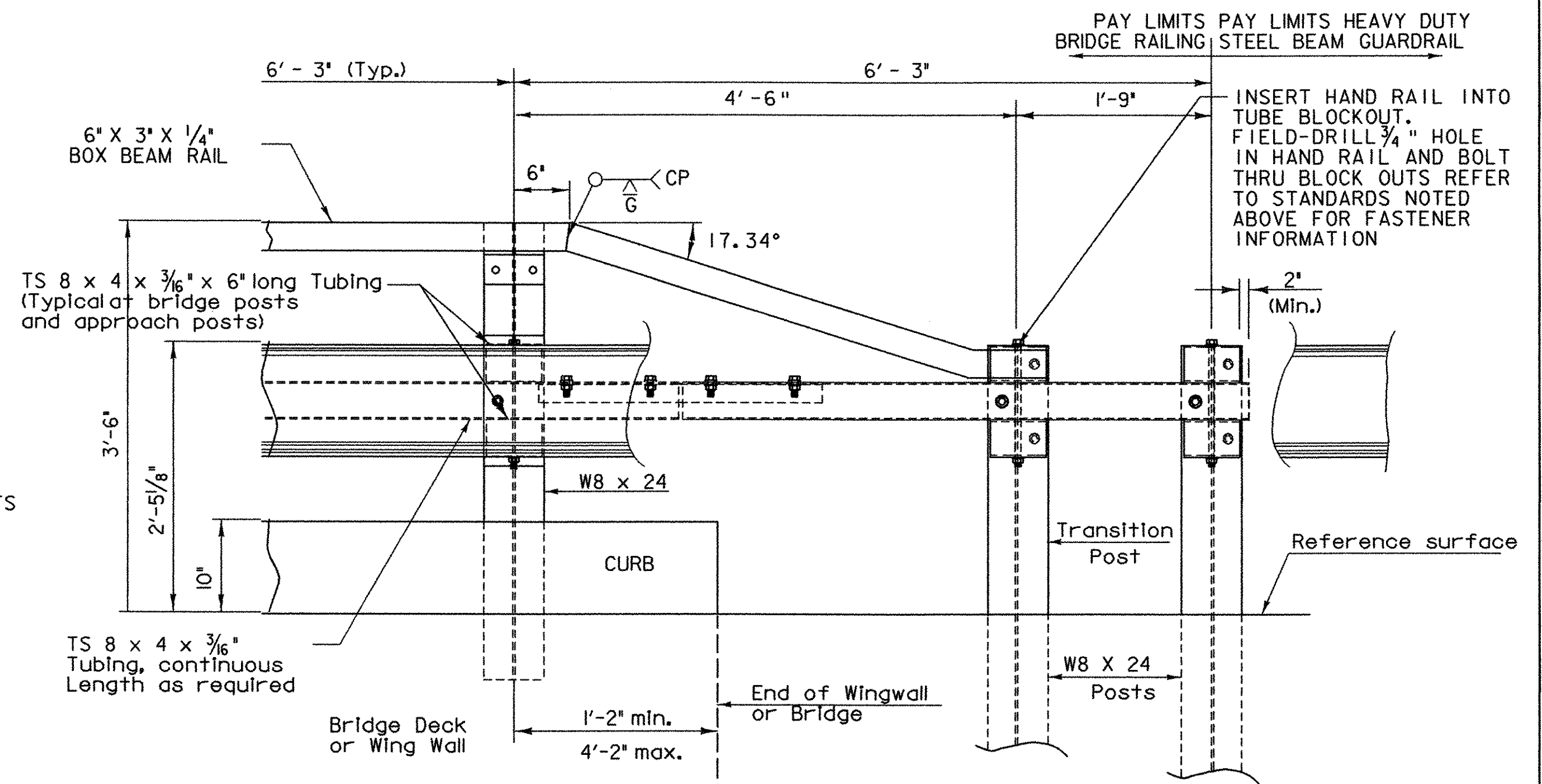
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON PROJECT CONSTRUCTION SIGNING, OFF PROJECT DETOUR SIGNING, AND BARRICADES. THE COSTS FOR REQUIRED ON PROJECT CONSTRUCTION SIGNING AND BARRICADES OTHER THAN TEMPORARY TRAFFIC BARRIERS SHALL BE INCIDENTAL TO OTHER ITEMS. THE COSTS FOR DETOUR SIGNING AND NECESSARY SIGN POSTS SHALL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL." THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY CONCRETE TRAFFIC BARRIERS DURING THE CONSTRUCTION PERIOD TO PREVENT VEHICLES FROM DRIVING OFF THE BRIDGE OR APPROACHES. ALL COSTS SHALL BE INCLUDED IN ITEM 621.90, "TEMPORARY TRAFFIC BARRIER."
- ALL CONSTRUCTION AND DETOUR SIGNING AND SIGN POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVES AND SIDE ROADS DURING CONSTRUCTION. COSTS SHALL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL."
- ALL DETOUR SIGNS SHALL BE ORANGE WITH BLACK LETTERING AND BLACK BORDERS.
- ALL DETAILS NOT SPECIFIED SHALL BE IN ACCORDANCE WITH THE MUTCD AND VAOT E SERIES STANDARDS.

REINFORCING STEEL NOTES:

- REINFORCING STEEL IN THE DECK, CURTAIN WALL, AND BRUSH CURBS SHALL BE EPOXY COATED.
- EPOXY REINFORCING STEEL TO BE CUT IN THE FIELD SHALL BE SAW CUT AND THE EXPOSED ENDS TREATED. NO FLAME CUTTING SHALL BE PERMITTED.
- MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
 - ALONG BACK FACES OF WALLS AGAINST EARTH: 2.0 INCHES
 - ALONG TOP SURFACE OF DECK SLAB: 2.5 INCHES
 - ALONG BOTTOM SURFACE OF DECK SLAB: 1.5 INCHES
 - ELSEWHERE UNLESS OTHERWISE INDICATED: 3.0 INCHES
- REINFORCEMENT STEEL PLACEMENT TOLERANCES SHALL BE:
 - SPACING: +/- 1"
 - CLEARANCE: +/- 1/4"
- DRILLING AND GROUTING DOWELS SHALL BE PAID AS ITEM 507.16, DRILLING AND GROUTING DOWELS. ALL DRILLED HOLES SHALL HAVE A MINIMUM OF 6-INCH CLEAR COVER.
- THE WELDED WIRE STEEL FABRIC FOR THE NEW CAP ON ABUTMENT NO. 1 SHALL BE PAID FOR INCIDENTAL TO ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B."



- NOTE:
- SEE VAOT STANDARD SHEET SB-R6-86 AND SB-R7-90 FOR ADDITIONAL DETAILS.
 - FIELD DRILLED HOLES IN HAND RAIL SHALL BE GALVANIZED PER ASTM A 760.



RAIL ELEVATION

REVISIONS			STATE OF VERMONT AGENCY OF TRANSPORTATION	
NO.	DESCRIPTION	BY & DATE	Town Of	Bridge No.
1	MODIFIED NOTES TO REFLECT REVISIONS TO PLANS	APG 2/3/04	CHESTER	11
			Highway No.	Log Sta.
			TH 5	Surv. Sta.
CHURCH STREET OVER WILLIAMS RIVER				
CONSTRUCTION NOTES				
Designed By		B. C. AUSTIN		Drawn By
Checked By		Date		Bridge Design Supervisor
J. TUCKER		03/01		J. TUCKER Date 03/01
PROJECT			PROJECT NO.	
CHESTER			BHO 1442 (32)	
I.G.C. Info.			...zj365gn10.dgn	
D & K DWG NO.			I353 Sheet 10 of 22	

