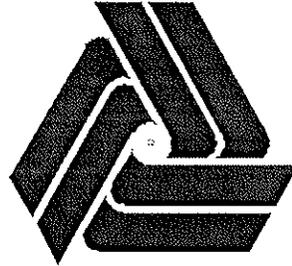


STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

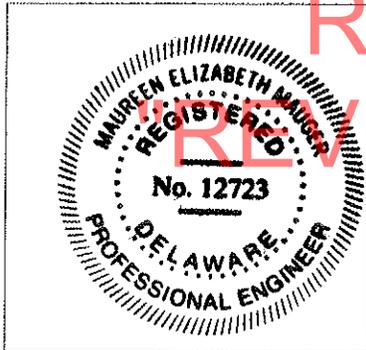


PLANS AND SPECIFICATIONS FOR

Contract Number: T201306701
Federal Aid Project Number: ESTP-2013(17)

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

**OUTDATED
PLANS
REFER TO
REVISED PLANS**

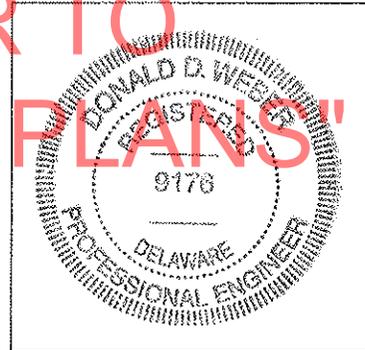


RECOMMENDED:

North District Design Engineer

30 MAY 2013

Date



APPROVED:

North District Engineer,
Maintenance and Operations

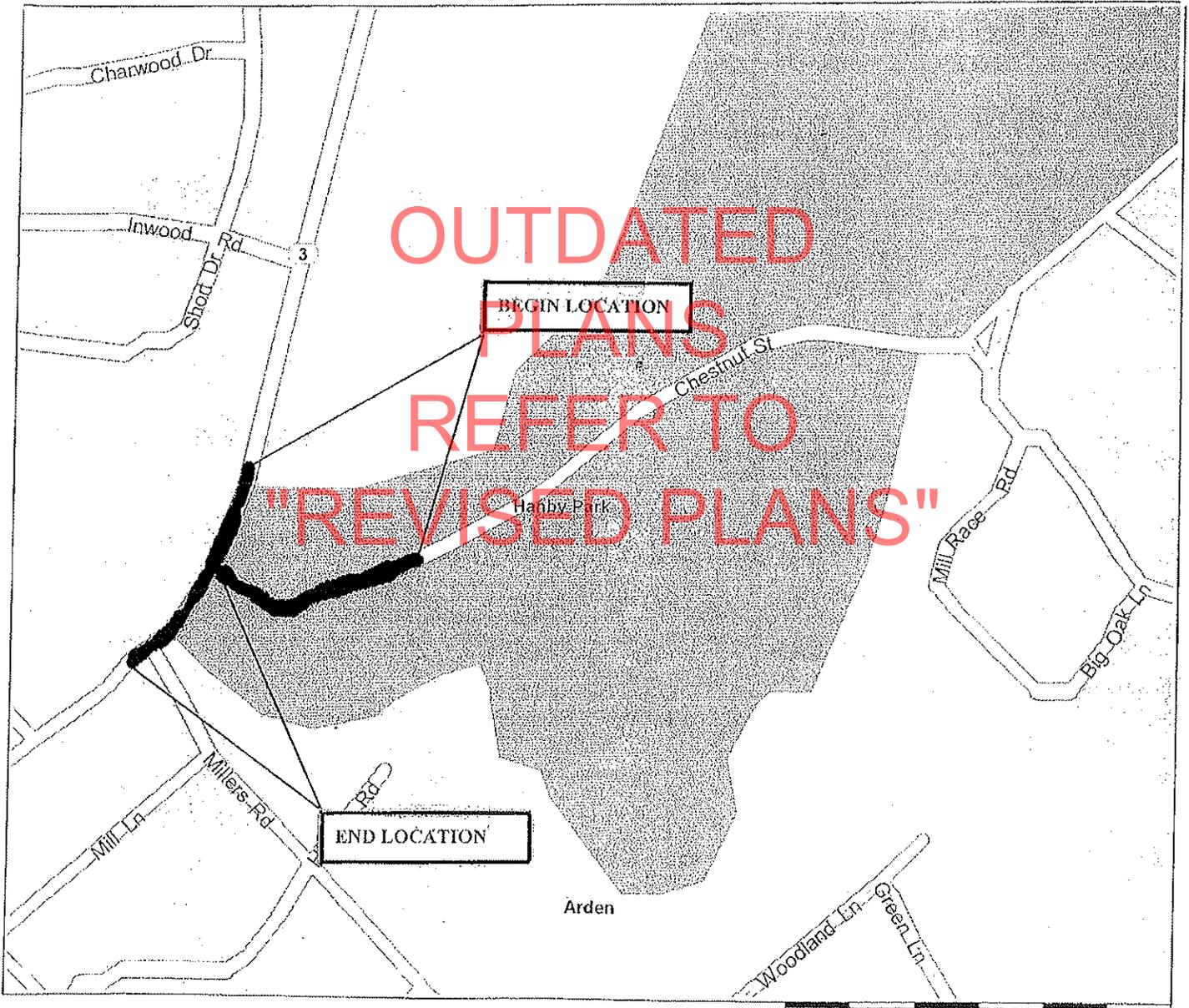
5/30/13

Date

VARIOUS ROADS IN NORTH DISTRICT

LOCATION MAP

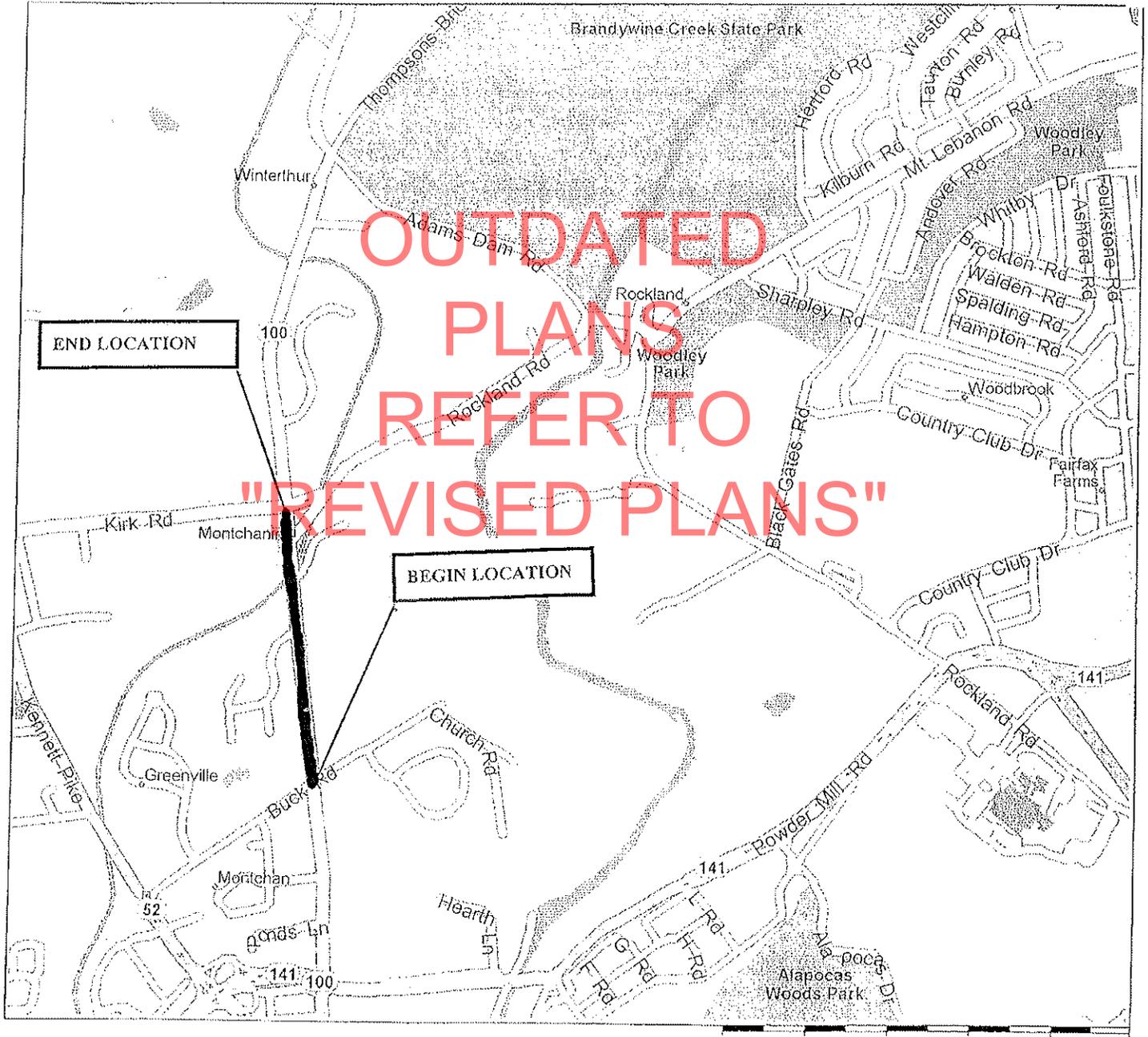
Location #1 - Chestnut Lane, from Marsh Rd to 500 feet from Marsh Rd;
and Marsh Road, 500 feet at intersection



VARIOUS ROADS IN NORTH DISTRICT

LOCATION MAP

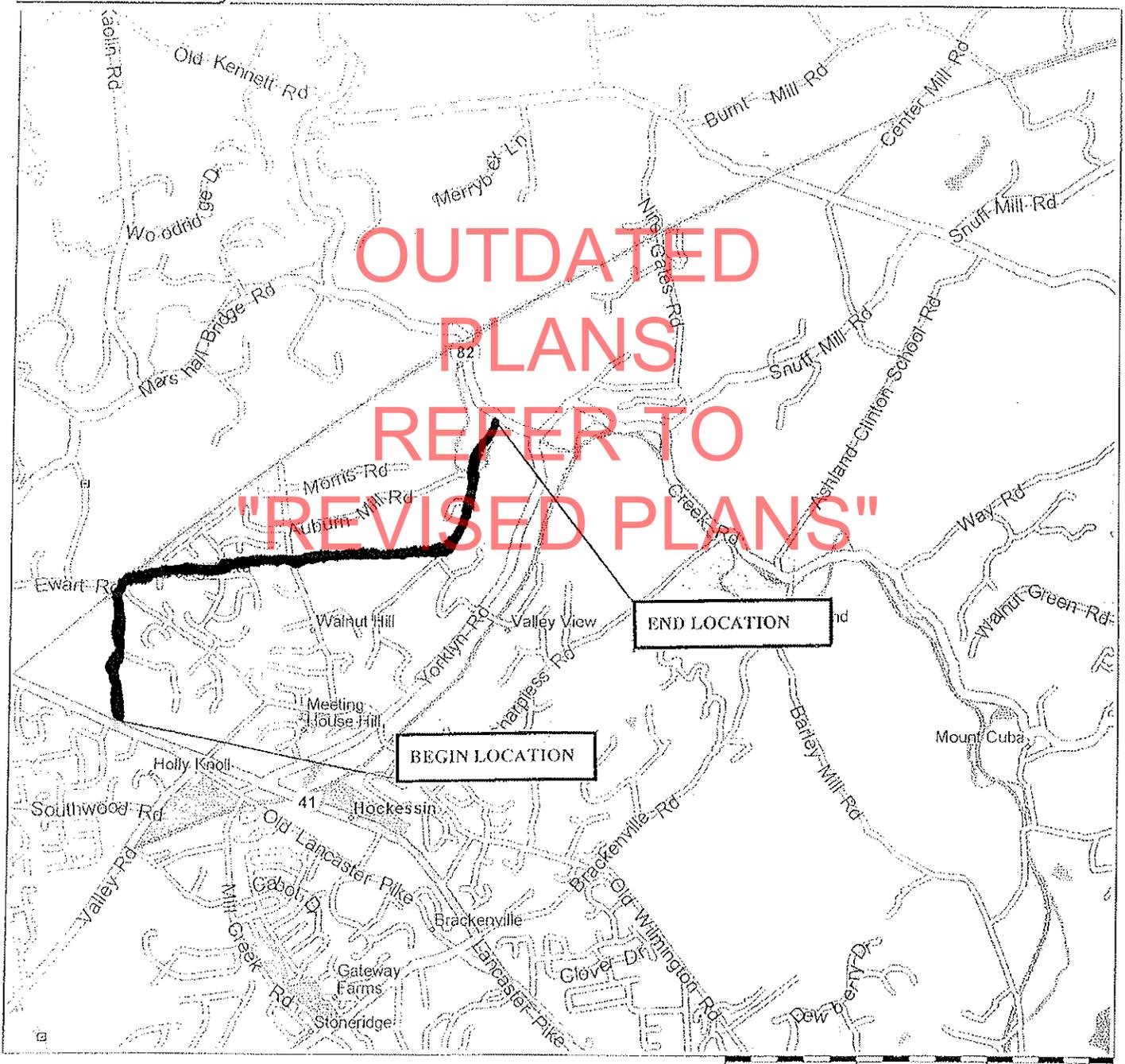
Location #2 - Montchanin Rd, from Buck Rd to Kirk Rd



VARIOUS ROADS IN NORTH DISTRICT

LOCATION MAP

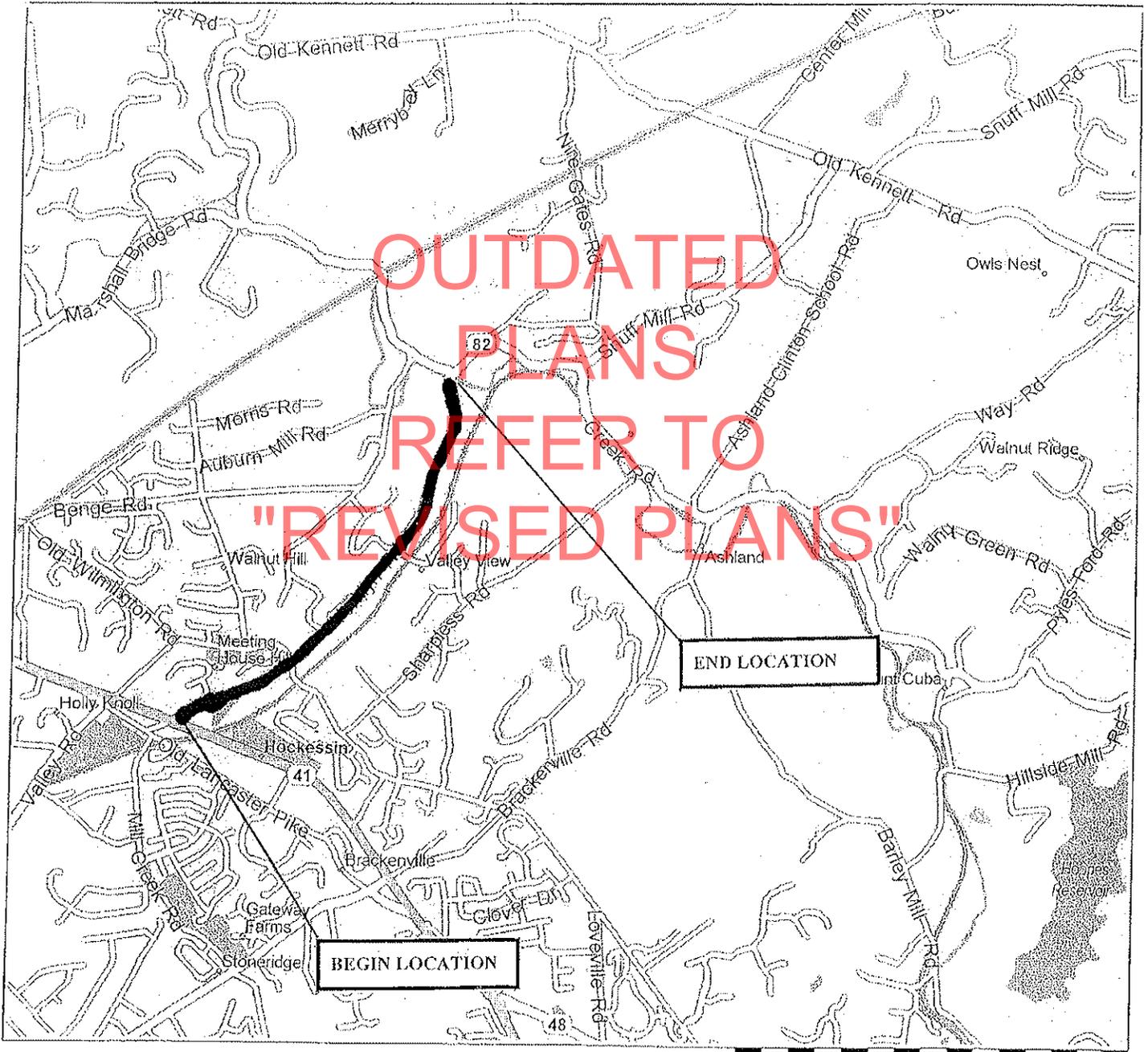
Location #3 - McGovern Rd, from Lancaster Pike to Creek Rd



VARIOUS ROADS IN NORTH DISTRICT

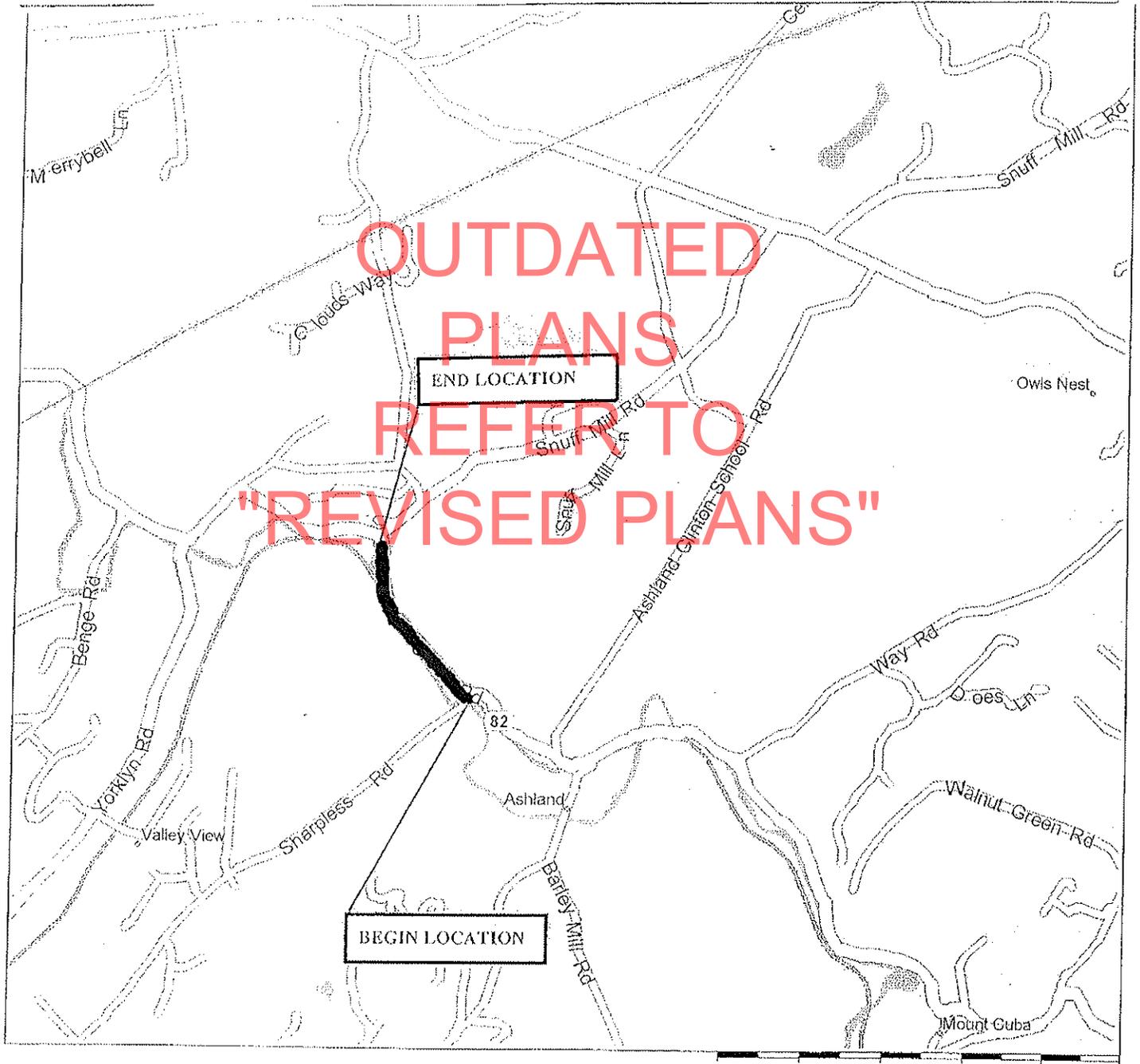
LOCATION MAP

Location #4 - Yorklyn Rd, from Lancaster Pike to Red Clay Creek Bridge



LOCATION MAP

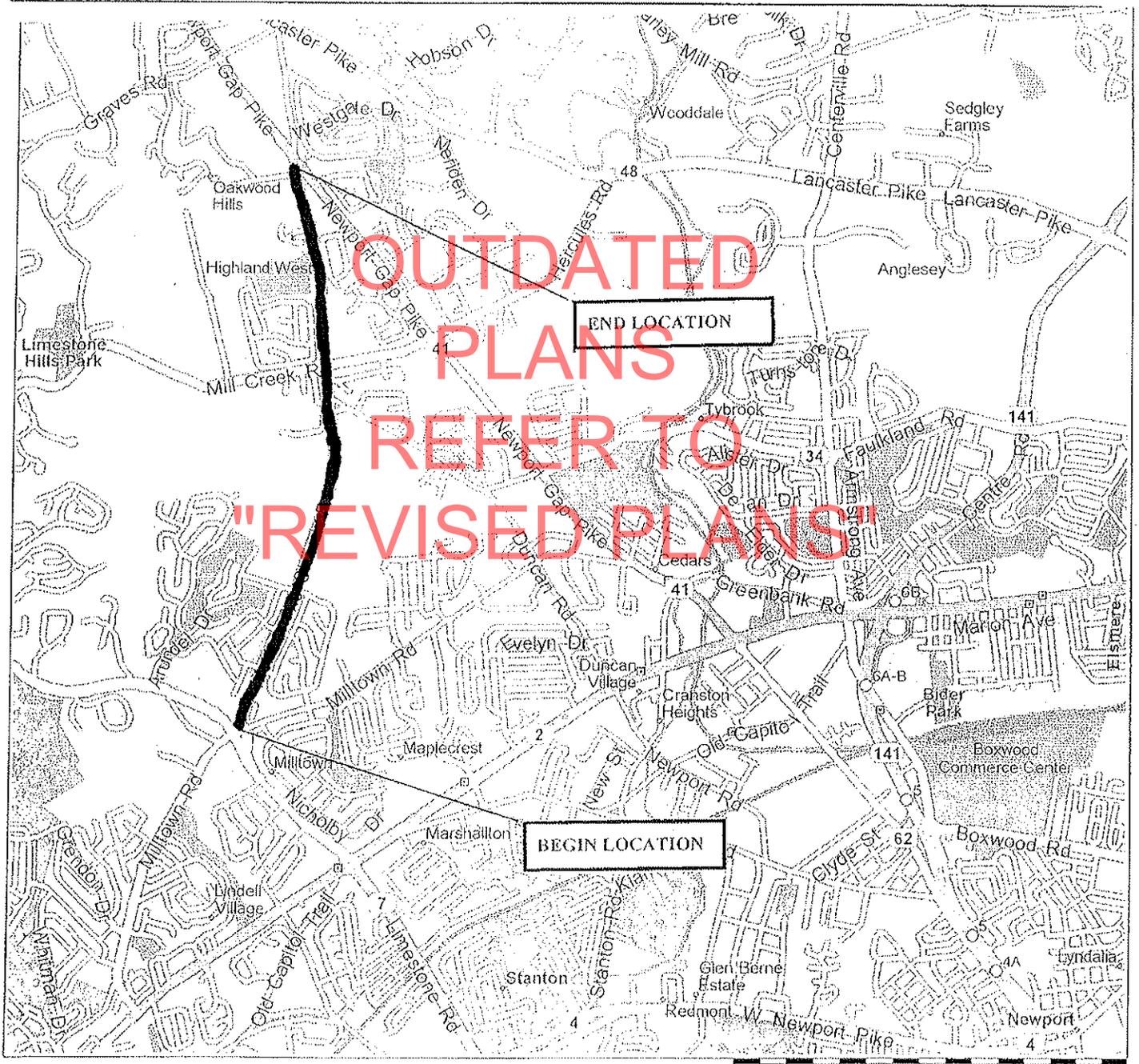
Location #5 - Rt 82 (Creek Rd), from Sharpless Rd to Snuff Mill Rd



VARIOUS ROADS IN NORTH DISTRICT

LOCATION MAP

Location #6 - McKennans Church Rd, from Milltown Rd to Newport Gap Pike



LOCATION MAP

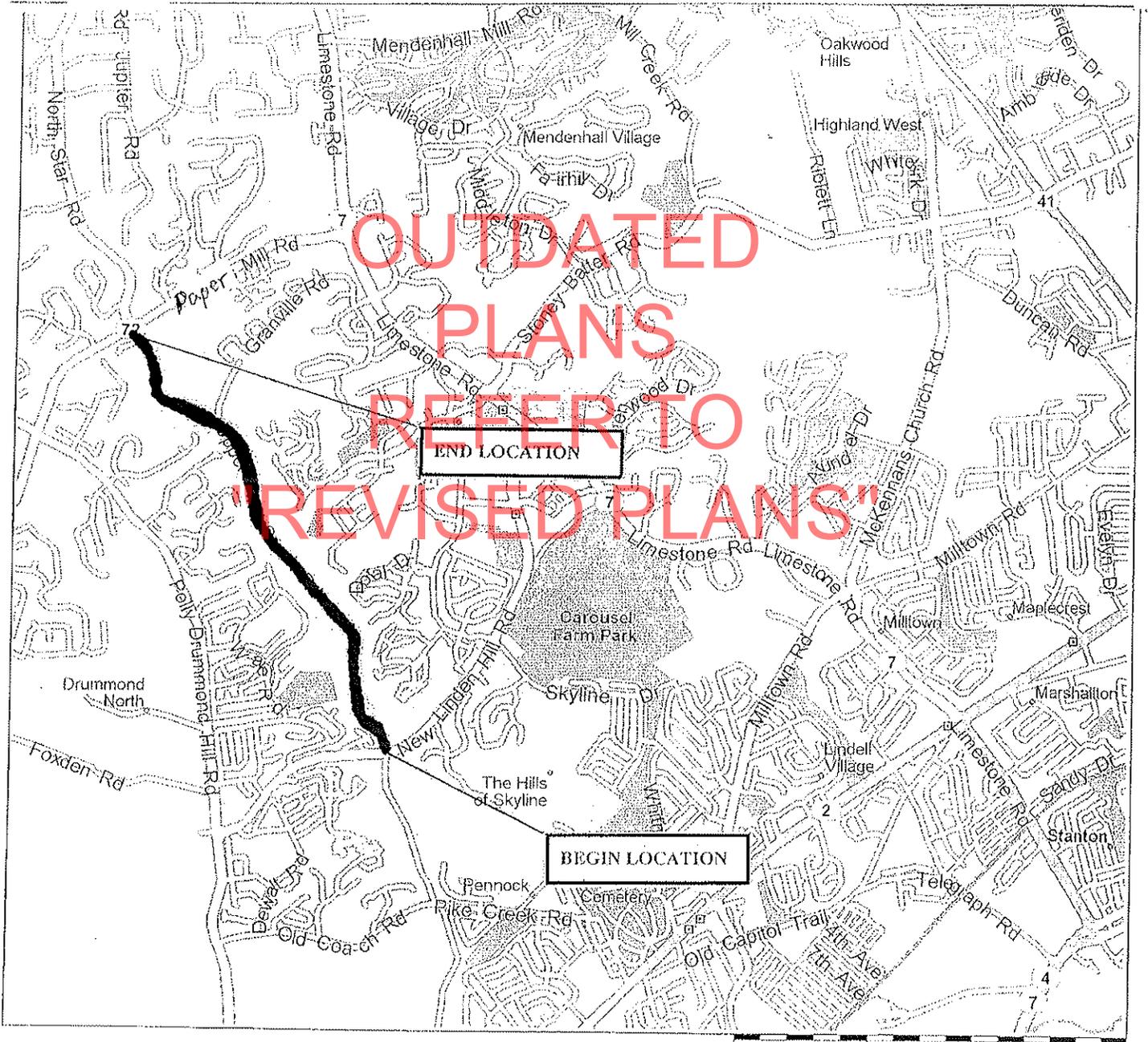
Location #7 - McKennans Church Rd, from Milltown Rd to Limestone Rd



VARIOUS ROADS IN NORTH DISTRICT

LOCATION MAP

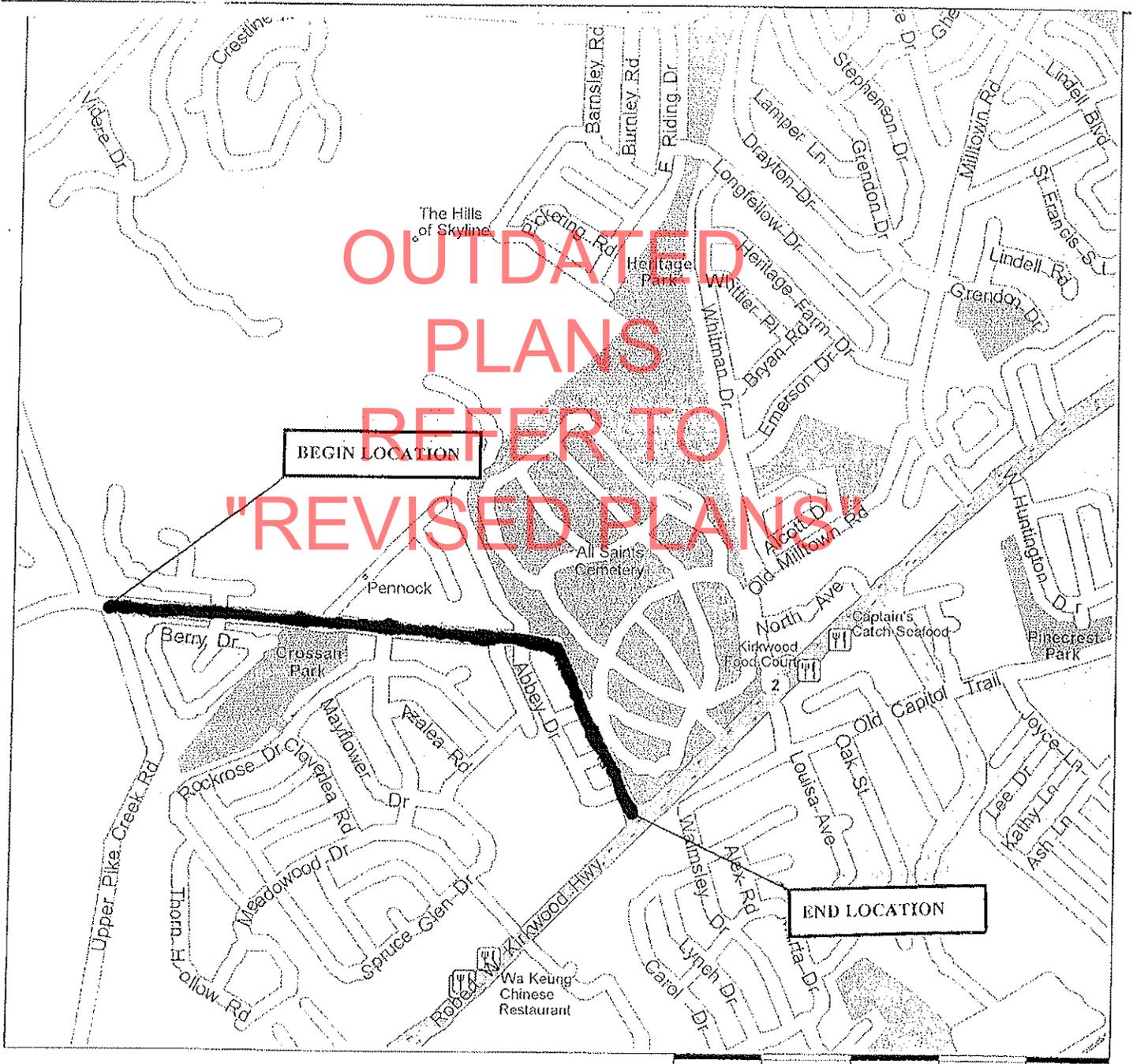
Location #8 - Upper Pike Creek Rd, from New Linden Hill Rd to Paper Mill Rd



VARIOUS ROADS IN NORTH DISTRICT

LOCATION MAP

Location #9 - Pike Creek Rd, from Upper Pike Creek Rd to Kirkwood Hwy



MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

GENERAL CONTRACT PLAN NOTES

GENERAL CONTRACT NOTES

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, and these Notes.
2. The purpose of this contract is to perform micro-surfacing and repairs to roads and/or streets within the North District. 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. 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. Location listings indicate general limits of construction, major types of improvements, and estimated quantities. During the bidding period, any questions pertaining to the locations shall be directed to the contract administrator. After the award, such questions shall be referred to the North District Engineer or his representative.
6. The Contractor shall submit the required copies of a detailed progress schedule 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 of shifts, and scheduled working hours. During the contract, the Contractor shall submit two week (or as required) "look ahead" schedules to the DelDOT Engineer no later than noon of each Thursday. Failure to comply will result in suspension of all contract work with the time charges continuing to be assessed.
7. 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 of proposed work dates.
8. The Contractor is reminded that Section 105.07 of the Standard Specifications requires the General

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

GENERAL CONTRACT PLAN NOTES

Contractor to have a competent superintendent or foreman on the project at all times.

9. The Contractor shall protect all driveways from damage due to Contractor's equipment and shall be responsible for all such damage done by Contractor's equipment.

10. All costs for the following work shall be incidental to the bid price for micro-surfacing Pay Item 403510 as applicable: Clipping back vegetation from the edges of the roadway, shoulders, and the first 3 feet of paved driveway entrances; picking up and disposing of waste and excess material; and cleaning the existing pavement prior to the micro-surfacing.

11. 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 expense

12. For Pay Item 401823 (WMA Superpave BCBC), the maximum allowable lift thickness is 6 inches depth. Minimum allowable lift thickness is 3 inches.

13. 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).

14. All milled material shall remain the property of the Contractor.

15. Removal of all warm-mix, base course material, and unsuitable soil shall be paid under Item 406001 (Warm-Mix Patching).

16. Removal of material under Pay Item 406001 (Warm-Mix Patching) shall be performed by use of a milling machine, unless directed otherwise by the Engineer. The Engineer may require use of other removal methods for small patching locations, at the sole discretion of the Engineer. The minimum width for pavement repair is 6 feet, unless directed otherwise by the Engineer. All warm mix materials shall be placed utilizing a paving machine.

17. Excavated material not needed on the project shall be removed from the site at Contractor's expense.

18. All milled patch areas must be backfilled with Superpave B.C.B.C. the same day.

19. Proper disposal of construction related wastes shall be the sole responsibility of the Contractor.

20. After pavement milling, all raised edges of manholes, drainage inlets, water valve boxes, and similar objects shall be ramped with Warm-mix temporary roadway material (TRM) at a 20:1 slope or flatter. Payment shall be incidental to Item 406001 (Warm-Mix Patching). Pavement milling or cold patch

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

GENERAL CONTRACT PLAN NOTES

material will not be allowed for this purpose. All warm-mix TRM shall be removed prior to paving operations.

21. The Contractor shall take care in removing pavement around utilities, butt joints, curbs, and similar objects, 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 warm-mix residue wedge remaining after milling operations shall be incidental to Item 406001 (Warm-Mix Patching). The removal of existing raised pavement markers shall be incidental to Item 406001.

22. The Contractor shall submit detailed drawings that show the existing pavement markings for each project work location. The drawings shall be submitted to the Engineer at the Preconstruction meeting. The drawings shall include, but not be limited to, the existing striping lengths, lane and shoulder widths, turn lane lengths, location of stop bars, turn arrows, crosswalks, and railroad crossings. These drawings will be reviewed by the DelDOT 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 exist. If Department personnel must provide a 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.

The Contractor shall be required to show proof that he has sufficient approved striping materials on hand, to ensure striping is completed prior to opening roadway to traffic.

23. 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. 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 the removal of erroneous markings shall be repaired/replaced to the satisfaction of the Engineer at Contractor's expense.

24. 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 micro-surface. Failure to comply will result in suspension of all other contract work, with time charges continuing to be assessed. If the

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

GENERAL CONTRACT PLAN NOTES

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.

25. 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.

26. The Contractor shall provide all residents and businesses who live adjacent to the work zone a minimum 48 hour written notice prior to the start of construction work. This notification shall include the scope of work, working hours, anticipated start and completion dates, Contractor name and address, and DeIDOT contact numbers. Failure to give proper notice will result in a suspension of the work requiring notice, until proper notice is provided. Access to all business 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.

27. All paving for warm-mix patching is to be completed within seven (7) calendar days from the time the existing pavement was removed, unless directed otherwise by the Engineer. Failure to comply will result in suspension of all other contract work, with time charges continuing to be assessed.

28. The Contractor shall submit certified weight tickets to DeIDOT for all aggregate, mineral filler, and emulsion delivered to the job site. These tickets will be checked against the measured yields to ensure final yields meet those stated in the specification.

29. 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.

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

GENERAL CONTRACT PLAN NOTES

Maintenance of Traffic

30. Temporary traffic control devices shall be furnished and placed in accordance with the most recent version of the **Delaware Manual of Uniform Traffic Control Devices** (MUTCD). The Contractor shall refer to the configuration requirements for each Typical Application scenario at each work location. The proposed traffic control device configuration will be addressed the Contractor's Traffic Control Plan.

31. All **warning signs** shall be diamond grade **retroreflective** on aluminum panels, and made up of NCHRP 350 compliant rigid material.

32. The Contractor, with the Engineer's representative, shall **inventory all signs** on all roads subject to improvements. Necessary signs shall be maintained in operation during construction, and any other signs shall be properly stored with the Contractor, who shall be responsible for loss or damage. Immediately prior to final inspection, the Contractor and Engineer shall again inventory the traffic signs and account for any lost or damaged signs. Lost or damaged signs shall be replaced by the Contractor at Contractor's expense.

33. 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 on Uniform Traffic Control Devices, Part 6, including revisions up to the date of advertisement for bids.

34. The Contractor shall prepare and submit a site-specific **Traffic Control Plan** for each work location. The Traffic Control Plan shall be submitted to DeIDOT for approval five working days before the start of work at each location. The Traffic Control Plan must clearly indicate orientation of traffic control devices to be used for each site. The Contractor shall submitted Traffic Control Plans for all work locations, including certification documentation for all traffic control devices, prior to the Preconstruction Meeting. The Plans must be approved by the DeIDOT Safety Officer and DeIDOT Engineer prior to commencement of work at each site. Costs for preparation of the Traffic Control Plan shall be included in the bid price for Item 763643 (Maintenance of Traffic, All Inclusive).

35. All traffic control devices shall be in new or refurbished condition, and shall be in compliance with the Delaware Manual on Uniform Traffic Control Devices and NCHRP 350 as defined in Part 6 of the Manual. The devices shall be approved by the District Safety Officer prior to use and shall be maintained in good condition for the duration of the Contract.

36. If a road closure is required, the Contractor shall be required to submit the proposed detour route to the DeIDOT Safety Officer for approval. The Contractor shall coordinate the road closure with the Engineer. The Engineer will coordinate with the DeIDOT Safety Section, and be responsible for the

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

GENERAL CONTRACT PLAN NOTES

necessary emergency notifications. The detour route requires approval by the Engineer prior to closure. The Engineer will coordinate with the DeIDOT Team Support Section for notification requirements prior to road closure. A two week lead time for detour plan review shall be required for any requested detour. The Contractor shall be responsible for furnishing and maintaining the Maintenance of Traffic apparatus at the closure (such as Type III barricades, road closure signs, etc) and all advanced warning signs. The Contractor shall be responsible for placement of detour trailblazers. Payment for detour trailblazers shall be under Item 763643 (Maintenance of Traffic).

37. All open excavations shall be secured with plastic **drums with retroreflective** fluorescent orange and white prismatic sheeting and orange plastic snow fence. If the construction activity results in a vertical difference or drop-off 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) as directed by the Engineer. The snow fence, tie wire, and associated items shall be incidental to Item 763643 (Maintenance of Traffic, All Inclusive).

38. **Drums** with fluorescent sheeting will be required in work areas where completion time will extend beyond one daylight operation. All drums shall consist of fluorescent orange and white prismatic reflective sheeting. Lights shall not be used on drums.

39. All **flaggers** utilized by the Contractor for this project shall be ATSSA certified by a Department approved certification program. All flaggers shall have certification cards and photo identification with them while working. Absence of a certification card will be justification for flagger dismissal from the site, and corresponding suspension of work. All garments worn by the flaggers shall comply with the applicable regulations for visibility and reflectivity. All construction and Contractor vehicles and self-propelled equipment shall be equipped with an operating roof mounted amber flashing light.

40. All workers shall wear a retro reflective safety vest while they are within the right-of-way or adjacent to it. All retro-reflective safety vests must be minimum ANSI Class 2.

41. Work hours shall be from **8:00 AM to 4:00 PM**, Monday through Friday, unless directed otherwise by the Engineer. The Contractor shall comply with these time restrictions.

42. Costs for adjustment in position of traffic control devices due to variances from the standard MOT case numbers, or for any other reason, shall be included in unit price for each respective MOT pay item 763643 (Maintenance of Traffic, All Inclusive).

43. A **Truck mounted attenuator**, Type II (Item 743010) shall be required on roads for shoulder work, travel lane work and other operations as outlined in the Delaware MUTCD, or as directed by the Engineer.

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

GENERAL CONTRACT PLAN NOTES

- 44. No lane closures will be permitted unless applicable work activity is taking place.
- 45. Do not perform microsurfacing, crack sealing or patching within Railroad right-of-way.

**OUTDATED
PLANS
REFER TO
"REVISED PLANS"**

DETAILS SHEET



OUTDATED
PLANS
REFER TO
REVISED PLANS

UNDERCUT EXCAVATION
(WHEN DIRECTED
BY THE ENGINEER)
(SEE NOTE 1 AND NOTE 2)

WARM-MIX PATCH
TYPICAL SECTION
NOT TO SCALE

NOTES

1. DEPTH WILL VARY, AS DIRECTED BY THE DELDOT ENGINEER
2. BACKFILL FOR UNDERCUT EXCAVATION SHALL BE WMA SUPERPAVE B.C.B.C. (ITEM 401823). LIFT THICKNESS SHALL BE 3" (MINIMUM) AND 6" (MAXIMUM) FOR SUPERPAVE B.C.B.C.

	DELAWARE DEPARTMENT OF TRANSPORTATION	WARM-MIX PATCH BENEATH MICROSURFACING
DRAWN BY: RCC FEB 2011		

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306701

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NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 1 208(CHESTNUT LANE) FROM RD 23 MARSH RD TO 500 FEET FROM MARSH RD

LENGTH 0.1287 km 0.08 MILE AADT 3046

GENERAL IMPROVEMENTS

MICROSURFACING, CRACK SEALING

COMMENTS:

Chestnut Lane is also known as Chestnut Street. Scope of work for this Location includes microsurfacing and crack sealing 500 ft of Chestnut St, and 500 ft of Marsh Rd, at intersection.

MATERIAL ESTIMATE FOR LOCATION 1

403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	1,300.00 S.Y.
406507	CRACK SEALING	900.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	200.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	20.00 HOUR
748032	TEMPORARY MARKINGS, PAINT, 5"	950.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	735.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	1,750.00 L.F.

** DENOTES FIXED PRICE ITEM

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306701

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NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 2 225(MONTCHANIN ROAD) FROM RD 265 BUCK RD TO RD 236 KIRK RD

LENGTH 1.1263 km 0.7 MILE AADT 4910

GENERAL IMPROVEMENTS

MICROSURFACING AND CRACK SEALING

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 2

403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	9,100.00 S.Y.
406507	CRACK SEALING	4,000.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	200.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL OVERTIME	20.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLAST IC	260.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	260.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	30,600.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	6,866.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	15,300.00 L.F.

** DENOTES FIXED PRICE ITEM

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306701

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NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 3 253(MCGOVERN ROAD) FROM RD 237 LANCASTER PIKE TO RD 247 CREEK RD

LENGTH 3.8777 km 2.41 MILE AADT 1746

GENERAL IMPROVEMENTS

MICROSURFACING, WARM MIX PATCHING, CRACK SEALING

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 3

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	600.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	31,200.00 S.Y.
406001	WARM-MIX PATCHING	10,650.00 SY-IN
406507	CRACK SEALING	35,000.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	400.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	40.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	50.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	50.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	25,000.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	4,964.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	11,700.00 L.F.
762001	SAW CUTTING, HOT MIX	1,100.00 L.F.

** DENOTES FIXED PRICE ITEM

NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 4 257(YORKLYN ROAD) FROM RD 237 LANCASTER PIKE TO RED CLAY CREEK
BRIDGE

LENGTH 3.0732 km 1.91 MILE AADT 7319

GENERAL IMPROVEMENTS

MICROSURFACING, WARM MIX PATCHING, CRACK SEALING

COMMENTS: There is a subdivision project occurring on Yorklyn Road just west of the bridge. Coordinate this work with Public Works.

MATERIAL ESTIMATE FOR LOCATION 4

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	50.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	24,700.00 S.Y.
406001	WARM-MIX PATCHING	900.00 SY-IN
406507	CRACK SEALING	15,000.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	300.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	30.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	200.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	200.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	50,000.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	18,260.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	43,000.00 L.F.
762001	SAW CUTTING, HOT MIX	100.00 L.F.

OUTDATED
 PLANS
 REFER TO
 "REVISED PLANS"

** DENOTES FIXED PRICE ITEM

CONTRACT T201306701

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NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 5 **261(MOUNT CUBA ROAD) FROM RD 251 SHARPLESS RD TO RD 247 SNUFF MILL RD**

LENGTH 0.8206 km 0.51 MILE AADT 1785

GENERAL IMPROVEMENTS

MICROSURFACING, PATCHING, CRACK SEALING

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 5

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	125.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	6,600.00 S.Y.
406001	WARM-MIX PATCHING	2,200.00 SY-IN
406507	CRACK SEALING	13,200.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	200.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	20.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	200.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	200.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	30,000.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	6,220.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	16,000.00 L.F.
762001	SAW CUTTING, HOT MIX	100.00 L.F.

** DENOTES FIXED PRICE ITEM

NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 6 276(MCKENNANS CHURCH ROAD) FROM RD 280 MILLTOWN RD TO RD 21
NEWPORT GAP PIKE

LENGTH 3.7007 km 2.3 MILE AADT 10

GENERAL IMPROVEMENTS

MICROSURFACING, WARM MIX PATCHING, CRACK SEALING

COMMENTS: Work performed at this location should be done outside of school hours.

MATERIAL ESTIMATE FOR LOCATION 6

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	100.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	43,500.00 S.Y.
406001	WARM-MIX PATCHING	1,800.00 SY-IN
406507	CRACK SEALING	30,375.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	400.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	40.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	420.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	420.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	135,000.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	21,420.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	50,000.00 L.F.
762001	SAW CUTTING, HOT MIX	150.00 L.F.

** DENOTES FIXED PRICE ITEM

NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 7 280A(MCKENNANS CHURCH ROAD) FROM RD 280 MILLTOWN RD TO RD 31
LIMESTONE RD

LENGTH 0.1609 km 0.1 MILE AADT 660

GENERAL IMPROVEMENTS

MICROSURFACING, WARM MIX PATCHING, CRACK SEALING

COMMENTS: Coordinate with the funeral home located on this portion of McKennans Church Road to avoid impacts.

MATERIAL ESTIMATE FOR LOCATION 7

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	25.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	1,300.00 S.Y.
406001	WARM-MIX PATCHING	500.00 SY-IN
406507	CRACK SEALING	1,250.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	200.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	20.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	25.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	25.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	1,000.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	277.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	600.00 L.F.
762001	SAW CUTTING, HOT MIX	50.00 L.F.

** DENOTES FIXED PRICE ITEM

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT T201306701

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NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 8 295(UPPER PIKE CREEK ROAD) FROM RD 321 NEW LINDEN HILL RD TO RD 13
PAPER MILL RD

LENGTH 3.3467 km 2.08 MILE AADT 7775

GENERAL IMPROVEMENTS

MICROSURFACING, WARM MIX PATCHING, CRACK SEALING

COMMENTS:

MATERIAL ESTIMATE FOR LOCATION 8

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	50.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	26,900.00 S.Y.
406001	WARM-MIX PATCHING	900.00 SY-IN
406507	CRACK SEALING	10,000.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	400.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	40.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	25.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	25.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	45,000.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	9,685.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	23,000.00 L.F.
762001	SAW CUTTING, HOT MIX	100.00 L.F.

** DENOTES FIXED PRICE ITEM

NORTH
MAINTENANCE

MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14

LOCATION 9 316(PIKE CREEK ROAD) FROM RD 322 UPPER PIKE CREEK RD TO RD 11
KIRKWOOD HWY

LENGTH 1.432 km 0.89 MILE AADT 4212

GENERAL IMPROVEMENTS

MICROSURFACING, WARM MIX PATCHING, CRACK SEALING

COMMENTS: Work performed at this location should be done outside of school hours.

MATERIAL ESTIMATE FOR LOCATION 9

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	50.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	11,500.00 S.Y.
406001	WARM-MIX PATCHING	900.00 SY-IN
406507	CRACK SEALING	4,700.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	10.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	4.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	200.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	20.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	200.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	200.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	37,600.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	8,096.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	18,800.00 L.F.
762001	SAW CUTTING, HOT MIX	100.00 L.F.

OUTDATED
 PLANS
 REFER TO
 "REVISED PLANS"

** DENOTES FIXED PRICE ITEM

DELAWARE DEPARTMENT OF TRANSPORTATION

CONTRACT: T201306701

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NORTH MICRO-SURFACING B, NORTH DISTRICT, FY13-FY14
MAINTENANCE

CONTRACT QUANTITIES SUMMARY SHEET

401823	WMA, SUPERPAVE, BITUMINOUS CONCRETE BASE COURSE, 160 GYRATIONS, PG 64-22, PATCHING	1,000.00 TON
403510	POLYMER-MODIFIED EMULSION MICRO-SURFACING	156,100.00 S.Y.
406001	WARM-MIX PATCHING	17,850.00 SY-IN
406507	CRACK SEALING	114,425.00 L.F.
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGN	90.00 EA-DY
743010	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR, TYPE II	36.00 EA-DY
743056	** FLAGGER, NEW CASTLE COUNTY, FEDERAL	2,500.00 HOUR
743065	** FLAGGER, NEW CASTLE COUNTY, FEDERAL, OVERTIME	250.00 HOUR
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	1,380.00 S.F.
748026	TEMPORARY MARKINGS, PAINT SYMBOL/LEGEND	1,380.00 S.F.
748032	TEMPORARY MARKINGS, PAINT, 5"	355,150.00 L.F.
748530	REMOVAL OF PAVEMENT STRIPING	76,523.00 S.F.
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	180,150.00 L.F.
762001	SAW CUTTING, HOT MIX	1,700.00 L.F.
763000	INITIAL EXPENSE	LUMP SUM
763643	MAINTENANCE OF TRAFFIC, ALL INCLUSIVE	LUMP SUM

** DENOTES FIXED PRICE ITEM