

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MAINTENANCE AND OPERATIONS



PLANS AND SPECIFICATIONS FOR
Contract Number: T201706401
Federal Aid Project Number: N/A
PCC Patching, North, Open End, FY17-19

PLANS PREPARED BY: nk
NORTH DISTRICT CONTRACTS ENGINEER

DATE: 12/2/16

DATE RECOMMENDED: 12/2/16

R Schilling
NORTH DISTRICT DESIGN ENGINEER



DATE RECOMMENDED: 2 December 2016

Maureen Elizabeth Mauger
NORTH DISTRICT MAINTENANCE ENGINEER



DATE APPROVED: 12/5/16

Donald D. Weber
NORTH DISTRICT ENGINEER



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CONTRACT No : T201706401

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CONTRACT DESCRIPTION

The purpose of this contract is to repair sections of Portland Cement Concrete (PCC) pavement on roads in DelDOT North District, New Castle County, Delaware. Work includes PCC patching, saw-cutting, removal of existing concrete pavement, placing concrete and dowel bars, bituminous paving, crack sealing, pavement striping, adjusting/repairing drainage inlets/manholes, and other related work activities.

The specific work sites are not listed herein, but will be assigned as available by the District Maintenance office via work orders.

The duration of this open-end contract shall be for a period of two years from the date of initial "Notice to Proceed" letter.

GENERAL NOTES

1. All work shall be performed in accordance with the Delaware Department of Transportation Standard Specifications dated August 2016 (as amended by the Supplemental Specifications), the DelDOT Special Provisions, Standard Constructions Details, and these project notes.
2. An updated Performance Bond shall be submitted at the beginning of each fiscal year. Failure on the part of the Contractor to submit the Performance Bond shall result in the Contract being cancelled.
3. Whenever the word "Contractor" is used in this contract, it shall refer to the person or persons, company or corporation furnishing the services required.
4. Whenever the word "Department" or "Engineer" is used, it shall refer to the person or persons, representing the Delaware Department of Transportation (DelDOT).
5. Tasking of work is contingent upon authorization of State funding.
6. It is anticipated that all work will occur within DelDOT's existing right of way or easement areas. Should the need occur to trespass onto private property; it will be the responsibility of the DelDOT Project Manager to secure such trespass needs.
7. It is anticipated that all work will occur within DelDOT's right of way. Should the need occur to trespass onto railroad property, including the highway-rail crossing; it will be the responsibility of the Project Manager to contact the DelDOT Railroad Coordinator and obtain written authorization before entering.

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8. No utility relocation involvement is anticipated. Should any conflicts be encountered during construction requiring adjustment and/or relocation of the agencies' existing facilities, the necessary relocation work shall be accomplished by the respective agencies' forces, as directed by the District Engineer. Any adjustments and/or relocations of municipally owned facilities shall be done by the State's contractor in accordance with the respective agencies' standard specifications as directed by the District Engineer.

9. Prosecution and Progress of Work:

The Contractor shall commence on work indicated on the work order no later than the third (3rd) business day after issuance unless required materials are not available. Non-availability of materials shall be verified by at least three (3) different sources. Verification shall be formal and supplied by the Contractor in writing.

Issuance of each work order constitutes the notice to proceed with the work described on the work order.

If there is a verified non-availability of materials, time charges shall commence on the first (1st) working day following the delivery date of materials.

Failure to start assigned work orders in the allowed time constitutes "Failure to Pursue the Work" and subjects the Contractor to Liquidated damages as outlined in Section 108.08 of the Standard Specifications. If work on a specific work order is not completed within the allotted time, Liquidated Damages will be assessed in accordance with Subsection 108.09 and based on the total value of that work order.

Each work order shall be considered a separate unit of work. Upon the substantial completion of the work at an individual location, the Engineer will stop time at that location and perform a semi-final inspection for the work order location in accordance with Subsection 105.16. The Engineer reserves the right to require the Contractor to add Work or make repairs to completed locations until such a location has been accepted by the Department. The Contractor must repair all defects in the work caused by poor workmanship or materials at his/her own expense until the Department accepts the Contract after the Final Inspection.

A Final Inspection will be completed on an annual basis for work orders completed in a calendar year. Upon satisfactory completion of the Final Punchlist, the Department will accept the location and release the Contractor from responsibility for the Work at that location. If a work order is sufficiently large and complex as determined by the Engineer, a Final Inspection may be held upon the individual completion of that work order.

10. Payment will be monthly for the completed work as outlined in Section 109.07.

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11. Clearing and grubbing of trees, shrubs and other vegetation less than 6 inches in diameter shall be incidental to Item 763000 (Initial Expense/De-Mobilization). Grubbing activities performed in wetland areas requires environmental permit approvals.
12. The Contractor shall not trespass on private property unless the District has acquired a "Temporary Trespass Agreement" from the property owner. If the work is within a permanent easement, the work shall not begin until the adjacent property owners have been notified. Prior to starting work on private property, the Contractor shall notify affected property owners in writing of the proposed work dates, scope of work, proposed work hours, and DelDOT contact phone number. Compensation for notification shall be incidental to Item 763000 (Initial Expense/De-Mobilization).
13. No environmental permits are required for this work provided no jurisdictional wetlands or waters are impacted. If there is any question as to whether or not a water or wetland is jurisdictional, contact the DelDOT Environmental Section at (302) 760-2264.
14. Work within waters/wetlands shall not begin on locations requiring environmental permits until all applicable permits have been obtained by DelDOT. Confirm permit status with DelDOT Engineer prior to commencement of applicable work.
15. Proper disposal of construction related wastes shall be the sole responsibility of the Contractor.
16. Underground utilities may be present at all locations. Therefore, all standard practices and procedures regarding utilities shall be followed. The Contractor shall contact Miss Utility of Delaware prior to starting each work order. The Contractor is responsible for the support and protection of all utilities when excavating. The Contractor is responsible for ensuring proper clearances, including safety clearances, from overhead utilities for construction equipment. The Contractor is advised to check the site for access purposes for his equipment, and make arrangements directly with utility companies for field adjustments for adequate clearances if necessary.
17. Section 101.03 "Working Day" definition is amended. There will not be a winter shutdown from December 16th to March 15th. The Department reserves the right to issue work and charge time between these dates.
18. Delete Section 104.06 of the DelDOT Standard Specifications, and replace with the following:

The Department reserves the right to, at any time prior to completion of the contract, issue plan revisions, make adjustments in Contract item quantities, or make such alterations considered necessary to satisfactorily complete the Contract.

The Department reserves the right to increase or decrease the quantities of Pay Items specified in the Contract. Such additions or deletions shall not be cause for an increase or decrease in Contract unit bid prices. The "Change" threshold of plus or minus 25%, as described in Subsection 104.06 of the DelDOT Standard Specifications dated

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August 2016 shall not apply to this Contract. Quantity increases or decreases of plus or minus 25% or greater shall not be justification for adjustments to unit prices.

The plan revisions and quantity adjustments described above do not invalidate the Contract or release the Contract surety. Payment for these changes shall exclude any amount for loss of anticipated profits alleged to result from the change.

When payment for the Contract work cannot be agreed upon by the Contractor and the Department prior to starting such work ordered, the Department may direct the Contractor to perform the work under Force Account provisions of Subsection 109.04. The Contractor will proceed immediately with the work so ordered and such direction shall neither invalidate the Contract, nor release the surety.

19. Trash, rubbish, debris or brush that hampers repair / maintenance work in this Contract (as determined by the Engineer), shall be removed within the project limits and shall be incidental to Pay Item 763000 (Initial Expense).
20. Portable Light Assemblies will be required for all night time operations and as directed by the Engineer. Payment for portable lighting shall be under pay item 804001 (Furnish And Maintain Portable Light Assembly).
21. If required during the placement or repair of PCC items, preformed expansion joint material shall be placed at designated locations as directed by the Engineer. Payment for furnishing and placing the preformed expansion joint material shall be incidental to the PCC pay items.
22. Patching of graded aggregate base course within roadway (including shoulders and travel lanes) shall be performed to match existing full depth pavement section with respect to course thickness and pavement structural number.
23. Proper disposal of construction related wastes shall be the sole responsibility of the Contractor, and shall be performed in accordance with all applicable State regulations.
24. Grass and soil areas within State right-of-way that have been damaged by equipment during this contract, shall be restored with topsoil, seed and mulch at Contractor's own expense, and in accordance with the requirements for Special Provisions 908004 (Topsoil, 6"Depth) and 908014 (Permanent Grass Seeding, Dry Ground).
25. The Contractor shall guarantee all work to be free from defects for a period of one year from time of owner acceptance. Any defects occurring during this period shall be corrected by the Contractor at no additional cost to the Department.
26. Time to perform the work assigned per work order shall be developed by the following method and items:

LEGEND:

A= SQUARE YARDS (SQ) OF PCC PATCHING IN WORK ORDER

B= LINEAR FEET (LF) OF FULL DEPTH PCC SAWCUT IN WORK ORDER

T= TIME ALLOWED TO PERFORM JOB ORDER ROUNDED UP TO THE

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WORKING DAY

FORMULA:

$$T = \frac{A}{56 \text{ SY}} + \frac{B}{504 \text{ LF}}$$

SAMPLE CALCULATION:

A= 80 SQUARE YARDS
B= 288 LINEAR FEET

$$T = \frac{80 \text{ SY}}{56 \text{ SY}} + \frac{288 \text{ LF}}{504 \text{ LF}}$$

$$T = 1.43 + .57$$

$$T = 2.0 = 2 \text{ WORKING DAYS}$$

Daytime restricted hours may be required on some job orders. The time for these locations shall be increased by fifty percent (for example: 10 working days will become 15 working days).

27. Conform with DelDOT Standard Construction Details for P.C.C. Pavement Patching (Standard Details P-2).
28. Unless otherwise directed by the Engineer, all full depth saw cuts will be wet cuts. All additional costs for wet cutting is incidental to Item 762001 (Sawcutting, Concrete, Full Depth).
29. Excavated material not needed on the project shall be removed from the site at Contractor's expense.
30. All warm mix bituminous paving materials shall be placed utilizing a paving machine, unless otherwise directed by the Engineer.
31. The location of the work to be performed is designated by zones. The zone limits are shown on the numbered zone maps included in the Contract documents. The Department will make every attempt to minimize the distance between successive locations. The Contractor shall be paid for "Road Location Mobilizations" as defined in Specials Provisions 763544, 763545, 763546, and 763548. Payment for "Road Location Mobilization" will not be made for crack sealing, pavement striping, or pavement symbol work.

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32. The Contractor shall provide residents 24-hour prior written notice for all phases of contract work. This notice shall be given to all residents whose property is adjacent to the street on which work is to be performed. This work is incidental to Item 763000 (Initial Expense). Failure to give notice will result in suspension of work.
33. The Contractor shall take care in removing existing pavement around utilities, curb edges, drainage inlets, and other objects. Care should be taken to not dig deeper than the required depth. Failure to do so will result in the Contractor placing leveling course at his own expense.
34. As directed by the Engineer, where there is existing striping being removed, the Contractor shall be required to provide proof that sufficient material and equipment is available onsite to ensure the temporary striping is completed in a timely manner, before traffic is allowed on the roadway.
35. For work locations in this contract, a concrete patch thickness of 9.0" (+/- 1 inch) shall be assumed. Additional thickness may be paid using Pay Item 503004 (Patching PCC Pavement, (Undercutting)). Determination of method of payment shall be the sole discretion of the DelDOT Engineer.
36. All excavated areas shall be backfilled as directed by the Engineer the same day.
37. DelDOT will not compensate the Contractor for erroneous pavement markings. Any erroneous pavement markings placed by the Contractor shall be corrected immediately by the Contractor at Contractor's 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. Any damage to the pavement caused by the removal of erroneous markings shall be repaired/replaced to the satisfaction of the Engineer at Contractor's expense.
38. Final pavement markings shall conform to all existing patterns, and shall be placed within five (5) calendar days (maximum) after placement of the final course of paving material. Failure to comply will result in suspension of all other contract work, with time charges continuing to be assessed. If the Contractor fails to document the existing pavement markings in an acceptable manner, he shall be required to provide at his own expense, a new pavement marking plan, signed and sealed by a Professional Engineer in the State of Delaware.
39. At the end of each work day, and before traffic is returned to unrestricted roadway use, temporary striping shall be placed at locations that require permanent striping. Placement of temporary markings shall receive prior approval from the Engineer. Temporary pavement striping must match the permanent 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 markings will be at the Contractor's expense.
40. Surface deviations measured using a 10 foot straightedge, will be measured by placing the straightedge half on existing pavement and half on the new patch. Any surface deviations, greater

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then as specified in Section 503 of the standard specifications, shall be repaired via diamond grinding or at the discretion of the Engineer at the Contractor's expense.

MAINTENANCE OF TRAFFIC

41. 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 Delaware Manual of Uniform Traffic Control Devices (MUTCD), part 6, including revisions up to the date of advertisement for bids.
42. All shoulder or travel lane closures shall be performed at times directed by the Engineer with direction from the North District Safety Officer. Any deviation from the time restriction must be approved by the North District Engineer and North District Safety Officer prior to the commencement of work.
43. No lane closures will be permitted on holidays or holiday weekends, unless approved by the Engineer with consultation with DelDOT Safety Section. This requirement applies to all roads impacted in this Contract.
44. Upon selection of a location, the DelDOT Safety Section must be notified a minimum of three weeks in advance of the work in order to determine the type of and prepare a Transportation Management Plan (TMP) for the location. Should a Type "B" TMP be required, all time restrictions given in the TMP will be followed. Should a Type "A" TMP be required, above time restrictions will be followed or as directed by the Engineer with direction from the North District Safety Officer
45. If a road/ramp closure is required, the Contractor shall be required to submit the proposed detour route to the DelDOT Safety Officer for approval. Payment for detour plan preparation shall be included in the bid price for Item 763000 (Initial Expense). The Department will coordinate with the Safety Section and be responsible for the necessary notifications. The detour route requires approval by the Department prior to closure. A two week detour review lead time shall be required for any requested detour. The Contractor shall be responsible for furnishing and maintaining the Maintenance of Traffic apparatus at the closure (i.e. Type III Barricade, Road Closed signs, etc.) and all signs. The Contractor shall be responsible for placement of detour trailblazers. Payment will be under Item 810001 (Temporary Warning Signs and Plaques).
46. The Project Manager shall be responsible for coordinating with the Traffic Section relating to any impacts to Traffic Section facilities (including but not limited to traffic loops, junction wells, etc.) at least four weeks in advance of the start of the activity. Prior to initiating any work on this contract (or sites), the Project Manager shall be responsible for preparing and submitting for approval of the Safety Section, a Maintenance of Traffic Plan. Sufficient time shall be provided for the review and approval of the plan. The Maintenance of Traffic Plan shall include proposed time restrictions on the closure of travel lanes subject to the approval of the Safety Section.

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47. The Project Manager is responsible for ensuring any required documents and analysis as part of the adopted Work Zone Safety and Mobility Procedures and Guidelines has been completed prior to any work starting on this contract.
48. Traffic control devices shall be provided and placed in accordance with the Delaware Manual on Uniform Traffic Control Devices (MUTCD). The Contractor shall prepare and submit a Traffic Control Plan for each bridge site to DelDOT for approval. The Traffic Control Plan must clearly indicate orientation of traffic control devices to be used for each site. The plan must be approved by the DelDOT Safety Officer and DelDOT Engineer prior to commencement of work on each bridge. Maintenance of Traffic Typical Applications is described in the Delaware MUTCD. The Contractor shall be responsible for determining the applicable Typical Application for each work application. The proposed Traffic Control Plan must be submitted to DelDOT a minimum of ten (10) working days prior to commencement of work at each location.
49. No lane closures or shoulder closures will be permitted unless applicable work activity is taking place.
50. All repair/maintenance equipment shall be removed from the job sites on a daily basis, except when approved by the Engineer. Contractor shall follow guidelines set forth by the Delaware MUTCD for storage of materials.
51. The Contractor shall be required to have an American Traffic Safety Services Association (ATSSA) certified Traffic Control Supervisor on the project. The ATSSA supervisor may be the Contractor's general superintendent for this project or another ATSSA certified member of the Contractor's project staff. The ATSSA certified Traffic Control Supervisor's responsibility shall be the maintenance of traffic throughout the project. This responsibility shall include, but is not limited to, the installation, operations, maintenance and service of temporary traffic control devices. Also required is the daily maintenance of a log to record maintenance of traffic activities, i.e. number and location of temporary traffic control devices; and times of installation, changes, and repairs to temporary traffic control devices. He/she shall also serve as the liaison with the Department concerning the Contractor's maintenance of traffic. The name and contact information for the ATSSA certified Traffic Control Supervisor shall be provided to the Engineer at the Preconstruction Meeting. A copy of the certifications for the ATSSA certified Traffic Control Supervisors proposed for the project shall be submitted to the Department with the Contractor's bid package. The responsibilities of the ATSSA certified supervisor shall be for the duration of the Open End Contract. Payment for the ATSSA certified traffic control supervisor shall be under Item 801000 (Maintenance of Traffic).
52. No separate payment shall be made for use of traffic cones. Traffic cones and/or work associated with their use, such as set up, removal, cleaning, etc., shall be incidental to the work for which they protect.

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53. All open excavations shall be secured with plastic drums with retroreflective fluorescent orange and white prismatic sheeting. If the construction activity results in a vertical difference along, adjacent to, or across a travelway, the Contractor shall eliminate or remedy this hazard by the methods detailed in Table 6G-1 of the Delaware Manual on Uniform Traffic Control Devices (DEMUTCD), or as directed by the Engineer.
54. Payment for relocation and re-positioning of Traffic Control devices shall be incidental to the respective unit price Pay Items for Maintenance of Traffic included in this Contract. There shall be no additional compensation for relocation or re-positioning of traffic control devices.
55. Costs for adjustment in position of traffic control devices due to variances from the standard Maintenance of Traffic (MOT) typical application numbers, or for any other reason, shall be included in the unit price for each respective MOT pay item.
56. All permanent warning signs shall be retroreflective, and constructed of rigid material complying with NCHRP 350 and/or MASH requirements.
57. The safety measures outlined within this Contract and the Delaware MUTCD are not necessarily sufficient in every instance to guarantee the protection of the traveling public or the persons working on the project. Therefore, the provisions of this Contract do not relieve the Contractor of the sole responsibility for the safety of all persons working within or traveling through the work zone throughout the duration of the project. The Contractor shall implement any additional safety measures that are not expressly required by the Contract and are necessary to ensure the safety of all persons. The Contractor shall submit to the Engineer justification for deviations from the Traffic Control Plan or Traffic Management Plan. Final approval of the deviations or additions shall rest with the Engineer with guidance from the Traffic Safety Section. All costs for this work shall be incidental to the applicable maintenance of traffic pay items as listed in the original contract.
58. The Department reserves the right to stop the Contractor's operations, if in the opinion of the Engineer the Contractor's operations are not in compliance with the Delaware MUTCD, the specifications, or the Plans. The Department also reserves the right to stop the Contractor's operations if the Engineer deems the operations to be unsafe.
59. The Department will not make payment to the Contractor for any and all temporary traffic control devices where the Contractor sets up temporary traffic control to perform work, but fails to perform any work.
60. Immediately prior to the implementation of any lane or roadway closures, the Engineer shall notify the DelDOT TMC at (302) 659-4600. Notifications shall also be given to the TMC when the closure is lifted. The Engineer shall notify the TMC and the DelDOT Safety Officer if lane closures cannot be removed prior to the end of the allowable work hours.
61. Any deficiencies related to temporary traffic control that are reported to the Contractor in writing shall be corrected within 24 hours or as directed by the Engineer. Corrective actions on severe

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deficiencies shall be taken immediately unless otherwise directed by the Engineer. Failure to comply will result in non-payment for those devices that are found to be deficient for the duration of the deficiency. Serious deficiencies that are not corrected immediately could result in possible suspension of work until items identified are brought back into compliance and/or the holding of the pay estimate until the serious deficiencies are corrected.

62. The use of millings and GABC in the travel way, temporary travel way, high volume entrances and access ramp for the purpose of providing a temporary roadway surface, pothole repair, tapered edge for utilities, butt joints, and longitudinal drop-offs (milling and paving operations) is prohibited unless it is otherwise designated to be used in the contract plans. Use cold patch, bituminous concrete, bituminous concrete wedge, or taper mill, as noted in the Contract Documents or approved by the Engineer. Payment for cold patch, bituminous concrete, or bituminous concrete shall be paid under the bituminous concrete milling item.

Millings or GABC shall be used at the following locations where access to a business residence, or edge drop off needs to be maintained unless otherwise noted in the plans or directed by the Engineer to use bituminous concrete or cold patch. All milling and GABC will be rolled and compacted to help prevent the material from unraveling.

- a. Driveways
- b. Entrances
- c. Low volume access ramps (Identified in the contract documents)
- d. Edge drop-offs adjacent to live roadway (lane, shoulder, or turn lane) and the proposed road construction
- e. Edge of roadway dropoff

Grading and maintaining base course that is being used for roadway wedge/fillet between travel lanes and pavement box, edge of travel way, driveway or entrance access shall be incidental to Item No. 801000 - Maintenance of Traffic. The base course material shall be placed at no greater than the slope specified in table 6G-1 and shall be compacted. Excess base course material shall be pushed ahead and used in the next segment and shall be incidental to the particular base course pay item. No separate payment shall be made for Millings or GABC temporary roadway material (TRM) used to protect edge drop-offs, unless the material is eventually utilized as part of a permanent roadway at which time the material would be paid for under the respective contract material item. Vertical differences shall be corrected in accordance with table 6G-1 of the Delaware MUTCD.

63. If the Contractor does not complete the contract work within the contract completion time as listed on the Work Order (including approved time extensions), the Contractor shall be responsible for providing the necessary temporary traffic control devices that are required to complete any remaining work. The cost of such temporary traffic control shall be borne by the Contractor. No additional payment will be made to the Contractor to maintain traffic in accordance with the Delaware MUTCD, specifications, and these Project Notes. Temporary traffic control items shall

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include, but not be limited to, warning lights, warning signs, barricades, plastic drums, P.C.C. safety barrier, flaggers, traffic officers, arrow panels, message boards, portable light assemblies and portable impact attenuators.

64. Pedestrian Maintenance of Traffic: This work shall consist of providing and maintaining an accessible pedestrian route throughout the project's limits in accordance with the Americans with Disabilities Act of 1990 (ADA) Title II, paragraph 35.130.

The contractor shall be required to review each curb ramp location and submit the appropriate maintenance of traffic detail and devices to the Engineer for each location at least 2-weeks before construction for review, comment, and approval.

The following considerations shall be taken into account when addressing accessible pedestrian maintenance of traffic:

- All pedestrians, including persons with disabilities, shall be provided with a reasonably safe, convenient and accessible path that replicates as much as practicable the existing pedestrian facilities.
- Maintain access to all business and residents at all times.
- Provide pedestrian access thru or around the work zone. If a detour is deemed necessary the Contractor must submit the detour route to the Engineer for review and approval by the Traffic Safety Section. The detour route must meet or exceed the current conditions.
- Work should be phased so that all areas of an intersection/sidewalk path are not under construction at the same time unless a clear path is provided and identified.
- Traffic control devices and other construction materials and features shall not intrude into the usable width of the sidewalk, temporary pathway or other pedestrian facility.
- Signs and other devices mounted lower than 7 ft above the temporary pedestrian pathway shall not project more than 4 in. into accessible pedestrian route.
- A smooth, continuous hard surface shall be provided throughout the entire length and width of the pedestrian route throughout construction.
- There shall be no curbs or vertical elevation changes greater than ¼ in. in grade or terrain that could cause tripping or be a barrier to wheelchair use.

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QUANTITY SUMMARY

ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY
202000	Excavation and Embankment	CY	75.00
202004	Undercut Excavation, Patching	CY	150.00
207000	Structural Excavation	CY	20.00
209004	Borrow Type C	CY	100.00
211001	Removal Of Portland Cement Concrete Pavement, Curb and Sidewalk	SY	300.00
301002	Graded Aggregate Base Course, Type B, Patching	CY	150.00
401028	WMA, Superpave, Bituminous Concrete Base Course, 160 Gyration, PG 64-22, Patching	TON	25.00
401026	Bituminous Concrete, Superpave Type C, 160 Gyration, PG 64-22 Patching	TON	40.00
402000	Bituminous Concrete Patching	SY-IN	200.00
403000	Hot-Mix Bituminous Concrete and/or Cold-Laid Bituminous Concrete	TON	25.00
503001	Patching P.C.C. Pavement, 6' to 15', Type A	SY	6,000.00
503002	Patching P.C.C. Pavement Greater Than 15' to 100', Type B	SY	6,000.00
503004	Patching PCC Pavement, (Undercutting)	SY-IN	800.00
503006	Dowel Bars	EA	5,000.00
503513	Dowel Bar Retrofit	EA	100.00
503514	Longitudinal Steel Retrofit	EA	10.00
503543	Nighttime P.C.C. Patching Surcharge, New Castle County	SY	100.00
504001	Crack and Joint Sealing Less Than 3/4" Wide	LF	20,000.00
504002	Crack and Joint Sealing 3/4" to 1 3/4" Wide	LF	300.00
505000	P.C.C. Patching, Partial Depth	SY-IN	500.00
602035	Manhole, Round	EA	1.00
602100	Replace Drainage Inlet Grate(s)	EA	2.00
602101	Replace Drainage Inlet Frame(s)	EA	2.00
602130	Adjusting and Repairing Existing Drainage Inlet	EA	40.00
602132	Adjusting and Repairing Existing Manhole	EA	20.00
701015	PCC Curb and Gutter, Type 1-2	LF	200.00
701016	PCC Curb and Gutter, Type 1-4	LF	200.00
701019	Int PCC Curb and Gutter, Type 2	LF	100.00
707001	Riprap, R-4	SY	25.00
708003	Geotextiles, Riprap	SY	25.00
710002	Adjust Water Valve Boxes	EA	3.00

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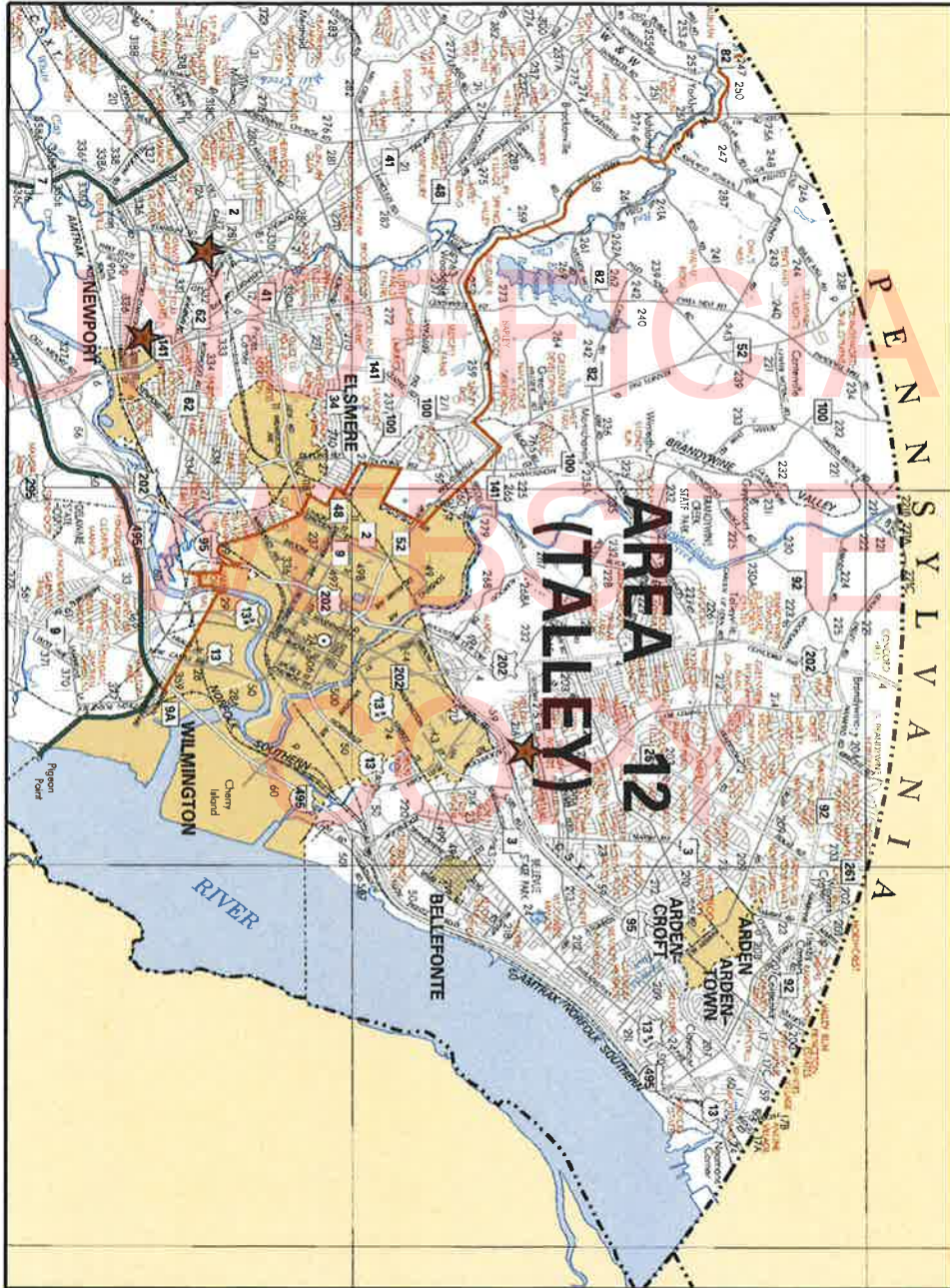
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760010	Pavement Milling, Bituminous Concrete Pavement	SY-IN	300.00
762000	Saw Cutting, Bituminous Concrete	LF	100.00
762001	Saw Cutting, Concrete, Full Depth	LF	20,000.00
762004	Butt Joints, Concrete	SY	20.00
763000	Initial Expense	LS	1.00
763544	Road Location Mobilization, Zone 1	EA	5.00
763545	Road Location Mobilization, Zone 2	EA	5.00
763546	Road Location Mobilization, Zone 3	EA	5.00
763548	Road Location Mobilization, Zone 5	EA	1.00
801000	Maintenance of Traffic	LS	1.00
802003	Arrowpanels, Type C	EADY	200.00
803001	Furnish and Maintain Portable Changeable Message Sign	EADY	200.00
804001	Furnish and Maintain Portable Light Assembly	EADY	15.00
805001	Plastic Drums	EADY	15,000.00
806001	Traffic Officers	HOUR	150.00
808002	Furnish and Maintain Truck Mounted Attenuator, Type II	EADY	10.00
810001	Temporary Warning Signs and Plaques	EADY	3,000.00
811001	Flagger, New Castle County, State	HOUR	6,000.00
811013	Flagger, New Castle County, State, Overtime	HOUR	100.00
813001	Temporary Barricades, Type III	LFDY	3,000.00
817003	Temporary Markings, Paint, 4"	LF	2,500.00
817004	Temporary Markings, Paint, Symbol/Legend	SF	150.00
817009	Temporary Markings, Tape, 4"	LF	2,000.00
817010	Temporary Markings, Tape, Words/Symbols	SF	250.00
817012	Retroreflective Performed Patterned markings, Symbol/Legend	SF	35.00
817013	Permanent Pavement Striping, Epoxy Resin Paint, White/Yellow, 5"	LF	5,000.00
817018	Permanent Pavement Striping, Epoxy Resin Paint, Black, 3"	LF	1,000.00
846001	Furnish & Install Loop Wire 1- Conductor #14 AWG Encased In 1/4" Flexible Tubing In A Loop Sawcut	LF	100.00
905001	Silt Fence	LF	100.00
905004	Inlet Sediment Control, Drainage Inlet	EACH	150.00
905005	Inlet Sediment Control, Curb Inlet	EACH	150.00
908004	Topsoil, 6" Depth	SY	40.00
908014	Permanent Grass Seeding, Dry Ground	SY	100.00

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No : T201706401

PCC Patching, North, Open End, FY17-19



DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No : T201706401

PCC Patching, North, Open End, FY17-19

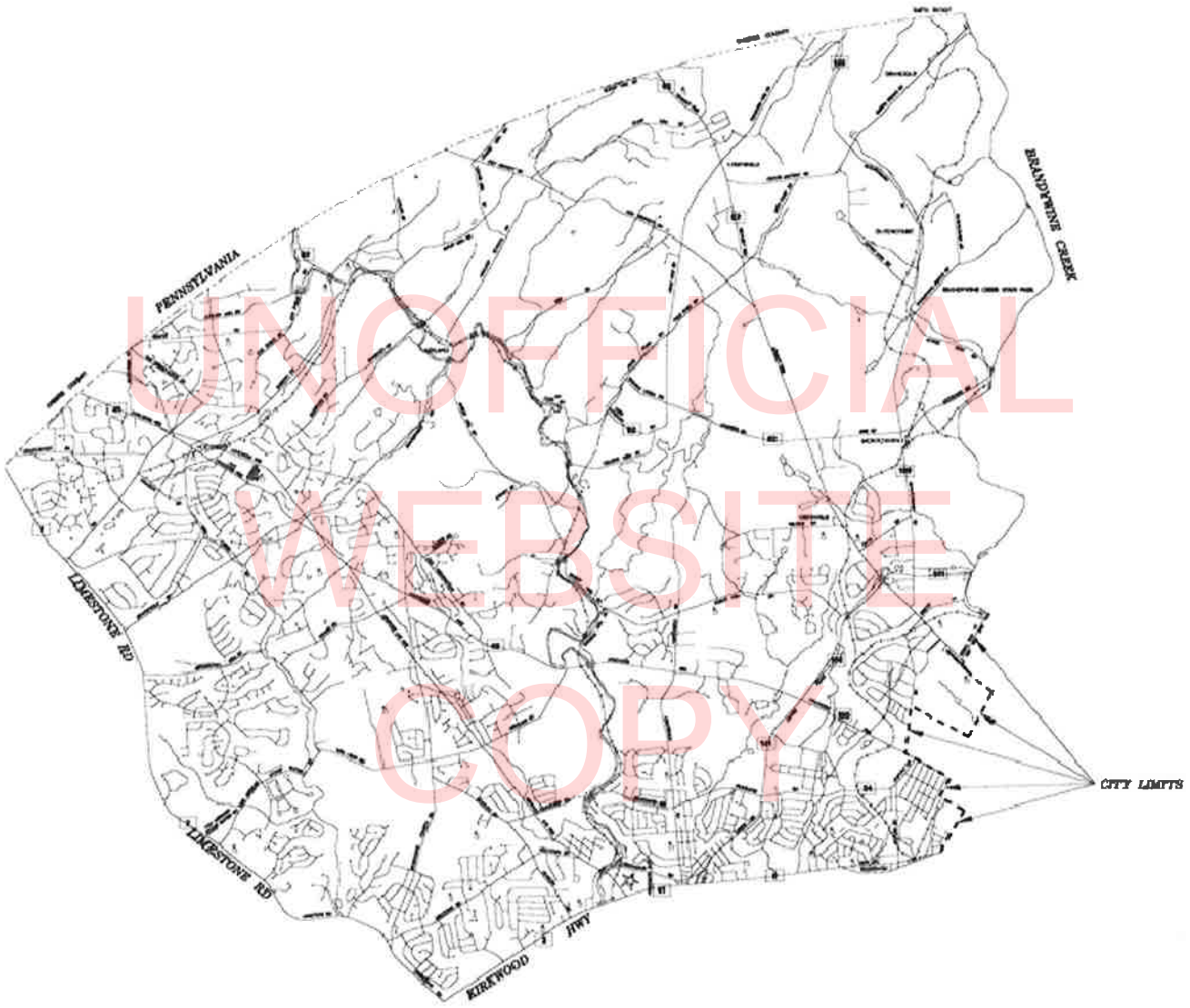


MOBILIZATION ZONE - 1

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No : T201706401

PCC Patching, North, Open End, FY17-19

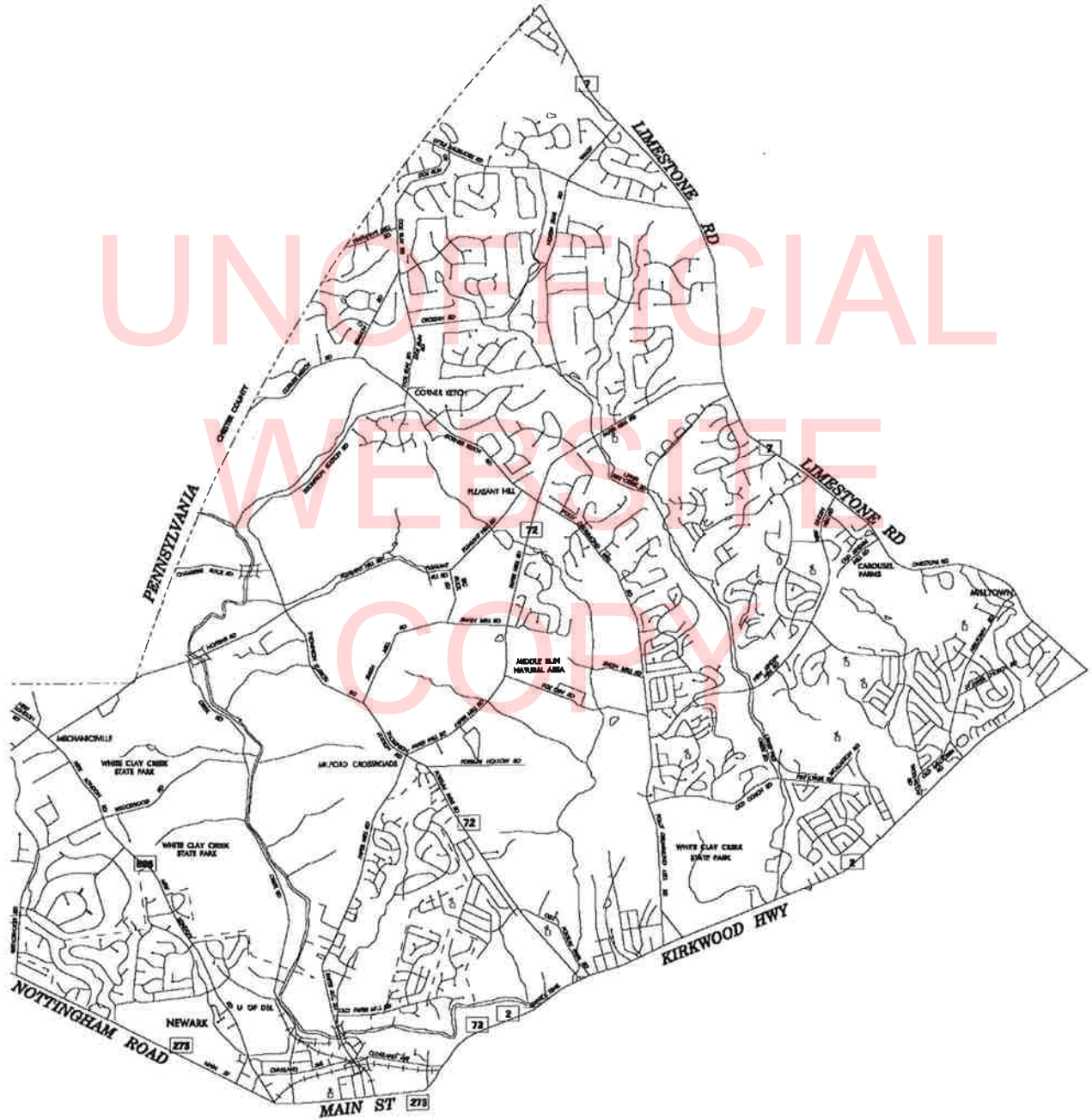


MOBILIZATION ZONE - 2

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No : T201706401

PCC Patching, North, Open End, FY17-19

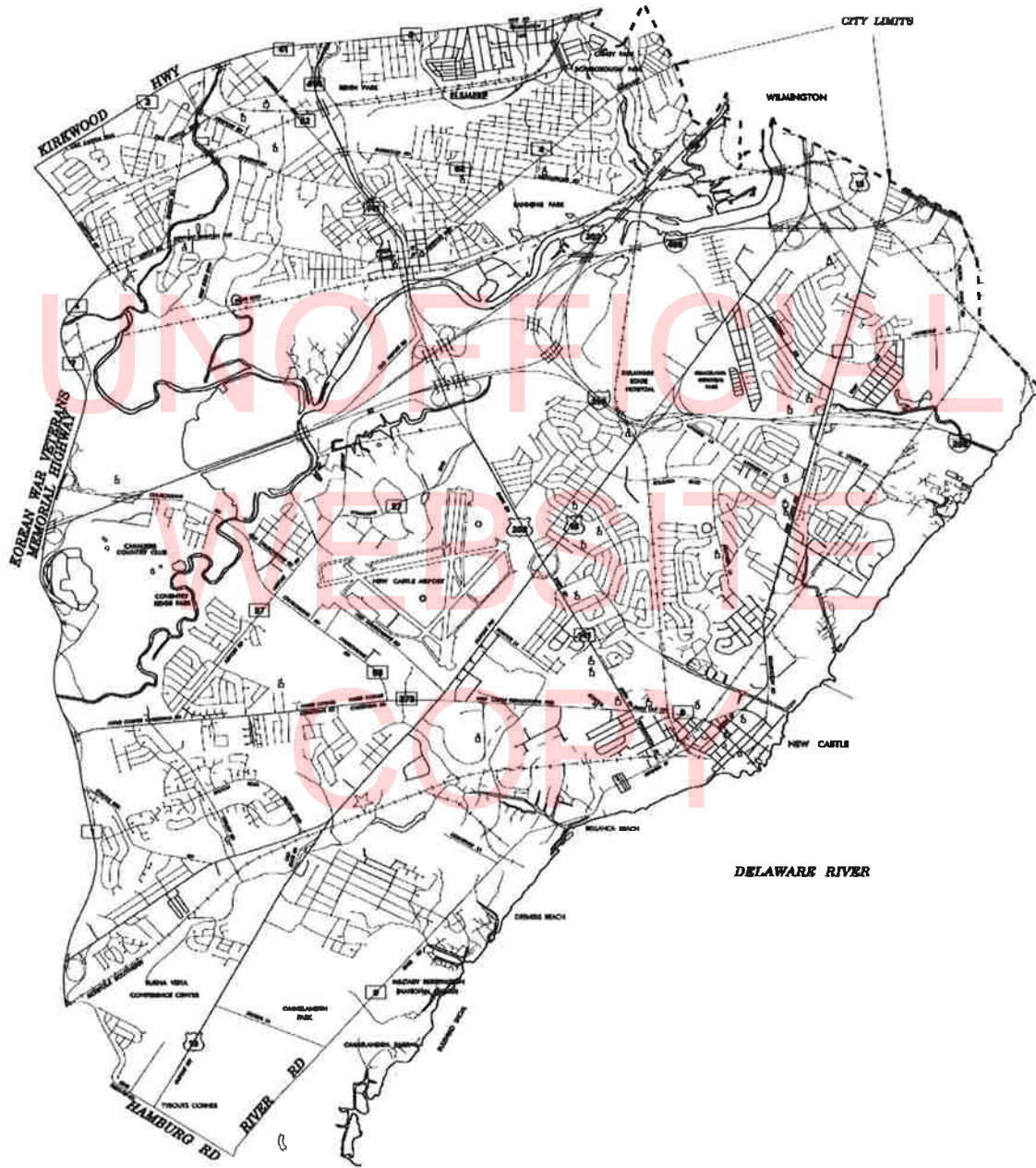


MOBILIZATION ZONE - 3

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT No : T201706401

PCC Patching, North, Open End, FY17-19



MOBILIZATION ZONE - 5