

THE STATE OF DELAWARE



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

PAVEMENT & REHABILITATION-KENT IV (NORTH STATE ST & MLK BLVD), 2016

CONTRACT NUMBER - T201606204.01

PRIMAVERA ID - 16-06204

FUNDING - 100% STATE

CENTRAL DISTRICT MAINTENANCE

PLANS PREPARED BY: Paul Farkas
DESIGN TECHNICIAN

DATE RECOMMENDED: 3/3/2016

Bradford L. Salvo
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



DEPARTMENT OF TRANSPORTATION

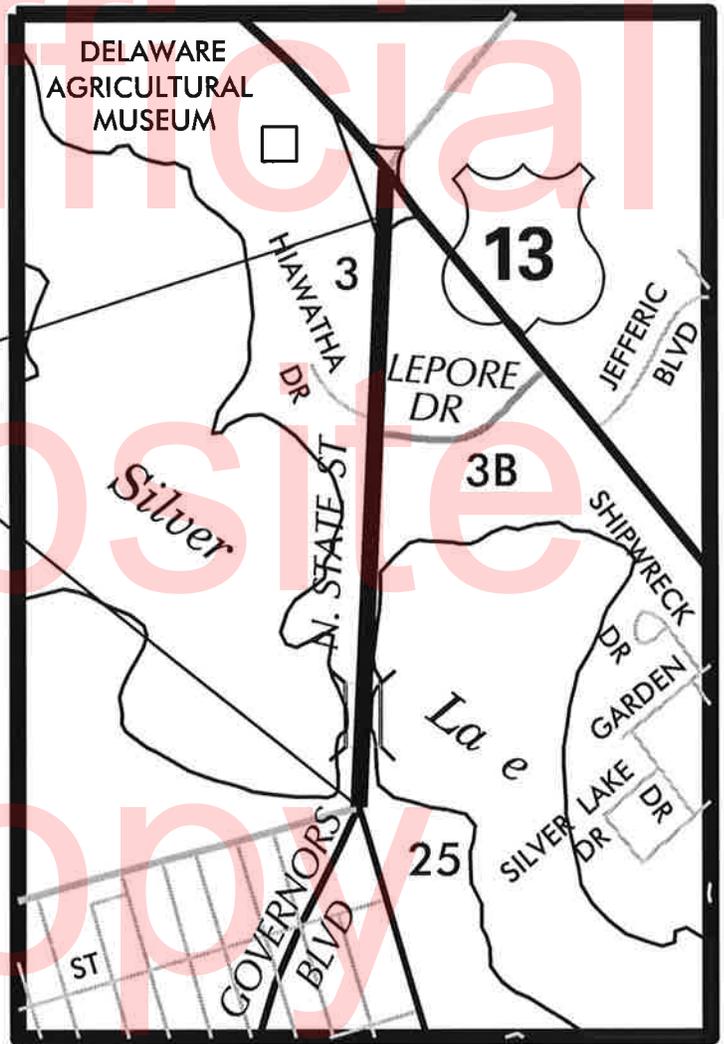
CONTRACT NUMBER- T201606204

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VARIOUS LOCATIONS

LOCATION MAP

Location 1
North State St. from
Walker Rd. to
US13, DuPont Hwy.

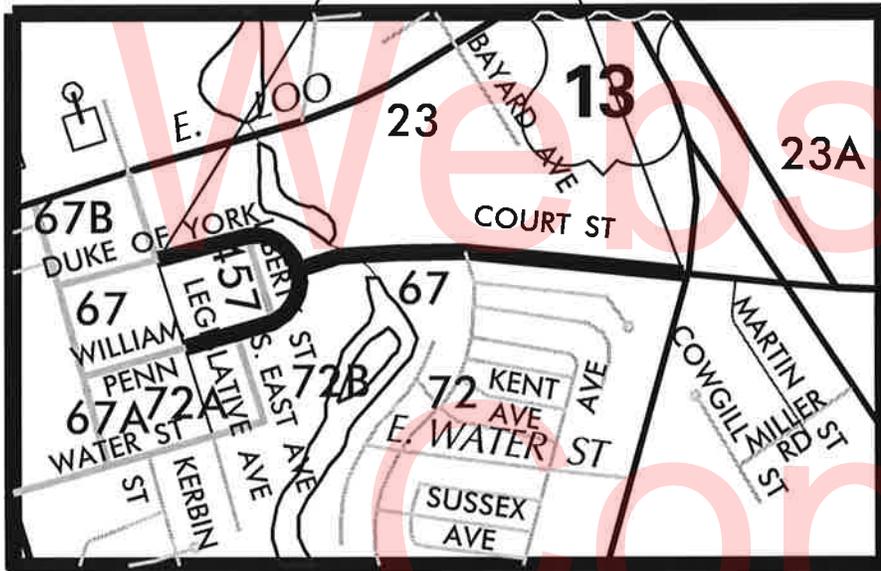


VARIOUS LOCATIONS

LOCATION MAP

Location 2

**Martin Luther King Blvd/Court St. from
US13, DuPont Hwy to Legislative Ave.**



PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK BLVD) 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 ENCLOSES 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 IV, (NORTH STATE ST & MLK BLVD) 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 IV, (NORTH STATE ST & MLK BLVD) 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 IV, (NORTH STATE ST & MLK BLVD) 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.

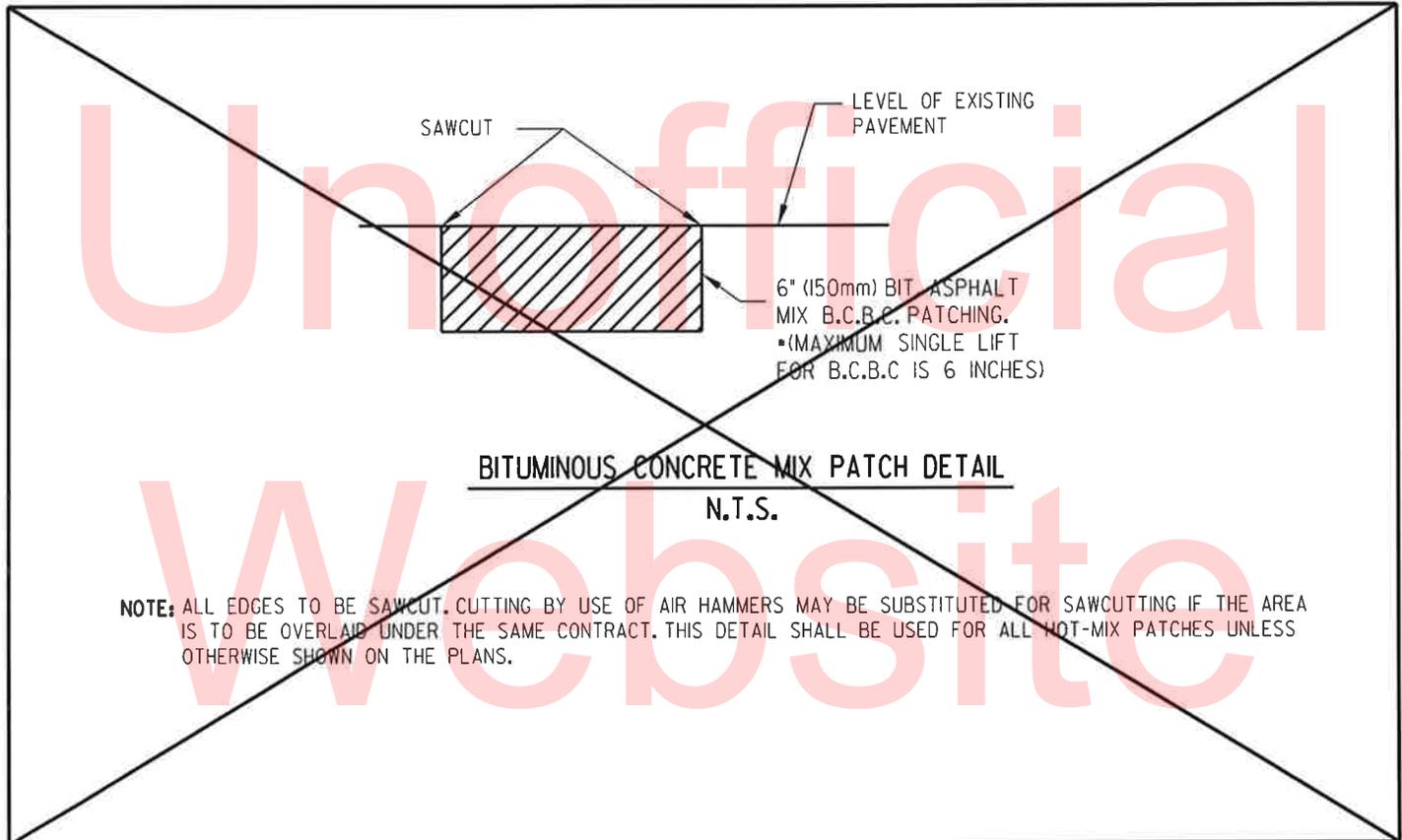
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CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET



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

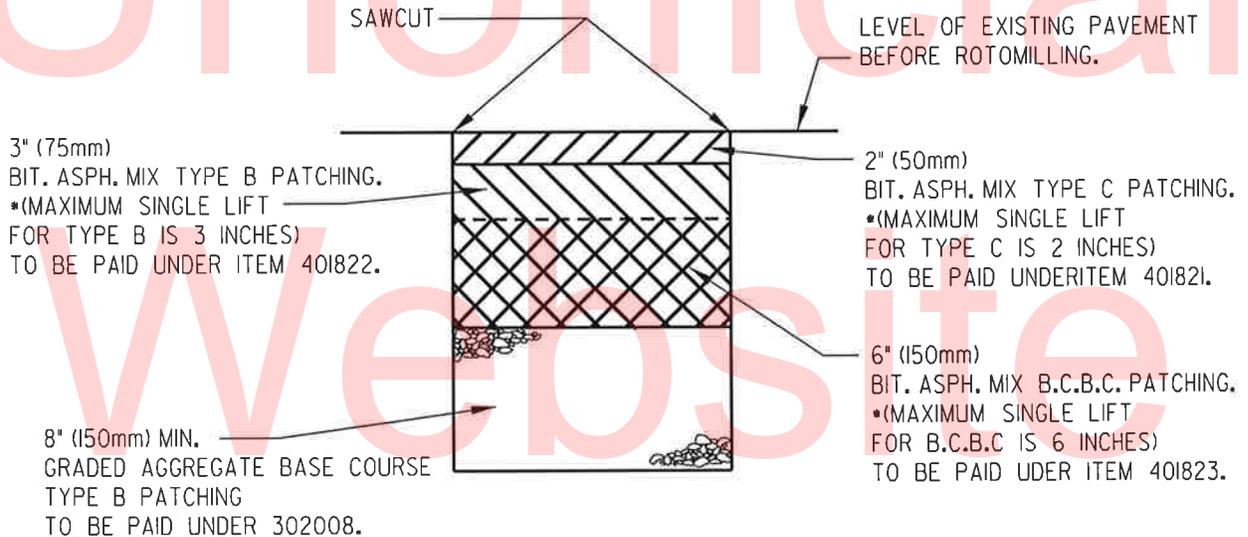
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CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET

Unofficial
Website

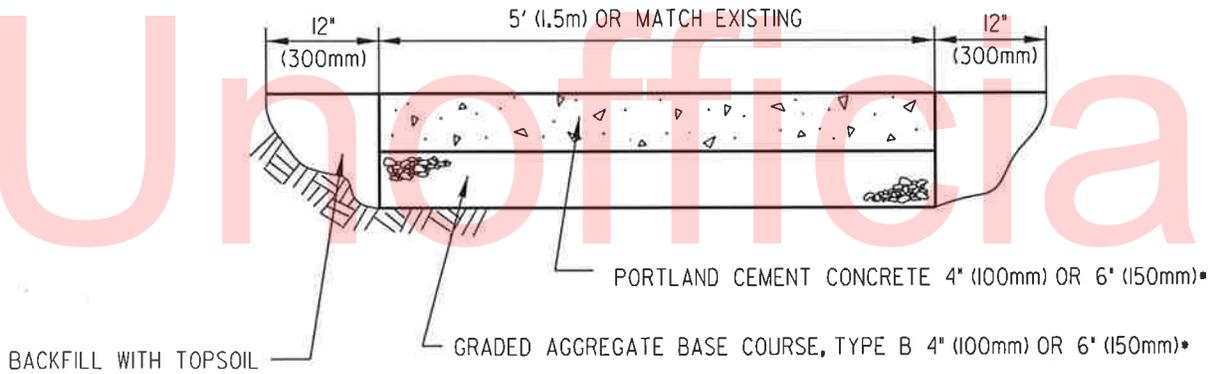


BIT. ASPHALT MIX PATCHING DETAIL
FOR NORTH STATE STREET

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.

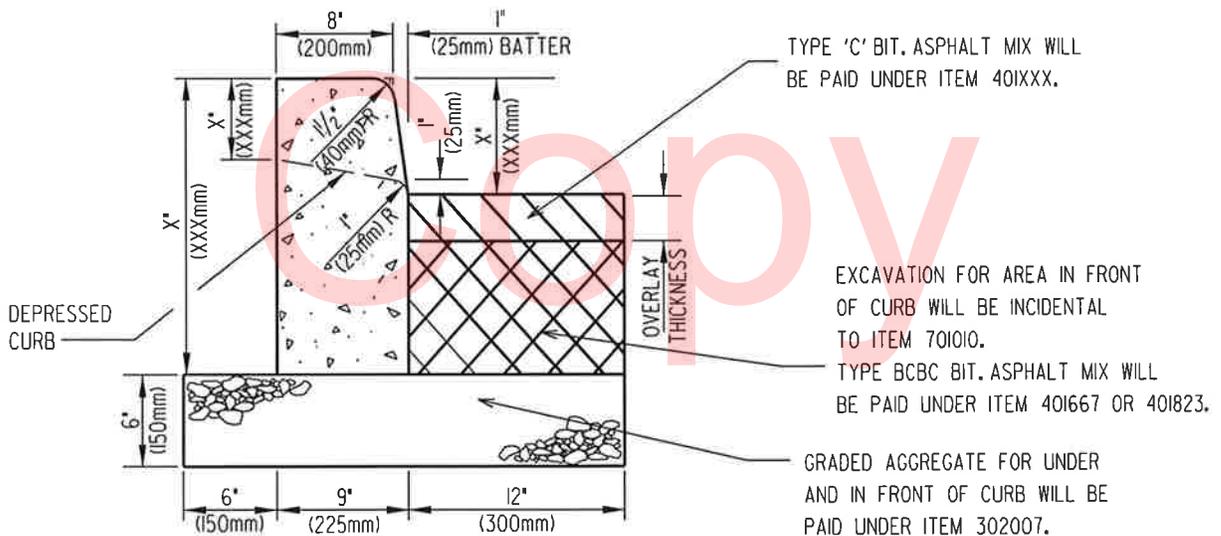
DETAILS SHEET



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.

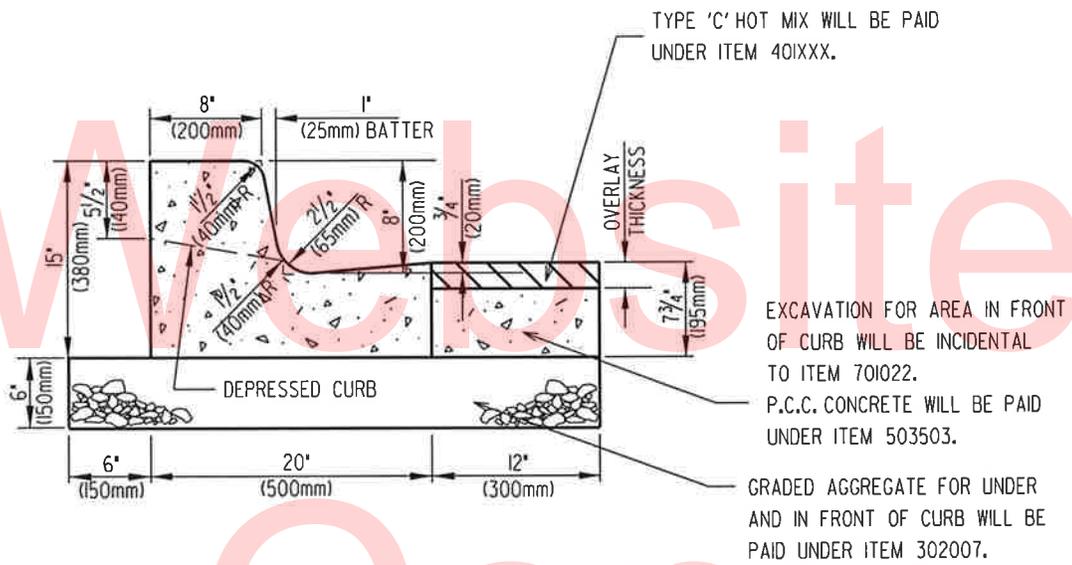
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CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET



INTEGRAL P.C.C. CURB & GUTTER TYPE 3-8

N.T.S.

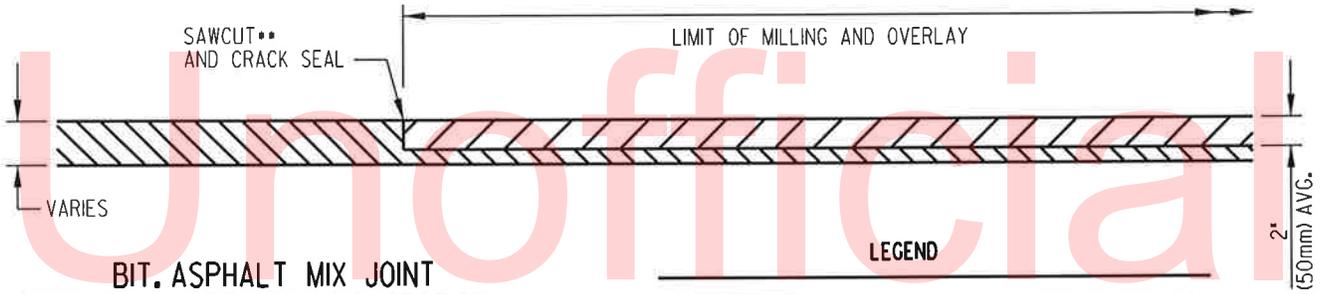
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CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET

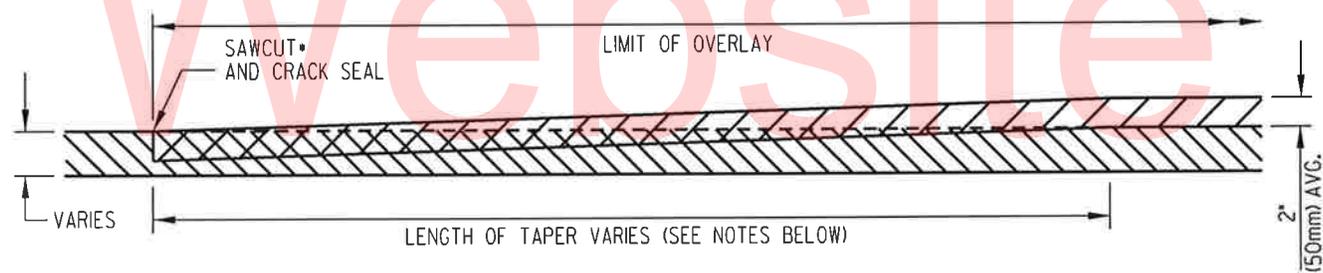


**BIT. ASPHALT MIX JOINT
FOR FULL WIDTH MILLING SECTION****

**SAWCUT SHALL BE PAID UNDER ITEM 762001.

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 761001.

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

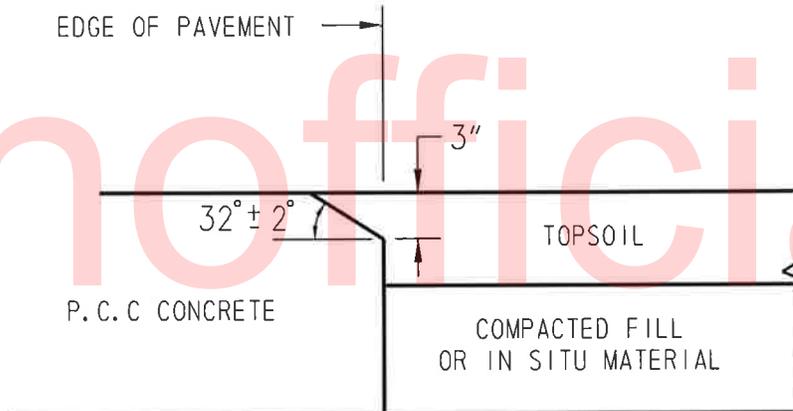
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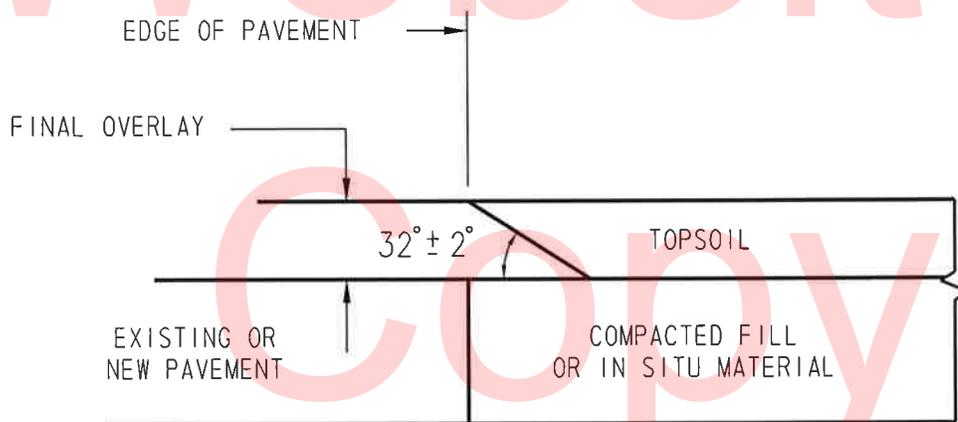
CENTRAL MAINTENANCE VARIOUS LOCATIONS

DETAILS SHEET



CONCRETE PAVEMENTS

NOT TO SCALE



BIT. ASPHALT MIX PAVEMENTS AND OVERLAYS

NOT TO SCALE

SAFETY EDGE DETAIL

NOT TO SCALE

CENTRAL
MAINTENANCE

PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK BLVD)
2016

LOCATION 1 NORTH STATE ST (K3) - (DOVER) FROM WALKER RD (K70) TO US13 (K2)

LENGTH 801.6240 m 2630.0000 L.F. AADT 13964

GENERAL IMPROVEMENTS

2" MILLING, BIT. CONCRETE PATCHING (CONCRETE), CURB & SIDEWALK REPLACEMENT AND 2" BIT. CONCRETE TYPE C (76-22,NC) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

212001	UNDERCUT EXCAVATION, PATCHING	2.00 C.Y.
302007	GRADED AGGREGATE BASE COURSE, TYPE B	128.00 C.Y.
302008	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	108.00 C.Y.
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	10.00 TON
401821	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING	64.00 TON
401822	BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING	84.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	210.00 TON
401833	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22, (NON-CARBONATE STONE)	1,774.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	16.00 TON
406002	BITUMINOUS CONCRETE PATCHING, CONCRETE	9,244.00 SY-IN
701010	PORTLAND CEMENT CONCRETE CURB, TYPE 1-8	129.00 L.F.
701014	PORTLAND CEMENT CONCRETE CURB, TYPE 1-6	370.00 L.F.
701022	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-8	38.00 L.F.
701023	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-6	173.00 L.F.
705001	P.C.C. SIDEWALK, 4"	3,506.00 S.F.
705002	P.C.C. SIDEWALK, 6"	2,419.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	168.00 S.F.
705008	CURB RAMP, TYPE 1	750.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	790.00 S.F.
705504	BRICK AND/OR BLOCK SIDEWALK	1,550.00 S.F.
708060	REPLACE DRAINAGE INLET GRATE(S)	1.00 EACH
708061	REPLACE DRAINAGE INLET FRAME(S)	1.00 EACH
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	13.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	5.00 EACH
743003	ARROWPANELS, TYPE C	24.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	98.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	96.00 EA-DY

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CENTRAL
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PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK BLVD)
2016

LOCATION 1 **NORTH STATE ST (K3) - (DOVER) FROM WALKER RD (K70) TO US13 (K2)**

LENGTH 801.624 m 2630 L.F. AADT 13964

GENERAL IMPROVEMENTS

2" MILLING, BIT. CONCRETE PATCHING (CONCRETE), CURB & SIDEWALK REPLACEMENT AND 2" BIT. CONCRETE TYPE C (76-22,NC) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

743007	** TRAFFIC OFFICERS	240.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	24.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	900.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	135.00 HOUR
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	4.00 EACH
744541	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 11	1.00 EACH
745602	FURNISH & INSTALL UP TO 4" SCHEDULE 80 HDPE CONDUIT (BORE)	485.00 L.F.
745604	FURNISH & INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	455.00 L.F.
745606	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (TRENCH)	110.00 L.F.
746847	POLE BASE, TYPE 3	2.00 EACH
746850	POLE BASE, TYPE 4A	10.00 EACH
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	2,955.00 L.F.
747516	CABINET BASE, TYPE P	1.00 EACH
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	1,435.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	26,720.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	2,870.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	13,360.00 L.F.
748554	PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, PEDESTRIAN SYMBOL	1.00 EACH
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	63.00 EACH
749689	INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" DEPTH	2.00 EACH
749690	INSTALLATION OR REMOVAL OF TRAFFIC SIGNS ON MULTIPLE SIGN POSTS	14.00 S.F.
750000	ADJUST WATER VALVE BOXES	3.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENTCONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	623.00 S.Y.
760507	PROFILE MILLING, BITUMINOUS CONCRETE	31,189.00 SY-IN
762001	SAW CUTTING, BITUMINOUS CONCRETE	2,554.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	1,037.00 L.F.

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PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK BLVD)
2016

LOCATION 1 NORTH STATE ST (K3) - (DOVER) FROM WALKER RD (K70) TO US13 (K2)

LENGTH 801.624 m 2630 L.F. AADT 13964

GENERAL IMPROVEMENTS

2" MILLING, BIT. CONCRETE PATCHING (CONCRETE), CURB & SIDEWALK REPLACEMENT AND 2"
BIT. CONCRETE TYPE C (76-22,NC) FULL WIDTH OVERLAY.

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 1

763621	CONSTRUCTION ENGINEERING, REHABILITATION	30.00 HOUR
908001	TOPSOIL (TON)	7.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	45.00 S.Y.

** DENOTES FIXED PRICE ITEM

LOCATION 1 NORTH STATE ST (K3) - (DOVER) FROM WALKER RD (K70) TO US13 (K2)

COMMENTS:

- 1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-33 (TRAVEL LANES).
 . TYPICAL APPLICATION, TA-36 (TRAVEL LANES).
 . TYPICAL APPLICATION, TA-3A (SHOULDERS).
 . TYPICAL APPLICATION, TA-28 (SIDEWALK).
- 2. NIGHTTIME ALLOWABLE LANE CLOSURES: 8:00P - 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. 10 MILES.

- 5. EXISTING TYPICAL R.O.W FOR THIS LOCATION IS 60' AS PER ARCHIVE PLANS;
 . A. 235 E. SKR1016
 . B. 155A F. 79-062-03
 . C. SKR970 G. 88-008-01
 . D. SKR4970
- 6. BIT. CONCRETE PATCH EXISTING OLD UTILITY TRENCH PATCH LOCATED IN SOUTHBOUND LANE STARTING HIAWATHA LANE HEADING NORTH FOR APPROX. 860' +/- LENGTH. REFERENCE ATTACHED DETAIL.
- 7. REPLACE P.C.C. CONCRETE ISLAND AT LEPURE DRIVE.
- 8. THE ATTACHED TRAFFIC SIGNAL DESIGN PLANS ARE PRELIMINARY AND ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE SUBJECT TO BE REVISED PRIOR TO ACTUAL CONSTRUCTION.

9. BUS STOP PADS

- . A. INSTALL TWO TYPE 2 BUS STOP PADS AT THE FOLLOWING LOCATIONS;
 . 1. APPROX. 100 FEET NORTH OF HIAWATHA LANE, SOUTHBOUND LANES. EXISTING SIGN.
 . 2. APPROX. 220 FEET NORTH OF LEPURE DRIVE. EXISTING SIGN.
- . B. THE BUS PADS SHALL BE PAID UNDER THE APPROPRIATE SIDEWALK AND ASSOCIATED ITEMS. EXISTING CURB MAY BE LEFT IN PLACE. REFERENCE THE STANDARD CONSTRUCTION DETAILS.

10. CURB AND SIDEWALK

- . A. REPLACE EXISTING CURB & SIDEWALK AT DOVER POOL LOCATION TO ADDRESS DRAINAGE ISSUE AT ENTRANCE. APPROX. 370' +/- . CONTACT THE DESIGNER PRIOR TO START OF WORK.

LOCATION 1 NORTH STATE ST (K3) - (DOVER) FROM WALKER RD (K70) TO US13 (K2)

. B. REPLACE DETERIORATED SIDEWALK AT SOUTHERN MOST ENTRANCE TO THE COUNTRY EATERY WITH 6" DEPTH SIDEWALK MATCH WIDTH IN KIND. A "TCE" AGREEMENT MUST BE OBTAINED BEFORE ANY WORK CAN BE STARTED. CONTACT THE DESIGNER PRIOR TO THE START OF WORK.

. C. REPLACE SIDEWALK AS DIRECTED BY THE FIELD ENGINEER TO CORRECT ADA DEFICIENCIES; SUCH AS VERTICAL DIFFERENCES, EXCESSIVE CROSS SLOPES, ETC...

11. BRICK PAVER SIDEWALK AT SILVER LAKE BRIDGE

. A. RECONSTRUCT EXISTING PAVER SIDEWALK ON BOTH SIDES TO BE PAID UNDER ITEM 705504 - BRICK AND/OR BLOCK SIDEWALK. THE PAVER BASE SHALL BE PAID UNDER ITEM 705001 - 4" SIDEWALK. REFERENCE STANDARD CONSTRUCTION DETAILS.

. B. THE EXISTING BRICK PAVERS SHALL BE CAREFULLY REMOVED, STORED AND REUSED IF APPLICABLE. NEW BRICK PAVERS SHALL MATCH THE SIZE AND COLOR OF THE EXISTING PAVER SIDEWALK.

. C. THE BRICK PAVERS SHALL BE INSTALLED IN A HERRINGBONE PATTERN TO MATCH EXISTING WITH TIGHT JOINTS.

. D. APPROX. TOTAL LENGTH IS 310 FEET. (155 FEET +/- FOR EACH SIDE).

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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PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK BLVD)
2016

LOCATION 2 **MARTIN LUTHER KING BLVD/COURT ST (K67) - (DOVER) FROM LEGISLATIVE AVE TO US13 (K7)**

LENGTH 1371.6 m 4500 L.F. AADT 6981

GENERAL IMPROVEMENTS

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

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 2

212001	UNDERCUT EXCAVATION, PATCHING	1.00 C.Y.
302007	GRADED AGGREGATE BASE COURSE, TYPE B	79.00 C.Y.
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	11.00 TON
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	2,167.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	19.00 TON
503001	PATCHING P.C.C. PAVEMENT, 6' TO 15', TYPE A	48.00 S.Y.
503006	DOWEL BARS	96.00 EACH
503503	** PATCHING CONCRETE	235.00 SY-IN
705001	P.C.C. SIDEWALK, 4"	6,000.00 S.F.
705002	P.C.C. SIDEWALK, 6"	330.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	70.00 S.F.
705008	CURB RAMP, TYPE 1	375.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	840.00 S.F.
705504	BRICK AND/OR BLOCK SIDEWALK	6,000.00 S.F.
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	39.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	2.00 EACH
743003	ARROW PANELS, TYPE C	20.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	28.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	80.00 EA-DY
743007	** TRAFFIC OFFICERS	200.00 HOUR
743051	FLAGGER, KENT COUNTY, STATE	600.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	90.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	943.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	28,170.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	1,886.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	14,085.00 L.F.
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	4.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	704.00 S.Y.

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PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK BLVD)
2016

LOCATION 2 **MARTIN LUTHER KING BLVD/COURT ST (K67) - (DOVER) FROM LEGISLATIVE AVE TO US13 (K7)**

LENGTH 1371.6 m 4500 L.F. AADT 6981

GENERAL IMPROVEMENTS

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

COMMENTS:

Please see attached sheets for comments

MATERIAL ESTIMATE FOR LOCATION 2

760507	PROFILE MILLING, BITUMINOUS CONCRETE	37,578.00 SY-IN
762001	SAW CUTTING, BITUMINOUS CONCRETE	705.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	180.00 L.F.
763621	CONSTRUCTION ENGINEERING, REHABILITATION	14.00 HOUR
908001	TOPSOIL (TON)	40.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	78.00 S.Y.

** DENOTES FIXED PRICE ITEM

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LOCATION 2 MARTIN LUTHER KING BLVD/COURT ST (K67) - (DOVER) FROM LEGISLATIVE AVE TO US13 (K7)

COMMENTS:

1. RECOMMENDED M.O.T. TYPICAL APPLICATION, TA-33 (TRAVEL LANES).
 . TYPICAL APPLICATION, TA-3A (SHOULDERS).
 . TYPICAL APPLICATION, TA-28 (SIDEWALK).
2. NIGHTTIME ALLOWABLE LANE CLOSURES: 8:00P - 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. 9 MILES.

5. EXISTING TYPICAL R.O.W FOR THIS LOCATION IS 200' AS PER ARCHIVE PLANS;
 . A. 1169
6. DO NOT MILL THRU PATTERNED CROSSWALKS.
7. CURB AND SIDEWALK

 . A. REPLACE SIDEWALK AS DIRECTED BY THE FIELD ENGINEER TO CORRECT ADA DEFICIENCIES; SUCH AS VERTICAL DIFFERENCES, EXCESSIVE CROSS SLOPES, ETC...

8. BRICK PAVER SIDEWALK

 . A. RECONSTRUCT EXISTING PAVER SIDEWALK TO BE PAID UNDER ITEM 705504 - BRICK AND/OR BLOCK SIDEWALK. THE PAVER BASE SHALL BE PAID UNDER ITEM 705001 - 4" SIDEWALK. REFERENCE STANDARD CONSTRUCTION DETAILS.
 . B. THE EXISTING BRICK PAVERS SHALL BE CAREFULLY REMOVED, STORED AND REUSED IF APPLICABLE. NEW BRICK PAVERS SHALL MATCH THE SIZE AND COLOR OF THE EXISTING PAVER SIDEWALK.
 . C. THE BRICK PAVERS SHALL BE INSTALLED IN A HERRINGBONE PATTERN TO MATCH EXISTING WITH TIGHT JOINTS.

9. BRICK PAVER SIDEWALK LIMITS

 . A. NORTH SIDE - STARTING FROM ENTRANCE TO GARDEN COURT APTS. TO NEW PAVERS AT CROSSWALK. CURB RAMP SHALL BE INCIDENTAL TO THE PAVER SIDEWALK. LENGTH IS APPROX. 590 FEET +/-, WIDTH WILL VARY.
 . B. SOUTH SIDE - STARTING AT NEW PAVERS AT CROSSWALK TO EXISTING JOINT APPROX. 50 FEET +/- PAST FIRE HYDRANT. LENGTH IS APPROX. 240 FEET +/-.

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PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK BLVD) 2016

LOCATION 2 MARTIN LUTHER KING BLVD/COURT ST (K67) - (DOVER) FROM LEGISLATIVE AVE
 TO US13 (K7)

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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PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK
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CONTRACT QUANTITIES SUMMARY SHEET

212001	UNDERCUT EXCAVATION, PATCHING	3.00 C.Y.
302007	GRADED AGGREGATE BASE COURSE, TYPE B	207.00 C.Y.
302008	GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING	108.00 C.Y.
401696	ENTRANCE, DRIVEWAY AND INTERSECTING STREET PAVING SURCHARGE	21.00 TON
401801	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS PG 64-22 (CARBONATE STONE)	2,167.00 TON
401821	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 64-22, PATCHING	64.00 TON
401822	BITUMINOUS CONCRETE, SUPERPAVE, TYPE B, 160 GYRATIONS, PG 64-22, PATCHING	84.00 TON
401823	BITUMINOUS CONCRETE, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	210.00 TON
401833	BITUMINOUS CONCRETE, SUPERPAVE, TYPE C, 160 GYRATIONS, PG 76-22, (NON-CARBONATE STONE)	1,774.00 TON
402000	BITUMINOUS CONCRETE AND/OR COLD-LAID BITUMINOUS CONCRETE (TRM)	35.00 TON
406002	BITUMINOUS CONCRETE PATCHING, CONCRETE	9,244.00 SY-IN
503001	PATCHING P.C.C. PAVEMENT, 6' TO 15', TYPE A	48.00 S.Y.
503006	DOWEL BARS	96.00 EACH
503503	** PATCHING CONCRETE	235.00 SY-IN
701010	PORTLAND CEMENT CONCRETE CURB, TYPE 1-8	129.00 L.F.
701014	PORTLAND CEMENT CONCRETE CURB, TYPE 1-6	370.00 L.F.
701022	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-8	38.00 L.F.
701023	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-6	173.00 L.F.
705001	P.C.C. SIDEWALK, 4"	9,506.00 S.F.
705002	P.C.C. SIDEWALK, 6"	2,749.00 S.F.
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	238.00 S.F.
705008	CURB RAMP, TYPE 1	1,125.00 S.F.
705009	CURB RAMP, TYPE 2, 3, AND/OR 4	1,630.00 S.F.
705504	BRICK AND/OR BLOCK SIDEWALK	7,550.00 S.F.
708060	REPLACE DRAINAGE INLET GRATE(S)	1.00 EACH
708061	REPLACE DRAINAGE INLET FRAME(S)	1.00 EACH
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	52.00 EACH
710002	ADJUSTING AND REPAIRING EXISTING MANHOLE	7.00 EACH

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PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK
BLVD) 2016

CONTRACT QUANTITIES SUMMARY SHEET

743003	ARROWPANELS, TYPE C	44.00 EA-DY
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	126.00 EA-DY
743005	FURNISH AND MAINTAIN PORTABLE LIGHT ASSEMBLY	176.00 EA-DY
743007	** TRAFFIC OFFICERS	440.00 HOUR
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	24.00 EA-DY
743051	FLAGGER, KENT COUNTY, STATE	1,500.00 HOUR
743063	FLAGGER, KENT COUNTY, STATE, OVERTIME	225.00 HOUR
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	4.00 EACH
744541	FURNISH & INSTALL FRAME AND LID FOR JUNCTION WELL, TYPE 11	1.00 EACH
745602	FURNISH & INSTALL UP TO 4" SCHEDULE 80 HDPE CONDUIT (BORE)	485.00 L.F.
745604	FURNISH & INSTALL UP TO 4" SCHEDULE 80 PVC CONDUIT (TRENCH)	455.00 L.F.
745606	FURNISH & INSTALL UP TO 4" GALVANIZED STEEL CONDUIT (TRENCH)	110.00 L.F.
746847	POLE BASE, TYPE 3	2.00 EACH
746850	POLE BASE, TYPE 4A	10.00 EACH
746924	FURNISH & INSTALL LOOP WIRE 1-CONDUCTOR #14 AWG ENCASED IN 1/4" FLEXIBLE TUBING IN A LOOP SAWCUT	2,955.00 L.F.
747516	CABINET BASE, TYPE P	1.00 EACH
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	2,378.00 S.F.
748019	TEMPORARY MARKINGS, PAINT, 4"	54,890.00 L.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	4,756.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	27,445.00 L.F.
748554	PREFORMED RETROREFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS, PEDESTRIAN SYMBOL	1.00 EACH
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST	67.00 EACH
749689	INSTALLATION OF 4" DIAMETER HOLE, GREATER THAN 6" DEPTH	2.00 EACH
749690	INSTALLATION OR REMOVAL OF TRAFFIC SIGNS ON MULTIPLE SIGN POSTS	14.00 S.F.
750000	ADJUST WATER VALVE BOXES	3.00 EACH
758000	REMOVAL OF EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, CURB, SIDEWALK, ETC.	1,327.00 S.Y.
760507	PROFILE MILLING, BITUMINOUS CONCRETE	68,767.00 SY-IN

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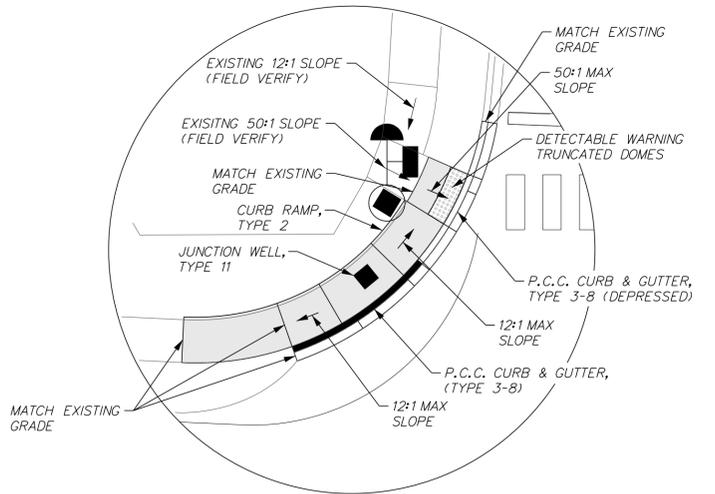
PAVEMENT & REHABILITATION, KENT IV, (NORTH STATE ST & MLK
BLVD) 2016

CONTRACT QUANTITIES SUMMARY SHEET

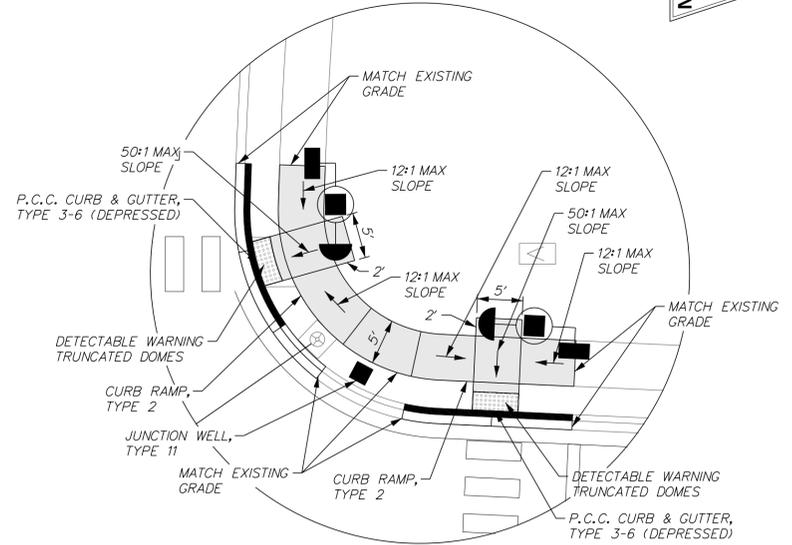
762001	SAW CUTTING, BITUMINOUS CONCRETE	3,259.00 L.F.
762002	SAW CUTTING, CONCRETE, FULL DEPTH	1,217.00 L.F.
763000	INITIAL EXPENSE	LUMP SUM
763621	CONSTRUCTION ENGINEERING, REHABILITATION	44.00 HOUR
763643	MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP SUM
908001	TOPSOIL (TON)	47.00 TON
908014	PERMANENT GRASS SEEDING, DRY GROUND	123.00 S.Y.

** DENOTES FIXED PRICE ITEM

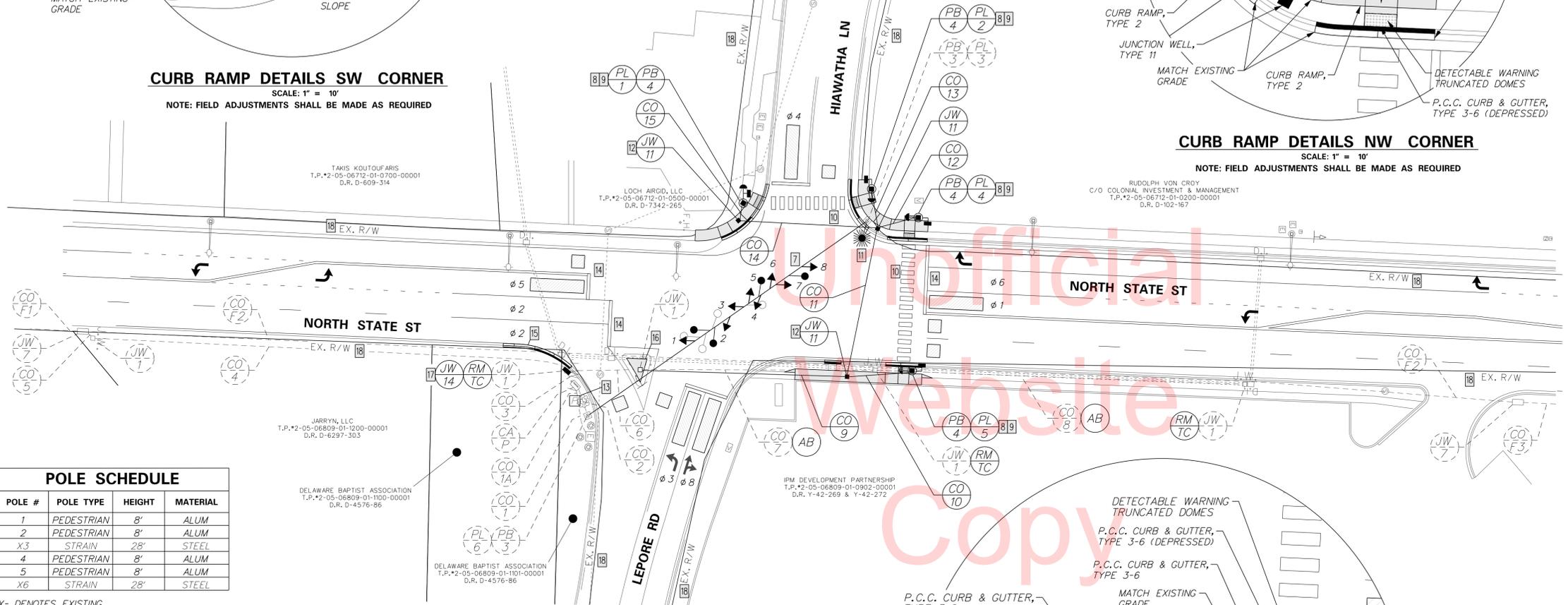
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CURB RAMP DETAILS SW CORNER
SCALE: 1" = 10'
NOTE: FIELD ADJUSTMENTS SHALL BE MADE AS REQUIRED

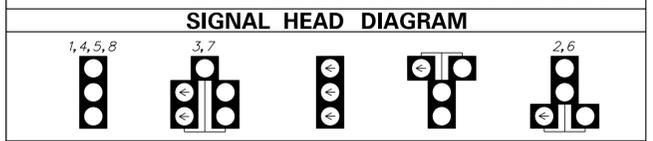
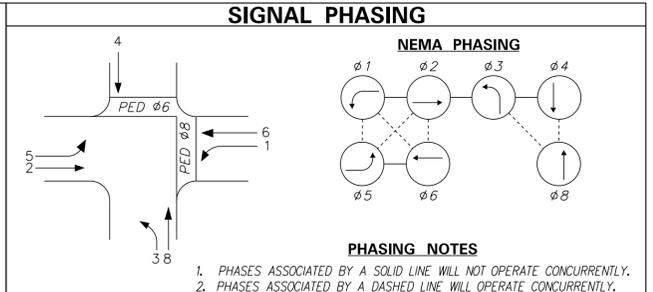


CURB RAMP DETAILS NW CORNER
SCALE: 1" = 10'
NOTE: FIELD ADJUSTMENTS SHALL BE MADE AS REQUIRED



ADDITIONAL SIGNAL NOTES

- 7 ALL EXISTING VEHICULAR SIGNAL COMPONENTS CALLED OUT FOR REMOVAL OR ABANDONMENT SHALL REMAIN INTACT AND FULLY FUNCTIONAL UNTIL ALL PROPOSED VEHICULAR SIGNAL COMPONENTS INSTALLATIONS ARE READY TO BE COMMISSIONED. CONTRACTOR SHALL ENSURE THAT SIGNAL DOWNTIME DURING DECOMMISSIONING OF THE EXISTING AND COMMISSIONING OF THE PROPOSED SIGNAL INSTALLATION IS MINIMAL.
- 8 ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE.
- 9 CONTRACTOR SHALL INSTALL COUNT-DOWN PEDESTRIAN SIGNS (R10-3E) WITH ARROWS ALIGNED ON EACH STATION BUTTON PER PLANNING DESIGN.
- 10 ALL CROSSWALKS SHALL BE 6 FEET IN WIDTH.
- 11 A FISH-EYE VIDEO DETECTOR WILL BE INSTALLED ON THE MAST ARM TO ACHIEVE OPTIMUM DETECTION PER MANUFACTURER'S SPECIFICATIONS. THE DESIRED DETECTION ZONES SHALL BE SET AND APPROVED BY DELDOT.
- 12 ALL JUNCTION WELLS INSTALLED IN SIDEWALK/ CURB RAMP SHALL BE INSTALLED FLUSH WITH SIDEWALK/ CURB RAMP FINISHED GRADES.
- 13 CONTRACTOR SHALL INSTALL NEW ELECTRICAL SERVICE PEDSTAL.
- 14 GENERAL CONTRACTOR SHALL INSTALL/REMOVE ALL PAVEMENT MARKINGS PER SIGNING AND STRIPING PLANS.
- 15 REPLACE SECTION OF P.C.C. CURB AND GUTTER, TYPE 3-6.
- 16 CONTRACTOR SHALL REPLACE ISLAND CONCRETE (6" THICK).
- 17 CONTRACTOR SHALL REMOVE EXISTING JUNCTION WELL AND REPLACE WITH PROPOSED JUNCTION WELL TYPE AS SHOWN. DURING THE REMOVAL AND REPLACEMENT PROCESS CARE SHALL BE TAKEN NOT TO DAMAGE ANY EXISTING CONDUITS AND/OR CABLES TO REMAIN.
- 18 RIGHT OF WAY SHOWN ON PLAN WAS ESTABLISHED FROM KENT COUNTY TAX PARCELS.



LEGEND

(AB) ABANDON	(OH) EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
(CA) EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	(OH) PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
(CA) PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	(PB) EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
(CO) EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	(PB) PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
(CO) PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	(PL) EXISTING POLE IDENTIFIER (* OF POLE)
(JW) EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	(PL) PROPOSED POLE IDENTIFIER (* OF POLE)
(JW) PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	(RM) REMOVE BY CONTRACTOR
(MA) EXISTING MAST ARM IDENTIFIER (* OF MAST ARM)	(RM) REMOVE BY OTHERS
(MA) PROPOSED MAST ARM IDENTIFIER (* OF MAST ARM)	(RM) REMOVE BY TRAFFIC CONTRACTOR

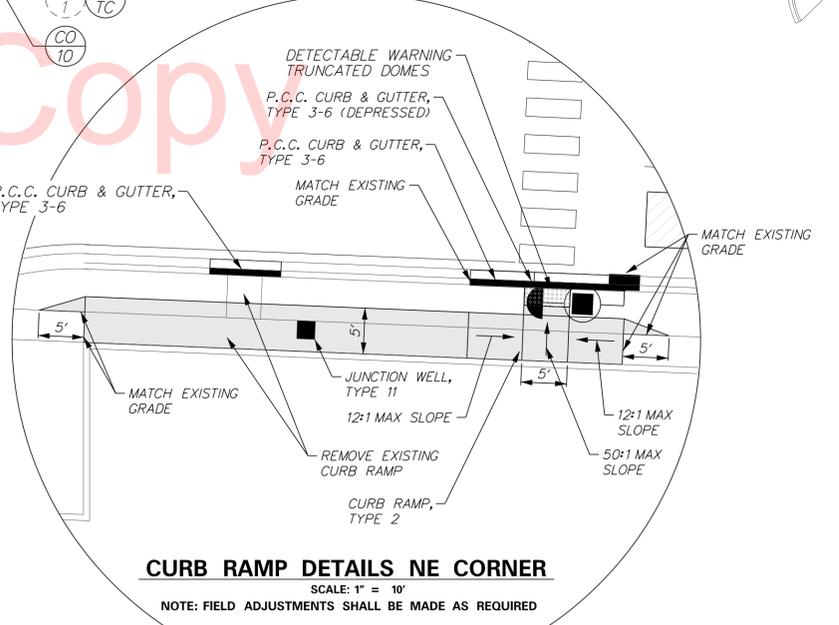
POLE SCHEDULE

POLE #	POLE TYPE	HEIGHT	MATERIAL
1	PEDESTRIAN	8'	ALUM
2	PEDESTRIAN	8'	ALUM
X3	STRAIN	28'	STEEL
4	PEDESTRIAN	8'	ALUM
5	PEDESTRIAN	8'	ALUM
X6	STRAIN	28'	STEEL

CONDUIT RUN SCHEDULE

CO#	# OF CONDUITS	SIZE	TYPE	LENGTH	B/T/O/P	AMOUNT AND TYPE OF CABLE/WIRE
X1	1	1.5"	-	15'	-	REMOVE (1)2/*8 U.F. W/GROUND NEW (1)2/*8 U.F. W/ GROUND
X1A	1	1.5"	-	5'	-	REMOVE (1)2/*8 U.F. W/GROUND NEW (1)2/*8 U.F. W/ GROUND
X2	1	2.5"	-	15'	-	REMOVE [(2)16/*14, (5)4/*18] NEW [(2)16/*14, (4)4/*18, (1) VIDEO DETECTION HOME RUN, (1)*6 BSC]
X3	1	2.5"	-	5'	-	EXISTING [(5)4/*18, (1)48 CNT SM] NEW [(4)5/*14, (1)*6 BSC]
X4	1	1.5"	-	225'	-	REMOVE (1)4/*18 EXISTING (1)48 CNT SM
X5	1	1.5"	-	5'	-	REMOVE (1)4/*18 EXISTING (1)48 CNT SM
X6	1	2.5"	-	35'	-	REMOVE (3)4/*18 NEW [(4)5/*14, (1)*6 BSC]
X7	1	1.5"	-	110'	-	REMOVE (2)4/*18
X8	1	1.5"	-	170'	-	REMOVE (1)4/*18
9	1	4"	HPDE	95'	B	NEW [(4)5/*14, (1)*6 BSC]
10	1	2.5"	PVC	30'	T	NEW [(1)5/*14, (1)*6 BSC]
11	1	4"	HDPE	70'	B	NEW [(3)5/*14, (1)*6 BSC]
12	1	2.5"	PVC	20'	T	NEW [(1)5/*14, (1)*6 BSC]
13	1	2.5"	PVC	20'	T	NEW [(1)5/*14, (1)*6 BSC]
14	1	4"	HDPE	65'	B	NEW [(1)5/*14, (1)*6 BSC]
15	1	2.5"	PVC	10'	T	NEW [(1)5/*14, (1)*6 BSC]
XF1	1	4"	-	860'	-	EXISTING [(1)144 CNT SM, (2)96 CNT SM, (3)48 CNT SM]
XF2	1	4"	-	660'	-	EXISTING [(1)144 CNT SM, (2)96 CNT SM, (3)48 CNT SM]
XF3	1	4"	-	360'	-	EXISTING [(1)144 CNT SM, (2)96 CNT SM, (3)48 CNT SM]

LEGEND
X- DENOTES EXISTING
BSC- BARE STRANDED COPPER
MW- MICROWAVE
B- BORE
T- TRENCH
O- OPEN CUT
P- ATTACH TO POLE
A- AERIAL



CURB RAMP DETAILS NE CORNER
SCALE: 1" = 10'
NOTE: FIELD ADJUSTMENTS SHALL BE MADE AS REQUIRED

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: _____

RECOMMENDED _____ DATE: _____

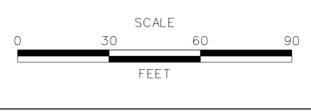
APPROVED TRAFFIC ENGINEER _____ DATE: _____

APPROVED FOR INSTALLATION CHIEF TRAFFIC ENGINEER _____ DATE: _____



ADDENDUM / REVISIONS

NO.	DESCRIPTION



PAVEMENT & REHABILITATION
KENT IV, FY-2016

CONTRACT	T201606204.01
PERMIT NO.	K182
DESIGNED BY:	MJP (CEI)
CHECKED BY:	BAM (CEI)

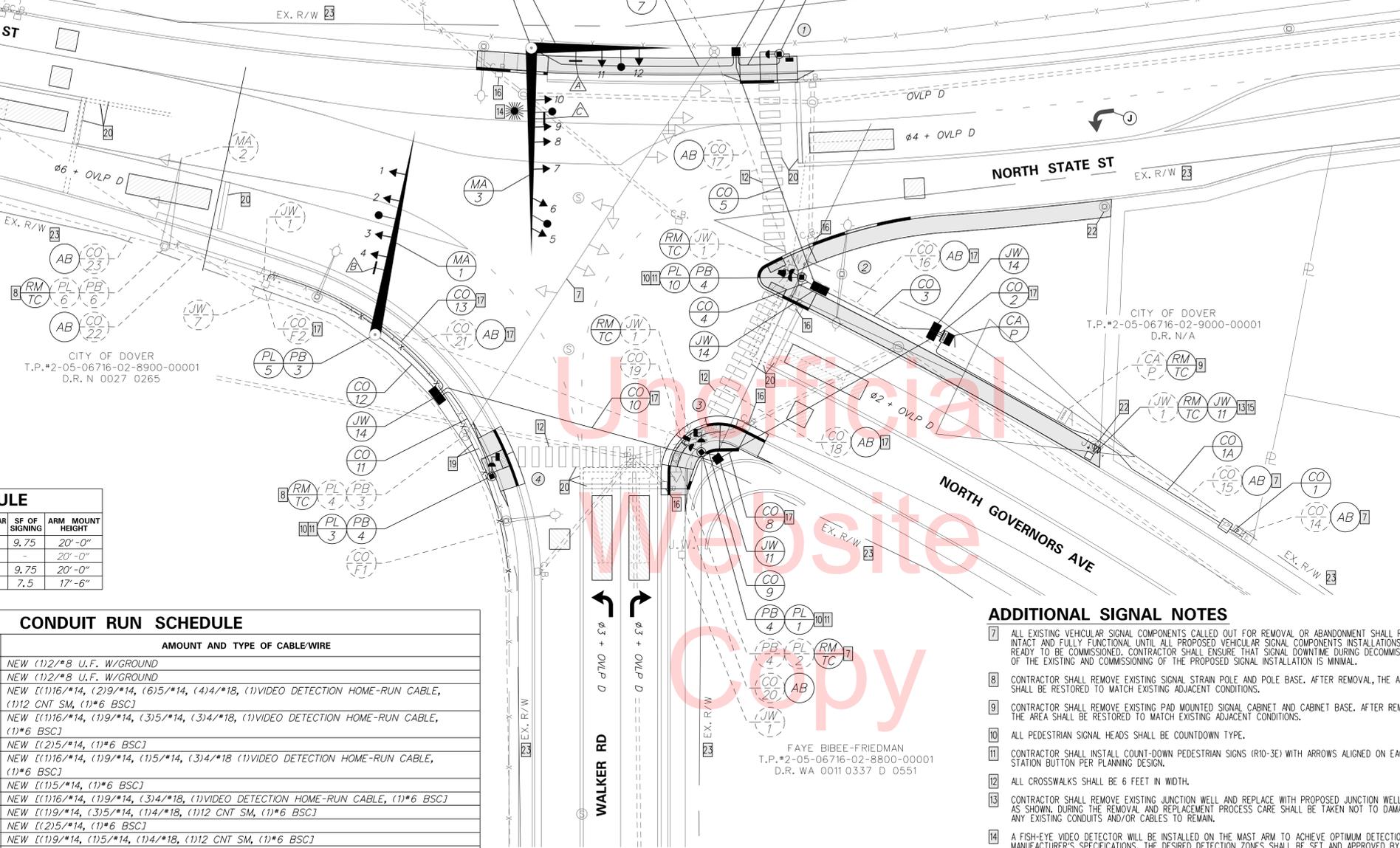
SIGNAL PLAN N STATE ST & LEPORE RD / HIAWATHA LN	SHEET NO. 1
TOTAL SHTS. 1	

4/12/2016 11:50:05 AM TRAFFIC - 1740 - N15015.05 PAR Kent IV CAD FILES\Sheets\Signal\sig_K182 State St and Lepore-Hiawatha.dgn 2:52:08 PM

PROPOSED OVERHEAD SIGNING



LAKEVIEW CEMETERY
T.P. #2-05-06813-01-0200-00001
D.R. N 0027 0265



POLE SCHEDULE

POLE #	POLE TYPE	HEIGHT	MATERIAL
1	PEDESTRAIN	8'	ALUM
X2	PEDESTRAIN	12'	ALUM
3	PEDESTRAIN	8'	ALUM
X4	STRAIN	28'	STEEL
5	MAST	21'	STEEL
X6	PEDESTRAIN	14'	ALUM
7	MAST	21'	STEEL
X8	STRAIN	25'	STEEL
9	PEDESTRAIN	8'	ALUM
10	PEDESTRAIN	8'	ALUM

MAST ARM SCHEDULE

MA#	LENGTH OF ARM	# OF SIGNAL HEADS	# OF OPTICOM RECEIVERS	# OF VEHICULAR DETECTORS	SF OF SIGNING	ARM MOUNT HEIGHT
1	60'	4	-	-	9.75	20'-0"
X2	25'	2	-	-	-	20'-0"
3	60'	6	2	1	9.75	20'-0"
4	40'	2	1	-	7.5	17'-6"

CONDUIT RUN SCHEDULE

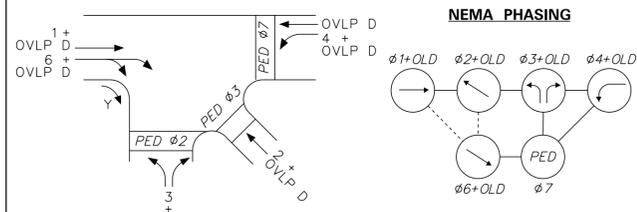
CO#	# OF CONDUITS	SIZE	TYPE	LENGTH	B/T/O/P	AMOUNT AND TYPE OF CABLE/WIRE
1	1	2.5"	GALV	5'	T	NEW (1)2/*8 U.F. W/GROUND
1A	1	2.5"	GALV	105'	T	NEW (1)2/*8 U.F. W/GROUND
2	3	4"	PVC	5'	T	NEW (1)16/*14, (2)9/*14, (6)5/*14, (4)4/*18, (1)VIDEO DETECTION HOME-RUN CABLE, (1)12 CNT SM, (1)*6 BSC
3	1	4"	PVC	35'	T	NEW (1)16/*14, (1)9/*14, (3)5/*14, (3)4/*18, (1)VIDEO DETECTION HOME-RUN CABLE, (1)*6 BSC
4	1	2.5"	PVC	5'	T	NEW (1)25/*14, (1)*6 BSC
5	1	4"	HDPE	70'	B	NEW (1)16/*14, (1)9/*14, (1)5/*14, (3)4/*18 (1)VIDEO DETECTION HOME-RUN CABLE, (1)*6 BSC
6	1	2.5"	PVC	20'	T	NEW (1)15/*14, (1)*6 BSC
7	1	4"	PVC	65'	T	NEW (1)16/*14, (1)9/*14, (3)4/*18, (1)VIDEO DETECTION HOME-RUN CABLE, (1)*6 BSC
8	1	4"	HDPE	75'	B	NEW (1)19/*14, (3)5/*14, (1)4/*18, (1)12 CNT SM, (1)*6 BSC
9	1	2.5"	PVC	5'	T	NEW (1)25/*14, (1)*6 BSC
10	1	4"	HDPE	85'	B	NEW (1)19/*14, (1)5/*14, (1)4/*18, (1)12 CNT SM, (1)*6 BSC
11	1	2.5"	PVC	30'	T	NEW (1)15/*14, (1)*6 BSC
12	1	2.5"	PVC	25'	T	NEW (1)19/*14, (1)4/*18, (1)*6 BSC
13	1	4"	PVC	65'	T	NEW (1)12 CNT SM, (1)*6 BSC
X14	1	2"	-	3'	-	REMOVE (1)2/*8 U.F. W/GROUND
X15	1	1.5"	-	59'	-	REMOVE (1)2/*8 U.F. W/GROUND
X16	1	2.5"	-	89'	-	REMOVE (1)16/*14, (3)9/*14, (8)4/*18, (1)48 CNT SM
X17	1	2.5"	-	68'	-	REMOVE (1)16/*14, (1)9/*14, (4)4/*18
X18	1	2.5"	-	59'	-	REMOVE (2)9/*14, (2)4/*18, (1)48 CNT SM
X19	1	1.5"	-	7'	-	REMOVE (1)9/*14
X20	1	1.5"	-	48'	-	REMOVE (1)9/*14
X21	1	1.5"	-	80'	-	REMOVE (1)9/*14, (1)4/*18, (1)48 CNT SM
X22	1	1.5"	-	30'	-	REMOVE (1)9/*14, (1)4/*18
X23	1	1.5"	-	135'	-	REMOVE (1)4/*18
XF1	1	4"	-	356'	-	EXISTING (1)144 CNT SM, (2)96 CNT SM, (3)48 CNT SM
XF2	1	2"	-	5'	-	REMOVE (1)48 CNT SM NEW (1)12 CNT SM, (1)*6 BSC
XF3	1	4"	-	205'	-	EXISTING (1)144 CNT SM, (2)96 CNT SM, (3)48 CNT SM

LEGEND
 X- DENOTES EXISTING, TO BE REMOVED
 B- BORE
 T- TRENCH
 O- OPEN CUT
 P- ATTACH TO POLE
 A- AERIAL
 BSC- BARE STRANDED COPPER
 MW- MICROWAVE

ADDITIONAL SIGNAL NOTES

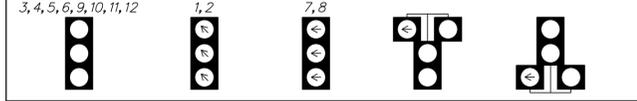
- ALL EXISTING VEHICULAR SIGNAL COMPONENTS CALLED OUT FOR REMOVAL OR ABANDONMENT SHALL REMAIN INTACT AND FULLY FUNCTIONAL UNTIL ALL PROPOSED VEHICULAR SIGNAL COMPONENTS INSTALLATIONS ARE READY TO BE COMMISSIONED. CONTRACTOR SHALL ENSURE THAT SIGNAL DOWNTIME DURING DECOMMISSIONING OF THE EXISTING AND COMMISSIONING OF THE PROPOSED SIGNAL INSTALLATION IS MINIMAL.
- CONTRACTOR SHALL REMOVE EXISTING SIGNAL STRAIN POLE AND POLE BASE. AFTER REMOVAL, THE AREA SHALL BE RESTORED TO MATCH EXISTING ADJACENT CONDITIONS.
- CONTRACTOR SHALL REMOVE EXISTING PAD MOUNTED SIGNAL CABINET AND CABINET BASE. AFTER REMOVAL, THE AREA SHALL BE RESTORED TO MATCH EXISTING ADJACENT CONDITIONS.
- ALL PEDESTRIAN SIGNAL HEADS SHALL BE COUNTDOWN TYPE.
- CONTRACTOR SHALL INSTALL COUNT-DOWN PEDESTRIAN SIGNS (R10-3E) WITH ARROWS ALIGNED ON EACH STATION BUTTON PER PLANNING DESIGN.
- ALL CROSSWALKS SHALL BE 6 FEET IN WIDTH.
- CONTRACTOR SHALL REMOVE EXISTING JUNCTION WELL AND REPLACE WITH PROPOSED JUNCTION WELL TYPE AS SHOWN. DURING THE REMOVAL AND REPLACEMENT PROCESS CARE SHALL BE TAKEN NOT TO DAMAGE ANY EXISTING CONDUITS AND/OR CABLES TO REMAIN.
- A FISH-EYE VIDEO DETECTOR WILL BE INSTALLED ON THE MAST ARM TO ACHIEVE OPTIMUM DETECTION PER MANUFACTURER'S SPECIFICATIONS. THE DESIRED DETECTION ZONES SHALL BE SET AND APPROVED BY DELDOT.
- ALL JUNCTION WELLS INSTALLED IN SIDEWALK/ CURB RAMP SHALL BE INSTALLED FLUSH WITH SIDEWALK/CURB RAMP FINISHED GRADES.
- CONTRACTOR SHALL RE-CONSTRUCT DRAINAGE INLET CURB TO MATCH PROPOSED CURB RAMP GRADE. THE CURB OPENING SHALL CLOSED SIMILAR TO A DELDOT DRAINAGE INLET TOP - TYPE C.
- THE EXISTING (1)48 CNT SM FIBER LINE SHALL BE REMOVED FROM THE CONDUITS CO-16, 18 & 21. A NEW (1)12 CNT SM FIBER LINE WILL BE RUN THRU PROPOSED CONDUITS CO-2, 8, 10 & 13 AFTER INSTALLATION OF PROPOSED CONDUIT AND SIGNAL CABINET.
- CONTRACTOR SHALL REFER TO PEDESTRIAN MOT PLAN FOR MAINTENANCE OF PEDESTRIAN ACCESS AT ALL TIMES.
- PORTION OF EXISTING FENCE SHALL BE RELOCATED AS NECESSARY TO ACCOMMODATE PROPOSED CURB RAMP AND PEDESTRIAN POLE.
- STOP LINE INSTALLATION, PAVEMENT MARKING REMOVAL AND CROSSWALKS SHOWN ARE INCLUDED IN PAVEMENT AND REHABILITATION PORTION OF THE PROJECT.
- GENERAL CONTRACTOR SHALL INSTALL/REMOVE ALL PAVEMENT MARKINGS PER SIGNING AND STRIPING PLANS.
- GENERAL CONTRACTOR TO RELOCATE EXISTING LIGHT POLE ADJACENT TO PROPOSED SIDEWALK.
- RIGHT OF WAY SHOWN ON PLAN WAS ESTABLISHED FROM KENT COUNTY TAX PARCELS.

SIGNAL PHASING



PHASING NOTES
 1. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
 2. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.

SIGNAL HEAD DIAGRAM



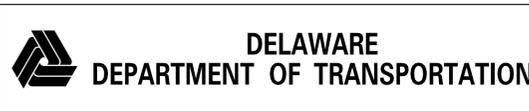
LEGEND

EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.
LOOP DETECTOR, TYPE 1	[Symbol]
LOOP DETECTOR, TYPE 2	[Symbol]
LUMINAIRE	[Symbol]
MAST ARM	[Symbol]
MICROWAVE DETECTION	[Symbol]
OPTICOM RECEIVER	[Symbol]
OVERHEAD SIGNING	[Symbol]
PEDESTRIAN SIGNAL/BASE	[Symbol]
PEDESTRIAN PUSHBUTTON	[Symbol]
PEDESTRIAN SIGNAL HEAD	[Symbol]
RIGHT-OF-WAY	[Symbol]
SERVICE PEDESTAL	[Symbol]
SIGNAL CABINET	[Symbol]
SIGNAL HEAD	[Symbol]
SIGNAL POLE/BASE	[Symbol]
SPAN INSULATOR	[Symbol]
SPAN WIRE	[Symbol]
UTILITY POLE	[Symbol]
VIDEO DETECTION	[Symbol]

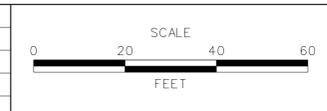
GENERAL SIGNAL NOTES

- ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC-DOVER, DELAWARE.
- POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS ARE TO BE REMOVED IN ACCORDANCE WITH SECTION 201, 202, AND 746 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
- POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHALL BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (50:1 OR FLATTER) LANDING AREA OF THE CURB RAMP. THESE POLE BASES SHALL BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 42 TO 48 INCHES ABOVE THE LANDING AREA AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE DOES NOT EXCEED TO INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE.
- ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET, BOLTED AND COMPRESSION FITTINGS ARE NOT ACCEPTABLE.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY ENTITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT IMMEDIATELY BEFORE CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH TRAFFIC SIGNAL MAINTENANCE FOR THE IDENTIFICATION AND REMOVAL OF ALL UNUSED AND REDUNDANT COPPER CABLE.

RECOMMENDED _____ DATE: _____ APPROVED FOR INSTALLATION _____ DATE: _____
 RECOMMENDED _____ DATE: _____ CHIEF TRAFFIC ENGINEER _____ DATE: _____
 RECOMMENDED _____ DATE: _____ APPROVED TRAFFIC ENGINEER _____ DATE: _____



ADDENDUM / REVISIONS

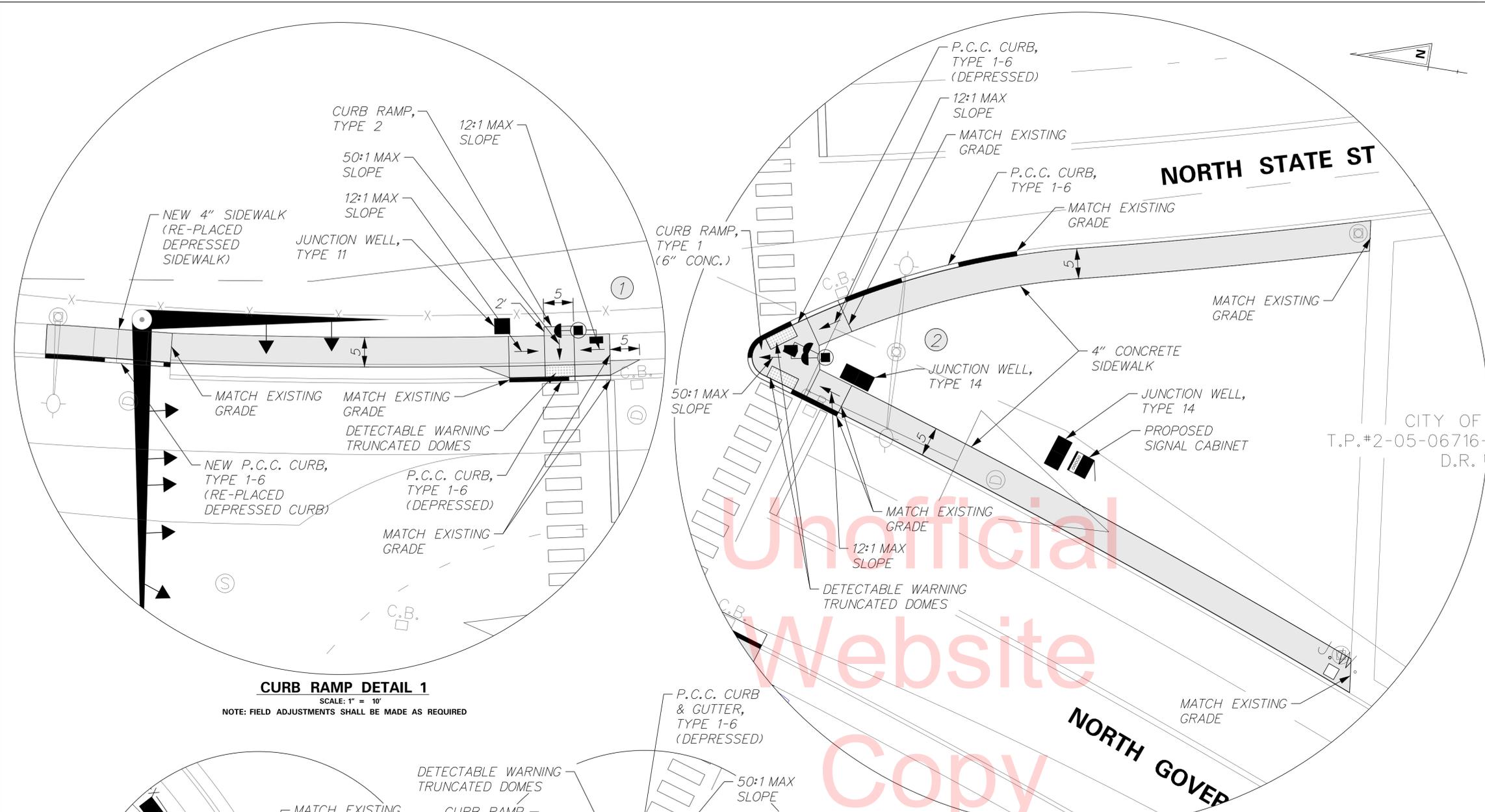


**PAVEMENT & REHABILITATION
KENT IV, FY-2016**

CONTRACT	T201606204.01
PERMIT NO.	K014P
DESIGNED BY:	MJP (CEI)
COUNTY	KENT
CHECKED BY:	BAM (CEI)

SIGNAL PLAN N STATE ST, N GOVERNORS AVE & WALKER RD	
SHEET NO.	1
TOTAL SHTS.	2

4/12/2016 11:50:05 AM TRAFFIC - 1740 - I:\150505.05-P&R Kent IV\CADD FILES\Sheets\Signals\K014P State St and Governors Ave.dgn



SIGNAL PHASING

SIGNAL HEAD DIAGRAM

LEGEND

(AB)	ABANDON	(OH)	EXISTING OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
(CA)	EXISTING CABINET IDENTIFIER (TYPE OF CABINET)	(OH)	PROPOSED OVERHEAD RUN IDENTIFIER (* OF OVERHEAD RUN)
(CA)	PROPOSED CABINET IDENTIFIER (TYPE OF CABINET)	(PB)	EXISTING POLE BASE IDENTIFIER (TYPE OF POLE BASE)
(CO)	EXISTING CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	(PB)	PROPOSED POLE BASE IDENTIFIER (TYPE OF POLE BASE)
(CO)	PROPOSED CONDUIT RUN IDENTIFIER (* OF CONDUIT RUN)	(PE)	EXISTING POLE IDENTIFIER (* OF POLE)
(JW)	EXISTING JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	(PL)	PROPOSED POLE IDENTIFIER (* OF POLE)
(JW)	PROPOSED JUNCTION WELL IDENTIFIER (TYPE OF JUNCTION WELL)	(RM)	REMOVE BY CONTRACTOR
(MA)	EXISTING MAST ARM IDENTIFIER (* OF MAST ARM)	(RM)	REMOVE BY OTHERS
(MA)	PROPOSED MAST ARM IDENTIFIER (* OF MAST ARM)	(RM)	REMOVE BY TRAFFIC CONTRACTOR

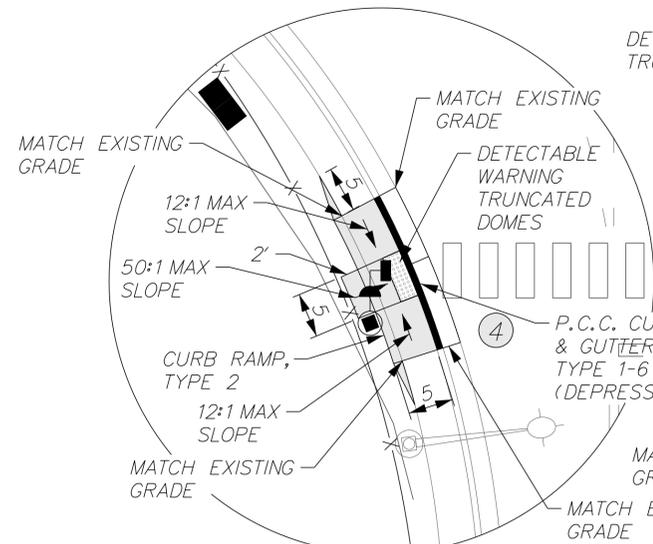
	EXISTING SYMBOL	PROPOSED SYMBOL
JUNCTION WELL	J.W.	■
LOOP DETECTOR, TYPE 1	□	□
LOOP DETECTOR, TYPE 2	□	□
LUMINAIRE	⊙	⊙
MAST ARM	⊙	⊙
MICROWAVE DETECTION	⊙	⊙
OPTICOM RECEIVER	⊙	⊙
OVERHEAD SIGNING	⊙	⊙
PEDESTRIAN POLE/BASE	⊙	⊙
PEDESTRIAN PUSHBUTTON	⊙	⊙
PEDESTRIAN SIGNAL HEAD	⊙	⊙
RIGHT-OF-WAY	---	--- R/W ---
SERVICE PEDESTAL	⊙	⊙
SIGNAL CABINET	⊙	⊙
SIGNAL HEAD	⊙	⊙
SIGNAL POLE/BASE	⊙	⊙
SPAN INSULATOR	◇	◇
SPAN WIRE	--- XX ---	--- XX ---
UTILITY POLE	⊙	⊙
VIDEO DETECTION	⊙	⊙

GENERAL SIGNAL NOTES

- ALL SIGNAL EQUIPMENT REMOVED FROM A PROJECT IS TO BE RETURNED TO DELDOT TRAFFIC-DOVER, DELAWARE.
- POLE BASES, CABINET BASE AND CONDUIT JUNCTION WELLS ARE TO BE REMOVED IN ACCORDANCE WITH SECTION 201, 202, AND 746 OF THE STANDARD SPECIFICATIONS OR AS DIRECTED BY ENGINEER. EXISTING CONDUIT IS TO BE ABANDONED.
- POLE BASES SUPPORTING POLES WITH PEDESTRIAN PUSHBUTTONS SHALL BE CONSTRUCTED IMMEDIATELY ADJACENT TO THE FLAT (OR FLATTER) LANDING AREA OF THE CURB RAMP. THESE POLE BASES SHALL BE FLUSH WITH THE ADJOINING LANDING AREA. THE PEDESTRIAN PUSHBUTTON SHOULD BE INSTALLED AT A HEIGHT OF 42 TO 48 INCHES ABOVE THE LANDING AREA AND SHALL BE LOCATED SUCH THAT THE MAXIMUM REACH DISTANCE DOES NOT EXCEED 10 INCHES FROM THE LANDING AREA TO THE FACE OF THE PUSHBUTTON. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 7 FEET OR MORE THAN 10 FEET ABOVE.
- ALL GALVANIZED CONDUIT (GRC) SHALL BE REAMED AND THREADED. ALL GRC SHALL BE THREADED TOGETHER WITH APPROVED COUPLINGS. SET, BOLTED AND COMPRESSION FITTINGS ARE NOT ACCEPTABLE.
- ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY, AND/OR THE APPROPRIATE UTILITY ENTITY PRIOR TO THE BEGINNING OF CONSTRUCTION FOR THE UTILITY MARKOUTS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY DELDOT IMMEDIATELY BEFORE CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH TRAFFIC SIGNAL MAINTENANCE FOR THE IDENTIFICATION AND REMOVAL OF ALL UNUSED AND REDUNDANT COPPER CABLE.

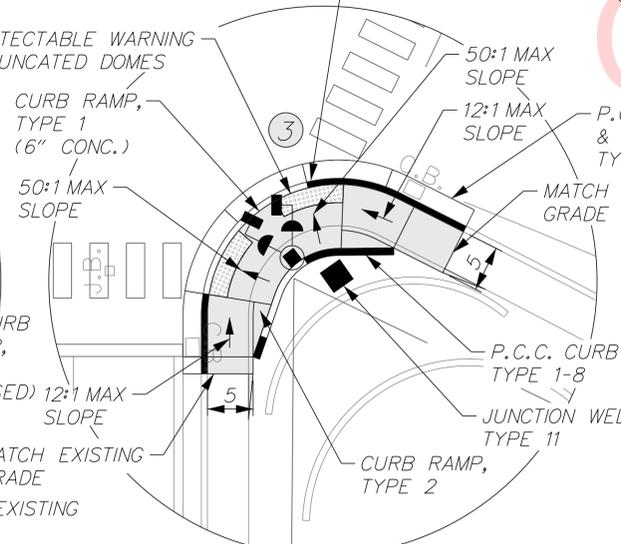
CURB RAMP DETAIL 1

SCALE: 1" = 10'
NOTE: FIELD ADJUSTMENTS SHALL BE MADE AS REQUIRED



CURB RAMP DETAIL 4

SCALE: 1" = 10'
NOTE: FIELD ADJUSTMENTS SHALL BE MADE AS REQUIRED



CURB RAMP DETAIL 3

SCALE: 1" = 10'
NOTE: FIELD ADJUSTMENTS SHALL BE MADE AS REQUIRED

CURB RAMP DETAIL 2

SCALE: 1" = 10'
NOTE: FIELD ADJUSTMENTS SHALL BE MADE AS REQUIRED

RECOMMENDED _____ DATE: _____ APPROVED FOR INSTALLATION _____ DATE: _____
 RECOMMENDED _____ DATE: _____ CHIEF TRAFFIC ENGINEER _____



ADDENDUM / REVISIONS



PAVEMENT & REHABILITATION
KENT IV, FY-2016

CONTRACT	PERMIT NO.	K014P
T201606204.01	DESIGNED BY:	
KENT	CHECKED BY:	

SIGNAL PLAN		SHEET NO.
N STATE ST,		2
N GOVERNORS AVE		TOTAL SHTS.
& WALKER RD		2

4/12/2016 2:25:54 PM G:\PROJECTS\150505.00 TRAFFIC - 1740 - 1\150505.05 PAR Kent IV\CADD FILES\Sheets\Sigals\sig_014P State St and Governors Ave.dgn