

PAVEMENT (CONT.)

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN

THIS ITEM IS ANTICIPATED TO BE USED TO REPAIR UNEVEN JOINTS IN THE CONCRETE BASE, AS DIRECTED BY THE ENGINEER.

THIS ITEM OF WORK SHALL CONSIST OF REMOVAL OF THE EXISTING ASPHALT SURFACE LAYERS AND REMOVAL OF 3 INCHES OF THE UNDERLYING CONCRETE BASE, IN AREAS OF SEVERE REFLECTIVE CRACKING/JOINT SEPARATION, AS DETERMINED BY THE ENGINEER.

USE CAUTION WHEN REMOVING CONCRETE BASE TO PREVENT DAMAGE TO EXISTING REINFORCING STEEL. THE 3 INCH CONCRETE BASE REMOVAL DEPTH SHALL BE REDUCED WHERE NECESSARY TO PREVENT DAMAGE TO EXISTING REINFORCING STEEL.

PAVEMENT REPAIR SHALL BE PERFORMED AFTER PAVEMENT PLANING AND BEFORE PLACEMENT OF THE INTERMEDIATE AND/OR SURFACE COURSE. THE CONTRACTOR SHALL BE CAPABLE OF PERFORMING PAVEMENT REPAIRS TO A MINIMUM OF 2 FEET WIDE.

THE DEPTH OF THE PAVEMENT REPAIR SHALL BE ESTIMATED AT 6" ± 1".

REPLACEMENT MATERIAL SHALL BE ITEM 301, ITEM 441 TYPE 2, OR ITEM 442 19MM MATERIAL AND SHALL BE PLACED AND COMPACTED TO FINISH FLUSH WITH THE ADJACENT PAVEMENT SURFACE.

PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE PAVEMENT REPAIRS. PAYMENT WILL BE MADE AT THE UNIT BID PRICE PER SQUARE YARD OF ITEM 253 - PAVEMENT REPAIR, AS PER PLAN. THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED IN THE GENERAL SUMMARY TO BE USED AT LOCATIONS DETERMINED BY THE ENGINEER:

ITEM 253 - PAVEMENT REPAIR, AS PER PLAN 350 CY

ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 2, (448), PG64-22, AS PER PLAN

THIS ITEM SHALL BE USED FOR CORRECTION OF CROWN, PROFILE AND ANY OTHER IRREGULARITIES.

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (MB-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PAYMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS 614 MAINTAINING TRAFFIC. REQUIREMENTS OF 441 APPLY.

ITEM 441 ASPHALT CONCRETE SURFACE COURSE TYPE 1, (446), PG70-22M, AS PER PLAN

THE COARSE VIRGIN AGGREGATE FOR THIS ITEM SHALL CONSIST OF A BLEND OF 60% MINIMUM AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

ALL OPEN TRANSVERSE JOINTS SHALL BE TAPERED TO MEET EXISTING PAVEMENT BEFORE INTRODUCING TRAFFIC. A "BUMP" SIGN (MB-1-36) SHALL BE ERECTED ON EACH SIDE OF TRANSVERSE JOINTS LEFT OPEN OVER NIGHT, INCLUDING A SPEED ADVISORY SIGN. THESE SIGNS SHALL BE REMOVED IMMEDIATELY AFTER JOINT HAS BEEN CLOSED. PAYMENT OF SIGNS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS 614 MAINTAINING TRAFFIC.

CARE SHALL BE TAKEN TO MATCH EXISTING PAVEMENT ELEVATIONS AT EXISTING PAVED BERMS, DRIVES, INTERSECTIONS, ETC.

ASPHALT CONCRETE SURFACE COURSE SEALING REQUIREMENTS

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, THE CONTRACTOR SHALL SEAL THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- BUTT JOINTS BETWEEN PAVED SHOULDER AND DRIVEWAY ASPHALT AND TAPERED EDGE WHEN FEATHER TO AN EXISTING ASPHALT DRIVEWAY.
- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
- ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2-3 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

ITEM 632 - DETECTOR LOOP, AS PER PLAN

DETECTOR LOOPS DISTURBED BY PAVEMENT PLANING, PAVEMENT REPAIR, OR BUTT JOINT OPERATIONS SHALL BE ABANDONED IN PLACE. THE NEW DETECTOR LOOP WIRE WILL BE CUT INTO THE INTERMEDIATE COURSE BEFORE THE PROPOSED SURFACE COURSE HAS BEEN PLACED. NEW LOOP DETECTORS SHALL BE PLACED AT THE SAME LOCATIONS AND BE THE SAME SIZE AND TYPE AS THE EXISTING, OR AS DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL NOTIFY CITY OF WILLOUGHBY HILLS ENGINEER 216-377-3838 FIVE WORKING DAYS IN ADVANCE OF ANY PLANING OPERATIONS OR PAVEMENT REPAIR WORK THAT WILL DAMAGE DETECTOR LOOP INSTALLATIONS. THIS NOTIFICATION IS NEEDED TO SCHEDULE TEMPORARY SIGNAL TIMING MODIFICATIONS FOR THE TIME PERIOD WHEN THE DETECTOR LOOPS ARE OUT OF OPERATION. THE CONTRACTOR SHALL THEN RENOTIFY THE CITY WITHIN 2 WORKING DAYS AFTER THE DAMAGED DETECTOR LOOPS ARE REPLACED SO THAT SIGNAL TIMINGS CAN BE RESTORED TO THE ORIGINAL SETTINGS.

THE NEW DETECTOR LOOP WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX, POLE, OR PULLBOX, WHICHEVER IS APPLICABLE. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT (CONFORMING TO 725.15) THAT MUST BE USED IN MAKING THESE CONNECTIONS. ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT FOR PROPER INSTALLATION AND OPERATION SHALL BE INCIDENTAL TO PAYMENT OF THESE ITEMS.

ITEM 611 - MANHOLE, CATCH BASIN, OR INLET ADJUSTED TO GRADE

ITEM 611 - MANHOLE, CATCH BASIN OR INLET RECONSTRUCTED TO GRADE, AS PER PLAN

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED WHERE DIRECTED BY THE ENGINEER.

ITEM 611 - CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN 2 EACH

ITEM SPECIAL - MISCELLANEOUS METAL, AS PER PLAN

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIAL SHALL MEET ITEM 611 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER. REPLACEMENT OF OTHER CASTINGS (I.E. VALVE BOXES, MONUMENT BOXES, ETC.) UNSUITABLE FOR REUSE WILL ALSO BE PAID UNDER THIS ITEM.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS DETERMINED BY THE ENGINEER:

ITEM SPECIAL - MISCELLANEOUS METAL, AS PER PLAN 2000 POUNDS

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

PLANED SURFACES

THE DURATION OF TIME BETWEEN MILLING AND PLACEMENT OF THE INTERMEDIATE COURSE SHALL BE NO LONGER THAN FOURTEEN (14) DAYS, UNLESS MOT NOTES STATE OTHERWISE. THE LIMIT SHALL BEGIN ON THE FIRST DAY OF PLANING AND SHALL CONTINUE BASED ON CALENDAR DAYS, MINUS ANY BAD WEATHER DAYS, UNTIL COMPLETION OF THE ASPHALT CONCRETE INTERMEDIATE COURSE.

ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT. AS PER PLAN

THIS ITEM SHALL CONSIST OF REMOVING THE EXISTING PAVEMENT (ASPHALT & CONCRETE), FULL DEPTH, AND REPLACING WITH FLEXIBLE PAVEMENT.

FOR ESTIMATING PURPOSES, THE DEPTH OF THE FULL DEPTH PAVEMENT REPAIR SHALL BE 10.5 INCHES (±1 INCH)

THE ENGINEER WILL LOCATE AND MARK ALL AREAS FOR FULL DEPTH REPAIR BEFORE THE START OF FULL DEPTH SAWING. SAW THE LIMITS OF THE FULL DEPTH REPAIR AT THE LIMITS OF THE AREA DESIGNATED BY THE ENGINEER TO BE REPAIRED.

IF, AFTER PAVEMENT REMOVAL, THE ENGINEER DETERMINES THAT THE SUBBASE OR SUBGRADE HAS FAILED OR IS PUMPING, THE ENGINEER WILL DIRECT THE CONTRACTOR TO EXCAVATE THE UNSUITABLE MATERIAL AND REPLACE IT WITH COMPACTED 304 AGGREGATE. QUANTITIES OF ITEM 203 - EXCAVATION AND ITEM 304 - AGGREGATE BASE HAVE BEEN PROVIDED TO REPAIR SAID FAILED SUBBASE OR SUBGRADE AREAS.

PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER.

ALL COSTS ASSOCIATED WITH THIS ITEM INCLUDING THE SAWCUTTING, LABOR, MATERIALS AND EQUIPMENT SHALL BE INCLUDED IN ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED OVER TO THE GENERAL SUMMARY TO BE USED AS DETERMINED BY THE ENGINEER:

ITEM 204 - EXCAVATION OF SUBGRADE, AS PER PLAN	20 CY
ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL & FLEXIBLE REPLACEMENT, AS PER PLAN	2000 SY
ITEM 304 - AGGREGATE BASE, AS PER PLAN	20 CY

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GENERAL NOTES

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MAINTENANCE OF TRAFFIC (CONT.)

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

THE ESTIMATED QUANTITY PROVIDES FOR 2 PCMS UNITS AT 2 MONTHS EACH.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 4 SNMT
ASSUMING 3 PCMS SIGN(S) FOR 2 MONTH(S)

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