

THE STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION
OFFICE OF TRANSPORTATION SOLUTIONS
PLANS AND SPECIFICATIONS FOR

CONTRACT NUMBER- T201606201

CENTRAL MAINTENANCE

FEDERAL AID NUMBER- NONE

PAGE 1 OF 25

CONTRACT TITLE- PAVEMENT & REHABILITATION, KENT COUNTY - OPEN-END, FY2016 – FY2018

PLANS PREPARED BY:

George LaCata

DESIGN TECHNICIAN

DATE RECOMMENDED: 5/27/2015

Bradford L. Salmons

GROUP ENGINEER, CONSTRUCTION – GROUP 3

DATE RECOMMENDED: 5-27-15

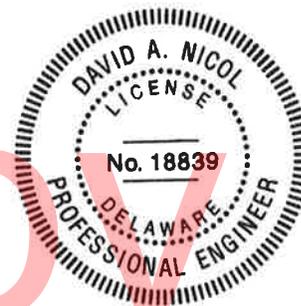
David A. Nicol

ASSIST. DIRECTOR, ENGINEERING SUPPORT

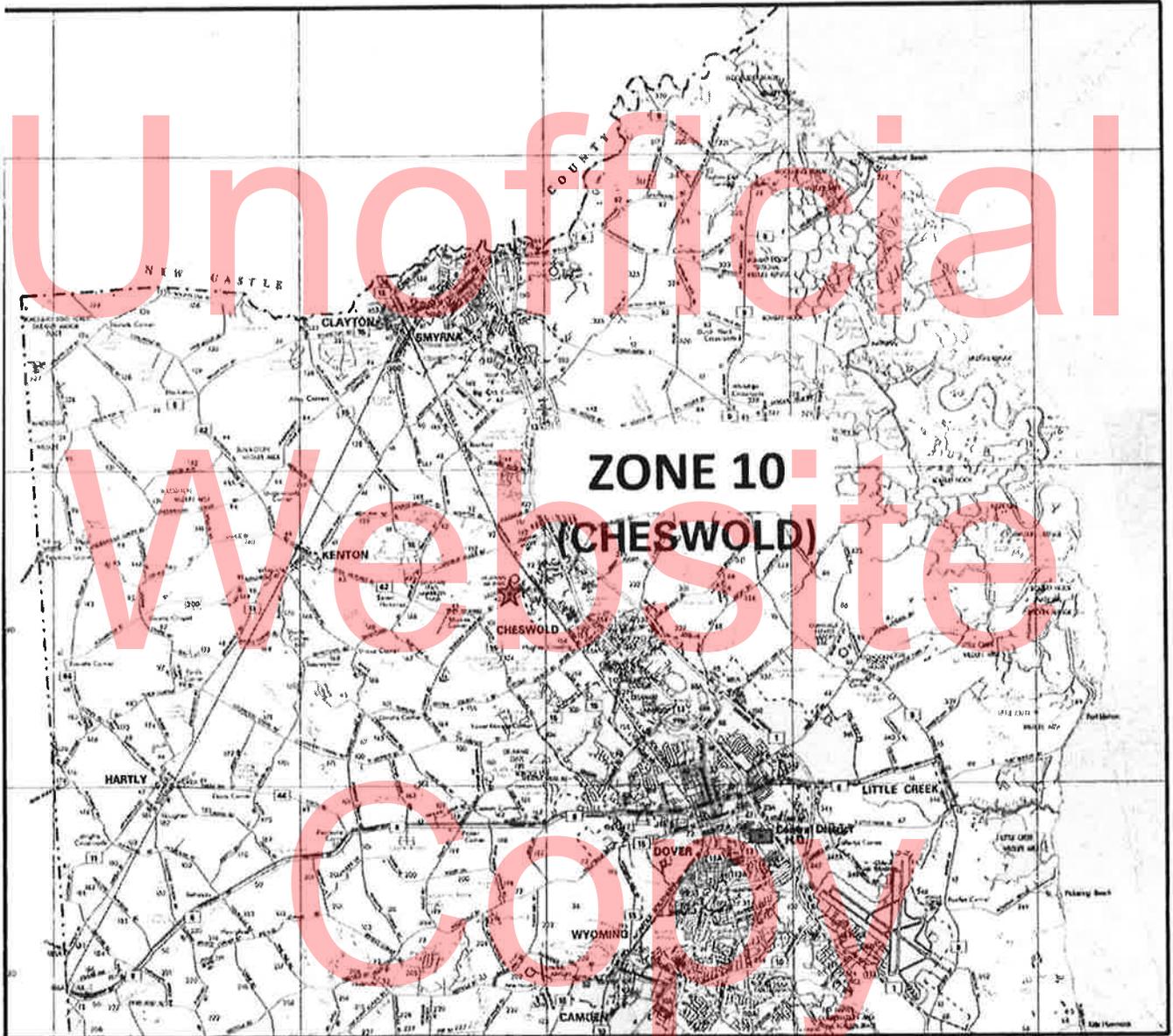
DATE RECOMMENDED: 5/27/15

Robert Brian McCleary

CHIEF ENGINEER



LOCATION MAP



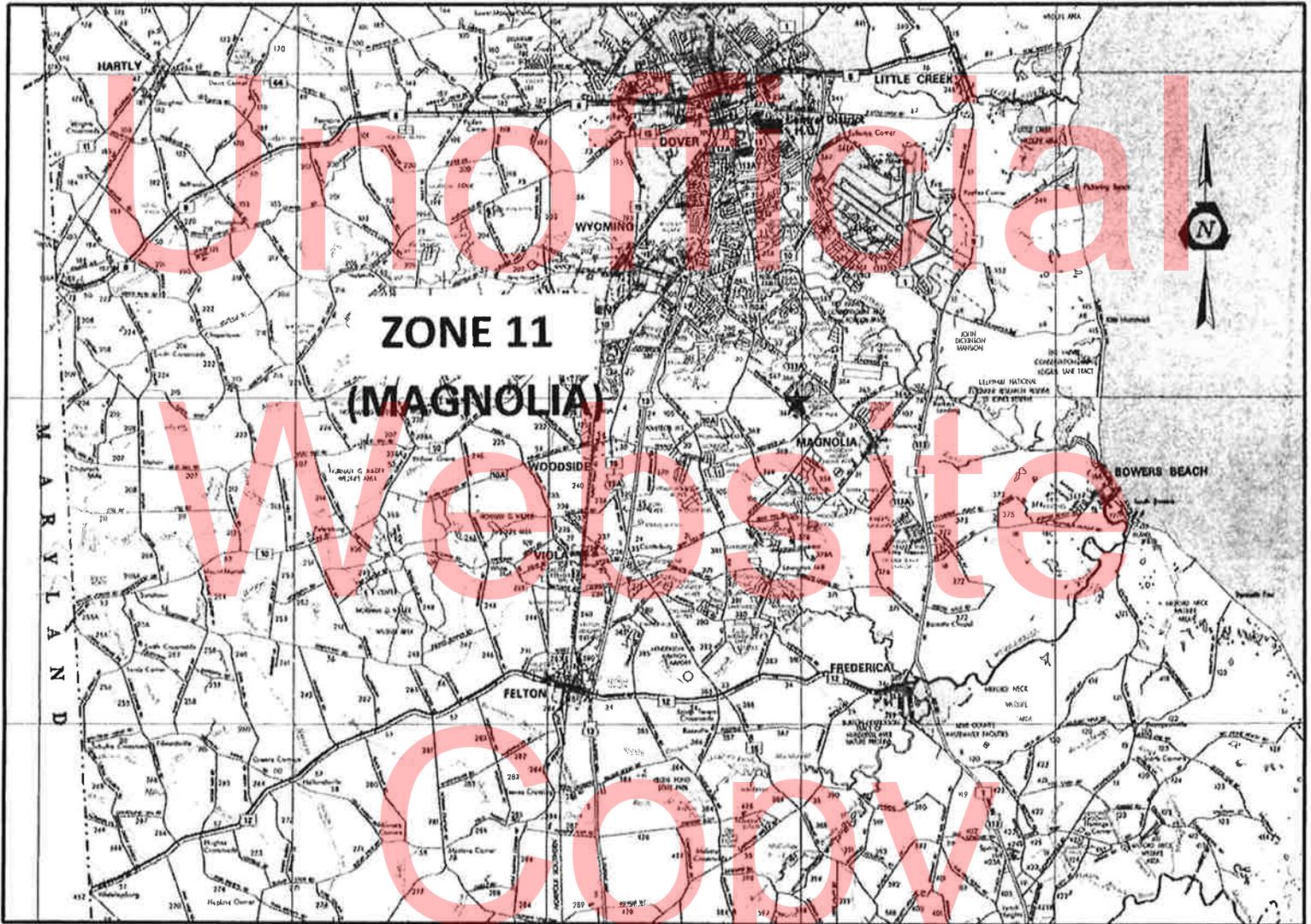
DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201606201

PAGE 3 OF 25

VARIOUS LOCATIONS

LOCATION MAP



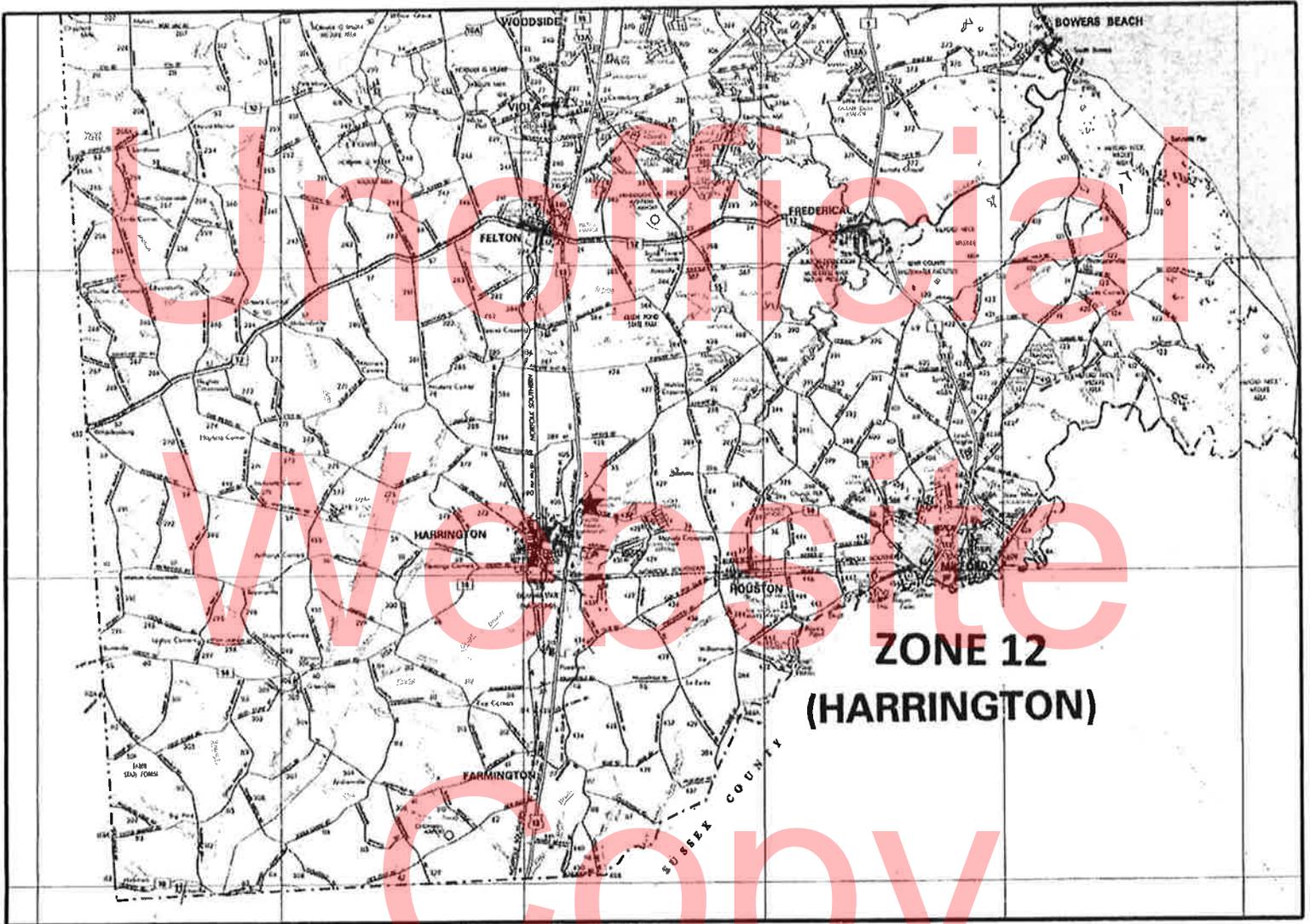
DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201606201

PAGE 4 OF 25

VARIOUS LOCATIONS

LOCATION MAP



GENERAL CONTRACT PLAN NOTES

REVISED 1/2015

GENERAL

PROSECUTION AND PROGRESS OF WORK:

1. WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL BE GENERATED THROUGH JOB ORDERS ISSUED TO THE CONTRACTOR BY THE DEPARTMENT'S PROJECT MANAGER. JOB ORDERS WILL BE ASSEMBLED TO ALLOW THE MOST EFFICIENT ALLOCATION OF THE CONTRACTOR'S WORK FORCE AS THE SITUATION ALLOWS.
2. EACH JOB ORDER ISSUED WILL HAVE CLEAR "START BY" DATE AND TIME ALLOCATED TO COMPLETE SAID JOB ORDER. FAILURE TO COMPLETE A JOB ORDER IN THE SPECIFIED TIME SHALL CONSTITUTE "FAILURE TO PURSE THE WORK" AND SUBJECTS THE CONTRACTOR TO LIQUIDATED DAMAGES AS OUTLINED IN SUBSECTION 108.08 OF THE STANDARD SPECIFICATIONS.
3. EACH JOB ORDER IS TO BE COMPLETED WITHIN THE SPECIFIED TIME. ADDITIONAL ITEMS AND/OR WORKING DAYS MAY BE ADDED TO ANY JOB ORDER AS NEEDED AT THE DISCRETION OF THE ENGINEER. IF THE WORK ON A SPECIFIED JOB ORDER IS NOT COMPLETED WITHIN THE ALLOCATED TIME, LIQUIDATED DAMAGES WILL BE ASSESSED IN ACCORDANCE WITH SUBSECTION 108.09 OF THE STANDARD SPECIFICATIONS BASED ON THE TOTAL VALUE OF THAT PARTICULAR JOB ORDER.

OPEN END SPECIFIC PROJECT NOTES

4. NO UTILITY RELOCATION INVOLVEMENT IS ANTICIPATED. SHOULD ANY CONFLICTS BE ENCOUNTERED DURING CONSTRUCTION REQUIRING ADJUSTMENT AND/OR RELOCATION OF THE AGENCIES' EXISTING FACILITIES, THE NECESSARY RELOCATION WORK SHALL BE ACCOMPLISHED BY THE RESPECTIVE AGENCIES' FORCES, AS DIRECTED BY THE DISTRICT ENGINEER. ANY ADJUSTMENTS AND/OR RELOCATIONS OF MUNICIPALLY OWNED FACILITIES SHALL BE DONE BY THE STATE'S CONTRACTOR IN ACCORDANCE WITH THE RESPECTIVE AGENCIES' STANDARD SPECIFICATIONS AS DIRECTED BY THE DISTRICT ENGINEER.
5. NO ENVIRONMENTAL PERMITS ARE REQUIRED FOR THIS WORK PROVIDED NO JURISDICTIONAL WETLANDS OR WATERS ARE IMPACTED. IF THERE IS ANY QUESTION AS TO WHETHER OR NOT A WATER OR WETLAND IS JURISDICTIONAL, CONTACT THE DEL DOT ENVIRONMENTAL SECTION AT 302-760-2264.
6. IT IS ANTICIPATED THAT ALL WORK WILL OCCUR WITHIN DELDOT'S EXISTING RIGHT OF WAY OR EASEMENT AREAS. SHOULD THE NEED OCCUR TO TRESPASS ONTO PRIVATE PROPERTY; IT WILL BE THE RESPONSIBILITY OF THE PROJECT MANAGER TO SECURE SUCH TRESPASS NEEDS.

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 - FY2018

GENERAL CONTRACT PLAN NOTES

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

8. THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR COORDINATING WITH THE TRAFFIC SECTION RELATING TO ANY IMPACTS TO TRAFFIC SECTION FACILITIES (INCLUDING BUT NOT LIMITED TO TRAFFIC LOOPS, JUNCTION WELLS ETC.) AT LEAST 4 WEEKS IN ADVANCE OF THE START OF THE ACTIVITY. PRIOR TO INITIATING ANY WORK ON THIS CONTRACT (OR SITES), THE PROJECT MANAGER SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING FOR APPROVAL OF THE SAFETY SECTION, A MAINTENANCE OF TRAFFIC PLAN. SUFFICIENT TIME SHALL BE PROVIDED FOR THE REVIEW AND APPROVAL OF THE PLAN. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE PROPOSED TIME RESTRICTIONS ON THE CLOSURE OF TRAVEL LANES SUBJECT TO THE APPROVAL OF THE SAFETY SECTION.

9. THE PROJECT MANAGER IS RESPONSIBLE FOR ENSURING ANY REQUIRED DOCUMENTS AND ANALYSIS AS PART OF THE ADOPTED WORK ZONE SAFETY AND MOBILITY PROCEDURES AND GUIDELINES HAS BEEN COMPLETED PRIOR TO ANY WORK STARTING ON THIS CONTRACT.

10. THE DEPARTMENT RESERVES THE RIGHT TO REQUEST AN EXTENSION OF THIS CONTRACT, WITH THE AGREEMENT OF THE CONTRACTOR, AT THE CURRENT CONTRACT PRICES.

11. THE WORK WILL BE SCHEDULED VIA JOB ORDERS FROM THE DISTRICT. WORK SITES WILL VARY IN SIZE. THE JOB ORDERS WILL INDICATE THE WORK TO BE PERFORMED AT EACH LOCATION.

UPSET LIMIT:

12. DEPENDING ON FUND AVAILABILITY, THE DEPARTMENT RESERVES THE RIGHT TO INCREASE OR DECREASE THE QUANTITIES OF THE ITEMS SPECIFIED IN THIS CONTRACT. SUCH ADDITIONS OR DELETIONS SHALL NOT BE CAUSE FOR AN INCREASE OR DECREASE IN ANY CONTRACT UNIT BID PRICES. THE TOTAL CONTRACT VALUE, WITH ALL ADDITIONAL WORK IF ADDED, SHALL NOT EXCEED 150 PERCENT OF THE ORIGINAL CONTRACT VALUE UNLESS DIRECTED OTHERWISE.

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 - FY2018

GENERAL CONTRACT PLAN NOTES

13. UPON RECEIPT OF EACH JOB ORDER, THE CONTRACTOR SHALL SUBMIT THE REQUIRED COPIES OF A DETAILED PROGRESS SCHEDULE (PSC) AS OUTLINED IN STANDARD SPECIFICATION 108.04. 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.

14. CONSTRUCTION OF THIS CONTRACT SHALL CONFORM TO DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED AUGUST 2001 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.

15. 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.

16. 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.

17. 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.

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 - FY2018

GENERAL CONTRACT PLAN NOTES

MAINTENANCE OF TRAFFIC

18. 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.

19. 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. 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.

20. 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.

21. 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 763XXX -MAINTENANCE OF TRAFFIC.

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 BY THE DISTRICT TRAFFIC SAFETY OFFICER

THE FOLLOWING CONSIDERATIONS SHALL BE TAKEN INTO ACCOUNT WHEN ADDRESSING ACCESSIBLE PEDESTRIAN MAINTENANCE OF TRAFFIC:

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 - FY2018

GENERAL CONTRACT PLAN NOTES

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.

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 7FT 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.

22. 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

23. 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.

GENERAL CONTRACT PLAN NOTES

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).

24. 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.

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

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

TRAFFIC SIGNAL NOTES

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

28. 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

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

30. 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 30200X.

31. 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

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 - FY2018

GENERAL CONTRACT PLAN NOTES

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.

32. 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.

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

34. EXCAVATION UP TO 1' IN FRONT OF CURB WILL BE INCIDENTAL TO ITEM 701XXX. HOT MIX PLACED IN FRONT OF CURB WILL BE PAID UNDER ITEM 401XXX. USE OF CONCRETE AS FILL IN FRONT OF CURB WILL NO LONGER BE ACCEPTED UNLESS DIRECTED BY THE ENGINEER. AT EACH LOCATION, BACKFILLING SHALL BE PERFORMED IMMEDIATELY UPON REMOVAL OF FORMS FOR CURB OR SIDEWALK. TOPSOIL, SEEDING, SEALING OF VALLEY GUTTERS, REMOVING OF FORMS, AND PARGING OF CATCH BASINS, SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS OF COMPLETION OF THE ITEM OF WORK. ITEM 732XXX, TOPSOIL, SHALL BE USED AS BACKFILL MATERIAL BEHIND CURB AND AROUND SIDEWALK OR/AS DIRECTED BY THE ENGINEER. TOPSOIL SHALL BE SCREENED/SIFTED SO AS NO MATERIAL GREATER THAN .5" IS PRESENT IN MATERIAL USED FOR BACKFILL. EXCAVATED MATERIAL, NOT NEEDED ON THE PROJECT, SHALL BE REMOVED FROM THE CONTRACT AT THE CONTRACTORS EXPENSE. FAILURE TO COMPLY WILL RESULT IN A SUSPENSION OF ALL OTHER CONTRACT WORK WITH TIME CHARGES CONTINUING TO BE ASSESSED.

35. 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.

36. 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.

37. THE CONTRACTOR SHALL TAKE CARE IN REMOVING PAVEMENT AROUND UTILITIES, BUTT JOINTS, CURBS, 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

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 - FY2018

GENERAL CONTRACT PLAN NOTES

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.

38. 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.

39. DRAINAGE INLETS, WHICH ARE 4' GREATER IN DEPTH AND ARE SLATED FOR REPAIR WILL HAVE STEPS INSTALLED IN ACCORDANCE WITH SECTION 708.07 OF THE STANDARD SPECIFICATIONS. PAYMENT SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR ITEM 710001.

40. THE PORTLAND CEMENT CONCRETE USED WITHIN ITEM 710002 - ADJUST AND REPAIR EXISTING MAN HOLES AND ITEM 750000 - 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. ALSO, THE PERIMETER OF THE UTILITY ADJUSTMENT WILL BE SEALED AND WILL BE CONSIDERED INCIDENTAL TO THE APPLICABLE ADJUSTMENT ITEM.

41. WHEN JACKHAMMERING OR THE USE OF A BREAKER IS NECESSARY ON CONTRACTS THAT OCCUR DURING THE NIGHTTIME HOURS THE JACKHAMMERING AND BREAKING MUST CEASE AT 12:00AM REGARDLESS OF ANY NOISE WAIVER THAT MAY EXIST.

42. CURB RAMP AND/OR SIDEWALK CONSTRUCTION (NOT INCLUDING MEDIAN ISLANDS) SHALL BE COMPLETED DURING A SINGLE OPERATION. THE RAMP/SIDEWALK SHALL BE REMOVED AND PLACED BACK THE SAME NIGHT/DAY AND OPEN TO PEDESTRIAN TRAFFIC THE FOLLOWING DAY. THE USE OF A MONOLITHIC POUR SHALL BE PERMITTED WITH A BOND BREAKER TO BE PLACED AT THE BACK OF THE CURB AND EDGE OF SIDEWALK. IF THE CURB RAMP/SIDEWALK CANNOT BE COMPLETED IN A SINGLE OPERATION THE EXCAVATED AREA MUST BE BACKFILLED TO GRADE WITH COMPACTED MILLING MATERIAL ONLY. THIS MATERIAL WILL BE INCIDENTAL TO THE CURB RAMP ITEM. THE DRESSING UP OF THE AREA BEING PAID AS A CURB RAMP WITH TOPSOIL AND SEED WILL BE INCIDENTAL TO THE CURB RAMP ITEMS.

43. ANY MILLING MATERIAL REQUIRED TO MAKE AREAS ADA COMPLIANT IF NOT COMPLETED IN THE SAME SHIFT AT CURB, SIDEWALK, CURB RAMPS, ISLANDS, ETC. WILL BE INCIDENTAL TO THE PAY ITEM ASSOCIATED WITH THE WORK. MILLING MATERIAL IS THE ONLY APPROVED MATERIAL FOR THIS PRACTICE.

44. WHEN CONTRACT INCLUDES ITEMS 503001 AND 503002 PATCHES WILL BE PRESUMED TO BE STANDARD PATCH SIZES AND LOCATIONS WILL BE DETERMINED AT THE CONSTRUCTION PRE-WALK. THE USE OF STEEL PLATES WILL BE PROHIBITED. ROADWAY MUST BE RETURNED TO UNRESTRICTED USE AT THE END OF EACH WORK DAY. ALL PCC PAVEMENT WILL BE PRESUMED

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 - FY2018

GENERAL CONTRACT PLAN NOTES

TO BE 9".

45. ITEM 763621 CONSTRUCTION ENGINEERING, REHABILITATION WILL COMPENSATE THE CONTRACTOR FOR THE FOLLOWING SURVEY ACTIVITIES. ANY LAYOUT ASSOCIATED WITH ADA IMPROVEMENTS, PROVIDING GRADES FOR UTILITY ADJUSTMENTS IF NECESSARY, THE LAYOUT OF LANE LINES FOR PAVING, GRADES FOR THE INSTALLATION OF DRAINAGE STRUCTURES OR OTHER ITEMS OF WORK AS DETERMINED BY THE ENGINEER OR PROGRAM MANAGER. THIS ITEM WILL NOT COMPENSATE THE CONTRACTOR FOR THE LAYOUT OF STRIPING AS THIS IS THE RESPONSIBILITY OF THE STRIPING SUBCONTRACTOR. THE HOURLY PAYMENT WILL BE BASED UPON ACTUAL HOURS OF SURVEYING PERFORMED IN THE FIELD. IT WILL NOT INCLUDE TIME SPENT IN VEHICLE OR OFFICE. THE SURVEY CREW WILL BE RESPONSIBLE UPON ARRIVAL AND DEPARTURE ON THE JOBSITE TO CONTACT A MEMBER OF THE INSPECTION STAFF SO THAT HOURS CAN BE TRACKED FOR PAYMENT. THE CONSEQUENCE FOR NOT DOING THIS WILL BE NON-PAYMENT FOR THE SURVEYING SERVICES.

46. UPON RECEIPT OF THE MONTHLY PAY ESTIMATE ANY ISSUES OR DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER/PROGRAM MANAGER IF POSSIBLE BEFORE THE ISSUANCE OF THE NEXT PAY ESTIMATE. TO ALLOW FOR INVOICES FROM SUBCONTRACTORS ETC., A 60 DAY TIME PERIOD TO REPORT DISCREPANCIES WILL BE PERMITTED. ANY DISCREPANCIES BEYOND THE 60 DAY TIME PERIOD WILL NOT BE ENTERTAINED.

47. FOR ITEM 743007 TRAFFIC OFFICERS, REQUIRED INVOICES WILL BE REVIEWED FOR ACCURACY. ANY MAJOR INACCURACIES WILL BE ADJUSTED ACCORDINGLY. FOR EXAMPLE, IF INVOICE SHOWS CHARGED HOURS ON A CERTAIN DATE AND WE HAVE DOCUMENTATION THAT NO WORK OCCURED THAT DATE OR NO OFFICERS WERE PRESENT THE INVOICE WILL BE ADJUSTED ACCORDINGLY.

48. INFORMATION AND DETAILS FOR RAISED/RECESSED PAVEMENT MARKERS CAN BE FOUND ON THE DELDOT WEBSITE (WWW.DELDOT.GOV) BY GOING TO PUBLICATIONS/MUTCD/PART 3 PAVEMENT MARKINGS

49. INFORMATION AND DETAILS FOR RUMBLE STRIP INSTALLATION CAN BE FOUND ON THE DELDOT WEBSITE (WWW.DELDOT.GOV) BY GOING TO PUBLICATIONS/DELAWARE GUIDANCE MEMORANDUM/1-18.

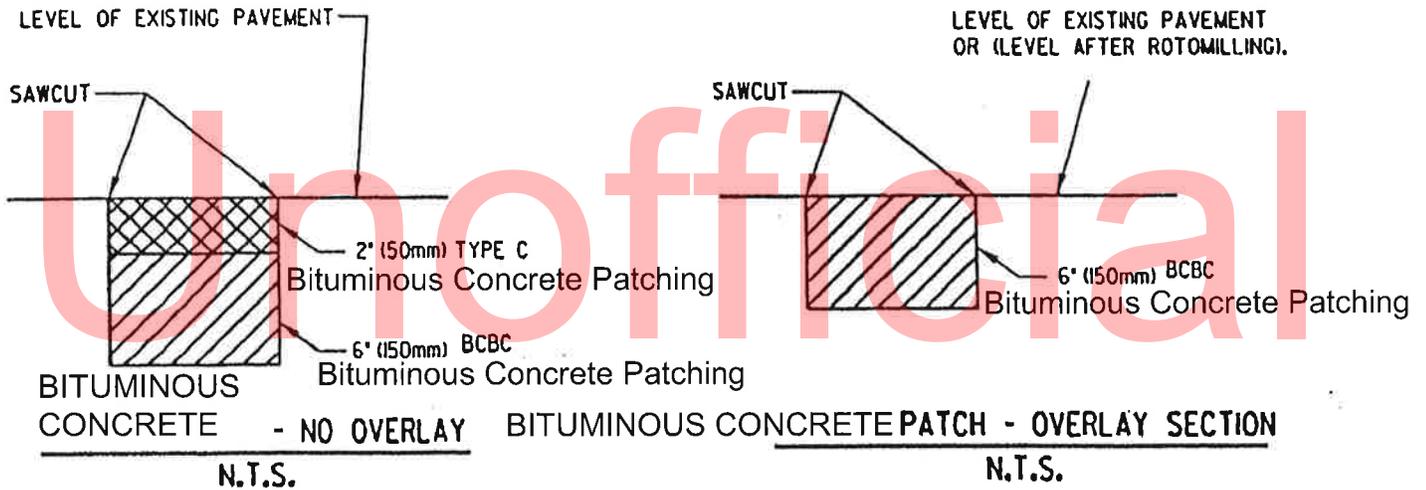
DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT NUMBER- T201606201

PAGE 14 OF 25

CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET



•UNDERCUT EXCAVATION PATCHING TO BE UTILIZED BELOW 8" (200mm) WHEN DIRECTED BY THE ENGINEER.

•UNDERCUT EXCAVATION PATCHING TO BE UTILIZED BELOW 6" (150mm) WHEN DIRECTED BY THE ENGINEER.

NOTE: PREFERRED EXCAVATION METHOD TO BE BY ROTOMILLING. SAWCUTTING EDGES SHALL BE AS DIRECTED BY ENGINEER AND DEPENDENT ON THE CONDITION LEFT BY THE ROTOMILLING OPERATION. BACKFILL FOR UNDERCUT EXCAVATION SHALL BE SUPERPAVE BCBC PATCH (SEPERATE LIFT). MINIMUM WIDTH OF PATCHING 6' (1.8M). THIS DETAIL SHALL BE USED FOR ALL HOT MIX PATCHES UNLESS OTHERWISE SHOWN ON THE PLANS. ALL HOT MIX TO BE PLACED USING A PAVER.

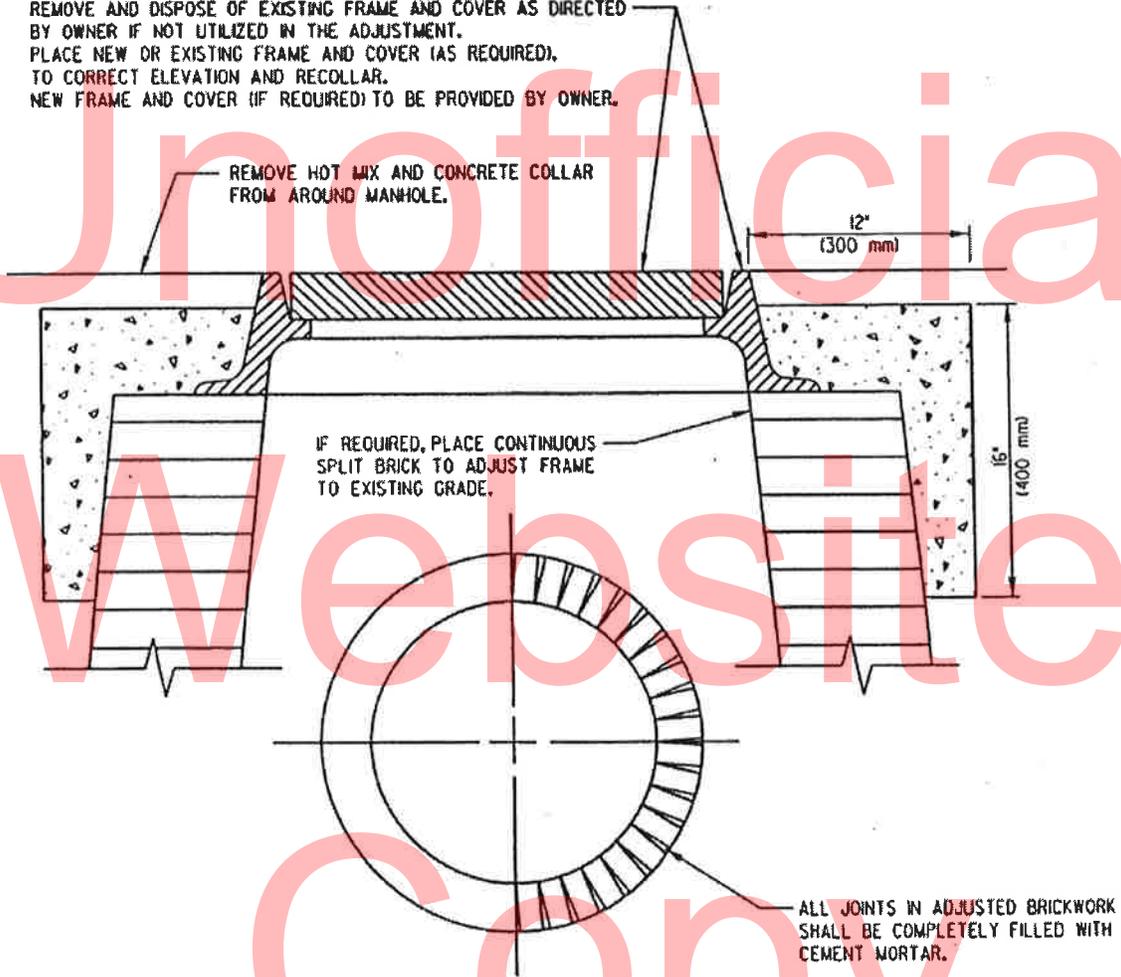
WHEN PCC PATCHING IS REQUIRED ON A COMPOSITE PAVEMENT(HOT-MIX OVER CONCRETE), THE CONTRACTOR MAY ELECT TO ELIMINATE ANY GRADE DIFFERENCE BETWEEN THE TOP OF THE CONCRETE PATCH AND THE TOP OF THE EXISTING HOT-MIX PAVEMENT BY EITHER PLACING HOT-MIX TRM MATERIAL(PAYMENT UNDER ITEM 402000) OR PLACING CONCRETE FLUSH WITH EXISTING HOT-MIX PAVEMENT(ADDITIONAL CONCRETE PAID AS ITEM 503503). IF CONCRETE IS PLACED FLUSH WITH EXISTING HOT-MIX, THE ROTOMILLING OF THE CONCRETE WILL BE PAID FOR AS ROTOMILLING HOT-MIX.

P.C.C. PATCHING NOTES

DETAILS SHEET

REMOVE AND DISPOSE OF EXISTING FRAME AND COVER AS DIRECTED BY OWNER IF NOT UTILIZED IN THE ADJUSTMENT. PLACE NEW OR EXISTING FRAME AND COVER (AS REQUIRED), TO CORRECT ELEVATION AND RECOLLAR. NEW FRAME AND COVER (IF REQUIRED) TO BE PROVIDED BY OWNER.

REMOVE HOT MIX AND CONCRETE COLLAR FROM AROUND MANHOLE.

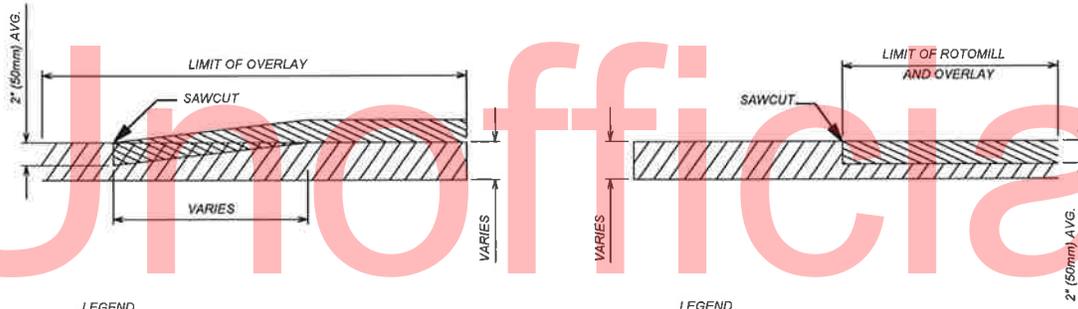


ADJUSTING AND REPAIRING MANHOLE

N.T.S.

NOTE: MANHOLES IN CONCRETE ROADWAYS SHALL BE SAWCUT FULL DEPTH TO THE SPECIFIED DIMENSION PRIOR TO ANY ADJUSTMENT BEING MADE. THE SAWCUTTING SHALL BE INCIDENTAL TO ITEM 710002.

DETAILS SHEET



LEGEND

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

**BUTT JOINT
FOR OVERLAY SECTION***
PAYMENT UNDER ITEM 761001

LEGEND

- PROPOSED FULL WIDTH ROTOMILL AND OVERLAY
- EXISTING PAVEMENT (TO REMAIN)

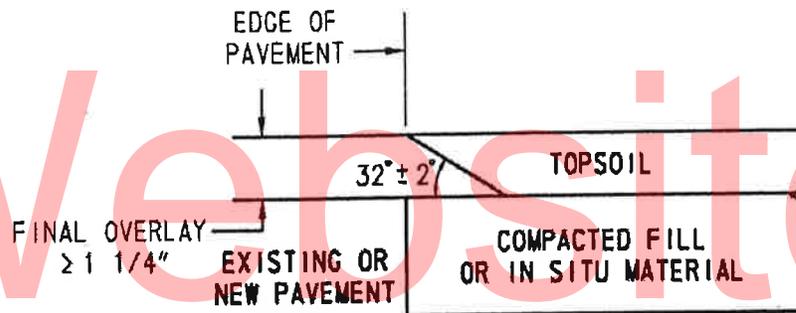
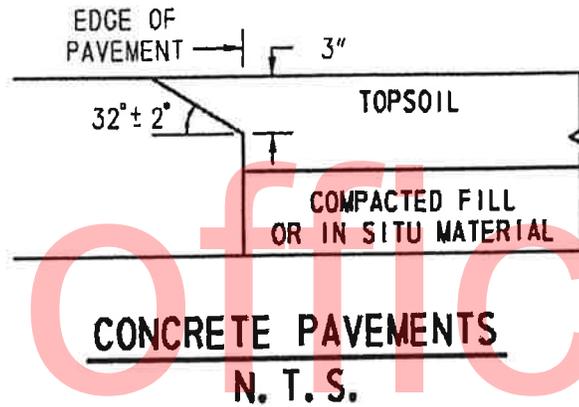
**BITUMINOUS CONCRETE JOINT
FOR FULL WIDTH MILL SECTION***
PAYMENT INCIDENTAL TO ITEM 760XXX, MILLING

BITUMENOUS CONCRETE JOINT DETAIL

NOTE: THE FOLLOWING LENGTHS ARE BASED ON THE POSTED SPEED OF THE ROADWAY: LESS THAN 50MPH = 20 FT PER 1" OF OVERLAY DEPTH
EQUAL TO OR GREATER THAN 50 MPH = 30 FT PER 1" OF OVERLAY DEPTH
AT STOP SIGNS = 15 FT PER 1" OF OVERLAY DEPTH

Copy

DETAILS SHEET



BITUMINOUS CONCRETE PAVEMENTS AND OVERLAYS
N. T. S.

Prior to placing concrete or bituminous concrete pavement, prepare the shoulder material where the Safety Edge will be placed to provide a foundation that will support its placement.

The Safety Edge is installed during a bituminous concrete resurfacing project using a special, removable wedge shape compaction device attached to and extending below the screed strike-off plate of the paver. This device is used to construct a pre-compacted, long lasting, low angle wedge fillet on the outside edge of the paved mat. The device has a self-adjusting internal spring that allows it to follow the surface independent of other paver components. The device has an angled surface that compacts the asphalt as it enters the device while another fixed-angle surface forms the tapered edge. As the asphalt continues under the wedge-forming surface, the asphalt is smoothed to create a finished surface on the tapered edge. Two wedge shape compaction devices that are commercially available are TransTech's Shoulder Wedge Maker and Advant-Edge Paving Equipment's Advant-Edger. The use of a single plate strike off is not allowed. Compaction of the edge should not be done with the first pass of the roller in order to give the Safety Edge a chance to harden some.

For concrete pavement or overlay, modify the paver screed to create the shoulder wedge as per the Safety Edge cross section.

CENTRAL
MAINTENANCE

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 -
FY2018

**LOCATION 1 (PAVEMENT AND REHABILITATION OPEN END - KENT COUNTY) FROM
VARIOUS LOCATIONS TO**

LENGTH

GENERAL IMPROVEMENTS

BITUMINOUS CONCRETE PATCHING, PROFILE MILLING, PAVING, PCC PATCHING, CRACK AND
JOINT SEALING, DRAINAGE IMPROVEMENTS, ADA IMPROVEMENTS, PCC
CURB/GUTTER/SIDEWALK, RUMBLE STRIPS, PAVEMENT MARKINGS, SIGNAGE

COMMENTS:

SEE COMMENT SHEET

MATERIAL ESTIMATE FOR LOCATION 1

202000	EXCAVATION AND EMBANKMENT	50.00 C.Y.
302005	GRADED AGGREGATE BASE COURSE, TYPE B	200.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, P 64-22, PATCHING	6,000.00 TON
401827	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATE STONE)	8,500.00 TON
401833	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22, (NON-CARBONATE STONE)	8,500.00 TON
406001	BITUMINOUS CONCRETE PATCHING	105,000.00 SY-IN
503001	PATCHING P.C.C. PAVEMENT, 6' TO 15', TYPE A	500.00 S.Y.
503002	PATCHING P.C.C. PAVEMENT GREATER THAN 15' TO 100', TYPE B	300.00 S.Y.
503006	DOWEL BARS	1,000.00 EACH
503501	CRACK AND JOINT SEALING LESS THAN 3/4" WIDE	1,000.00 L.F.
503502	CRACK AND JOINT SEALING 3/4" TO 1 3/4" WIDE	500.00 L.F.
503503	** PATCHING CONCRETE	500.00 SY-IN
503517	P.C.C. PATCHING, PARTIAL DEPTH	500.00 SY-IN
612020	REINFORCED CONCRETE PIPE, 12", CLASS IV	30.00 L.F.
612021	REINFORCED CONCRETE PIPE, 15", CLASS IV	60.00 L.F.
612022	REINFORCED CONCRETE PIPE, 18", CLASS IV	60.00 L.F.
612023	REINFORCED CONCRETE PIPE, 24", CLASS IV	60.00 L.F.
612519	CORRUGATED POLYETHYLENE PIPE, TYPE C, 15"	60.00 L.F.
617001	REINFORCED CONCRETE FLARED END SECTION, 12"	5.00 EACH
617002	REINFORCED CONCRETE FLARED END SECTION, 15"	5.00 EACH
617003	REINFORCED CONCRETE FLARED END SECTION, 18"	5.00 EACH
617005	REINFORCED CONCRETE FLARED END SECTION, 24"	5.00 EACH
701010	PORTLAND CEMENT CONCRETE CURB, TYPE 1-8	1,000.00 L.F.
701011	PORTLAND CEMENT CONCRETE CURB, TYPE 2	500.00 L.F.
701020	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 1-8	500.00 L.F.
701021	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 2	500.00 L.F.
701022	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-8	300.00 L.F.

**LOCATION 1 (PAVEMENT AND REHABILITATION OPEN END - KENT COUNTY) FROM
VARIOUS LOCATIONS TO**

LENGTH

GENERAL IMPROVEMENTS

BITUMINOUS CONCRETE PATCHING, PROFILE MILLING, PAVING, PCC PATCHING, CRACK AND JOINT SEALING, DRAINAGE IMPROVEMENTS, ADA IMPROVEMENTS, PCC CURB/GUTTER/SIDEWALK, RUMBLE STRIPS, PAVEMENT MARKINGS, SIGNAGE

COMMENTS:

SEE COMMENT SHEET

MATERIAL ESTIMATE FOR LOCATION 1

705001	P.C.C. SIDEWALK, 4"	2,500.00 S.F.
705002	P.C.C. SIDEWALK, 6"	1,000.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	300.00 S.F.
705008	CURB RAMP, TYPE 1	1,500.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	7,500.00 S.F.
705010	CURB RAMP, TYPE 5	500.00 S.F.
705505	RESET STONE/BRICK SIDEWALK AND/OR STONE/BRICK ROADWAY	300.00 S.F.
705530	TRIANGULAR CHANNELIZING ISLANDS	1,000.00 S.F.
708050	DRAINAGE INLET, 34" X 18"	5.00 EACH
708051	DRAINAGE INLET, 34" X 24"	5.00 EACH
708060	REPLACE DRAINAGE INLET GRATE(S)	10.00 EACH
708061	REPLACE DRAINAGE INLET FRAME(S)	10.00 EACH
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	25.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	25.00 EACH
710004	ADJUST & REPAIR EXISTING DOUBLE DRAINAGE INLET(S)	15.00 EACH
727502	ADJUSTING EXISTING MONUMENT BOX	5.00 EACH
743003	ARROWPANELS, TYPE C	250.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	100.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	100.00 EA-DY
743007	** TRAFFIC OFFICERS	500.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	250.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	3,000.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	300.00 HOUR
744505	ADJUST OR REPAIR EXISTING CONDUIT JUNCTION WELL	5.00 EACH
744506	CONDUIT JUNCTION WELL, TYPE 7, PRECAST POLYMER CONCRETE	5.00 EACH
744530	CONDUIT JUNCTION WELL, TYPE 11, PRECAST CONCRETE/ POLYMER LID-FRAME	5.00 EACH
744531	CONDUIT JUNCTION WELL, TYPE 14, PRECAST CONCRETE/ POLYMER LID-FRAME	5.00 EACH
744532	CONDUIT JUNCTION WELL, TYPE 15, PRECAST CONCRETE/ POLYMER LID-FRAME	5.00 EACH

CENTRAL
MAINTENANCE

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 -
FY2018

**LOCATION 1 (PAVEMENT AND REHABILITATION OPEN END - KENT COUNTY) FROM
VARIOUS LOCATIONS TO**

LENGTH

GENERAL IMPROVEMENTS

BITUMINOUS CONCRETE PATCHING, PROFILE MILLING, PAVING, PCC PATCHING, CRACK AND
JOINT SEALING, DRAINAGE IMPROVEMENTS, ADA IMPROVEMENTS, PCC
CURB/GUTTER/SIDEWALK, RUMBLE STRIPS, PAVEMENT MARKINGS, SIGNAGE

COMMENTS:

SEE COMMENT SHEET

MATERIAL ESTIMATE FOR LOCATION 1

744541	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 11	5.00 EACH
744542	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 14	5.00 EACH
744543	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 15	5.00 EACH
744544	ADJUST OR REPAIR EXISTING CONDUIT JUNCTION WELL	5.00 EACH
745602	FURNISH & INSTALL UP TO 4" SCHEDULE 80 HDPE CONDUIT (BORE)	300.00 L.F.
745603	FURNISH & INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (OPEN CUT)	300.00 L.F.
745604	FURNISH & INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	300.00 L.F.
745606	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (TRENCH)	300.00 L.F.
745607	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (BORE)	300.00 L.F.
745608	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (OPEN CUT)	300.00 L.F.
746614	POLE BASE EXTENSION	35.00 C.F.
746844	POLE BASE, TYPE 2	5.00 EACH
746847	POLE BASE, TYPE 3	5.00 EACH
746850	POLE BASE, TYPE 4	8.00 EACH
746883	PARTIAL REMOVAL OF CONCRETE POLE BASES AND CABINET FOUNDATIONS	5.00 C.Y.
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	2,000.00 L.F.
747515	CABINET BASE, TYPE M	3.00 EACH
747516	CABINET BASE, TYPE P	3.00 EACH
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	7,500.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	600,000.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	15,000.00 S.F.
748502	RAISED/RECESSED PAVEMENT MARKER	250.00 EACH
748530	REMOVAL OF PAVEMENT STRIPING	1,500.00 S.F.
748546	PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, SYMBOL/LEGEND	1,000.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	300,000.00 L.F.
748553	PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, BIKE SYMBOL	100.00 EACH
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	500.00 EACH

CENTRAL
MAINTENANCE

PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END, FY2016 -
FY2018

**LOCATION 1 (PAVEMENT AND REHABILITATION OPEN END - KENT COUNTY) FROM
VARIOUS LOCATIONS TO**

LENGTH

GENERAL IMPROVEMENTS

BITUMINOUS CONCRETE PATCHING, PROFILE MILLING, PAVING, PCC PATCHING, CRACK AND
JOINT SEALING, DRAINAGE IMPROVEMENTS, ADA IMPROVEMENTS, PCC
CURB/GUTTER/SIDEWALK, RUMBLE STRIPS, PAVEMENT MARKINGS, SIGNAGE

COMMENTS:

SEE COMMENT SHEET

MATERIAL ESTIMATE FOR LOCATION 1

749688	INSTALLATION OF 4" DIAMETER HOLE, LESS THAN OR EQUAL TO 6" DEPTH	25.00 EACH
749689	INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" DEPTH	25.00 EACH
749690	INSTALLATION OR REMOVAL OF TRAFFIC SIGNS ON MULTIPLE SIGN POSTS	500.00 S.F.
750000	ADJUST WATER VALVE BOXES	30.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	500.00 S.Y.
760012	RUMBLE STRIPS, BIKE-FRIENDLY, HOT-MIX	5,000.00 L.F.
760016	RUMBLE STRIPS, HOT-MIX	10,000.00 L.F.
760018	RUMBLE STRIPS, CENTER LINE, HOT-MIX	10,000.00 L.F.
760502	PAVEMENT MILLING, TAPER CUT	10,000.00 SY-IN
760507	PROFILE MILLING, BITUMINOUS CONCRETE	280,000.00 SY-IN
761001	BUTT JOINTS, HOT MIX	1,000.00 S.Y.
762001	SAW CUTTING, BITUMINOUS CONCRETE	5,000.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	3,000.00 L.F.
763553	ROAD LOCATION MOBILIZATION, ZONE 10	15.00 EACH
763554	ROAD LOCATION MOBILIZATION, ZONE 11	15.00 EACH
763555	ROAD LOCATION MOBILIZATION, ZONE 12	15.00 EACH
763605	TEMPORARY TRAFFIC CONTROL - TWO LANE, TWO-WAY WITH SHOULDER CLOSURE (TA-3)	20.00 EACH
763606	TEMPORARY TRAFFIC CONTROL - TWO LANE, TWO-WAY WITH LANE CLOSURE (TA-10)	20.00 EACH
763607	TEMPORARY TRAFFIC CONTROL - MULTILANE DIVIDED HIGHWAY WITH SHOULDER CLOSURE (TA-3A)	25.00 EACH
763608	TEMPORARY TRAFFIC CONTROL - MULTILANE DIVIDED HIGHWAY WITH LANE CLOSURE (TA-33)	25.00 EACH
763621	CONSTRUCTION ENGINEERING, REHABILITATION	100.00 HOUR
908001	TOPSOIL (TON)	200.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	1,600.00 S.Y.
908020	EROSION CONTROL BLANKET MULCH	1,600.00 S.Y.

** DENOTES FIXED PRICE ITEM

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201606201

PAGE 22 OF 25

**CENTRAL PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END,
MAINTENANCE FY2016 - FY2018**

CONTRACT QUANTITIES SUMMARY SHEET

202000	EXCAVATION AND EMBANKMENT	50.00 C.Y.
302005	GRADED AGGREGATE BASE COURSE, TYPE B	200.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	6,000.00 TON
401827	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATE STONE)	8,500.00 TON
401833	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22, (NON-CARBONATE STONE)	8,500.00 TON
406001	BITUMINOUS CONCRETE PATCHING	105,000.00 SY-IN
503001	PATCHING P.C.C. PAVEMENT, 6' TO 15', TYPE A	500.00 S.Y.
503002	PATCHING P.C.C. PAVEMENT GREATER THAN 15' TO 100', TYPE B	300.00 S.Y.
503006	DOWEL BARS	1,000.00 EACH
503501	CRACK AND JOINT SEALING LESS THAN 3/4" WIDE	1,000.00 L.F.
503502	CRACK AND JOINT SEALING 3/4" TO 1 3/4" WIDE	500.00 L.F.
503503	** PATCHING CONCRETE	500.00 SY-IN
503517	P.C.C. PATCHING, PARTIAL DEPTH	500.00 SY-IN
612020	REINFORCED CONCRETE PIPE, 12", CLASS IV	30.00 L.F.
612021	REINFORCED CONCRETE PIPE, 15", CLASS IV	60.00 L.F.
612022	REINFORCED CONCRETE PIPE, 18", CLASS IV	60.00 L.F.
612023	REINFORCED CONCRETE PIPE, 24", CLASS IV	60.00 L.F.
612519	CORRUGATED POLYETHYLENE PIPE, TYPE C, 15"	60.00 L.F.
617001	REINFORCED CONCRETE FLARED END SECTION, 12"	5.00 EACH
617002	REINFORCED CONCRETE FLARED END SECTION, 15"	5.00 EACH
617003	REINFORCED CONCRETE FLARED END SECTION, 18"	5.00 EACH
617005	REINFORCED CONCRETE FLARED END SECTION, 24"	5.00 EACH
701010	PORTLAND CEMENT CONCRETE CURB, TYPE 1-8	1,000.00 L.F.
701011	PORTLAND CEMENT CONCRETE CURB, TYPE 2	500.00 L.F.
701020	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 1-8	500.00 L.F.
701021	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 2	500.00 L.F.
701022	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-8	300.00 L.F.
705001	P.C.C. SIDEWALK, 4"	2,500.00 S.F.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201606201

PAGE 23 OF 25

CENTRAL PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END,
MAINTENANCE FY2016 - FY2018

CONTRACT QUANTITIES SUMMARY SHEET

705002	P.C.C. SIDEWALK, 6"	1,000.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	300.00 S.F.
705008	CURB RAMP, TYPE 1	1,500.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	7,500.00 S.F.
705010	CURB RAMP, TYPE 5	500.00 S.F.
705505	RESET STONE/BRICK SIDEWALK AND/OR STONE/BRICK ROADWAY	300.00 S.F.
705530	TRIANGULAR CHANNELIZING ISLANDS	1,000.00 S.F.
708050	DRAINAGE INLET, 34" X 18"	5.00 EACH
708051	DRAINAGE INLET, 34" X 24"	5.00 EACH
708060	REPLACE DRAINAGE INLET GRATE(S)	10.00 EACH
708061	REPLACE DRAINAGE INLET FRAME(S)	10.00 EACH
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	25.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	25.00 EACH
710004	ADJUST & REPAIR EXISTING DOUBLE DRAINAGE INLET(S)	15.00 EACH
727502	ADJUSTING EXISTING MONUMENT BOX	5.00 EACH
743003	ARROWPANELS, TYPE C	250.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	100.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	100.00 EA-DY
743007	** TRAFFIC OFFICERS	500.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	250.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	3,000.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	300.00 HOUR
744505	ADJUST OR REPAIR EXISTING CONDUIT JUNCTION WELL	5.00 EACH
744506	CONDUIT JUNCTION WELL, TYPE 7, PRECAST POLYMER CONCRETE	5.00 EACH
744530	CONCUIT JUNCTION WELL, TYPE 11, PRECAST CONCRETE/ POLYMER LID-FRAME	5.00 EACH
744531	CONDUIT JUNCTION WELL, TYPE 14, PRECAST CONCRETE/ POLYMER LID-FRAME	5.00 EACH
744532	CONDUIT JUNCTION WELL, TYPE 15, PRECAST CONCRETE/ POLYMET LID-FRAME	5.00 EACH
744541	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 11	5.00 EACH
744542	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 14	5.00 EACH

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201606201

PAGE 24 OF 25

CENTRAL PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END,
MAINTENANCE FY2016 - FY2018

CONTRACT QUANTITIES SUMMARY SHEET

744543	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 15	5.00 EACH
744544	ADJUST OR REPAIR EXISTING CONDUIT JUNCTION WELL	5.00 EACH
745602	FURNISH & INSTALL UP TO 4" SCHEDULE 80 HDPE CONDUIT (BORE)	300.00 L.F.
745603	FURNISH & INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (OPEN CUT)	300.00 L.F.
745604	FURNISH & INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	300.00 L.F.
745606	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (TRENCH)	300.00 L.F.
745607	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (BORE)	300.00 L.F.
745608	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (OPEN CUT)	300.00 L.F.
746614	POLE BASE EXTENSION	35.00 C.F.
746844	POLE BASE, TYPE 2	5.00 EACH
746847	POLE BASE, TYPE 3	5.00 EACH
746850	POLE BASE, TYPE 4	8.00 EACH
746883	PARTIAL REMOVAL OF CONCRETE POLE BASES AND CABINET FOUNDATIONS	5.00 C.Y.
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	2,000.00 L.F.
747515	CABINET BASE, TYPE M	3.00 EACH
747516	CABINET BASE, TYPE P	3.00 EACH
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	7,500.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	600,000.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	15,000.00 S.F.
748502	RAISED/RECESSED PAVEMENT MARKER	250.00 EACH
748530	REMOVAL OF PAVEMENT STRIPING	1,500.00 S.F.
748546	PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, SYMBOL/LEGEND	1,000.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	300,000.00 L.F.
748553	PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, BIKE SYMBOL	100.00 EACH
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	500.00 EACH
749688	INSTALLATION OF 4" DIAMETER HOLE, LESS THAN OR EQUAL TO 6" DEPTH	25.00 EACH
749689	INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" DEPTH	25.00 EACH
749690	INSTALLATION OR REMOVAL OF TRAFFIC SIGNS ON MULTIPLE SIGN POSTS	500.00 S.F.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201606201

PAGE 25 OF 25

CENTRAL PAVEMENT AND REHABILITATION, KENT COUNTY, OPEN-END,
MAINTENANCE FY2016 - FY2018

CONTRACT QUANTITIES SUMMARY SHEET

750000	ADJUST WATER VALVE BOXES	30.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	500.00 S.Y.
760012	RUMBLE STRIPS, BIKE-FRIENDLY, HOT-MIX	5,000.00 L.F.
760016	RUMBLE STRIPS, HOT-MIX	10,000.00 L.F.
760018	RUMBLE STRIPS, CENTER LINE, HOT-MIX	10,000.00 L.F.
760502	PAVEMENT MILLING, TAPER CUT	10,000.00 SY-IN
760507	PROFILE MILLING, BITUMINOUS CONCRETE	280,000.00 SY-IN
761001	BUTT JOINTS, HOT MIX	1,000.00 S.Y.
762001	SAW CUTTING, BITUMINOUS CONCRETE	5,000.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	3,000.00 L.F.
763000	INITIAL EXPENSE	LUMP SUM
763553	ROAD LOCATION MOBILIZATION, ZONE 10	15.00 EACH
763554	ROAD LOCATION MOBILIZATION, ZONE 11	15.00 EACH
763555	ROAD LOCATION MOBILIZATION, ZONE 12	15.00 EACH
763605	TEMPORARY TRAFFIC CONTROL - TWO LANE, TWO-WAY WITH SHOULDER CLOSURE (TA-3)	20.00 EACH
763606	TEMPORARY TRAFFIC CONTROL - TWO LANE, TWO-WAY WITH LANE CLOSURE (TA-10)	20.00 EACH
763607	TEMPORARY TRAFFIC CONTROL - MULTILANE DIVIDED HIGHWAY WITH SHOULDER CLOSURE (TA-3A)	25.00 EACH
763608	TEMPORARY TRAFFIC CONTROL - MULTILANE DIVIDED HIGHWAY WITH LANE CLOSURE (TA-33)	25.00 EACH
763621	CONSTRUCTION ENGINEERING, REHABILITATION	100.00 HOUR
908001	TOPSOIL (TON)	200.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	1,600.00 S.Y.
908020	EROSION CONTROL BLANKET MULCH	1,600.00 S.Y.

** DENOTES FIXED PRICE ITEM