

**NOTES**

1. APPROXIMATE WETLAND LOCATIONS HAVE BEEN IDENTIFIED. SEE PROJECT LAYOUT SHEETS FOR LOCATIONS. THE CONTRACTOR SHALL ACQUIRE THE NECESSARY STATE AND FEDERAL PERMITS IF WORK GOES BEYOND THE EXISTING TOE OF SLOPE.
2. COLD PLANING SHALL BE COMPLETED ACCORDING TO THE TYPICAL OR AS OTHERWISE NOTED ON THE PLANS. A FULL-DEPTH BUTT JOINT SHALL BE CONSTRUCTED AT THE PROJECT BEGIN AND END, AND AT ALL SIDE ROAD APPROACHES AS DENOTED ON THE PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER.
3. PRIOR TO RECLAIMING, ANY EXISTING SHOULDER MATERIAL DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED TO THE DEPTH OF RECLAIMING OR AS DIRECTED BY THE ENGINEER. EXCAVATED MATERIAL WILL BE SPREAD ON THE ADJACENT SLOPES OR REMOVED FROM THE PROJECT AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR USING THE APPROPRIATE RENTAL ITEM(S). THE METHOD OF REMOVAL AND THE USE OF RENTAL ITEM(S) SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY WORK BEING DONE. MATERIAL REMOVED SHALL BE REPLACED WITH ITEM 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED. AN ADDITIONAL QUANTITY OF 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED HAS BEEN INCLUDED TO CORRECT SUPERELEVATION AND GRADATION DEFICIENCIES WITHIN THE RECLAIMED SECTION.
4. DURING THE FIRST RECLAIM PASS WATER SHALL BE USED AS A STABILIZING AGENT AND FOR COMPACTION FOR THE RECLAIMED STABILIZED BASE AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE CONSIDERED INCIDENTAL TO ITEM 310.20 RECLAIMED STABILIZED BASE. THE FIRST RECLAIM PASS SHALL BE PERFORMED OVER THE FULL WIDTH OF THE EXISTING ROADWAY. THIS WORK SHALL BE PAID UNDER ITEM 310.20 "RECLAIMED STABILIZED BASE". THE SECOND PASS SHALL BE PERFORMED FULL WIDTH PER THE TYPICAL SECTION. THIS WORK SHALL BE PAID UNDER ITEM 900.675 SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT).
5. THE PORTLAND CEMENT STABILIZED COLD MIX SHALL BE PRODUCED FROM THE COLD PLANE GRINDINGS GENERATED FROM THE PROJECT AND PAID FOR UNDER ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT). IF THERE IS NOT A SUFFICIENT AMOUNT OF COLD PLANE GRINDINGS AVAILABLE TO PRODUCE THE 2 1/2" LIFT OF PORTLAND CEMENT STABILIZED COLD MIX, THE CONTRACTOR SHALL OBTAIN THE NECESSARY MATERIAL FROM ANOTHER SOURCE. THE COST ASSOCIATED WITH PROVIDING ADDITIONAL COLD PLANE GRINDINGS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT).
6. FOR THE PURPOSES OF QUANTITY CALCULATION THE FOLLOWING ASSUMPTIONS HAVE BEEN MADE: ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT) WILL REQUIRE 4% BY WEIGHT OF ITEM 415.25 EMULSIFIED ASPHALT, COLD MIX; ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION) WAS ESTIMATED AT 4% BY WEIGHT OF ITEM 900.675 SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT); ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING) WAS ESTIMATED AT 1% BY WEIGHT OF ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT); AND ITEM 900.683 SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT) WAS ESTIMATED AT AN APPLICATION RATE OF 0.15 GAL/SY.
7. SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 1/4" (TOTAL PAVEMENT THICKNESS). SUBBASE OF CRUSHED GRAVEL, FINE GRADED TOLERANCE = +/- 1" (TOTAL SUBBASE THICKNESS).
8. EMULSIFIED ASPHALT TYPE CRS-IH OR RS-IH SHALL BE APPLIED AS A TACK COAT IN BETWEEN ALL BITUMINOUS PAVEMENT COURSES (WHERE APPLICABLE) AT THE RATE OF 0.025 TO 0.040 GAL/SY OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE UNDER ITEM 900.683, "SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-IH OR CRS-IH)". IF ITEM 415.25 EMULSIFIED ASPHALT, COLD MIX IS SPECIFIED IN THE MIX DESIGN AS A CATIONIC EMULSION AND USED IN THE PRODUCTION OF ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT) THEN CRS-IH SHALL BE USED FOR TACK BETWEEN SUCCESSIVE LAYERS OF COLD MIX BASE COURSE AND PRIOR TO PLACEMENT OF THE TYPE IIIS BITUMINOUS CONCRETE PAVEMENT. AN APPLICATION RATE OF 0.040 TO 0.060 GAL/SY SHALL BE USED AS DIRECTED BY THE ENGINEER.
9. THE WEARING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, THE INTERMEDIATE COURSE SHALL BE TYPE IIIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT, AND THE BASE COURSE SHALL BE SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT). ALL ASPHALT CEMENT USED IN THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT SHALL BE AS SPECIFIED IN SUBSECTION 490.03B.
10. ALL EDGES OF PAVEMENT SHALL BE BACKED UP TO FULL HEIGHT WITH AGGREGATE SHOULDER MATERIAL AS DIRECTED BY THE ENGINEER AND WILL BE PAID FOR UNDER ITEM 402.12 AGGREGATE SHOULDERS.
11. ALL PAVED AND GRAVEL DRIVES SHALL RECEIVE A PAVED APRON OF 4' AND ALL FIELD DRIVES SHALL RECEIVE A 2' PAVED APRON UNLESS OTHERWISE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. ANY AND ALL REQUIRED EXCAVATION IN DRIVE AREAS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE NEW BITUMINOUS SURFACE SHALL BE CONSTRUCTED AS DIRECTED AND WILL BE PAID FOR UNDER ITEM 900.675, "SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)".
12. ITEM 613.10 STONE FILL, TYPE I; ITEM 651.40 GRUBBING MATERIAL; ITEM 649.31 GEOTEXTILE UNDER STONE FILL; ITEM 653.20 TEMPORARY EROSION MATTING; AND ITEM 608.25 ALL PURPOSE EXCAVATOR RENTAL, TYPE I HAVE BEEN INCLUDED FOR AREAS WITH PROPOSED SIDE SLOPES OF 1:1.5 OR STEEPER AND TO PROVIDE FOR REPAIR OF EXISTING STONE LINED DRAINAGE OUTLETS OR WASHOUTS LOCATED ALONG THE ROADWAY SIDE SLOPES AS DIRECTED BY THE ENGINEER.
13. ITEM 653.20 TEMPORARY EROSION MATTING HAS BEEN INCLUDED FOR AREAS WITH PROPOSED SIDE SLOPES STEEPER THAN 1:2 BUT FLATTER THAN 1:1.5 AS DIRECTED BY THE ENGINEER.
14. PIPE INLET AND OUTLET AREAS OF DITCH CLEANING THROUGHOUT THE PROJECT SHALL BE PERFORMED AT LOCATIONS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE MADE UNDER THE APPROPRIATE RENTAL ITEM(S).
15. DAMAGE TO ANY D'S, CROSS-CULVERTS OR OTHER DRAINAGE FEATURES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.
16. AN ESTIMATED QUANTITY OF ITEM 619.17 YIELDING MARKER POSTS HAS BEEN INCLUDED TO DELINEATE PIPE INLETS, PIPE OUTLETS AND DROP INLETS LOCATED OUTSIDE OF THE PAVEMENT SURFACE OR AS DIRECTED BY THE ENGINEER.
17. THE PROPOSED GUARDRAIL SHALL BE INSTALLED IN A LOCATION THAT MAXIMIZES THE DISTANCE FROM THE CENTER OF THE ROAD TO THE FACE OF GUARDRAIL. 7' POSTS SHALL BE USED FOR ALL BOX BEAM GUARDRAIL INSTALLATIONS.
18. ESTIMATED QUANTITIES OF ITEMS 608.25, "ALL PURPOSE EXCAVATOR RENTAL, TYPE I", 608.37, "TRUCK RENTAL", AND 608.40, "LOADER RENTAL, TYPE I" HAVE BEEN INCLUDED FOR THE PROVISION OF CONSTRUCTING GUARDRAIL END SECTIONS WITH EXCAVATED DITCHING MATERIAL AND THE REMOVAL OF BUILT UP EXCESS SHOULDER MATERIAL. AN ESTIMATED QUANTITY OF ITEM 203.30, "EARTH BORROW" HAS BEEN INCLUDED FOR USE WITH THE GUARDRAIL END SECTIONS. 25 CY OF ITEM 203.30, "EARTH BORROW" HAS BEEN ESTIMATED FOR EACH NEW END SECTION. GUARDRAIL END SECTIONS SHALL BE CAPPED WITH AN ESTIMATED 3 INCH DEPTH OF ITEM 651.35, "TOPSOIL" UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE QUANTITIES INCLUDED REFLECT 5 CY OF ITEM 651.35, "TOPSOIL" FOR EACH NEW GUARDRAIL END SECTION. ITEM 653.20, "TEMPORARY EROSION MATTING" SHALL BE PLACED ON SLOPES GREATER THAN 1:6 CREATED BY THE GUARDRAIL END SECTIONS. THE QUANTITIES INCLUDED REFLECT 25 SY OF ITEM 653.20, "TEMPORARY EROSION MATTING" FOR EACH NEW GUARDRAIL END SECTION. PRIOR TO THE PLACEMENT OF TEMPORARY EROSION MATTING, THE AREA SHALL BE TOPSOILED AND SEEDED USING ITEM 651.35, "TOPSOIL" AND ITEM 651.15, "SEED".

**NOTES (CONT.)**

19. AN ESTIMATED QUANTITY OF ITEM 649.51 GEOTEXTILE FOR SILT FENCE AND ITEM 653.60 EROSION LOG SHALL BE USED AT LOCATIONS DETERMINED BY THE ENGINEER. FOR ESTIMATING PURPOSES, IT WAS ASSUMED THAT THESE ITEMS WOULD BE PLACED APPROXIMATELY ALONG THE TOE-OF-SLOPE AT ALL STONE FILL INSTALLATIONS WITH SILT FENCE TO BE USED WHERE EXCAVATION IS IN CLOSE PROXIMITY TO ACTIVE WATER COURSES.
20. WHEN FINISHED GRADE HAS BEEN MET, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SIGNS BEING RETAINED ARE IN CONFORMANCE WITH VTRANS STANDARD E-121 AS DIRECTED BY THE ENGINEER. ESTIMATED QUANTITIES OF ITEM 675.341 SQUARE TUBE SIGN POST AND ANCHOR, ITEM 675.50 REMOVING SIGNS, AND ITEM 675.60 ERECTING SALVAGED SIGNS HAVE BEEN INCLUDED.

**SEEDING FORMULA**

RATE: DOUBLE IF HYDROSEEDING

% WT.	LBS./A.	NAME	PUR %	GERM %
38	32	CREEPING RED FESCUE	98	90
29	24	SPARTAN HARD FESCUE	95	85
15	12	AZAY SHEEP'S FESCUE	95	87
15	12	ANNUAL RYE GRASS	95	90
3	--	INERTS	--	--
100.0	80.0			

**GENERAL NOTES**

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS/ACRE (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE OR AS DIRECTED BY THE ENGINEER.

HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

**POSSIBLE ORDER OF OPERATIONS FOR RECLAIMED STABILIZED BASE WITH PORTLAND CEMENT PAVEMENT REHABILITATION**

STEP	DESCRIPTION	PAYMENT ITEM(S)
1	COLD PLANE EXISTING SURFACE 3"	ITEM 210.10 COLD PLANING, BITUMINOUS PAVEMENT
2	REPAIR EXISTING SHOULDERS AS DIRECTED BY THE ENGINEER	ITEM 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED
3	RECLAIM EXISTING ROADBED 8" FROM TOP OF SLOPE TO TOP OF SLOPE USING WATER FOR STABILIZATION AND COMPACTION	ITEM 310.20 RECLAIMED STABILIZED BASE.
4	CORRECT SUPERELEVATION DEFICIENCIES	ITEM 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED (SEE NOTE 3)
5	PLACE PORTLAND CEMENT ON ROADBED SURFACE AND RECLAIM ROADBED 8", CURE, MICROCRACK, AND APPLY FOG SEAL SURFACE TREATMENT	ITEM 900.675 SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT), AND ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION), AND ITEM 900.683 SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT)
6	PLACE 2 1/2" COLD MIXED RECYCLED ASPHALT SURFACE WITH PORTLAND CEMENT AND USE EMULSIFIED ASPHALT AS A LIQUID BINDER	ITEM 415.25 EMULSIFIED ASPHALT, COLD MIX, ITEM 900.675 SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT), AND ITEM 900.680 SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING).
7	PLACE 1 3/4" TYPE IIIS INTERMEDIATE COURSE	ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
8	PLACE 1 1/2" TYPE IVS WEARING COURSE	ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT

**NOTE:**

1. THIS LIST OF PROCEDURES FOR REHABILITATING THE EXISTING ROADBED IS PRESENTED FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL PREPARE THEIR OWN SCHEDULE OF OPERATIONS TO COMPLETE THE PROPOSED WORK IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS WHILE UTILIZING THE APPROPRIATE PAY ITEMS AS SHOWN IN THE PLANS AS DIRECTED BY THE ENGINEER.

**PROJECT TYPICAL SHEET #2**

PROJECT NAME: WARREN - WAITSFIELD

PROJECT NUMBER: STP 2506(1)

FILE NAME: p05b048.dgn

PROJECT LEADER: D.E.G.

DESIGNED BY: M.J.M.

IPARM FILE: p05b048+yp2.i

PLOT DATE: 12/21/2012

DRAWN BY: W.G.P.

CHECKED BY: D.E.G.

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