

GENERAL NOTES

- 1 NO SURVEY WAS TAKEN OF THIS PROJECT. INFORMATION SHEETS INCLUDED IN THE PLANS WERE TAKEN FROM ORIGINAL PLANS AND ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FIELD CHECKING ANY AND ALL DIMENSIONS APPLICABLE TO HIS WORK.
- 2 TRAFFIC IS TO BE CONTROLLED AND MAINTAINED AT ALL TIMES AT ALL THE BRIDGE LOCATIONS.
- 3 SIGNS, BARRICADES, AND TRAFFIC CONTROL DEVICES SHALL BE CLEANED WEEKLY AND THIS WORK SHALL BE INCLUDED IN THE PRICE FOR ITEM 527.10, 'MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS', OR ITEM 641.10, 'TRAFFIC CONTROL'.
- 4 ALL PRIVATE VEHICLES BELONGING TO THE WORK CREWS SHALL BE PARKED OFF THE PROJECT.
- 5 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR THIS PROJECT PRIOR TO COMMENCING ANY WORK.
- 6 IF A COLD PLANNER IS USED TO STRIP PAVEMENT FROM THE DECKS OR A PORTION OF THE APPROACH SLABS, THE FINAL ONE HALF (1/2) INCH SHALL BE REMOVED BY LOADER, GRADER, OR EQUIPMENT APPROVED BY THE ENGINEER. THIS WORK SHALL ALL BE INCLUDED IN THE UNIT PRICE BID FOR 'REMOVAL OF BRIDGE PAVEMENT'. ONLY FIVE (5) FEET OF APPROACH SLABS NEED TO BE STRIPPED TO BARE CONCRETE. ONLY THAT CONCRETE THAT IS LOOSE OR SPALLED ON EXPOSED PORTION OF APPROACH SLABS NEED BE REPLACED, AS DIRECTED BY THE ENGINEER. REMOVAL AND REPLACEMENT OF CONCRETE ON APPROACH SLABS TO BE PAID AS 'PREPARATION OF CONCRETE SURFACES, CLASS I (MOD.)'
- 7 PARTIAL REMOVAL OF BITUMINOUS CONCRETE PAVEMENT FROM APPROACH SLABS SHALL BE PAID UNDER ITEM 529.10, 'REMOVAL OF BRIDGE PAVEMENT'.
- 8 THERE SHALL BE SOME METHOD OF TRANSITIONING FROM EXISTING PAVEMENT TO BARE CONCRETE DURING THE CONSTRUCTION PHASE. THIS TRANSITION SHALL BE ACCOMPLISHED BY USING THE COLD PLANING MACHINE, PAVEMENT WEDGES, OR ANY METHOD APPROVED BY THE ENGINEER. THE DISTANCE ALONG ROADWAY NEEDED TO OBTAIN A SMOOTH TRANSITION SHALL BE AS DETERMINED BY THE ENGINEER. THE WIDTH OF TRANSITION LANES SHALL BE SUFFICIENT TO MAINTAIN A MINIMUM OF ONE-WAY TRAFFIC. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 527.10, 'MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS', OR ITEM 641.10, 'TRAFFIC CONTROL'.
- 9 DURING BRIDGE PAVEMENT REMOVAL, THE CONTRACTOR SHALL EXERCISE CARE TO INSURE THAT NO FURTHER DAMAGE OCCURS TO PORTLAND CEMENT CONCRETE DECK.
- 10 AFTER REMOVING THE BRIDGE PAVEMENT, ANY SPOTS IN THE TRAVELED LANES THAT ARE DANGEROUS TO THE TRAVELING PUBLIC WHILE WORK IS PROCEEDING IN THE ADJACENT LANE SHALL BE TEMPORARILY REPAIRED BY ANY METHOD APPROVED BY THE ENGINEER. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 527.10, 'MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS', OR ITEM 641.10, 'TRAFFIC CONTROL'.
- 11 DECK AREAS TO BE REPAIRED SHALL BE MARKED ON THE STRIPPED DECK BY VERMONT AOT PERSONNEL. THE METHODS USED FOR DEFINING AREAS NEEDING REPAIR MAY BE EITHER BY VISUAL INSPECTION, THE CHAIN DRAG METHOD, THE ASTM C-876 (HALF CELL POTENTIAL), OR A COMBINATION THEREOF. ANY EXPOSURE OF REBAR REQUIRED OF THE CONTRACTOR BY THE ENGINEER TO PERFORM ASTM C-876 TEST SHALL BE SUBSIDIARY TO ALL OTHER ITEMS IN THE PROJECT. ALL NECESSARY CLEANING OF THE DECK SURFACE PRIOR TO THE MARKING OF THE DECK REPAIR AREAS WILL BE PERFORMED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. THIS WILL ALSO INCLUDE ADDITIONAL CLEANINGS AT OTHER TIMES AS THE WORK PROGRESSES. PAYMENT WILL BE CONSIDERED SUBSIDIARY TO ALL OTHER PAY ITEMS.

- 12 DECK SURFACE IS TO BE REPAIRED AS NECESSARY UNDER ITEMS 501.45 OR 501.46, 'PREPARATION OF CONCRETE SURFACE, CLASS I OR CLASS II (MOD.)'. ALL EDGES OF REPAIRED AREAS ARE TO BE SAW CUT SQUARE AND A MINIMUM OF ONE (1) INCH DEEP. SEE SHEET 11. THE ANGLE BETWEEN THE DECK AND AIR HAMMER AXIS SHALL BE FROM ZERO (0) DEGREES TO FORTY-FIVE (45) DEGREES. AIR HAMMERS, USED FOR THE REMOVAL OF UNSOUND AND DETERIORATED CONCRETE, SHALL HAVE A MAXIMUM RATING OF THIRTY (30) POUNDS AND SHALL USE GAD OR CHISEL POINTS ONLY.

IF REINFORCING STEEL IS DAMAGED OR IF CONCRETE IS DEBONDED, DELAMINATED OR OTHERWISE DAMAGED, BEYOND THE DEFINED LIMITS OF REMOVAL, BECAUSE OF THE IMPROPER USE OF THE AIR HAMMERS, THEN THE CONTRACTOR SHALL REPAIR THE DAMAGED AREAS BY REMOVING AND REPLACING THE CONCRETE AND/OR REINFORCING STEEL AT HIS OWN EXPENSE.

- 13 IF MORE THAN ONE-QUARTER OF THE CIRCUMFERENCE OF THE REBAR IS EXPOSED OR THE BOND BETWEEN THE CONCRETE AND REBAR IS BROKEN, THEN PROCEED TO ITEM 501.46, 'PREPARATION OF CONCRETE SURFACE, CLASS II (MOD.)'. THE DECK TO BE PATCHED AND EXPOSED STEEL WHICH WILL HAVE CONCRETE PLACED AGAINST OR AROUND IT (I.E., METAL PLATE EXPANSION JOINTS, SCUPPERS, FINGER PLATE EXPANSION JOINTS, REINFORCING STEEL, ETC.) SHALL BE SANDBLASTED A MAXIMUM OF 24 HOURS PRIOR TO PLACING THE NEW CONCRETE. THE AREA SHALL BE VACUUMED OR FLUSHED, USING HIGH PRESSURE AIR OR WATER TO REMOVE ALL LOOSE PARTICLES, DUST AND DEBRIS. AFTER SANDBLASTING, ONCE THE CONCRETE IS WET, WHETHER FROM FLUSHING OR RAIN, THE CONCRETE MUST BE KEPT WET UNTIL THE PLACING OF NEAT CEMENT AND CONCRETE. IF THE CONCRETE IS ALLOWED TO DRY OUT, THE AREA MUST BE SANDBLASTED AGAIN AND ENTIRE AREA VACUUMED OR FLUSHED AGAIN. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR ITEMS 501.45 AND 501.46, 'PREPARATION OF CONCRETE SURFACE, CLASS I' OR 'CLASS II (MOD.)'.

- 14 QUANTITIES FOR ITEMS 501.45 (MOD.) AND 501.46 (MOD.) ARE ESTIMATED, BASED ON THE RESULTS OF USING ASTM C-876, 'STANDARD TEST METHOD FOR HALF CELL POTENTIALS OF REINFORCING STEEL IN CONCRETE', USING THE FOLLOWING LIMITS:

INTERSTATE - POTENTIALS OF 0.35 VOLTS OR GREATER
ALL THE REST - POTENTIALS OF 0.40 VOLTS OR GREATER

- 15 BRIDGE DECK AND APPROACH SLAB PATCHES SHALL BE MADE WITH 'CONCRETE, CLASS AA'. THE AREA TO BE PATCHED SHALL BE THOROUGHLY CLEANED, WETTED AND COATED WITH NEAT CEMENT. THE CEMENT (AASHTO M85, TYPE II) AND WATER SHALL BE MIXED TO A THICK LATEX PAINT CONSISTENCY. THE NEAT CEMENT SHALL NOT BE ALLOWED TO DRY OUT BEFORE IT IS COVERED WITH FRESH CONCRETE. THIS PREPARATION WORK, NEAT CEMENT AND 'CONCRETE, CLASS AA', SHALL BE INCLUDED IN THE BID PRICE FOR ITEMS 501.45 OR 501.46, 'PREPARATION OF CONCRETE SURFACE, CLASS I OR II (MOD.)'.

- 16 ANY CONCRETE REMOVAL THAT EXTENDS BELOW THE DEPTH LIMITS OF ITEM 501.46, 'PREPARATION OF CONCRETE SURFACE, CLASS II (MOD.)', SHALL BE PAID UNDER ITEM 529.25, 'REMOVAL OF CONCRETE OR MASONRY (MOD.)'. PAYMENT SHALL BE UNDER THE LATTER ITEM, WITH THE DEPTH BEING MEASURED FROM THE TOP SURFACE OF THE PORTLAND CEMENT CONCRETE DECK TO A SOUND SURFACE OR BOTTOM OF SAID DECK. ANY FULL DEPTH REPAIRS SHALL NECESSITATE THE USE OF FORMS AND FALSEWORK. ALL FORMWORK, 'CONCRETE, CLASS AA' FALSEWORK, LABOR, TOOLS, EQUIPMENT, AND OTHER INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 529.25, 'REMOVAL OF CONCRETE OR MASONRY (MOD.)'.

- 17 CONTRACTOR SHALL PROVIDE AND UTILIZE A TWELVE (12) FOOT STRAIGHT EDGE TO INSURE THAT THE PATCHES ARE SMOOTH AND MATCH THE SURROUNDING CONCRETE, THE STRAIGHT EDGE IS TO BE USED PARALLEL TO ϕ ONLY.

- 18 A MEMBRANE-FORMING CURING COMPOUND MAY BE USED TO CURE THE CONCRETE DECK PATCHES. THE TYPE OF CURING COMPOUND SHALL BE APPROVED BY THE ENGINEER PRIOR TO ITS USE. THE CURING PERIOD SHALL BE SEVEN (7) DAYS, REGARDLESS OF WHICH CURING METHOD IS UTILIZED. IF METHOD USED DOES NOT PRODUCE DESIRED RESULTS, ALTERNATE CURING METHODS MAY BE REQUIRED BY THE ENGINEER.

- 19 IF A LIQUID MEMBRANE CURING COMPOUND IS USED PRIOR TO THE APPLICATION OF ANY PROTECTIVE COATING OR PRIMER FOR THE SHEET MEMBRANE, THE CURING COMPOUND SHALL BE BLAST CLEANED FROM THE SURFACE. THIS WORK SHALL BE SUBSIDIARY TO THE OTHER ITEMS IN THE CONTRACT.

- 20 BRIDGE DECKS ARE TO BE PAVED CURB TO CURB WITH BITUMINOUS CONCRETE PAVEMENT, IN TWO COURSES (SEE SHEET 11 AND SPECIFIC NOTES). CARE SHALL BE EXERCISED TO SMOOTHLY TRANSITION THE NEW BRIDGE PAVEMENT INTO THE EXISTING PAVEMENT. ANY COLD PLANING NECESSARY FOR SHAPING BRIDGE APPROACHES FOR FINAL PAVING WILL BE PAID UNDER THE ITEM 'COLD PLANING BITUMINOUS PAVEMENT'.

- 21 ALL WELDING SHALL CONFORM TO SUBSECTION 506.10 WELDING.

- 22 THE ENGINEER SHALL ORDER REPLACEMENT OF ANY EXISTING REINFORCING STEEL THAT IS DETERIORATED (WITH MORE THAN 25% SECTION LOSS) WITH NEW REINFORCING STEEL OF THE SAME SIZE. ALL REINFORCING STEEL SHALL HAVE A MINIMUM TWO FOOT LAP SPLICE. CONTRACTOR SHALL SUPPLY AN EXTRA EIGHT (8) FOOT BAR OF EACH SIZE FOR TESTING PURPOSES IF NEW REINFORCING STEEL IS USED. REINFORCING STEEL SHALL BE PAID UNDER ITEM 507.15.

- 23 EXISTING JOINT AND BACKING MATERIAL SHALL BE REMOVED AS DIRECTED BY THE ENGINEER. RESTORATION OF JOINTS SHALL BE DONE ACCORDING TO SHEETS 11 AND DIRECTION OF THE ENGINEER. LABOR REQUIRED TO REMOVE AND RESTORE JOINT MATERIAL SHALL BE SUBSIDIARY TO THE ITEM 524.15, 'JOINT SEALER, PREFORMED NEOPRENE', OR THE ITEM 622.10, 'INSULATION BOARD'.

- 24 WHEN REPAIRING TRANSVERSE DECK JOINTS, THE CORNER EDGE SHALL BE TOOLED (WITH A SIDEWALK EDGER) IN PLACE OF USING WOOD CHAMFER STRIPS.

- 25 POLYURETHANE JOINT SEALER SHALL BE USED IN CURB JOINTS AS DIRECTED BY THE ENGINEER, AND IN ACCORDANCE WITH TYPICAL ON SHEET 11, DETAIL 3.

- 26 IT MAY BE NECESSARY TO PATCH THE TOP OF THE CURBS (BEHIND THE GRANITE FACING) IN SOME AREAS. LOCATIONS OF THE PATCHES SHALL BE DETERMINED BY THE ENGINEER. THE CONCRETE AND MORTAR BENEATH THE GRANITE CURBS WILL BE REMOVED AND REPLACED WITH CONCRETE, CLASS AA UNDER ITEM 501.45 'PREPARATION OF CONCRETE SURFACE, CLASS I, (MOD.)' AS DETERMINED BY THE ENGINEER. THE PROCEDURES AND PAY ITEMS INVOLVED WILL BE AS SHOWN ON SHEET 11, DETAIL 3.

STATE OF VERMONT			
AGENCY OF TRANSPORTATION			
Town of <u>HARTLAND, HARTFORD</u>		Bridge No. _____	
<u>SHARON</u>		Log Sta. _____	
Highway No. _____		Surv. Sta. _____	
DECK REHABILITATION GENERAL NOTES			
Designed By <u>G.S. ROGERS</u>		Drawn By <u>D.W. NEWTON</u>	
Checked By <u>G.S. ROGERS</u>		Date <u>8/86</u>	
		Bridge Design Supervisor <u>F.W. Bolkmeade</u>	
PROJECT <u>HARTLAND</u>		PROJECT NO. _____	
<u>HARTFORD, SHARON</u>		<u>IR-DECK (18)</u>	
L&C. Info. <u>QSAH30,32/DECKREHAB</u>			
Bridge Sheet No. _____		Sheet <u>3</u> of <u>39</u>	