

THE STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION

OFFICE OF TRANSPORTATION SOLUTIONS

CONSTRUCTION PLANS AND SPECIFICATIONS FOR

PAVEMENT & REHABILITATION-KENT II (MICRO SURFACE REPLACEMENT),2018

CONTRACT NUMBER - T201806202.01

PRIMA VERA ID – 18-06202

FUNDING - 100% STATE

CENTRAL DISTRICT MAINTENANCE

PLANS PREPARED BY:

Paul Farkas

DESIGN TECHNICIAN

DATE RECOMMENDED: 7/24/2018

Bradford L. Salmb

GROUP ENGINEER, CONSTRUCTION

DATE RECOMMENDED: 7/27/18

David A. Nicol

ASSIST. DIRECTOR, ENGINEERING SUPPORT

DATE RECOMMENDED: 7/27/18

Robert Brian McCleary

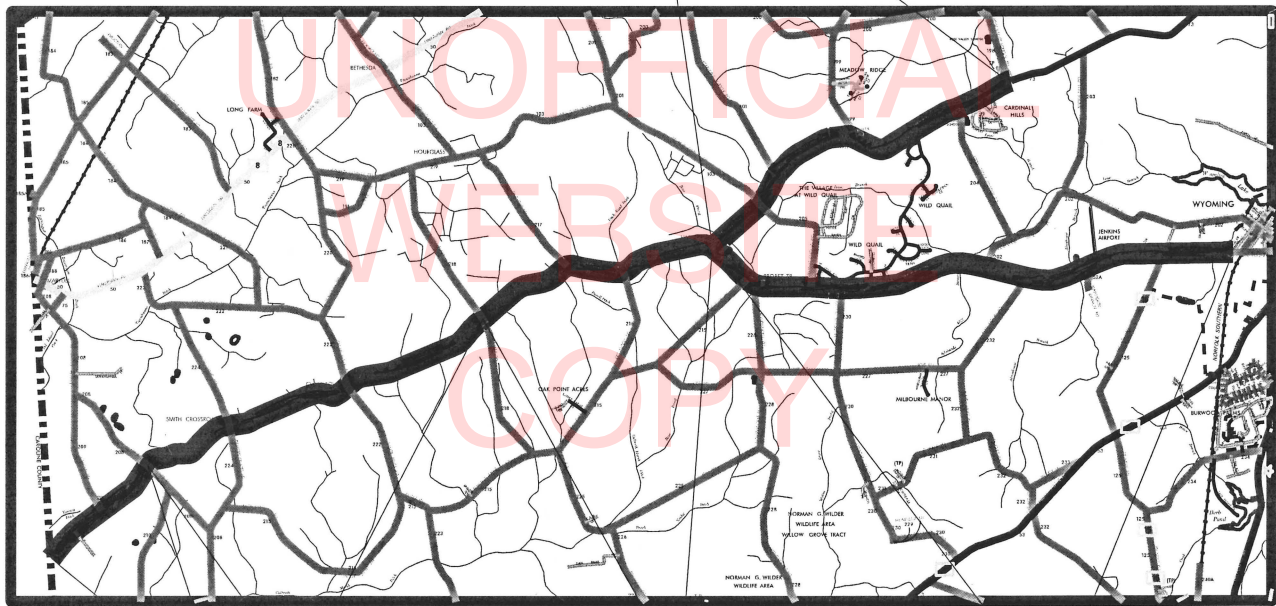
CHIEF ENGINEER



VARIOUS LOCATIONS

LOCATION MAP

Location 5
Hazelettsville Rd from
Westville Rd to
Rose Valley Rd.



Location 1
Westville Rd from
Maryland State line to
Mahan Corner Rd.

Location 2
Westville Rd from
Mahan Corner Rd to
Tower Rd.

Location 3
Westville Rd from
Tower Rd to
Hazelettsville Rd.

Location 4
Westville Rd from
Hazelettsville Rd to
Mechanic St. (Wyoming)

DEPARTMENT OF TRANSPORTATION

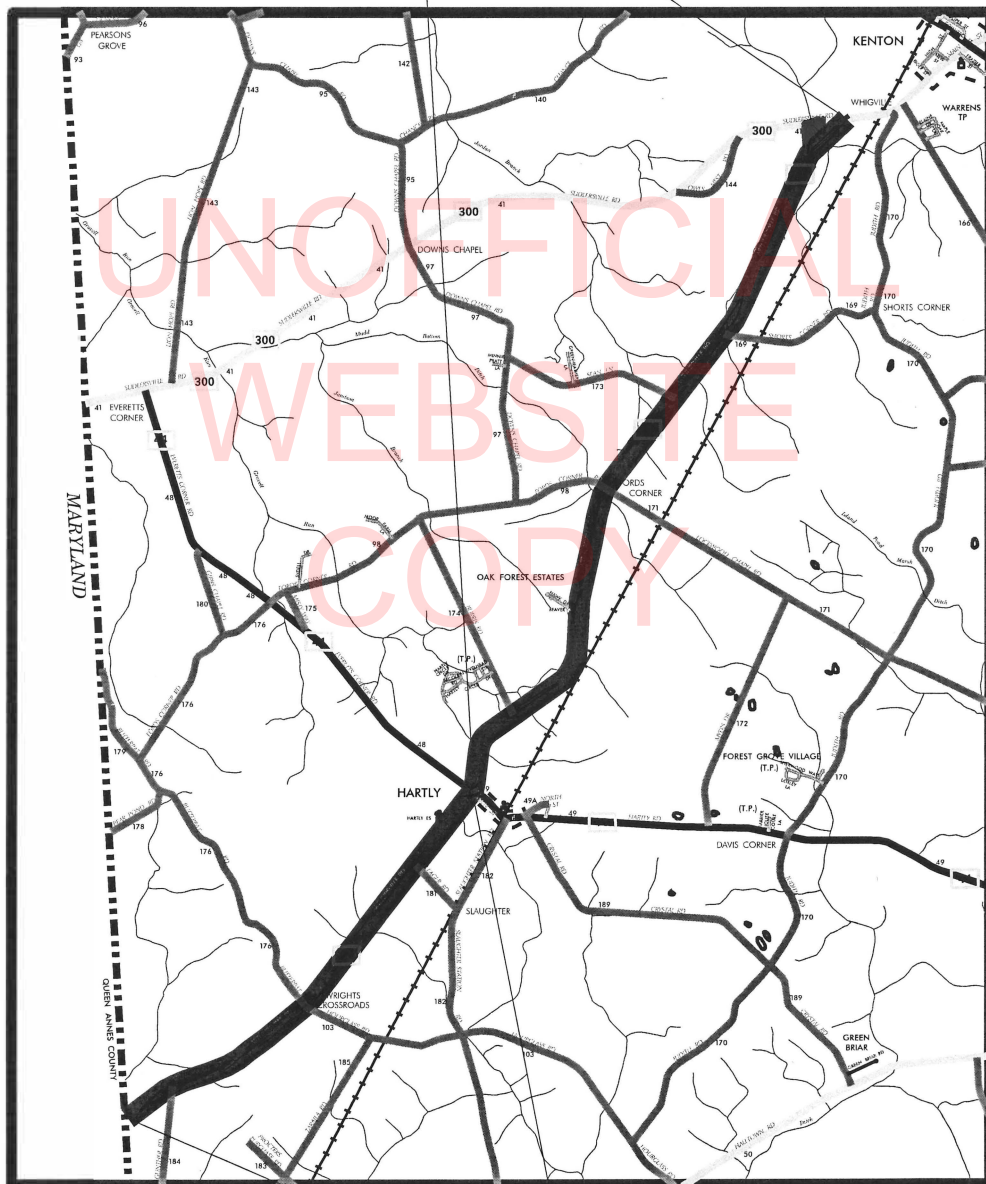
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VARIOUS LOCATIONS

LOCATION MAP

Location 7
Arthursville Rd from
Main St (Hartly) to
DE300, Sudlersville Rd.



Location 6
Arthursville Rd from
Maryland State line to Main St. (Hartly)

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PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING REPLACEMENT) 2018

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GENERAL CONTRACT PLAN NOTES

REVISED - JUNE 2018

GENERAL

1. CONSTRUCTION OF THIS CONTRACT SHALL CONFORM TO DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED AUGUST **2016** AS AMENDED BY THE SUPPLEMENTAL SPECIFICATIONS, THE SPECIAL PROVISIONS, THE MOST RECENT STANDARD CONSTRUCTION DETAILS, DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THESE PLANS.

2. THE PURPOSE OF THIS CONTRACT IS TO MAKE GENERAL IMPROVEMENTS TO ROADS AND/OR STREETS WITHIN THE DISTRICT HEREIN SPECIFIED. DEPENDING ON FUND AVAILABILITY, THE DEPARTMENT RESERVES THE RIGHT TO ADD OR DELETE LOCATIONS AND/OR QUANTITIES FOR THIS CONTRACT. SUCH LOCATION OR QUANTITY ADDITIONS OR DELETIONS SHALL NOT BE CAUSE FOR AN INCREASE OR DECREASE IN ANY CONTRACT UNIT BID PRICES. NO ITEM PRICES ARE TO BE RENEGOTIATED DUE TO EITHER AN INCREASE OR DECREASE IN QUANTITY USAGE RESULTING FROM SAID ADDITIONS OR DELETIONS.

3. THE CONTRACTOR SHALL PROVIDE ALL RESIDENTS AND BUSINESSES WHO LIVE ADJACENT TO THE WORK ZONE A MINIMUM 48 HR. PRIOR WRITTEN NOTICE FOR THE START OF CONSTRUCTION WORK. THIS NOTIFICATION SHALL INCLUDE THE SCOPE OF WORK, WORKING HOURS, ANTICIPATED START AND COMPLETION DATES, CONTRACTOR NAME & ADDRESS, AND DELDOT CONTACT NUMBERS. FAILURE TO GIVE PROPER NOTICE WILL RESULT IN A SUSPENSION OF WORK REQUIRING NOTICE, UNTIL PROPER NOTICE IS PROVIDED. ACCESS TO ALL BUSINESSES AND RESIDENCES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THIS CONTRACT. ANY TEMPORARY CLOSURE OF A DRIVEWAY FOR TIE-IN PURPOSES SHALL BE COORDINATED WITH THE ENGINEER AND/OR PROPERTY OWNER IN ADVANCE OF THE CLOSURE.

4. THE CONTRACTOR SHALL SUBMIT THE REQUIRED COPIES OF A DETAILED PROGRESS SCHEDULE (PSC) AS OUTLINED IN STANDARD SPECIFICATION 108.04 PRIOR TO OR AT THE PRECONSTRUCTION MEETING. DETAILS SHALL INCLUDE A DESCRIPTION OF EACH WORK ACTIVITY, THE PLANNED DAYS OF WORK, MULTIPLE CREWS OR SHIFTS, AND SCHEDULED WORKING HOURS. DURING THE CONTRACT, THE CONTRACTOR SHALL SUBMIT TWO-WEEK (OR AS REQUIRED) "LOOK AHEAD" SCHEDULES TO THE AREA ENGINEER/ MANAGER NO LATER THAN NOON OF EACH THURSDAY. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE REQUIRED CLEARANCES AND INSURANCES FOR EACH RAILWAY COMPANY INVOLVED IF THE RAILROAD PROPERTY AND/OR FACILITIES ARE LOCATED WITHIN OR NEAR THE PROPOSED LIMITS OF WORK AND/OR IF THE PROPOSED WORK ENCROACHES UPON THE RAILROAD'S RIGHT-OF-WAY, IN ACCORDANCE WITH DELDOT MAINTENANCE OF RAILROAD TRAFFIC ITEM NO. 801501. THE CONTRACTOR MUST CONTACT DELDOT'S RAILROAD SECTION MANAGER AT (302) 760-2183 PRIOR TO ANY WORK STARTED TO COORDINATE THE EXECUTION OF THE APPROPRIATE AGREEMENTS AND AUTHORIZATIONS REQUIRED FROM ANY RAILWAY COMPANY INVOLVED, INCLUDING COORDINATION FOR RAILROAD FLAGGING, IF NECESSARY.

MAINTENANCE OF TRAFFIC

6. **PERMANENT ADVANCE WARNING SIGNS WITH THE LEGENDS "ROAD WORK AHEAD" SHALL BE PLACED ON THE APPROACHES TO THE WORK AREA AND "END ROAD WORK" SIGNS SHALL BE PLACED BEYOND THE WORK AREA LIMITS IN BOTH DIRECTIONS.** ON ALL INTERSECTING ROADS, INSTALL "ROAD WORK AHEAD" SIGNS 500 FEET IN ADVANCE OF THE WORK AREA AND "END ROAD WORK" SIGNS 500 FEET BEYOND THE WORK AREA. ALL PERMANENT ADVANCE WARNING SIGNS SHALL BE GROUND-MOUNTED ON TWO NCHRP-350 OR MASH APPROVED BREAKAWAY POSTS AND SHALL BE MOUNTED IN COMPLIANCE WITH THE DE-MUTCD. PERMANENT ADVANCE WARNING SHALL BE MOUNTED AT A HEIGHT OF 7 FEET, MEASURED FROM THE PAVEMENT GRADE TO THE BOTTOM OF THE SIGN. THE USE OF SKID-MOUNTED SIGN SUPPORTS IS NOT

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GENERAL CONTRACT PLAN NOTES

ALLOWED UNLESS THE CONTRACTOR CAN DEMONSTRATE THAT A UTILITY CONFLICT EXISTS AND/ OR CONCRETE MEDIANS PREVENT THE INSTALLATION OF THE PERMANENT SIGNS IN THE APPROPRIATE LOCATION WHICH SHALL BE VERIFIED BY THE ENGINEER.

7. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED IN BOTH DIRECTIONS 10 DAYS IN ADVANCE OF CONSTRUCTION THROUGH 5 DAYS AFTER THE START OF CONSTRUCTION, AS WELL AS PRIOR TO ANY MAJOR TRAFFIC PATTERN CHANGES. ALL PCMS MESSAGES SHALL BE APPROVED BY THE DISTRICT SAFETY OFFICER.

8. THE CONTRACTOR SHALL BE REQUIRED TO SHOW PROOF THAT HE HAS SUFFICIENT APPROVED STRIPING MATERIALS ON HAND TO ENSURE STRIPING IS COMPLETED PRIOR TO FULL OPENING ROADWAY TO TRAFFIC.

9. AT THE END OF EACH DAY'S OPERATION AND BEFORE TRAFFIC IS RETURNED TO UNRESTRICTED ROADWAY USE, TEMPORARY STRIPING SHALL BE UTILIZED AT LOCATIONS THAT REQUIRE PERMANENT STRIPING, SHALL BE INSTALLED IN ACCORDANCE WITH THE TEMPORARY STRIPING POLICY. TEMPORARY PAVEMENT STRIPING MUST MATCH PERMANENT PAVEMENT STRIPING IN ALL REGARDS. TEMPORARY PAVEMENT MARKINGS SHALL BE PAID AT THE APPLICABLE CONTRACT UNIT PRICE. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE TEMPORARY MARKINGS IN GOOD CONDITION SUCH THAT THE PAVEMENT IS PROPERLY DELINEATED AT ALL TIMES. ANY REFRESHING OF THE TEMPORARY MARKINGS WILL BE AT THE CONTRACTOR'S EXPENSE.

10. ALL WORK SHALL BE PERFORMED IN A MANNER THAT WILL REASONABLY PROVIDE THE LEAST PRACTICABLE OBSTRUCTION TO ALL ROAD USERS, INCLUDING VEHICULAR, PEDESTRIAN AND BICYCLE TRAFFIC, AND SHALL CONFORM TO THE REQUIREMENTS OF THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART 6, INCLUDING ALL REVISIONS UP TO THE DATE OF ADVERTISEMENT FOR BIDS.

11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO AND ALONG PEDESTRIAN FACILITIES AT ALL TIMES DURING CONSTRUCTION. EARTH, STONE AND GRAVEL SURFACES ARE NOT ACCEPTABLE FOR PROVIDING PEDESTRIAN ACCESS. WHERE PEDESTRIAN ROUTES ARE CLOSED OR BLOCKED, ALTERNATE PEDESTRIAN ACCESS SHALL BE PROVIDED USING TA-28 AND/OR TA-29 OF THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR TO THE SATISFACTION OF THE ENGINEER. PEDESTRIAN DETOUR ROUTES OR ALTERNATE PEDESTRIAN FACILITIES SHALL CONSIST OF ADA COMPLIANT FACILITIES TO THE LEVEL OF WHICH EXISTS ON THE PEDESTRIAN ROUTE. THE COST FOR ANY PROVISIONS SHALL BE INCIDENTAL TO ITEM 801500 - MAINTENANCE OF TRAFFIC, ALL INCLUSIVE.

PEDESTRIAN MAINTENANCE OF TRAFFIC: THIS WORK SHALL CONSIST OF PROVIDING AND MAINTAINING AN ACCESSIBLE PEDESTRIAN ROUTE THROUGHOUT THE PROJECT'S LIMITS IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA) TITLE II, PARAGRAPH 35.130.

THE CONTRACTOR SHALL BE REQUIRED TO REVIEW EACH CURB RAMP LOCATION AND SUBMIT THE APPROPRIATE MAINTENANCE OF TRAFFIC DETAIL AND DEVICES TO THE ENGINEER FOR EACH LOCATION AT LEAST 2 WEEKS BEFORE CONSTRUCTION FOR REVIEW, COMMENT, AND APPROVAL. THE FOLLOWING CONSIDERATIONS SHALL BE TAKEN INTO ACCOUNT WHEN ADDRESSING ACCESSIBLE PEDESTRIAN MAINTENANCE OF TRAFFIC:

- ALL PEDESTRIANS, INCLUDING PERSONS WITH DISABILITIES, SHALL BE PROVIDED WITH A REASONABLY SAFE, CONVENIENT AND ACCESSIBLE PATH THAT REPLICATES AS MUCH AS PRACTICABLE THE EXISTING PEDESTRIAN FACILITIES.
- MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES AT ALL TIMES.

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GENERAL CONTRACT PLAN NOTES

- PROVIDE PEDESTRIAN ACCESS THROUGH OR AROUND THE WORK ZONE. IF A DETOUR IS CHOSEN THE CONTRACTOR MUST SUBMIT THE DETOUR ROUTE TO THE ENGINEER FOR REVIEW AND APPROVAL. THE DETOUR ROUTE MUST MEET OR EXCEED THE CURRENT CONDITIONS.
- WORK SHOULD BE PHASED SO THAT ALL AREAS OF AN INTERSECTION/SIDEWALK PATH ARE NOT UNDER CONSTRUCTION AT THE SAME TIME UNLESS A CLEAR PATH IS PROVIDED AND IDENTIFIED.
- TRAFFIC CONTROL DEVICES AND OTHER CONSTRUCTION MATERIALS AND FEATURES SHALL NOT INTRUDE INTO THE USABLE WIDTH OF THE SIDEWALK, TEMPORARY PATHWAY OR OTHER PEDESTRIAN FACILITY.
- SIGNS AND OTHER DEVICES MOUNTED LOWER THAN 7 FT ABOVE THE TEMPORARY PEDESTRIAN PATHWAY SHALL NOT PROJECT MORE THAN 4 IN. INTO ACCESSIBLE PEDESTRIAN ROUTE.

A SMOOTH, CONTINUOUS HARD SURFACE SHALL BE PROVIDED THROUGHOUT THE ENTIRE LENGTH AND WIDTH OF THE PEDESTRIAN ROUTE THROUGHOUT CONSTRUCTION. THERE SHALL BE NO CURBS OR VERTICAL ELEVATION CHANGES GREATER THAN ¼ IN. IN GRADE OR TERRAIN THAT COULD CAUSE TRIPPING OR BE A BARRIER TO WHEELCHAIR USE.

12. AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED TRAFFIC CONTROL SUPERVISOR SHALL BE REQUIRED FOR ALL LOCATIONS SPECIFIED IN THE CONTRACT PLANS. A COPY OF THE CERTIFICATION CARD FOR THE ATSSA TRAFFIC CONTROL SUPERVISOR SHALL BE SUBMITTED AT THE PRECONSTRUCTION MEETING. THE PAPER CERTIFICATE IS NOT ACCEPTABLE.

PAVEMENT MARKINGS

13. AT THE PRECONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS (INCLUDING BUT NOT LIMITED TO EXISTING STRIPING LENGTHS, LANE AND SHOULDER WIDTHS, TURN LANE LENGTHS, LOCATIONS OF STOP BARS, TURN ARROWS, CROSSWALKS AND RAILROAD CROSSINGS) THAT DEPICT THE EXISTING PAVEMENT MARKINGS FOR EACH PROJECT LOCATION. THESE DRAWINGS WILL BE REVIEWED BY THE DEPARTMENT'S TRAFFIC SECTION TO DETERMINE IF ANY CHANGES TO THE FINAL PAVEMENT MARKINGS ARE REQUIRED. FINAL PAVEMENT MARKINGS SHALL CONFORM TO ALL EXISTING PATTERNS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

THE DEPARTMENT WILL PROVIDE STRIPING LAYOUT AT LOCATIONS WHERE NO PAVEMENT MARKINGS PREVIOUSLY EXISTED. IF DEPARTMENT FORCES PROVIDE STRIPING LAYOUT ON LOCATIONS WHERE MARKINGS PREVIOUSLY EXISTED, THEN THE CONTRACTOR SHALL REIMBURSE THE DEPARTMENT FOR THE LAYOUT COSTS.

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, WHITE EDGE LINES SHALL WRAP AROUND THE RADIUS OF ALL SIDE STREETS AND MAJOR COMMERCIAL ENTRANCES TO A TANGENT POINT. YELLOW CENTERLINES SHALL BE CONTINUOUS AROUND MEDIAN ISLANDS. ALL DOUBLE YELLOW CENTERLINES SHALL BE PLACED IN A 5-6-5 CONFIGURATION (2 EACH, 5" YELLOW STRIPES WITH A 6" GAP BETWEEN).

14. ANY ERRONEOUS MARKING WILL NOT BE PAID FOR AND SHALL BE CORRECTED IMMEDIATELY AT THE CONTRACTORS EXPENSE. ERRONEOUS MARKINGS OR SHADOWS THAT EXCEED ONE (1) INCH IN WIDTH SHALL BE REMOVED BY EITHER SAND OR WATER BLASTING AS DIRECTED BY THE ENGINEER. NO OTHER REMOVAL METHODS WILL BE ALLOWED. A FLAT BLACK PAINT OR DRIVEWAY SEALER SHALL BE APPLIED IN THE AREA OF THE REMOVED MARKING TO MASK THE REPAIR. ANY DAMAGE TO THE PAVEMENT CAUSED BY REMOVAL OF ERRONEOUS MARKINGS SHALL BE REPAIRED / REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTORS EXPENSE.

15. STOP LINES "BARS" SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 3B.16 OF THE 2011 DELAWARE MUTCD.

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GENERAL CONTRACT PLAN NOTES

16. ALL CROSSWALKS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 3B.18 OF THE 2011 DELAWARE MUTCD.

TRAFFIC SIGNAL NOTES

17. TRAFFIC DETECTION LOOPS SHALL BE PLACED IN THE FINAL WEARING SURFACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

18. TRAFFIC DETECTION LOOPS THAT ARE CURRENTLY 5'x7' SHALL BE REPLACED WITH LOOPS THAT ARE 6'x6' AT THE SAME LOCATION. STOP BAR DETECTION LOOPS SHALL BE THE SAME SIZE AS CURRENTLY EXISTING, AND SHOULD BE PLACED STARTING TWO FEET BEHIND THE STOP BAR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IF SEPARATE SIGNAL PLANS HAVE BEEN DEVELOPED, THE PLANS SUPERSEDE THIS NOTE.

PROJECT

19. UNLESS SPECIFIED, OVERLAY WIDTHS SHALL MATCH EXISTING WIDTHS.

20. THE COST OF CLIPPING BACK THE EDGES OF THE ROADWAY, SHOULDERS, AND THE FIRST 3' OF UNPAVED DRIVEWAY ENTRANCES, PICKING UP AND DISPOSING OF WASTE AND EXCESS MATERIAL, AND CLEANING THE EXISTING PAVEMENT PRIOR TO OVERLAY SHALL BE INCIDENTAL TO SECTION 401(). PREPARING UNPAVED DRIVEWAY ENTRANCES BEYOND THE FIRST 3' SHALL BE PAID UNDER THE APPROPRIATE CONTRACT ITEMS: 202000 AND/OR 30100X.

21. BUTT JOINTS SHALL BE PLACED AT ALL INTERSECTING HOT MIX ROADS AND ANY OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. BUTT JOINTS AT DRAINAGE STRUCTURES NOT TO BE RESURFACED SHALL BE AS PER THE INCLUDED PLAN DETAIL OR LOCATION NOTES. BUTT JOINTS CUT PRIOR TO THE DAY OF THE PAVEMENT OVERLAY SHALL BE RAMPED WITH HOT MIX TRM. IN MILLING AREAS, THERE WILL BE NO SEPARATE PAYMENT FOR BUTT JOINTS. AFTER PAVEMENT MILLING, ALL TRANSVERSE VERTICAL DIFFERENCES, RAISED EDGES OF MANHOLES, CATCH BASINS, WATER VALVE BOXES, ETC...SHALL BE RAMPED WITH HOT-MIX TRM AT A 20:1 OR FLATTER SLOPE PRIOR TO OPENING THE ROADWAY TO TRAFFIC. PAVEMENT MILLINGS WILL NOT BE ALLOWED FOR USE AS RAMPING MATERIAL.

22. TAPER MILLING IS INTENDED FOR MILLING IN THE AREA OF FIXED STRUCTURES (I.E. CURBS GUARDRAIL, ETC.) THE MILLED DEPTH AT THE STRUCTURE SHALL BE THE DEPTH OF THE PROPOSED OVERLAY AND 0" AT A DISTANCE OF +/- 6½' FROM THE STRUCTURE. THE COMPUTED DEPTH FOR PAYMENT PURPOSES IS THE AVERAGE OF THE TWO DEPTHS.

23. ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE STATED.

24. EXCAVATION FOR P.C.C. CURBS, SIDEWALK OR VALLEY GUTTER SHALL BE INCIDENTAL TO THE BID PRICE FOR THESE RESPECTIVE ITEMS. EXCAVATED MATERIAL, NOT NEEDED ON THE PROJECT, SHALL BE REMOVED FROM THE CONTRACT AT THE CONTRACTORS EXPENSE. ITEM 9080XX, TOPSOIL, SHALL BE USED AS BACKFILL MATERIAL FOR CURB AND SIDEWALK AS DIRECTED BY THE ENGINEER. TOPSOIL SHALL BE SCREENED/SIFTED SO AS NO MATERIAL GREATER THAN .5" IS PRESENT IN MATERIAL USED FOR BACKFILL. AT EACH LOCATION, BACKFILLING SHALL BE PERFORMED IMMEDIATELY UPON REMOVAL OF FORMS FOR CURB OR SIDEWALK WORK. COMPLETE RESTORATION, TOPSOIL, SEEDING, AND REMOVAL OF ALL MATERIALS FOR CURB & GUTTER OR SIDEWALK; SEALING OF VALLEY GUTTERS AND PARGING OF CATCH BASINS, SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETION OF THE ITEM OF WORK. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL OTHER CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

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GENERAL CONTRACT PLAN NOTES

25. ALL ADJUSTMENTS SHALL BE MADE NO MORE THAN SEVEN (7) CALENDAR DAYS PRIOR TO THE PLACEMENT OF THE FINAL COURSE OF HOT MIX UNLESS OTHERWISE APPROVED BY THE ENGINEER. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL OTHER CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

26. ALL PAVING, INCLUDING TURN LANES, SHOULDERS AND INTERSECTIONS, IS TO BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FROM THE TIME THE AREA WAS MILLED. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL OTHER CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

27. THE CONTRACTOR SHALL TAKE CARE IN REMOVING PAVEMENT AROUND UTILITIES, BUTT JOINTS, CURBING, ETC. SO THAT EXISTING PAVEMENT BEYOND THE SPECIFIED DEPTHS IS NOT DAMAGED. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS MAY RESULT IN PLACING LEVELING COURSES AT THE CONTRACTOR'S EXPENSE. THE REMOVAL AND CLEAN UP OF THE HOT MIX RESIDUE WEDGE REMAINING AFTER MILLING OPERATIONS SHALL BE INCIDENTAL TO THE MILLING ITEM. THE REMOVAL OF EXISTING RAISED PAVEMENT MARKERS (RPM'S) SHALL BE INCIDENTAL TO THE APPLICABLE MILLING AND/OR RECLAMATION ITEMS.

28. ALL PORTLAND CEMENT CONCRETE MUST BE RECEIVED FROM AN APPROVED PRODUCTION PLANT UNLESS OTHERWISE APPROVED BY THE ENGINEER. ONLY CALIBRATED VOLUMETRIC CONCRETE TRUCKS WILL BE PERMITTED TO PROVIDE ON-SITE MIXTURES. THIS PERTAINS TO BOTH WORK OCCURRING DURING NORMAL WORKING HOURS AND NIGHTTIME RESTRICTED WORK.

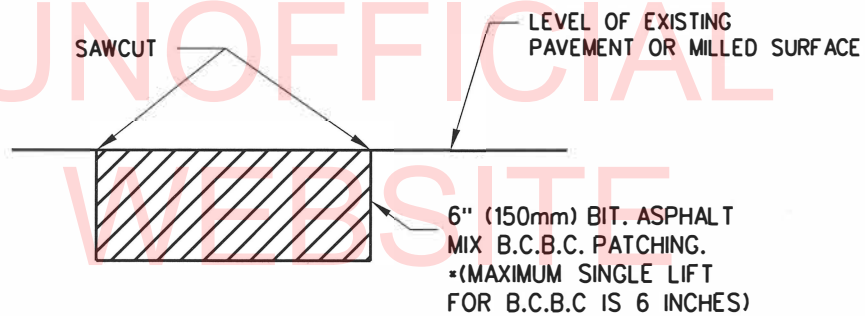
29. DRAINAGE INLETS, WHICH ARE 4' OR GREATER IN DEPTH AND ARE SLATED FOR REPAIR WILL HAVE STEPS INSTALLED IN ACCORDANCE WITH SECTION 602.03.B.4 OF THE STANDARD SPECIFICATIONS. PAYMENT SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 60213X.

30. THE PORTLAND CEMENT CONCRETE USED WITHIN ITEM 602132 - ADJUST AND REPAIR EXISTING MAN HOLES AND ITEM 710002 - ADJUST WATER VALVE BOX SHALL CONFORM TO THE REQUIREMENTS OF CLASS A CONCRETE AS STATED WITHIN SECTION 503.02 OF THE DEPARTMENT'S STANDARD SPECIFICATIONS.

CENTRAL
MAINTENANCE

VARIOUS LOCATIONS

DETAILS SHEET



BITUMINOUS CONCRETE MIX PATCH DETAIL

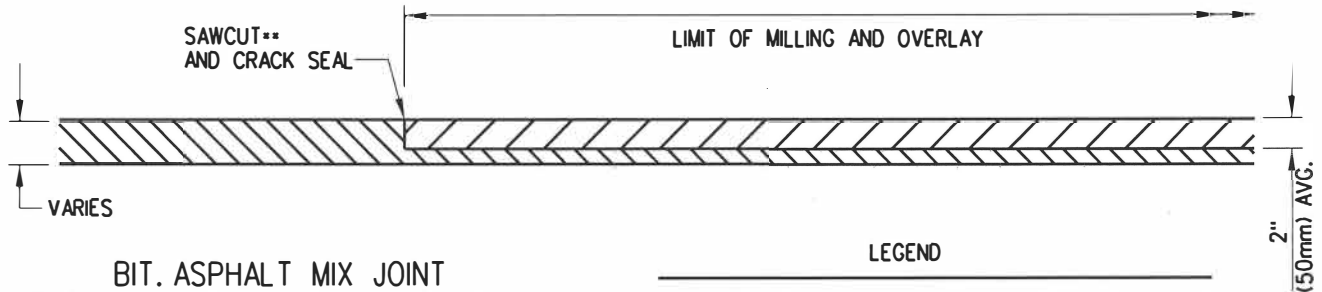
N.T.S.

NOTE: ALL EDGES TO BE SAWCUT. CUTTING BY USE OF AIR HAMMERS MAY BE SUBSTITUTED FOR SAWCUTTING IF THE AREA IS TO BE OVERLAID UNDER THE SAME CONTRACT. THIS DETAIL SHALL BE USED FOR ALL HOT-MIX PATCHES UNLESS OTHERWISE SHOWN ON THE PLANS.

CENTRAL
MAINTENANCE

VARIOUS LOCATIONS



DETAILS SHEET

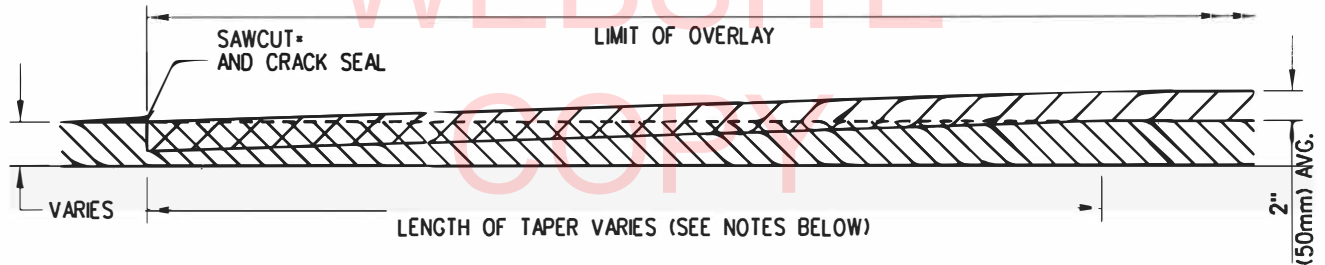


BIT. ASPHALT MIX JOINT
FOR FULL WIDTH MILLING SECTION**

**SAWCUT SHALL BE PAID UNDER ITEM 762000.

LEGEND




-  PROPOSED FULL WIDTH MILLING AND
BIT. ASPHALT MIX OVERLAY
-  EXISTING PAVEMENT (TO REMAIN)



BIT. ASPHALT MIX JOINT
FOR OVERLAY SECTION*

*SAWCUT IS INCIDENTAL TO ITEM 762004.

LEGEND

-  PROPOSED OVERLAY
-  EXISTING PAVEMENT
-  EXISTING PAVEMENT TO BE REMOVED

NOTES:

THE FOLLOWING LENGTHS ARE BASED ON THE POSTED SPEED OF THE ROADWAY:

1. EQUAL TO OR GREATER THAN 55 MPH - 40 FT (9.1m) PER 1" (25mm) OF OVERLAY DEPTH.
2. LESS THAN 55 MPH - 30 FT (6m) PER 1" (25mm) OF OVERLAY DEPTH.
3. AT STOP SIGNS - 15 FT (4.6m) PER 1" (25mm) OF OVERLAY DEPTH.
4. CRACK SEAL THE JOINT BETWEEN THE NEW AND EXISTING PAVEMENT, INCIDENTAL TO BIT. ASPHALT OVERLAY.

BITUMINOUS ASPHALT MIX JOINT DETAILS

DELAWARE DEPARTMENT OF TRANSPORTATION

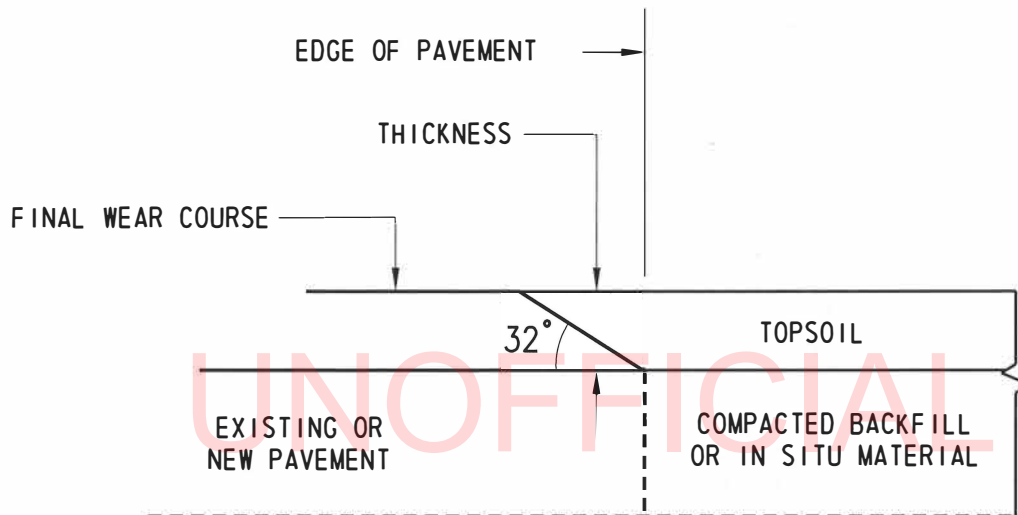
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CENTRAL
MAINTENANCE

VARIOUS LOCATIONS

DETAILS SHEET



THICKNESS OF SAFETY EDGE	
CONCRETE PAVEMENT	3"
BITUMINOUS CONCRETE PAVEMENT	HEIGHT OF FINAL LIFT OF TOP WEARING COURSE

NOTES:

1. FOR ROADWAYS WHERE THE COMBINED TRAVEL LANE WIDTH AND SHOULDER WIDTH IS 11FT OR LESS, THE SAFETY EDGE SHALL OVERLAP THE COMPACTED FILL OR IN-SITU MATERIAL. COMPACTED FILL OR IN-SITU MATERIAL SHALL BE LEVEL WITH THE ROADWAY PRIOR TO THE FINAL ASPHALT BITUMINOUS CONCRETE PAVING LIFT.

SAFETY EDGE DETAIL

NOT TO SCALE

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201806202

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**CENTRAL
MAINTENANCE**

**PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018**

LOCATION 1 **WESTVILLE RD (1), (K206) FROM MARYLAND STATE LINE TO MAHAN
CORNER RD (K208)**

LENGTH 1737.3600 m 5700.0000 L.F. **AADT** 412

GENERAL IMPROVEMENTS
1" MILLING (CRACK SEAL), BIT. ASPHALT PATCHING AND 2" TYPE C (CARB) FULL WIDTH
OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	49.00	S.Y.
301001	GRADED AGGREGATE BASE COURSE, TYPE B	8.00	C.Y.
301003	GRADED AGGREGATE BASE COURSE, TYPE B	25.00	TON
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	1,622.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	322.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	86.00	TON
402000	BITUMINOUS CONCRETE PATCHING	5,600.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	7.00	TON
705002	PORTLAND CEMENT CONCRETE SIDEWALK, 6"	441.00	S.F.
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	13,300.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	2,960.00	L.F.
762001	SAW CUTTING, CONCRETE, FULL DEPTH	140.00	L.F.
762004	BUTT JOINTS	311.00	S.Y.
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	98.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	14.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	286.00	HOUR
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	43.00	HOUR
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	60.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	44,400.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	120.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	22,200.00	L.F.
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	3.00	EACH
908001	TOPSOIL	178.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	1,900.00	S.Y.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 1 WESTVILLE RD (1), (K206) FROM MARYLAND STATE LINE TO MAHAN
CORNER RD (K208)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
2. DAYTIME WORK HOURS: 8:00A - 6:00P, (MONDAY THRU FRIDAY).
3. EXISTING R.O.W FOR THIS LOCATION IS 50' AS PER ARCHIVE PLANS;
 - A. 2099
 - B. SKR2166
 - C. SKR4926
4. THE P.C.C. REMOVAL AND 6" SIDEWALK ITEMS ARE FOR CONCRETE DRIVEWAYS.
5. THE GABC ITEM 301003 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS. CRUSHED CONCRETE AND MILLINGS SHALL NOT BE ALLOWED AS A SUBSTITUTE.
6. PLACE BITUMINOUS ASPHALT CONCRETE SAFETY EDGE AS PER ATTACHED DETAIL.
7. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED AT THE END OF EACH DAY IN ACCORDANCE WITH THE DELAWARE MANUAL ON TRAFFIC CONTROL DEVICES (DE-MUTCD-2011), CHAPTER 6, PAGE 6G-14, SECTION 6G.20 - VERTICAL DIFFERENCES.
8. INTERSECTING ROADS

 - A. THE FOLLOWING LOCATIONS WILL REQUIRE TYING BACK (MILL AND OVERLAY) TO THE EXISTING HOT-MIX JOINTS AS DIRECTED BY THE FIELD ENGINEER;

- GRYGO RD.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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**CENTRAL
MAINTENANCE**

**PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018**

LOCATION 2 **WESTVILLE RD (2), (K206) FROM MAHAN CORNER RD (K208) TO TOWER RD (K218)**

LENGTH 4968.2400 m 16300.0000 L.F. AADT 1561

GENERAL IMPROVEMENTS
1" MILLING (CRACK SEAL), BIT. ASPHALT PATCHING AND 2" TYPE C (CARB) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 2

211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	42.00	S.Y.
301001	GRADED AGGREGATE BASE COURSE, TYPE B	7.00	C.Y.
301003	GRADED AGGREGATE BASE COURSE, TYPE B	90.00	TON
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	4,838.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	690.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	300.00	TON
402000	BITUMINOUS CONCRETE PATCHING	12,000.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	20.00	TON
705002	PORTLAND CEMENT CONCRETE SIDEWALK, 6"	378.00	S.F.
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	39,844.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	6,280.00	L.F.
762001	SAW CUTTING, CONCRETE, FULL DEPTH	120.00	L.F.
762004	BUTT JOINTS	1,692.00	S.Y.
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	168.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	26.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	518.00	HOUR
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	78.00	HOUR
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	71.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	116,370.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	142.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	58,185.00	L.F.
908001	TOPSOIL	509.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	5,433.00	S.Y.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 2 **WESTVILLE RD (2), (K206) FROM MAHAN CORNER RD (K208) TO TOWER RD (K218)**

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES) .
2. DAYTIME WORK HOURS: 8:00A - 6:00P, (MONDAY THRU FRIDAY) .
3. EXISTING R.O.W FOR THIS LOCATION IS 50' AS PER ARCHIVE PLANS;
 - A. 2099
 - B. SKR4892
4. THE P.C.C. REMOVAL AND 6" SIDEWALK ITEMS ARE FOR CONCRETE DRIVEWAYS.
5. THE GABC ITEM 301003 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS. CRUSHED CONCRETE AND MILLINGS SHALL NOT BE ALLOWED AS A SUBSTITUTE.
6. PLACE BITUMINOUS ASPHALT CONCRETE SAFETY EDGE AS PER ATTACHED DETAIL.
7. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED AT THE END OF EACH DAY IN ACCORDANCE WITH THE DELAWARE MANUAL ON TRAFFIC CONTROL DEVICES (DE-MUTCD-2011) , CHAPTER 6, PAGE 6G-14, SECTION 6G.20 - VERTICAL DIFFERENCES.
8. INTERSECTING ROADS
 - A. THE FOLLOWING LOCATIONS WILL REQUIRE TYING BACK (MILL AND OVERLAY) TO THE EXISTING HOT-MIX JOINTS AS DIRECTED BY THE FIELD ENGINEER;
 - NORTH PARKERS CHAPEL RD.
 - SOUTH PARKERS CHAPEL RD.
 - NORTH SANDY BEND RD.
 - SOUTH SANDY BEND RD.
 - NORTH TOWER RD.
 - SOUTH TOWER RD.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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**CENTRAL
MAINTENANCE**

PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 3 WESTVILLE RD (3), (K206) FROM TOWER RD (K218) TO HAZLETTVILLE RD (K73)

LENGTH 3352.8000 m 11000.0000 L.F. AADT 1998

GENERAL IMPROVEMENTS
1 1/2" MILLING, BIT. ASPHALT PATCHING AND 2" TYPE C (CARB) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 3

301003	GRADED AGGREGATE BASE COURSE, TYPE B	63.00	TON
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	3,251.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	207.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	108.00	TON
402000	BITUMINOUS CONCRETE PATCHING	3,600.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	20.00	TON
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	40,667.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	1,990.00	L.F.
762004	BUTT JOINTS	730.00	S.Y.
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	126.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	20.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	405.00	HOUR
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	61.00	HOUR
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	40.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	144,140.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	80.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	42,070.00	L.F.
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	2.00	EACH
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	1.00	EACH
908001	TOPSOIL	344.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	3,667.00	S.Y.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 3 **WESTVILLE RD (3), (K206) FROM TOWER RD (K218) TO HAZLETTVILLE RD (K73)**

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES) .
 . TYPICAL APPLICATION, TA-10 (SHOULDERS) .
2. DAYTIME WORK HOURS: 8:00A - 6:00P, (MONDAY THRU FRIDAY) .
3. EXISTING R.O.W FOR THIS LOCATION IS 50' AS PER ARCHIVE PLANS;
 A. 2099
 B. SKR2151
4. THE GABC ITEM 301003 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS. CRUSHED CONCRETE AND MILLINGS SHALL NOT BE ALLOWED AS A SUBSTITUTE.
5. PLACE BITUMINOUS ASPHALT CONCRETE SAFETY EDGE AS PER ATTACHED DETAIL.
6. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED AT THE END OF EACH DAY IN ACCORDANCE WITH THE DELAWARE MANUAL ON TRAFFIC CONTROL DEVICES (DE-MUTCD-2011) , CHAPTER 6, PAGE 6G-14, SECTION 6G.20 - VERTICAL DIFFERENCES.
7. INTERSECTING ROADS

 A. THE FOLLOWING LOCATIONS WILL REQUIRE TYING BACK (MILL AND OVERLAY) TO THE EXISTING HOT-MIX JOINTS AS DIRECTED BY THE FIELD ENGINEER;

 - PINE TREE RD.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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**CENTRAL
MAINTENANCE**

**PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018**

**LOCATION 4 WESTVILLE RD (4), (K52) FROM HAZLETTVILLE RD (K73) TO MECHANIC ST.
- (WYOMING)**

LENGTH 7274.6616 m 23867.0000 L.F. AADT 2214

GENERAL IMPROVEMENTS
2" MILLING, BIT. ASPHALT PATCHING AND 2" TYPE C (CARB) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 6

211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	63.00	S.Y.
301001	GRADED AGGREGATE BASE COURSE, TYPE B	11.00	C.Y.
301002	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	83.00	C.Y.
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	11,906.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	207.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	231.00	TON
402000	BITUMINOUS CONCRETE PATCHING	3,600.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	51.00	TON
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	3.00	EACH
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	3.00	EACH
705002	PORTLAND CEMENT CONCRETE SIDEWALK, 6"	567.00	S.F.
710002	ADJUST WATER VALVE BOXES	1.00	EACH
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	101,327.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	3,550.00	L.F.
762001	SAW CUTTING, CONCRETE, FULL DEPTH	180.00	L.F.
762004	BUTT JOINTS	1,828.00	S.Y.
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	196.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	28.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	569.00	HOURL
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	85.00	HOURL
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	210.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	174,934.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	420.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	87,467.00	L.F.
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	6.00	EACH

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CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 4 WESTVILLE RD (4), (K52) FROM HAZLETTVILLE RD (K73) TO MECHANIC ST.
- (WYOMING)

LENGTH 7274.6616 m 23867.0000 L.F. AADT 2214

GENERAL IMPROVEMENTS

2" MILLING, BIT. ASPHALT PATCHING AND 2" TYPE C (CARB) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 6

817027	RAISED/RECESSED PAVEMENT MARKER	298.00	EACH
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	3.00	EACH
908001	TOPSOIL	746.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	7,956.00	S.Y.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 4 **WESTVILLE RD (4), (K52) FROM HAZLETTVILLE RD (K73) TO MECHANIC ST.**
- (WYOMING)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-11B (TRAVEL LANES) .
 . TYPICAL APPLICATION, TA-10 (TRAVEL LANES) .
 . TYPICAL APPLICATION, TA-10 (SHOULDERS) .
 .
2. DAYTIME WORK HOURS: 9:00A - 6:00P, (MONDAY THRU FRIDAY) .
3. EXISTING R.O.W FOR THIS LOCATION IS 60' AS PER ARCHIVE PLANS;
 A. 71-11-007
 B. 90-062-06
4. THE P.C.C. REMOVAL AND 6" SIDEWALK ITEMS ARE FOR CONCRETE DRIVEWAYS.
5. THE GABC ITEM 301003 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS. CRUSHED CONCRETE AND MILLINGS SHALL NOT BE ALLOWED AS A SUBSTITUTE.
6. PLACE BITUMINOUS ASPHALT CONCRETE SAFETY EDGE AS PER ATTACHED DETAIL.
7. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED AT THE END OF EACH DAY IN ACCORDANCE WITH THE DELAWARE MANUAL ON TRAFFIC CONTROL DEVICES (DE-MUTCD-2011) , CHAPTER 6, PAGE 6G-14, SECTION 6G.20 - VERTICAL DIFFERENCES.
8. INTERSECTING ROADS

 A. THE FOLLOWING LOCATIONS WILL REQUIRE TYING BACK (MILL AND OVERLAY) TO THE EXISTING HOT-MIX JOINTS AS DIRECTED BY THE FIELD ENGINEER;

 - OAK POINT SCHOOL RD.
 - MORGANS CHOICE RD.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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**CENTRAL
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**PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018**

**LOCATION 5 HAZLETTVILLE RD (K73) FROM WESTVILLE RD (K206) TO ROSE VALLY
SCHOOL RD (K198)**

LENGTH 4669.5360 m 15320.0000 L.F. **AADT** 2341

GENERAL IMPROVEMENTS

2" MILLING, BIT. ASPHALT PATCHING AND 2" TYPE C (CARB) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 7

301003	GRADED AGGREGATE BASE COURSE, TYPE B	82.00	TON
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	7,774.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	80.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	135.00	TON
402000	BITUMINOUS CONCRETE PATCHING	1,400.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	66.00	TON
760008	RUMBLE STRIPS, CENTER LINE, BITUMINOUS PAVEMENT	15,320.00	L.F.
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	132,773.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	2,270.00	L.F.
762004	BUTT JOINTS	1,015.00	S.Y.
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	28.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	20.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	597.00	HOURL
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	90.00	HOURL
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	353.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	111,290.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	706.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	55,645.00	L.F.
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	2.00	EACH
817027	RAISED/RECESSED PAVEMENT MARKER	192.00	EACH
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	24.00	EACH
819019	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS	18.00	S.F.
908001	TOPSOIL	479.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	5,107.00	S.Y.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 5 **HAZLETTVILLE RD (K73) FROM WESTVILLE RD (K206) TO ROSE VALLY
SCHOOL RD (K198)**

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-11B (TRAVEL LANES) .
 . TYPICAL APPLICATION, TA-10 (TRAVEL LANES) .
 . TYPICAL APPLICATION, TA-10 (SHOULDERS) .
2. DAYTIME WORK HOURS: 8:00A - 6:00P, (MONDAY THRU FRIDAY) .
3. EXISTING R.O.W FOR THIS LOCATION IS 60' AS PER ARCHIVE PLANS;
 - A. 125
 - B. SKR0732
 - C. SKR1052
 - D. SKR1367
 - E. SKR4464
 - F. SKR4688
 - G. SKR4798
4. THE GABC ITEM 301003 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS. CRUSHED CONCRETE AND MILLINGS SHALL NOT BE ALLOWED AS A SUBSTITUTE.
5. PLACE BITUMINOUS ASPHALT CONCRETE SAFETY EDGE AS PER ATTACHED DETAIL.
6. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED AT THE END OF EACH DAY IN ACCORDANCE WITH THE DELAWARE MANUAL ON TRAFFIC CONTROL DEVICES (DE-MUTCD-2011), CHAPTER 6, PAGE 6G-14, SECTION 6G.20 - VERTICAL DIFFERENCES.
7. THE REMOVAL OF EXISTING RAISED PAVEMENT MARKERS SHALL BE INCIDENTAL TO THE MILLING OPERATION.
8. INSTALL CENTERLINE RUMBLESTRIPS AS PER THE SIGNING & STRIPING PLAN SHEETS. REFERENCE DGM 1-18 IN THE DESIGN RESOURCE CENTER FOR DESIGN GUIDANCE.
9. INTERSECTING ROADS

 - A. THE FOLLOWING LOCATIONS WILL REQUIRE TYING BACK (MILL AND OVERLAY) TO THE EXISTING HOT-MIX JOINTS AS DIRECTED BY THE FIELD ENGINEER;

 - TROYER RD.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF
HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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**CENTRAL
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**PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018**

**LOCATION 6 ARTHURSVILLE RD (1), (K47) FROM MARYLAND STATE LINE TO DE 44,
MAIN ST - (HARTLY)**

LENGTH 4151.3760 m 13620.0000 L.F. **AADT** 2234

GENERAL IMPROVEMENTS

2 1/2" MILLING, P.C.C. PATCHING AND 2" RUBBERIZED-(TRAVEL LANES) AND TYPE C
(CARB)-(SHOULDERS) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 5

211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	17.00	S.Y.
301001	GRADED AGGREGATE BASE COURSE, TYPE B	3.00	C.Y.
301002	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	6.00	C.Y.
301003	GRADED AGGREGATE BASE COURSE, TYPE B	57.00	TON
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	3,066.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	207.00	TON
401582	ASPHALT RUBBER BITUMINOUS CONCRETE	3,783.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	72.00	TON
402000	BITUMINOUS CONCRETE PATCHING	3,600.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	108.00	TON
503001	PATCHING PORTLAND CEMENT CONCRETE PAVEMENT, 6' TO 15', TYPE A	224.00	S.Y.
503004	PATCHING PORTLAND CEMENT CONCRETE PAVEMENT, (UNDERCUTTING)	6.00	SY-IN
503006	DOWEL BARS	448.00	EACH
503503	PATCHING CONCRETE	1,322.00	SY-IN
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	3.00	EACH
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	3.00	EACH
705002	PORTLAND CEMENT CONCRETE SIDEWALK, 6"	156.00	S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	20.00	S.F.
705008	CURB RAMP, TYPE 1	125.00	S.F.
760008	RUMBLE STRIPS, CENTER LINE, BITUMINOUS PAVEMENT	13,620.00	L.F.
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	215,650.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	2,290.00	L.F.
762001	SAW CUTTING, CONCRETE, FULL DEPTH	880.00	L.F.
762004	BUTT JOINTS	637.00	S.Y.
763621	CONSTRUCTION ENGINEERING, REHABILITATION	2.00	HOUR

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**CENTRAL
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**PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018**

**LOCATION 6 ARTHURSVILLE RD (1), (K47) FROM MARYLAND STATE LINE TO DE 44,
 MAIN ST - (HARTLY)**

LENGTH 4151.3760 m 13620.0000 L.F. AADT 2234

GENERAL IMPROVEMENTS

2 1/2" MILLING, P.C.C. PATCHING AND 2" RUBBERIZED-(TRAVEL LANES) AND TYPE C
(CARB)-(SHOULDERS) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 5

803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	168.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	31.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	929.00	HOURL
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	139.00	HOURL
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	120.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	89,770.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	240.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	44,885.00	L.F.
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	1.00	EACH
817027	RAISED/RECESSED PAVEMENT MARKER	171.00	EACH
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	2.00	EACH
846001	FURNISH AND INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	210.00	L.F.
908001	TOPSOIL	426.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	4,540.00	S.Y.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 6 ARTHURSVILLE RD (1), (K47) FROM MARYLAND STATE LINE TO DE 44,
MAIN ST - (HARTLY)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-11B (TRAVEL LANES).
 . TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
 . TYPICAL APPLICATION, TA-10 (SHOULDERS).
 . TYPICAL APPLICATION, TA-29 (SIDEWALK).
2. DAYTIME WORK HOURS: 9:00A - 6:00P, (MONDAY THRU FRIDAY).
3. EXISTING R.O.W FOR THIS LOCATION IS 60' AS PER ARCHIVE PLANS;
 A. 541
4. THE P.C.C. REMOVAL AND 6" SIDEWALK ITEMS ARE FOR CONCRETE DRIVEWAYS.
5. THE GABC ITEM 301003 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS. CRUSHED CONCRETE
 AND MILLINGS SHALL NOT BE ALLOWED AS A SUBSTITUTE.
6. PLACE BITUMINOUS ASPHALT CONCRETE SAFETY EDGE AS PER ATTACHED DETAIL.
7. THE REMOVAL OF EXISTING RAISED PAVEMENT MARKERS SHALL BE INCIDENTAL TO THE MILLING
 OPERATION.
8. THE TYPICAL EXISTING PAVEMENT FOR P.C.C. PATCHING IS 5 +/- INCHES OF BIT. ASPHALT
 PAVEMENT OVER 9 +/- INCHES OF P.C.C. CONCRETE.
9. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED AT THE END OF EACH DAY IN
 ACCORDANCE WITH THE DELAWARE MANUAL ON TRAFFIC CONTROL DEVICES (DE-MUTCD-2011),
 CHAPTER 6, PAGE 6G-14, SECTION 6G.20 - VERTICAL DIFFERENCES.
10. INSTALL CENTERLINE RUMBLESTRIPS AS PER THE SIGNING & STRIPING PLAN SHEETS.
 REFERENCE DGM 1-18 IN THE DESIGN RESOURCE CENTER FOR DESIGN GUIDANCE.
11. HARTLY SIDEWALK PROJECT

 - A. COORDINATION WITH AN ADJACENT CONTRACTOR FOR THE PROPOSED HARTLY SIDEWALK PROJECT
 T201601202 AT THE MAIN ST INTERSECTION FOR M.O.T. LANE CLOSURES AND SIGNAGE MAY
 BE NECESSARY. PROJECT ENGINEER IS JEFF NIEZGODA, CONTACT NO. (302)760-2178.
 - B. THE PAVING LIMITS WILL SKIP OVER THE MAIN ST INTERSECTION. CONTACT THE PAVEMENT
 REHAB DESIGNER FOR THE LATEST LIMITS PRIOR TO CONSTRUCTION AT THIS LOCATION.
12. HOT-MIX OVERLAY NOTES

 - A. USE 2" RUBBERIZED BIT. ASPHALT CONCRETE - ITEM 401582, FOR THE MAINLINE TRAVEL
 LANES.
 - B. USE 2" BIT. ASPHALT TYPE C (CARB) - ITEM 401005, FOR THE OUTSIDE SHOULDERS.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF
HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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**CENTRAL
MAINTENANCE**

PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

**LOCATION 7 ARTHURSVILLE RD (2), (K46) FROM DE 44, MAIN ST - (HARTLY) TO DE 300,
 SUDLERSVILLE RD (K41)**

LENGTH 6995.1600 m 22950.0000 L.F. AADT 2543

GENERAL IMPROVEMENTS

2 1/2" MILLING, P.C.C. PATCHING AND 2" RUBBERIZED-(TRAVEL LANES) AND TYPE C
(CARB)-(SHOULDERS) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 4

211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	70.00	S.Y.
211002	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (GUARDRAIL)	2,056.00	L.F.
301001	GRADED AGGREGATE BASE COURSE, TYPE B	12.00	C.Y.
301002	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	13.00	C.Y.
301003	GRADED AGGREGATE BASE COURSE, TYPE B	93.00	TON
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	5,270.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	230.00	TON
401582	ASPHALT RUBBER BITUMINOUS CONCRETE	6,375.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	157.00	TON
402000	BITUMINOUS CONCRETE PATCHING	6,000.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	125.00	TON
503001	PATCHING PORTLAND CEMENT CONCRETE PAVEMENT, 6' TO 15', TYPE A	512.00	S.Y.
503004	PATCHING PORTLAND CEMENT CONCRETE PAVEMENT, (UNDERCUTTING)	13.00	SY-IN
503006	DOWEL BARS	1,024.00	EACH
503503	PATCHING CONCRETE	3,021.00	SY-IN
602100	REPLACE DRAINAGE INLET GRATE(S)	1.00	EACH
602101	REPLACE DRAINAGE INLET FRAME(S)	1.00	EACH
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	3.00	EACH
602504	CONVERT EXISTING CATCH BASIN TO DRAINAGE INLET	1.00	EACH
705002	PORTLAND CEMENT CONCRETE SIDEWALK, 6"	627.00	S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	30.00	S.F.
705008	CURB RAMP, TYPE 1	250.00	S.F.
720021	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	1,356.00	L.F.
720024	GUARDRAIL OVER CULVERTS, TYPE 1-31	2.00	EACH
721001	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	12.00	EACH

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**CENTRAL
MAINTENANCE**

**PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018**

**LOCATION 7 ARTHURSVILLE RD (2), (K46) FROM DE 44, MAIN ST - (HARTLY) TO DE 300,
 SUDLERSVILLE RD (K41)**

LENGTH 6995.1600 m 22950.0000 L.F. AADT 2543

GENERAL IMPROVEMENTS

2 1/2" MILLING, P.C.C. PATCHING AND 2" RUBBERIZED-(TRAVEL LANES) AND TYPE C
(CARB)-(SHOULDERS) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 4

760008	RUMBLE STRIPS, CENTER LINE, BITUMINOUS PAVEMENT	22,950.00	L.F.
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	250,458.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	2,420.00	L.F.
762001	SAW CUTTING, CONCRETE, FULL DEPTH	2,100.00	L.F.
762004	BUTT JOINTS	1,383.00	S.Y.
763621	CONSTRUCTION ENGINEERING, REHABILITATION	4.00	hour
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	168.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	50.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	1,500.00	hour
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	225.00	hour
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	667.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	152,786.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	1,334.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	76,393.00	L.F.
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	4.00	EACH
817027	RAISED/RECESSED PAVEMENT MARKER	287.00	EACH
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	22.00	EACH
908001	TOPSOIL	717.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	7,650.00	S.Y.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 7 ARTHURSVILLE RD (2), (K46) FROM DE 44, MAIN ST - (HARTLY) TO DE 300,
SUDLERSVILLE RD (K41)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-11B (TRAVEL LANES).
. TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
. TYPICAL APPLICATION, TA-10 (SHOULDERS).
. TYPICAL APPLICATION, TA-29 (SIDEWALK).
2. DAYTIME WORK HOURS: 9:00A - 6:00P, (MONDAY THRU FRIDAY).
3. EXISTING R.O.W FOR THIS LOCATION IS 60' AS PER ARCHIVE PLANS;
A. 541
B. 84-035-03
4. THE P.C.C. REMOVAL AND 6" SIDEWALK ITEMS ARE FOR CONCRETE DRIVEWAYS.
5. THE GABC ITEM 301003 AND QUANTITY IS FOR UNIMPROVED DRIVEWAYS. CRUSHED CONCRETE AND MILLINGS SHALL NOT BE ALLOWED AS A SUBSTITUTE.
6. PLACE BITUMINOUS ASPHALT CONCRETE SAFETY EDGE AS PER ATTACHED DETAIL.
7. THE REMOVAL OF EXISTING RAISED PAVEMENT MARKERS SHALL BE INCIDENTAL TO THE MILLING OPERATION.
8. THE TYPICAL EXISTING PAVEMENT FOR P.C.C. PATCHING IS 5 +/- INCHES OF BIT. ASPHALT PAVEMENT OVER 9 +/- INCHES OF P.C.C. CONCRETE.
9. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED AT THE END OF EACH DAY IN ACCORDANCE WITH THE DELAWARE MANUAL ON TRAFFIC CONTROL DEVICES (DE-MUTCD-2011), CHAPTER 6, PAGE 6G-14, SECTION 6G.20 - VERTICAL DIFFERENCES.
10. INSTALL CENTERLINE RUMBLESTRIPS AS PER THE SIGNING & STRIPING PLAN SHEETS. REFERENCE DGM 1-18 IN THE DESIGN RESOURCE CENTER FOR DESIGN GUIDANCE.
11. HARTLY SIDEWALK PROJECT

 - A. COORDINATION WITH AN ADJACENT CONTRACTOR FOR THE PROPOSED HARTLY SIDEWALK PROJECT T201601202 AT THE MAIN ST INTERSECTION FOR M.O.T. LANE CLOSURES AND SIGNAGE MAY BE NECESSARY. PROJECT ENGINEER IS JEFF NIEZGODA, CONTACT NO. (302)760-2178.
 - B. THE PAVING LIMITS WILL SKIP OVER THE MAIN ST INTERSECTION. CONTACT THE PAVEMENT REHAB DESIGNER FOR THE LATEST LIMITS PRIOR TO CONSTRUCTION AT THIS LOCATION.
12. HOT-MIX OVERLAY NOTES

 - A. USE 2" RUBBERIZED BIT. ASPHALT CONCRETE - ITEM 401582, FOR THE MAINLINE TRAVEL LANES.
 - B. USE 2" BIT. ASPHALT TYPE C (CARB) - ITEM 401005, FOR THE OUTSIDE SHOULDERS.

CENTRAL
MAINTENANCEPAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
REPLACEMENT) 2018

LOCATION 7 **ARTHURSVILLE RD (2), (K46) FROM DE 44, MAIN ST - (HARTLY) TO DE 300,
SUDLERSVILLE RD (K41)**

13. PROJECT LIMIT NOTES

- A. THE PROJECT LIMITS FOR THIS LOCATION INCLUDE;
1. THE SPUR @ DE300, SUDLERSVILLE RD.
 2. THE RIGHT TURN LANE FROM MAIN ST. ONTO ARTHURSVILLE RD.

14. PWBD CONVERSION

- A. 1 LOCATED AT THE FIREHOUSE SOUTH ENTRANCE.

15. GUARDRAIL

- A. REPLACE EXISTING GUARDRAIL SYSTEMS AT THE FOLLOWING;
1. DRY CREEK BED LOCATED NEAR BURRIS RD.
 2. PINKS BRANCH.
 3. PINKS BRANCH, OFF SHOOT
- B. RE-ESTABLISH THE MAINTENANCE STRIP (2FT 4" WIDTH @ 10/1 SLOPE FROM FACE OF W-BEAM) UNDER THE GUARDRAIL AS DIRECTED BY THE FIELD ENGINEER AND PLACE A 2" BIT ASPHALT OVERLAY AT A 10/1 SLOPE. PAYMENT TO COMPLETE THIS WORK SHALL BE PAID UNDER ITEM NUMBERS; 402000, 301002 AND 401005, RESPECTIVELY.

16. INTERSECTING ROADS

- A. THE FOLLOWING LOCATIONS WILL REQUIRE TYING BACK (MILL AND OVERLAY) TO THE EXISTING HOT-MIX JOINTS AS DIRECTED BY THE FIELD ENGINEER;

- SHORTS CORNER RD.

THIS LOCATION SHALL MEET THE TOLERANCES OF SUBSECTION 401580 - RIDE QUALITY OF HOT-MIX PAVEMENT REQUIREMENTS, AS SPECIFIED IN THE SPECIAL PROVISIONS.

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MAINTENANCE****PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
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CONTRACT QUANTITIES SUMMARY SHEET

211001	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK	241.00	S.Y.
211002	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (GUARDRAIL)	2,056.00	L.F.
301001	GRADED AGGREGATE BASE COURSE, TYPE B	41.00	C.Y.
301002	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	102.00	C.Y.
301003	GRADED AGGREGATE BASE COURSE, TYPE B	410.00	TON
401005	SUPERPAVE TYPE C, PG 64-22 (CARBONATE STONE)	37,727.00	TON
401021	SUPERPAVE TYPE BCBC, PG 64-22	1,943.00	TON
401582	ASPHALT RUBBER BITUMINOUS CONCRETE	10,158.00	TON
401696	ENTRANCE, DRIVEWAY, AND INTERSECTING STREET PAVING SURCHARGE	1,089.00	TON
402000	BITUMINOUS CONCRETE PATCHING	35,800.00	SY-IN
403000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS (TRM) CONCRETE	397.00	TON
503001	PATCHING PORTLAND CEMENT CONCRETE PAVEMENT, 6' TO 15', TYPE A	736.00	S.Y.
503004	PATCHING PORTLAND CEMENT CONCRETE PAVEMENT, (UNDERCUTTING)	19.00	SY-IN
503006	DOWEL BARS	1,472.00	EACH
503503	PATCHING CONCRETE	4,343.00	SY-IN
602100	REPLACE DRAINAGE INLET GRATE(S)	1.00	EACH
602101	REPLACE DRAINAGE INLET FRAME(S)	1.00	EACH
602130	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	9.00	EACH
602132	ADJUSTING AND REPAIRING EXISTING MANHOLE	6.00	EACH
602504	CONVERT EXISTING CATCH BASIN TO DRAINAGE INLET	1.00	EACH
705002	PORTLAND CEMENT CONCRETE SIDEWALK, 6"	2,169.00	S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	50.00	S.F.
705008	CURB RAMP, TYPE 1	375.00	S.F.
710002	ADJUST WATER VALVE BOXES	1.00	EACH
720021	GALVANIZED STEEL BEAM GUARDRAIL, TYPE 1-31	1,356.00	L.F.
720024	GUARDRAIL OVER CULVERTS, TYPE 1-31	2.00	EACH
721001	GUARDRAIL END TREATMENT, TYPE 1-31, TEST LEVEL 3	12.00	EACH

DELAWARE DEPARTMENT OF TRANSPORTATION**CONTRACT T201806202****PAGE 31 OF 31****CENTRAL
MAINTENANCE****PAVEMENT & REHABILITATION, KENT II, (MICRO SURFACING
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CONTRACT QUANTITIES SUMMARY SHEET

760008	RUMBLE STRIPS, CENTER LINE, BITUMINOUS PAVEMENT	51,890.00	L.F.
760010	PAVEMENT MILLING, BITUMINOUS CONCRETE PAVEMENT	794,019.00	SY-IN
762000	SAW CUTTING, BITUMINOUS CONCRETE	21,760.00	L.F.
762001	SAW CUTTING, CONCRETE, FULL DEPTH	3,420.00	L.F.
762004	BUTT JOINTS	7,596.00	S.Y.
763000	INITIAL EXPENSE/DE-MOBILIZATION	LUMP	SUM
763621	CONSTRUCTION ENGINEERING, REHABILITATION	6.00	HOURL
801500	MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP	SUM
803001	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	952.00	EA-DY
808002	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	189.00	EA-DY
811002	FLAGGER, KENT COUNTY, STATE	4,804.00	HOURL
811014	FLAGGER, KENT COUNTY, STATE, OVERTIME	721.00	HOURL
817002	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD-THERMOPLASTIC	1,521.00	S.F.
817003	TEMPORARY MARKINGS, PAINT, 4"	833,690.00	L.F.
817004	TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND	3,042.00	S.F.
817013	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	386,845.00	L.F.
817015	PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL	15.00	EACH
817027	RAISED/RECESSED PAVEMENT MARKER	948.00	EACH
819018	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	55.00	EACH
819019	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS	18.00	S.F.
846001	FURNISH AND INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	210.00	L.F.
908001	TOPSOIL	3,399.00	TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	36,253.00	S.Y.