

THE STATE OF DELAWARE



DEPARTMENT OF TRANSPORTATION
OFFICE OF TRANSPORTATION SOLUTIONS
CONSTRUCTION PLANS AND SPECIFICATIONS FOR

PAVEMENT & REHABILITATION – KENT III (KENTON & CLAYTON AREA), 2016

CONTRACT NUMBER - T201606203.01

PRIMAVERA ID – 16-06203

FUNDING - 100% STATE

CENTRAL DISTRICT MAINTENANCE

PLANS PREPARED BY: Paul Farkas
DESIGN TECHNICIAN

DATE RECOMMENDED: 3/3/2016

Bradford L. Salmons
GROUP ENGINEER, CONSTRUCTION

DATE RECOMMENDED: 3/9/16

David A. Nicol
ASSIST. DIRECTOR, ENGINEERING SUPPORT

DATE RECOMMENDED: 3/9/2016

Robert Brian McCleary
CHIEF ENGINEER



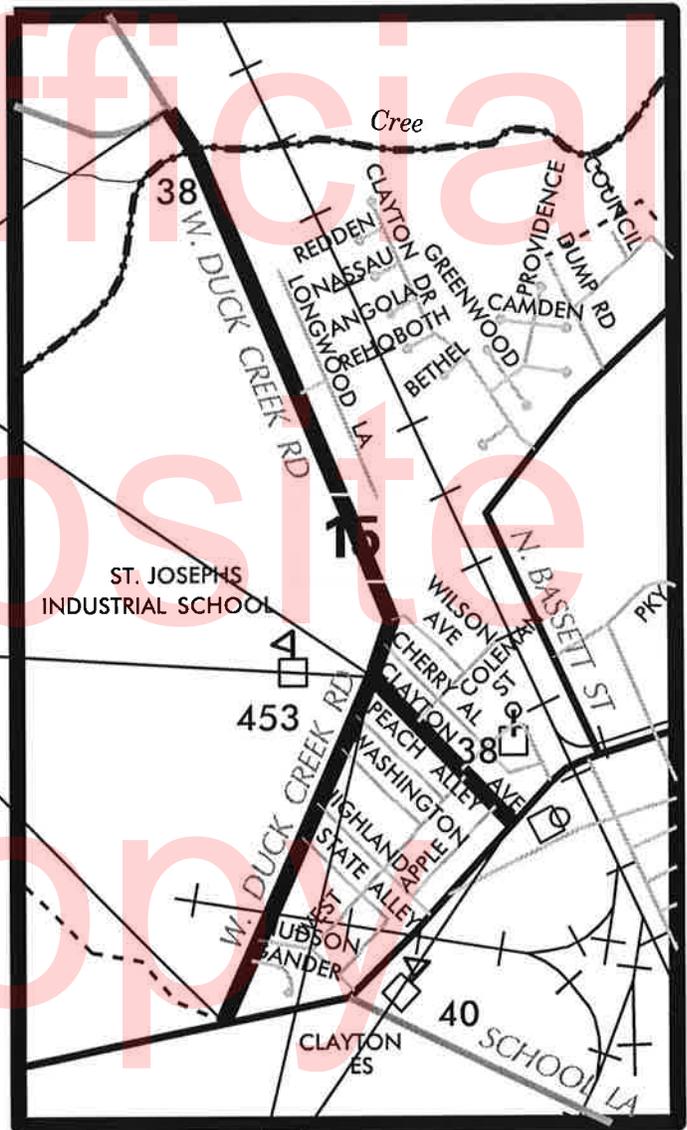
VARIOUS LOCATIONS

LOCATION MAP

Location 2
West Duck Creek Rd., DE15 from
Clayton Ave. to
Clayton Delaney Rd.

Location 4
West Duck Creek Rd., DE15 from
Millington Rd., DE6 to
Clayton Ave.

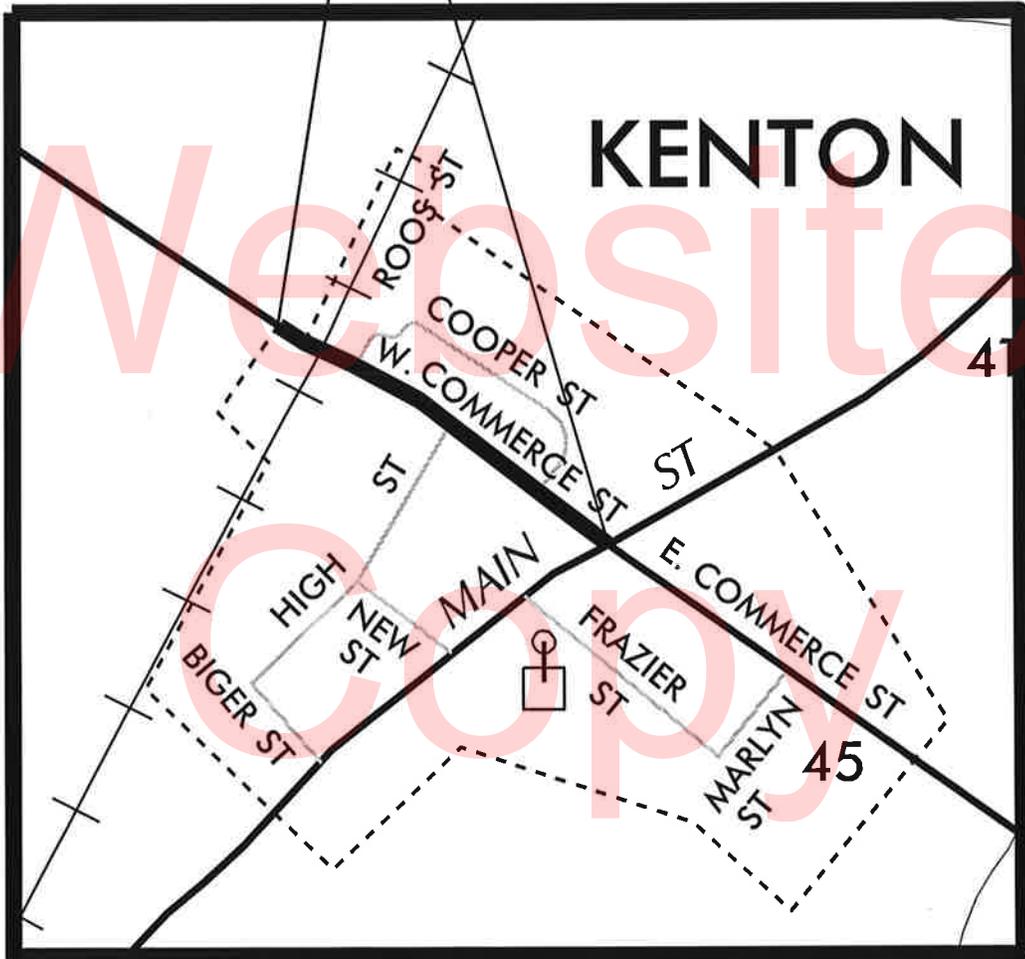
Location 1
Clayton Ave. from Main St., DE6 to
West Duck Creek Rd., DE15.



LOCATION MAP

Location 3

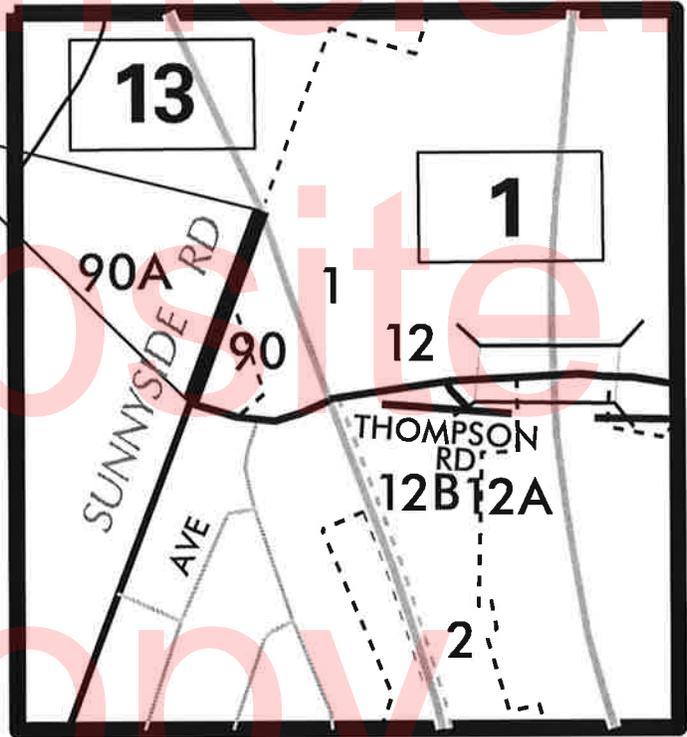
West Commerce St. from
HMJ West of Cooper St. to
Main St., DE300.



VARIOUS LOCATIONS

LOCATION MAP

Location 5
Sunnyside Rd. from
US13, DuPont Hwy. to
Smyrna Leipsic Rd.



PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

GENERAL CONTRACT PLAN NOTES

REVISED - MARCH 2016

GENERAL

1. 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.
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. 763502. 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 1500 FT", "ROAD WORK 1000 FT", "ROAD WORK AHEAD" SIGNS SHALL BE PLACED AT A DISTANCE NOT LESS THAN 500 FEET BEFORE AND AFTER THE WORK AREA, RESPECTIVELY, INCLUDING ALL INTERSECTING ROADS WITHIN THE PROJECT LIMITS. ALL PERMANENT ADVANCE WARNING SIGNS SHALL BE GROUND-MOUNTED ON TWO NCHRP-350 OR MASH APPROVED BREAKAWAY POSTS AND SHALL BE MOUNTED IN

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

GENERAL CONTRACT PLAN NOTES

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 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 763643 - 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.

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

GENERAL CONTRACT PLAN NOTES

- 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.

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

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

GENERAL CONTRACT PLAN NOTES

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.

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 30200X.

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 732XXX, 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.

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GENERAL CONTRACT PLAN NOTES

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.

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' 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.

30. THE PORTLAND CEMENT CONCRETE USED WITHIN ITEM 701002 - 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.

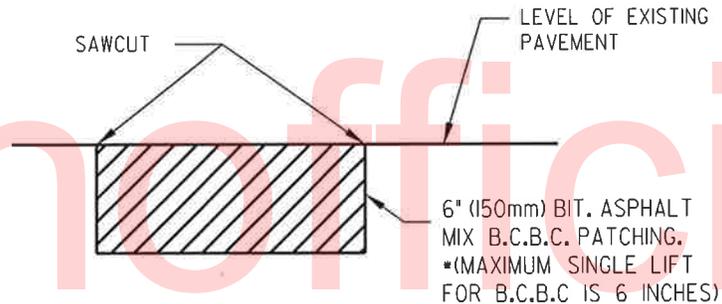
DELAWARE DEPARTMENT OF TRANSPORTATION

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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.

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 MILLING OF THE CONCRETE WILL BE PAID FOR AS MILLING HOT-MIX.

P.C.C. PATCHING NOTES

DELAWARE DEPARTMENT OF TRANSPORTATION

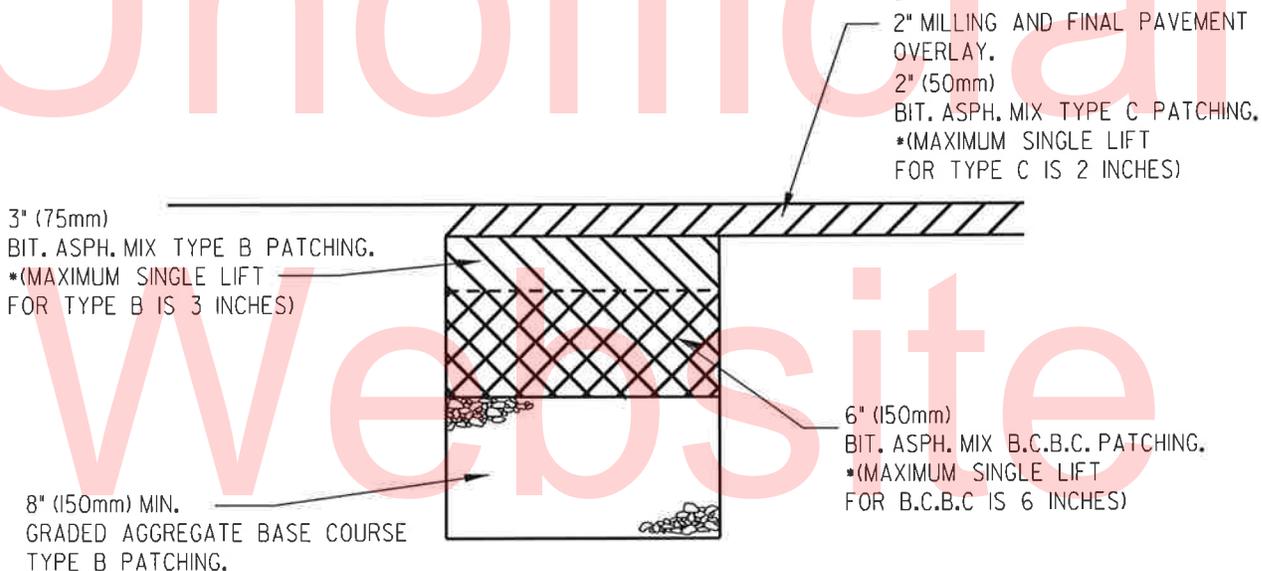
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CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET

Unofficial

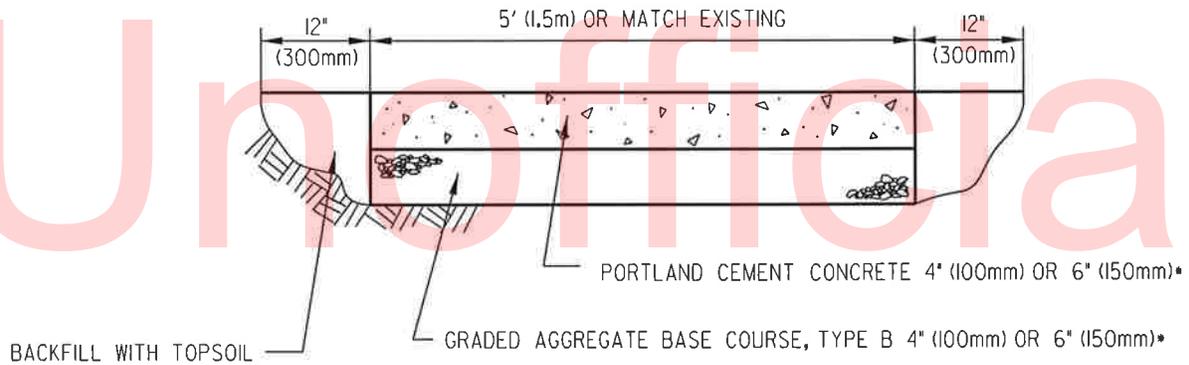


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BIT. CONCRETE MIX DETAIL
FOR SHOULDER WIDENING @ SUNNYSIDE RD
N.T.S.

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.

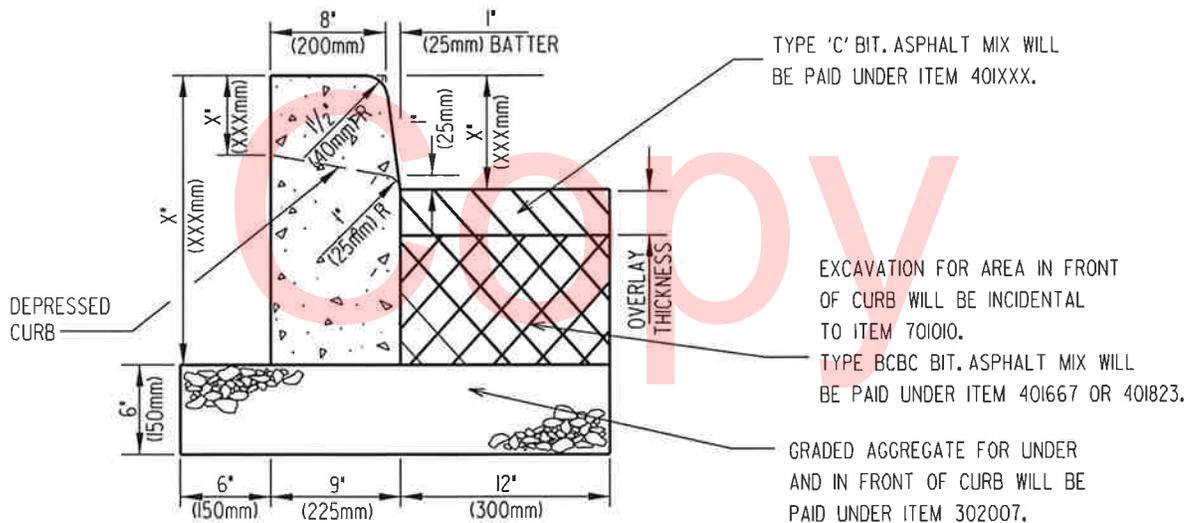
DETAILS SHEET



P.C.C. SIDEWALK

N.T.S.

- **NOTE:** 6" (150mm) CONCRETE OVER 6" (150mm) GRADED AGGREGATE TO BE USED FOR DRIVEWAY PLACEMENT



P.C.C. CURB TYPE I-X*

N.T.S.

- **NOTE:** REFERENCE STANDARD CONSTRUCTION DETAILS FOR P.C.C. CURB TYPE I-4 AND TYPE I-6.

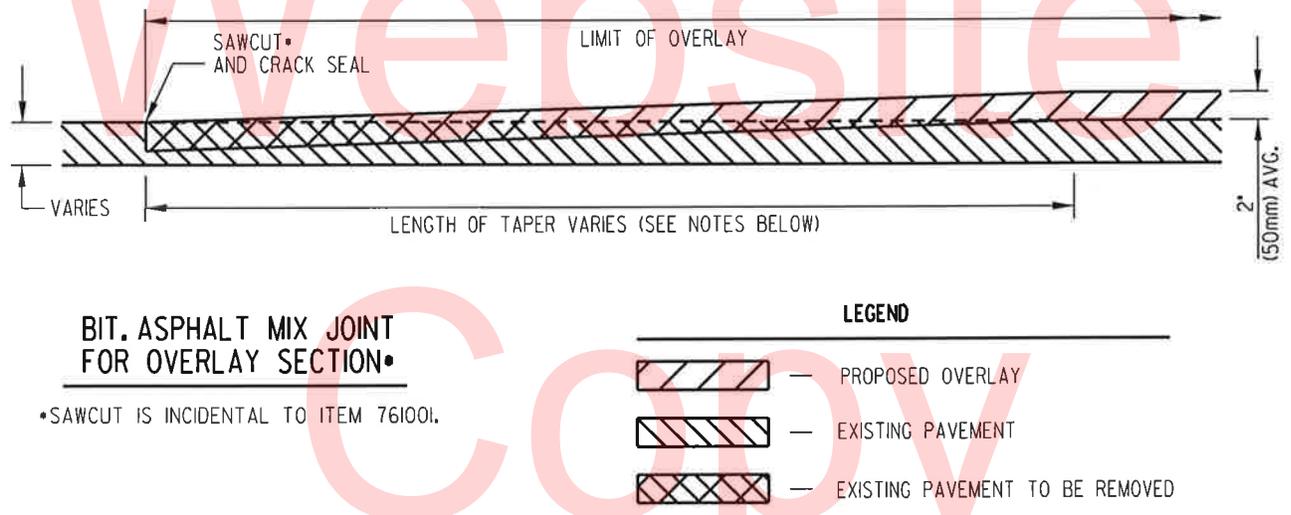
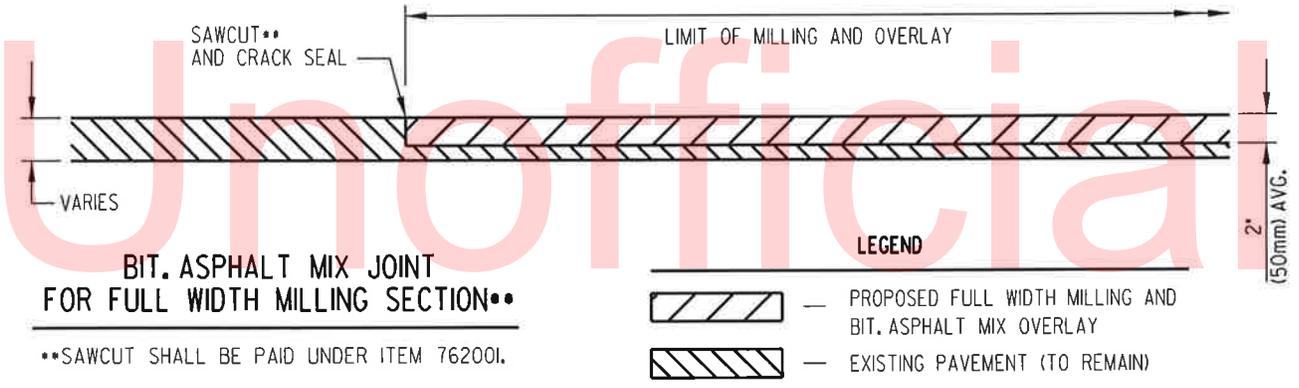
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CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET



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

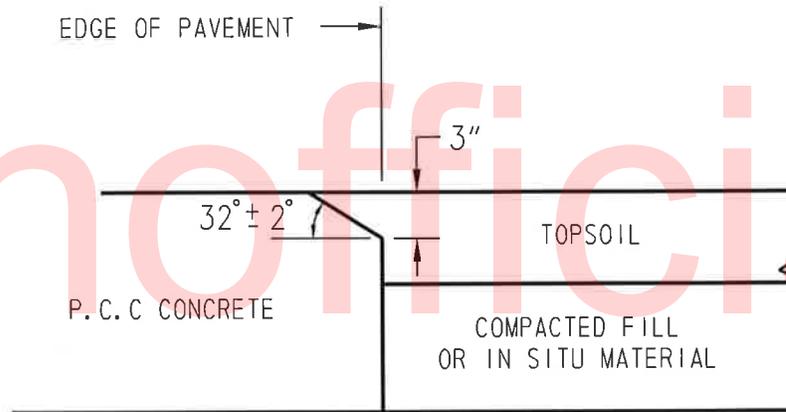
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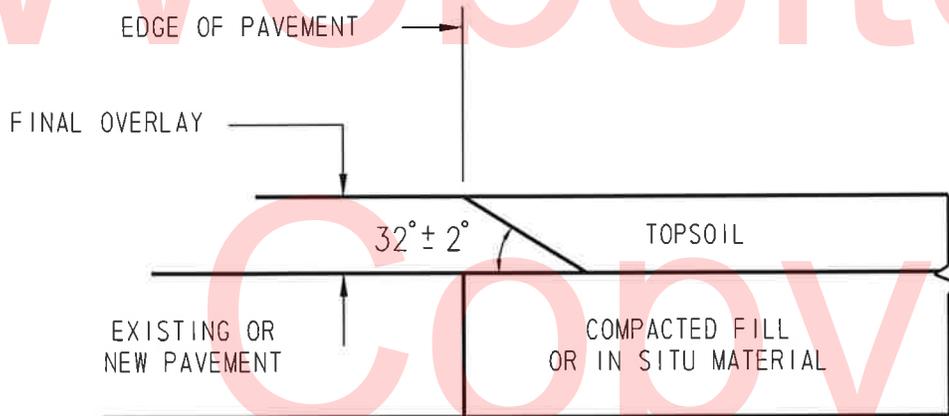
CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET



CONCRETE PAVEMENTS

NOT TO SCALE



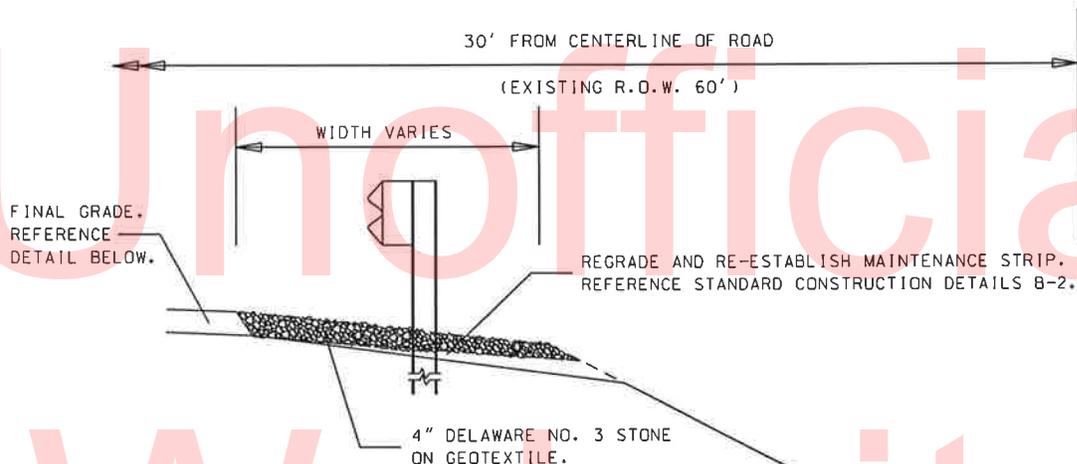
BIT. ASPHALT MIX PAVEMENTS AND OVERLAYS

NOT TO SCALE

SAFETY EDGE DETAIL

NOT TO SCALE

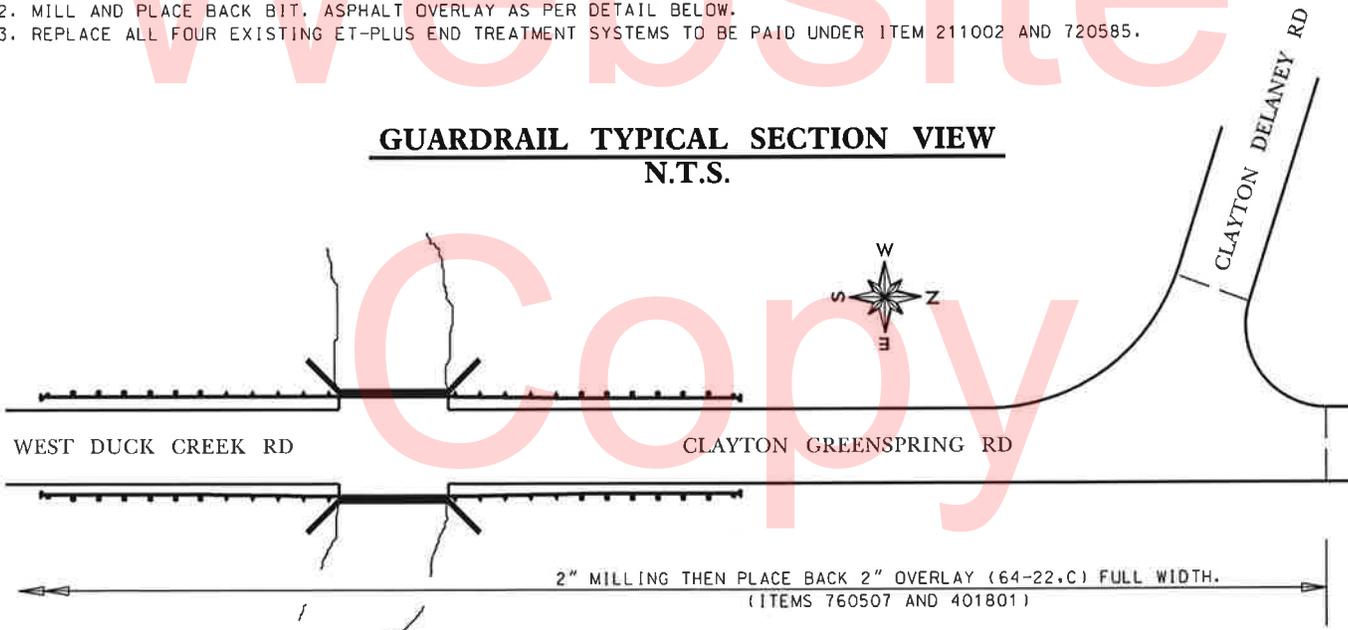
DETAILS SHEET



Notes

- 1. REPAIR AND RE-ESTABLISH MAINTENANCE STRIP AS DIRECTED BY THE FIELD ENGINEER PER THE STANDARD CONSTRUCTION DETAILS TO BE PAID UNDER ITEMS 202000, 713001, 302011, 908001 AND 908014 RESPECTIVELY.
- 2. MILL AND PLACE BACK BIT, ASPHALT OVERLAY AS PER DETAIL BELOW.
- 3. REPLACE ALL FOUR EXISTING ET-PLUS END TREATMENT SYSTEMS TO BE PAID UNDER ITEM 211002 AND 720585.

GUARDRAIL TYPICAL SECTION VIEW
N.T.S.



WEST DUCK CREEK RD (CLAYTON) - LOCATION 2
CULVERT SECTION & PAVING LIMITS
N.T.S.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201606203

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CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

LOCATION 1 CLAYTON AVE (K38) - (CLAYTON) FROM DE6, MAIN ST (K39) TO DE15, WEST
DUCK CREEK RD (K453)

LENGTH 362.712 m 1190 L.F. AADT 1253

GENERAL IMPROVEMENTS

2" MILLING, BIT. CONCRETE MIX PATCHING, CURB & SIDEWALK REPLACEMENT AND 2" TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

302007	GRADED AGGREGATE BASE COURSE, TYPE B	61.00 C.Y.
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	489.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	168.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	4.00 TON
406001	BITUMINOUS CONCRETE PATCHING	267.00 SY-IN
701014	PORTLAND CEMENT CONCRETE CURB, TYPE 1-6	1,100.00 L.F.
705002	P.C.C. SIDEWALK, 6"	820.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	120.00 S.F.
705008	CURB RAMP, TYPE 1	1,250.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	420.00 S.F.
708060	REPLACE DRAINAGE INLET GRATE(S)	2.00 EACH
708061	REPLACE DRAINAGE INLET FRAME(S)	2.00 EACH
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	2.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	4.00 EACH
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	56.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	200.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	30.00 HOUR
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	180.00 L.F.
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	100.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	200.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	200.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	2,380.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	21.00 EACH
750000	ADJUST WATER VALVE BOXES	4.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	183.00 S.Y.
760507	PROFILE MILLING, BITUMINOUS CONCRETE	8,604.00 SY-IN
762001	SAW CUTTING, BITUMINOUS CONCRETE	1,406.00 L.F.

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201606203

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CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

LOCATION 1 **CLAYTON AVE (K38) - (CLAYTON) FROM DE6, MAIN ST (K39) TO DE15, WEST
DUCK CREEK RD (K453)**

LENGTH 362.712 m 1190 L.F. AADT 1253

GENERAL IMPROVEMENTS

2" MILLING, BIT. CONCRETE MIX PATCHING, CURB & SIDEWALK REPLACEMENT AND 2" TYPE C
(64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

762002	SAW CUTTING, CONCRETE, FULL DEPTH	60.00 L.F.
763621	CONSTRUCTION ENGINEERING, REHABILITATION	24.00 HOUR
908001	TOPSOIL (TON)	20.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	144.00 S.Y.

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CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

LOCATION 1 CLAYTON AVE (K38) - (CLAYTON) FROM DE6, MAIN ST (K39) TO DE15, WEST DUCK
CREEK RD (K453)

COMMENTS:

- 1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
. TYPICAL APPLICATION, TA-3 (SHOULDERS).
. TYPICAL APPLICATION, TA-28 (SIDEWALK).
- 2. DAYTIME ALLOWABLE LANE CLOSURES: 8:00A - 6:00P.
- 3. COORDINATION WITH THE NEARBY SCHOOL FOR CLASSES/ACTIVITIES AND PLANT OPERATIONS SHALL BE REQUIRED WHEN SUBMITTING THE CONSTRUCTION SCHEDULE.
- 4. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED IN ACCORDANCE WITH THE DE-MUTCD AT THE END OF EACH WORK DAY.
- 5. ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE DEPARTMENT OF TRANSPORTATION AND BE DELIVERED TO THE MAGNOLIA YARD, AREA 7. CONTACT AND NOTIFY THE YARD SUPERVISOR, DUWAYNE SHAFFER, PHONE NO. 760-2419, 1 WEEK PRIOR TO DELIVERY.

DISTANCE TO YARD: APPROX. 22 MILES.

- 6. EXISTING R.O.W FOR THIS LOCATION IS 50' AS PER ARCHIVE PLANS;
. A. 90-062-04

7. CURB AND SIDEWALK

- . A. REPLACE EXISTING CURB AS DIRECTED BY THE FIELD ENGINEER - HEIGHT MAY VARY FROM 4 TO 6 INCHES, CURB TO BE PAID UNDER ITEM 701014. MATCH IN KIND.
- . B. AVOID CUTTING EXISTING TREE ROOTS AS MUCH AS POSSIBLE TO MINIMIZE DAMAGE TO THE ROOTS SYSTEM. IN AREAS OF CONFLICT WITH CURB PLACEMENT BUMP OUT CURB IN FRONT OF ROOTS TO AVOID DIRECT CONTACT.
- . C. REPLACE SIDEWALK AS DIRECTED BY THE FIELD ENGINEER TO CORRECT ADA DEFICIENCIES; SUCH AS VERTICAL DIFFERENCES, EXCESSIVE CROSS SLOPES, ETC...
- . D. REPLACE WALKWAY EXTENSIONS AS NEEDED LOCATED BETWEEN CURB AND SIDEWALK TO MATCH IN KIND.

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

LOCATION 2 DE15, WEST DUCK CREEK RD (K38) - (CLAYTON) FROM CLAYTON AVE (K38) TO CLAYTON-DELANEY RD (NC40)

LENGTH 1121.664 m 3680 L.F. AADT 1253

GENERAL IMPROVEMENTS

2" MILLING, BIT. CONCRETE ASPHALT PATCHING AND 2" TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 2

202000	EXCAVATION AND EMBANKMENT	32.00 C.Y.
211002	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (GUARDRAIL)	200.00 L.F.
302011	DELAWARE NO. 3 STONE	60.00 TON
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	1,132.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	303.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	5.00 TON
406001	BITUMINOUS CONCRETE PATCHING	5,280.00 SY-IN
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	5.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	1.00 EACH
713001	GEOTEXTILES, STABILIZATION	286.00 S.Y.
720585	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	4.00 EACH
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	56.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	239.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	36.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	120.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	27,700.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	240.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	13,850.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	14.00 EACH
760507	PROFILE MILLING, BITUMINOUS CONCRETE	21,044.00 SY-IN
762001	SAW CUTTING, BITUMINOUS CONCRETE	2,600.00 L.F.
908001	TOPSOIL (TON)	128.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	1,367.00 S.Y.

CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

LOCATION 2 DE15, WEST DUCK CREEK RD (K38) - (CLAYTON) FROM CLAYTON AVE (K38) TO
CLAYTON-DELANEY RD (NC40)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
2. DAYTIME ALLOWABLE LANE CLOSURES: 8:00A - 6:00P.
3. COORDINATION WITH THE NEARBY SCHOOL FOR CLASSES/ACTIVITIES AND PLANT OPERATIONS SHALL BE REQUIRED WHEN SUBMITTING THE CONSTRUCTION SCHEDULE.
4. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED IN ACCORDANCE WITH THE DE-MUTCD AT THE END OF EACH WORK DAY.
5. ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE DEPARTMENT OF TRANSPORTATION AND BE DELIVERED TO THE MAGNOLIA YARD, AREA 7. CONTACT AND NOTIFY THE YARD SUPERVISOR, DUWAYNE SHAFFER, PHONE NO. 760-2419, 1 WEEK PRIOR TO DELIVERY.

DISTANCE TO YARD: APPROX. 22 MILES.

6. EXISTING R.O.W FOR THIS LOCATION IS 60' AS PER ARCHIVE PLANS;
 - A. 90-062-04

7. P.C.C. CULVERT AT COUNTY LINE

. A. RE-ESTABLISH MAINTENANCE STRIP IN FRONT AND UNDER GUARDRAIL AS PER THE STANDARD CONSTRUCTION DETAILS.

. B. EXCAVATE 4 INCHES FROM TOP OF FINAL PAVEMENT GRADE AND PLACE BACK GEOTEXTILE MATERIAL WITH 4 INCHES OF DELAWARE STANE NO. 3 ON TOP TO BE PAID UNDER ITEMS 713001 AND 302011 RESPECTIVELY. REFERENCE DETAIL.

. C. FINISH GRADE SLOPE BEHIND GUARDRAIL AND PLACE TOPSOIL AS DIRECTED BY THE FIELD ENGINEER. REFERENCE DETAIL.

. D. REPLACE ALL FOUR EXISTING ET-PLUS END TREATMENT SYSTEMS.

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 III, (KENTON & CLAYTON AREA) 2016

LOCATION 3 WEST COMMERCE ST (K44) - (KENTON) FROM COOPER STREET TO DE300,
COMMERCE ST (K45)

LENGTH 381 m 1250 L.F. AADT 4084

GENERAL IMPROVEMENTS

2" MILLING, CURB & SIDEWALK REPLACEMENT AND 2" TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 3

908014

PERMANENT GRASS SEEDING, DRY GROUND

430.00 S.Y.

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CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

LOCATION 3 WEST COMMERCE ST (K44) - (KENTON) FROM COOPER STREET TO DE300,
COMMERCE ST (K45)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
. TYPICAL APPLICATION, TA-3 (SHOULDERS).
. TYPICAL APPLICATION, TA-28 (SIDEWALK).
2. DAYTIME ALLOWABLE LANE CLOSURES: 8:00A - 6:00P.
3. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED IN ACCORDANCE WITH THE DE-MUTCD AT THE END OF EACH WORK DAY.
4. ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE DEPARTMENT OF TRANSPORTATION AND BE DELIVERED TO THE MAGNOLIA YARD, AREA 7. CONTACT AND NOTIFY THE YARD SUPERVISOR, DUWAYNE SHAFFER, PHONE NO. 760-2419, 1 WEEK PRIOR TO DELIVERY.

DISTANCE TO YARD: APPROX. 20 MILES.

5. EXISTING R.O.W FOR THIS LOCATION IS 50' AS PER ARCHIVE PLANS;
. A. 1695

6. CURB AND SIDEWALK

-
- . A. REPLACE EXISTING CURB AS DIRECTED BY THE FIELD ENGINEER - HEIGHT MAY VARY FROM 4 TO 6 INCHES, CURB TO BE PAID UNDER ITEM 701014. MATCH IN KIND.
 - . B. REPLACE SIDEWALK AS DIRECTED BY THE FIELD ENGINEER TO CORRECT ADA DEFICIENCIES; SUCH AS VERTICAL DIFFERENCES, EXCESSIVE CROSS SLOPES, ETC...
 - . C. 6 INCH SIDEWALK SHALL BE USED FOR ENTRANCES.
 - . D. SIDEWALK REPLACEMENT ON NORTH END OF LIMITS. CONTACT DESIGNER PRIOR TO THE START OF WORK.

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

DELAWARE DEPARTMENT OF TRANSPORTATION

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CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

LOCATION 4 DE15, WEST DUCK CREEK RD (K453) - (CLAYTON) FROM DE6, MILLINGTON RD (K39) TO CLAYTON AVE (K38)

LENGTH 652.272 m 2140 L.F. AADT 1124

GENERAL IMPROVEMENTS

2" MILLING, BIT. CONCRETE PATCHING AND 2" TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 4

401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	648.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	130.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	6.00 TON
406001	BITUMINOUS CONCRETE PATCHING	2,267.00 SY-IN
708045	LAWN INLET	1.00 EACH
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	4.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	4.00 EACH
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	56.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	179.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	27.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	160.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	7,480.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	320.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	3,740.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	34.00 EACH
750000	ADJUST WATER VALVE BOXES	1.00 EACH
760507	PROFILE MILLING, BITUMINOUS CONCRETE	110,667.00 SY-IN
762001	SAW CUTTING, BITUMINOUS CONCRETE	1,510.00 L.F.
908001	TOPSOIL (TON)	67.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	713.00 S.Y.

CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON AREA) 2016

LOCATION 4 DE15, WEST DUCK CREEK RD (K453) - (CLAYTON) FROM DE6, MILLINGTON RD (K39)
TO CLAYTON AVE (K38)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
2. DAYTIME ALLOWABLE LANE CLOSURES: 8:00A - 6:00P.
3. COORDINATION WITH THE NEARBY SCHOOL FOR CLASSES/ACTIVITIES AND PLANT OPERATIONS SHALL BE REQUIRED WHEN SUBMITTING THE CONSTRUCTION SCHEDULE.
4. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED IN ACCORDANCE WITH THE DE-MUTCD AT THE END OF EACH WORK DAY.
5. ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE DEPARTMENT OF TRANSPORTATION AND BE DELIVERED TO THE MAGNOLIA YARD, AREA 7. CONTACT AND NOTIFY THE YARD SUPERVISOR, DUWAYNE SHAFFER, PHONE NO. 760-2419, 1 WEEK PRIOR TO DELIVERY.

DISTANCE TO YARD: APPROX. 22 MILES.

6. EXISTING R.O.W FOR THIS LOCATION IS 40' AS PER ARCHIVE PLANS;
. A. SKR0437
7. DRAINAGE ISSUE AT THE INTERSECITON OF CLAYTON AVE, CONTACT DESIGNER PRIOR TO THE START OF WORK.

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 III, (KENTON & CLAYTON AREA) 2016

LOCATION 5 SUNNYSIDE RD (K90A) - (SMYRNA) FROM US13(K1) TO SMYRNA-LEIPSIC RD(K90)

LENGTH 188.976 m 620 L.F. AADT 1144

GENERAL IMPROVEMENTS

2" MILLING AND 2" TYPE C (64-22,C) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 5

302008	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	23.00 C.Y.
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	7.00 TON
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	180.00 TON
401822	BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING	8.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	15.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	1.00 TON
406001	BITUMINOUS CONCRETE PATCHING	836.00 SY-IN
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	14.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	8.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	80.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	12.00 HOUR
748019	TEMPORARY MARKINGS, PAINT, 4"	2,480.00 L.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	1,240.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	6.00 EACH
760507	PROFILE MILLING, BITUMINOUS CONCRETE	2,702.00 SY-IN
762001	SAW CUTTING, BITUMINOUS CONCRETE	280.00 L.F.
908001	TOPSOIL (TON)	19.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	207.00 S.Y.

LOCATION 5 SUNNYSIDE RD (K90A) - (SMYRNA) FROM US13(K1) TO SMYRNA-LEIPSIC RD(K90)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-10 (TRAVEL LANES).
. TYPICAL APPLICATION, TA-3 (SHOULDERS).
2. ALLOWABLE LANE CLOSURES: 7:00P - 6:00A.
3. ALL PAVEMENT VERTICAL DIFFERENCES MUST BE ADDRESSED IN ACCORDANCE WITH THE DE-MUTCD AT THE END OF EACH WORK DAY.
4. ALL MILLED MATERIAL SHALL REMAIN THE PROPERTY OF THE DEPARTMENT OF TRANSPORTATION AND BE DELIVERED TO THE MAGNOLIA YARD, AREA 7. CONTACT AND NOTIFY THE YARD SUPERVISOR, DUWAYNE SHAFFER, PHONE NO. 760-2419, 1 WEEK PRIOR TO DELIVERY.

DISTANCE TO YARD: APPROX. 20 MILES.

5. EXISTING R.O.W FOR THIS LOCATION IS 60' AS PER ARCHIVE PLANS;
. A. 65-020-13

6. EDGE OF PAVEMENT ADJACENT TO US13

. A. WIDEN BY 4'+/- EXISTING PAVEMENT EDGE BETWEEN THE RADI FROM US13 TO THE FIRST ENTRANCE FOR THE HOSPITAL.

. B. EXCAVATE 19 INCHES AND PLACE BACK 8" GABCP, 6" BCBCP, 3" HMBP AND THE FINAL 2" TYPE C OVERLAY. THIS WORK SHALL BE PAID UNDER ITEMS 406001, 302008, 401821, 401822 AND 401823 RESPECTIVELY. REFERENCE DETAIL.

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

DELAWARE DEPARTMENT OF TRANSPORTATION

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CENTRAL PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON
MAINTENANCE AREA) 2016

CONTRACT QUANTITIES SUMMARY SHEET

202000	EXCAVATION AND EMBANKMENT	32.00 C.Y.
211002	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (GUARDRAIL)	200.00 L.F.
302007	GRADED AGGREGATE BASE COURSE, TYPE B	79.00 C.Y.
302008	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	23.00 C.Y.
302011	DELAWARE NO. 3 STONE	60.00 TON
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	7.00 TON
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	2,449.00 TON
401822	BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING	8.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	616.00 TON
401827	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22 (NON-CARBONATE STONE)	521.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	21.00 TON
406001	BITUMINOUS CONCRETE PATCHING	8,650.00 SY-IN
701012	PORTLAND CEMENT CONCRETE CURB, TYPE 1-4	100.00 L.F.
701014	PORTLAND CEMENT CONCRETE CURB, TYPE 1-6	1,100.00 L.F.
705001	P.C.C. SIDEWALK, 4"	400.00 S.F.
705002	P.C.C. SIDEWALK, 6"	1,280.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	140.00 S.F.
705008	CURB RAMP, TYPE 1	1,500.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	420.00 S.F.
708045	LAWN INLET	1.00 EACH
708060	REPLACE DRAINAGE INLET GRATE(S)	2.00 EACH
708061	REPLACE DRAINAGE INLET FRAME(S)	2.00 EACH
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	20.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	16.00 EACH
713001	GEOTEXTILES, STABILIZATION	286.00 S.Y.
720585	GUARDRAIL END TREATMENT ATTENUATOR, TYPE 1-31	4.00 EACH
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	238.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	8.00 EA-DY

DELAWARE DEPARTMENT OF TRANSPORTATION

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CENTRAL PAVEMENT & REHABILITATION, KENT III, (KENTON & CLAYTON
MAINTENANCE AREA) 2016

CONTRACT QUANTITIES SUMMARY SHEET

743051	FLAGGER, KENT COUNTY, STATE	908.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	137.00 HOUR
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	360.00 L.F.
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	454.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	45,360.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	908.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	24,960.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	92.00 EACH
750000	ADJUST WATER VALVE BOXES	7.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	287.00 S.Y.
760507	PROFILE MILLING, BITUMINOUS CONCRETE	152,181.00 SY-IN
762001	SAW CUTTING, BITUMINOUS CONCRETE	6,018.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	265.00 L.F.
763000	INITIAL EXPENSE	LUMP SUM
763621	CONSTRUCTION ENGINEERING, REHABILITATION	32.00 HOUR
763643	MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP SUM
908001	TOPSOIL (TON)	280.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	2,861.00 S.Y.