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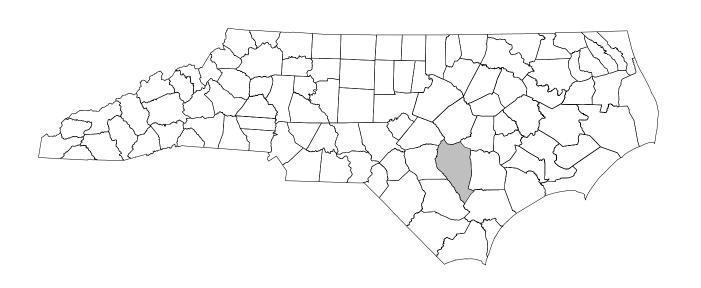
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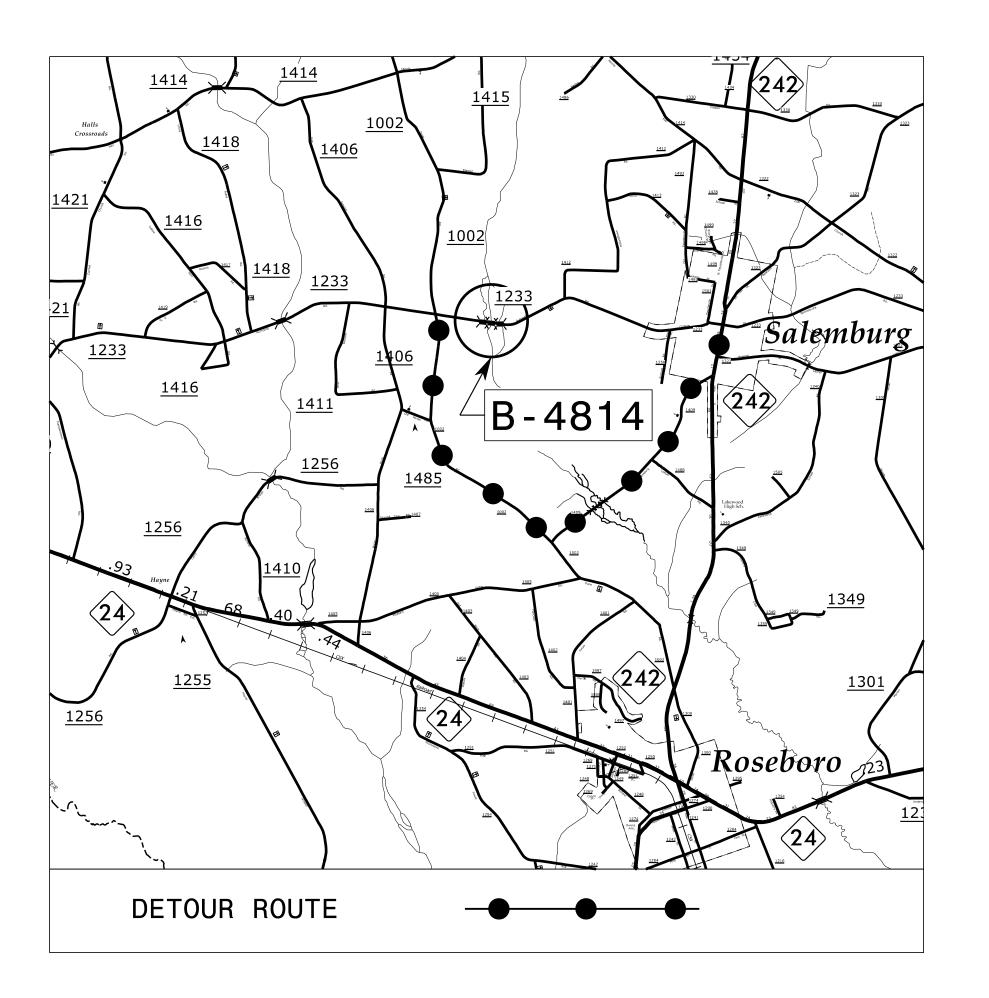
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# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

# TRANSPORTATION MANAGEMENT PLAN

# SAMPSON COUNTY





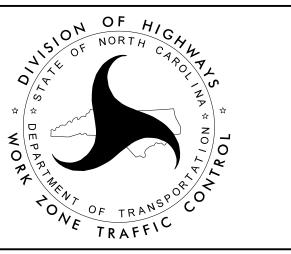
# WORK ZONE SAFETY & MOBILITY "from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
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### INDEX OF SHEETS

SHEET NO. TITLE TMP - 1

TITLE SHEET, VICINITY MAP, INDEX OF SHEETS AND LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS

TMP-1A TRANSPORTATION OPERATIONS PLAN: (GENERAL NOTES

AND PHASING)

TMP-2 SPECIAL SIGN DESIGN

TMP-3 OFF-SITE DETOUR ROUTE AND BARRICADE PLACEMENT

TMP-4 RESURFACING ADVANCE WARNING SIGNS FOR RURAL

AND SUBURBAN 2 LANE ROADS

# ROADWAY STANDARD **DRAWINGS**

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

#### SHEET NO.

#### TITLE

1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

#### DOCUMENT NOT CONSIDERED FINAL **UNLESS ALL SIGNATURES COMPLETED**

APPROVED: Don A. Parker *DATE*: 9/26/2016 SEAL

TMP-1

B

#### GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

#### LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- D) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- DO NOT INSTALL MORE THAN 1 MILE OF LANE CLOSURE ON ANY ROAD MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

#### PAVEMENT EDGE DROP OFF REQUIREMENTS

F) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT,

#### TRAFFIC PATTERN ALTERATIONS

G) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

#### SIGNING

- H) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

- L) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- M) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

#### LOCAL NOTES

#### LOCAL NOTE 1 - DETOUR RESURFACING REQUIREMENTS

TRAFFIC CONTROL DEVICES

BEFORE WORKING ON ANY ROAD, THE CONTRACTOR SHALL SUBMIT A WRITTEN CONSTRUCTION SEQUENCE FOR TRAFFIC CONTROL FOR ALL ROADS TO THE ENGINEER AT THE FIRST PRE-CONSTRUCTION MEETING FOR APPROVAL.

OBTAIN WRITTEN APPROVAL OF THE ENGINEER BEFORE WORKING IN MORE THAN ONE LOCATION.

CONTRACTOR SHALL MILL AND PAVE LANES IN AN ORDER SUCH THAT WATER SHALL NOT ACCUMULATE.

#### LOCAL NOTE 2 - PAVING LIFT REQUIREMENTS AND TIME LIMITATIONS FOR DETOUR RESURFACING.

BRING ALL NEWLY RESURFACED LANES TO THE SAME STATION AND ELEVATION WITHIN 72 HOURS. IF NOT BROUGHT UP TO THE SAME STATION AND ELEVATION WITHIN 72 HOURS, THE CONTRACTOR SHALL PLACE PORTABLE "UNEVEN PAVEMENT" SIGNS IN ADVANCE OF THE UNEVEN PAVEMENT AND SPACED EVERY 1/2 MILE ALONG THE SECTION OF UNEVEN PAVEMENT. ONCE MITIGATED, ALL PORTABLE "UNEVEN PAVEMENT" SIGNS SHALL BE REMOVED.

#### LOCAL NOTE 3 - ADVANCE WARNING SIGNS FOR DETOUR RESURFACING

INSTALL ADVANCE/GENERAL WARNING WORK ZONE SIGNS ACCORDING TO TMP-4 PRIOR TO BEGINNING OF WORK. INSTALL AND MAINTAIN SIGNING IN ACCORDANCE WITH THE ATTACHED DRAWINGS AND DIVISIONS 11 AND 12 OF THE 2012 STANDARD SPECIFICATIONS.

#### (A) SIGN INSTALLATION

ALL STATIONARY ADVANCE/GENERAL WARNING WORK ZONE SIGNS REQUIRE NOTIFICATION TO EXISTING UTILITY OWNERS PER ARTICLE 105-8 OF THE 2012 STANDARD SPECIFICATIONS AND SPECIAL PROVISION SP1 G115 WITHIN 3 TO 12 FULL WORKING DAYS PRIOR TO INSTALLATION.

INSTALL ALL ADVANCE/GENERAL WARNING WORK ZONE SIGNS BEFORE BEGINNING WORK ON A PARTICULAR ROAD. IF SIGNS ARE INSTALLED MORE THAN SEVEN (7) CALENDAR DAYS PRIOR TO THE BEGINNING OF WORK ON A PARTICULAR ROAD, COVER THE SIGNS UNTIL THE WORK BEGINS. INSTALL EACH WORK ZONE ADVANCE/GENERAL WARNING SIGN SEPARATELY AND NOT ON THE SAME POST OR STAND WITH ANY OTHER SIGN EXCEPT WHERE AN ADVISORY SPEED PLATE OR DIRECTIONAL ARROW IS USED.

ALL STATIONARY SIGNING IS TO BE INSTALLED AS SHOWN ON THE DETAIL DRAWING(S) UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ALL SIGN LOCATIONS TO BE VERIFIED BY THE ENGINEER PRIOR TO INSTALLATION. ONCE THE SIGNS HAVE BEEN INSTALLED AND ACCEPTED, ANY SIGN RELOCATIONS REQUESTED BY THE DEPARTMENT WILL BE COMPENSATED IN ACCORDANCE WITH ARTICLE 104-7. ANY ADDITIONAL SIGNS OTHER THAN THE ONES SHOWN IN THE DRAWING WILL BE COMPENSATED IN ACCORDANCE WITH ARTICLE 104-7.

NO STATIONARY -Y- LINE ADVANCE WARNING SIGNAGE IS REQUIRED UNLESS THERE'S MORE THAN 1,000 FEET OF RESURFACING ALONG THE -Y-LINE. WHENEVER WORK PROCEEDS THROUGH AN INTERSECTION, PORTABLE SIGNS SHALL BE USED FOR TRAFFIC CONTROL.

PROJ. REFERENCE NO. SHEET NO. TMP - 1A B-4814

IF THERE IS A PERIOD OF CONSTRUCTION INACTIVITY LONGER THAN 14 CALENDAR DAYS, REMOVE OR COVER ADVANCE/GENERAL WARNING WORK ZONE SIGNS. UNCOVER ADVANCE/GENERAL WARNING WORK ZONE SIGNS NO MORE THAN 7 CALENDAR DAYS BEFORE WORK RESUMES. ALL OTHER OPERATIONS MAY BE SUSPENDED UPON FAILURE TO COMPLY WITH THE ABOVE REQUIREMENTS. SUCH SUSPENDED OPERATIONS WOULD NOT BE RESUMED

UNTIL THE ABOVE REQUIREMENTS ARE FULFILLED.

#### (B) SIGN REMOVAL

ALL STATIONARY WORK ZONE SIGNS SHALL BE REMOVED ONCE THE RESURFACING IS SUBSTANTIALLY COMPLETE. THE RESURFACING IS SUBSTANTIALLY COMPLETE WHEN THE RESURFACING OPERATIONS ARE COMPLETED AND THE SHOULDERS ARE BROUGHT UP TO THE SAME ELEVATION AS THE PROPOSED PAVEMENT AND WHEN PAVEMENT MARKINGS ARE INSTALLED. THE PAVEMENT MARKING DOESN'T HAVE TO BE THE FINAL MARKING MATERIAL TO BE CONSIDERED SUBSTANTIALLY COMPLETE. ANY REMAINING PUNCH LIST ITEMS ARE TO BE COMPLETED WITH PORTABLE WORK ZONE SIGNING. THERE WILL BE NO COMPENSATION FOR ANY PORTABLE SIGNING. SIGN REMOVAL IS A CONDITION OF FINAL ACCEPTANCE.

#### **PHASING**

#### PHASE I

- STEP 1 -- INSTALL ADVANCE WARNING SIGNS FOR DETOUR ROUTE RESURFACING. (SEE TMP-4 AND LOCAL NOTE 3).
- STEP 2 -- USING FLAGGERS, RESURFACE THE DETOUR ROUTE AND PLACE FINAL PAVEMENT MARKINGS IN ACCORDANCE WITH THE ROADWAY PLANS. (SEE RSD 1101.02, SHEET 1) AND LOCAL NOTES 1 AND 2.)
- STEP 3 -- REMOVE ADVANCE WARNING SIGNS FOR DETOUR ROUTE RESURFACING. (SEE LOCAL NOTE 3).

#### PHASE II

- STEP 1 -- USING RSD 1101.03. SHEET 1 OF 9. AND SHEET TMP-3. INSTALL DETOUR SIGNS. PLACE TYPE III BARRICADES TO CLOSE SR 1233 (AUTRYVILLE RD) TO THROUGH TRAFFIC, AND DETOUR TRAFFIC OFF-SITE.
- STEP 2 -- AWAY FROM TRAFFIC, COMPLETE THE FOLLOWING:
  - 1) REMOVE EXISTING STRUCTURE AND CONSTRUCT PROPOSED
  - STRUCTURE. (SEE ROADWAY AND STRUCTURE PLANS) 2) CONSTRUCT PROPOSED ROADWAY UP TO AND INCLUDING FINAL
  - LAYER OF SURFACE COURSE. (SEE ROADWAY PLANS)
  - 3) PLACE FINAL PAVEMENT MARKINGS AND TIE INTO EXISTING PAVEMENT MARKINGS. (SEE PAVEMENT MARKING PLANS)
- STEP 3 -- REMOVE ALL TRAFFIC CONTROL DEVICES, ALL DETOUR SIGNING AND OPEN SR 1233 (AUTRYVILLE RD) TO PROPOSED TRAFFIC PATTERN.

Don A. Parker APPROVED: 4DD48286261841D...

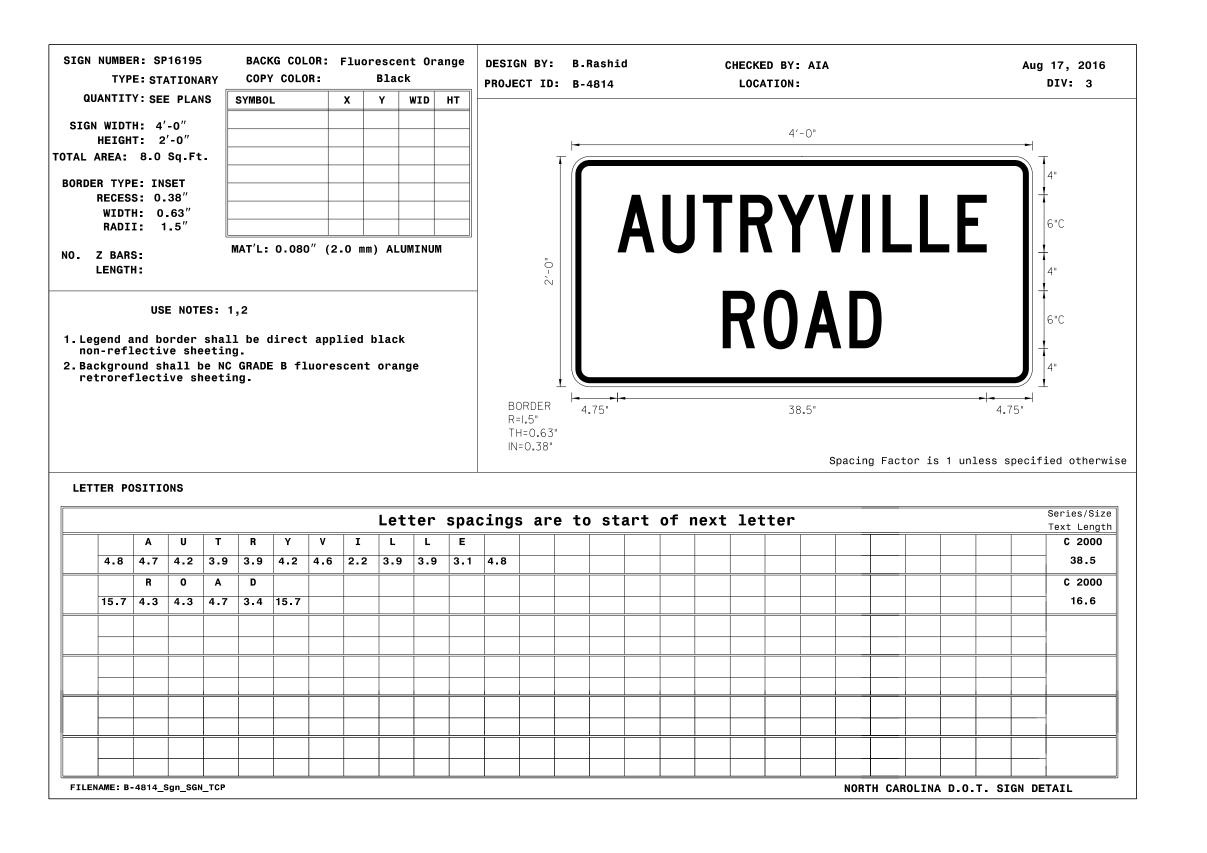
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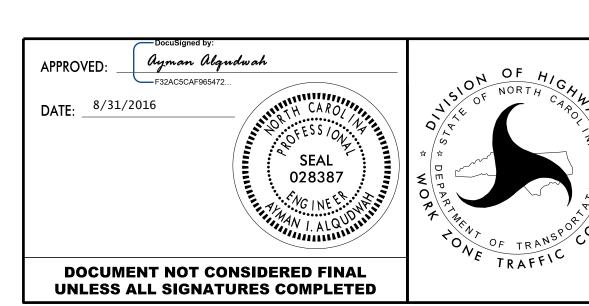


TRANSPORTATION **OPERATIONS PLAN** 

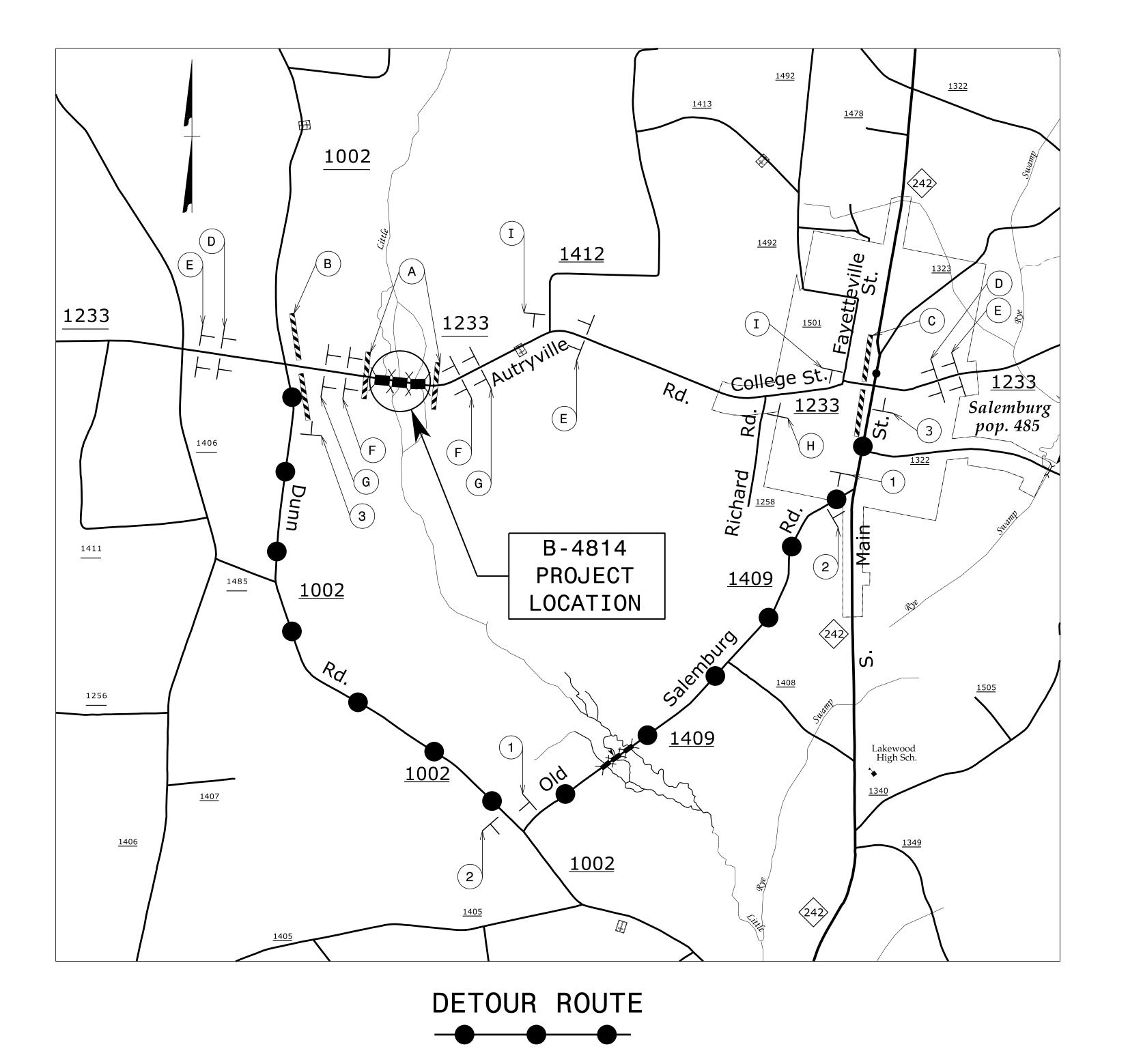
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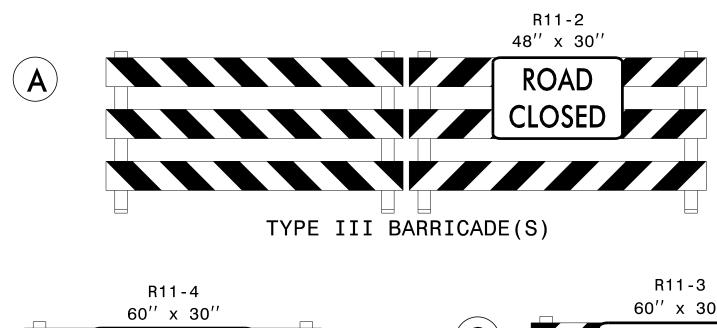
PROJ. REFERENCE NO. SHEET NO. B-4814 TMP-2

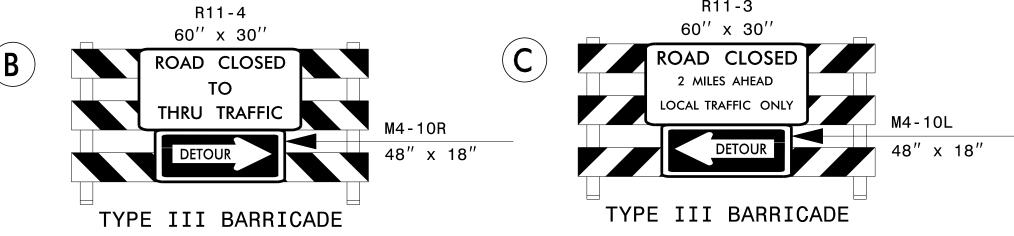


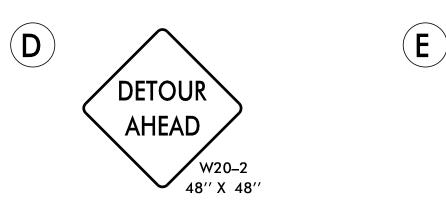


SPECIAL SIGN DESIGN

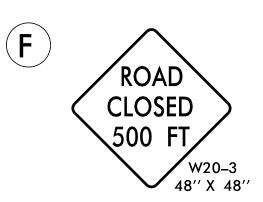


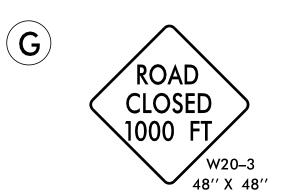


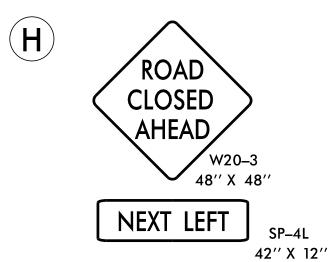


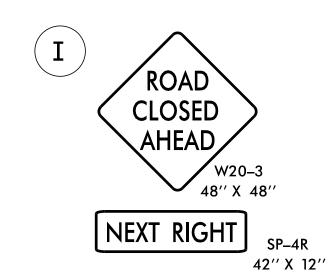














ROAD

DETOUR



24" X 12"

AUTRYVILLE

AUTRYVILLE **ROAD** SPECIAL SIGN 48'' X 24'' END

**3** 

ROAD SPECIAL SIGN 48" X 24" DETOUR 24′′ X 12′′

DETOUR

M4-8 A
24" X 18"

# **LEGEND**

TRAFFIC CONTROL DEVICES

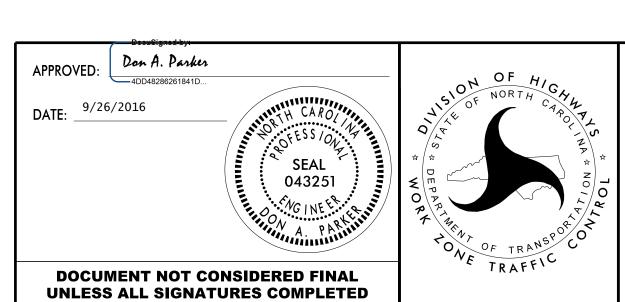
BARRICADE (TYPE III)

TEMPORARY SIGNING

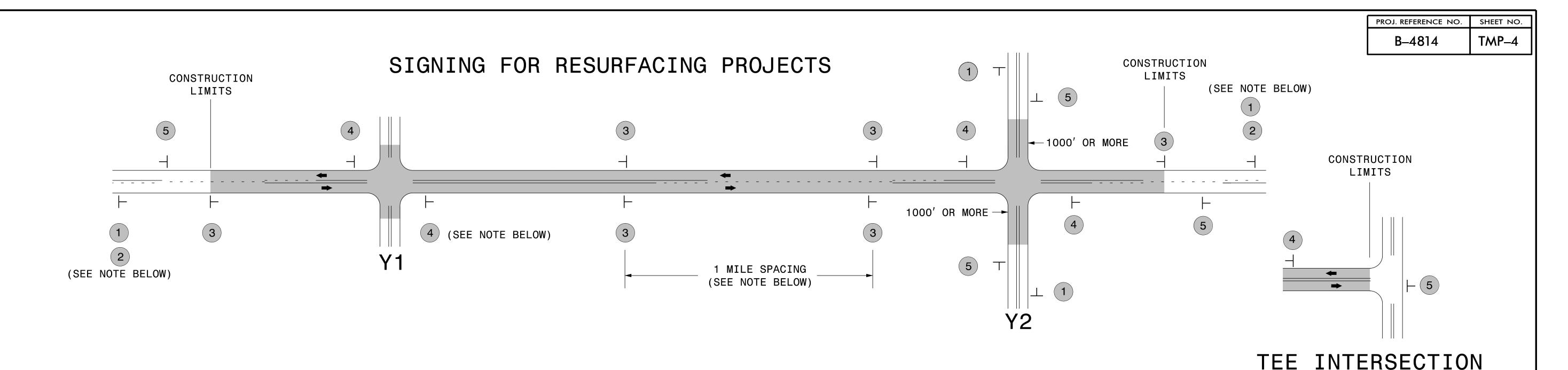
STATIONARY SIGN

NOTES: TRAFFIC CONTROL DEVICES (A) THROUGH (I) SHALL BE INSTALLED ACCORDING TO RSD 1101.03, SHEET 1 OF 9.

TRAFFIC CONSTROL DEVICES 1 THROUGH 3 SHALL BE INSTALLED AS SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.



OFF-SITE DETOUR ROUTE AND BARRICADE PLACEMENT



#### **LEGEND** ├ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW

# MAINLINE (-L-) SIGNING

#### PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ROAD ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. WORK O AHEAD W20-1 48" X 48" ND #2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. NEXT W7-3aP 24" X 18" ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS) A SH - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART LOW/SOFT THEREAFTER. SHOULDER/ - AT TEE INTERSECTIONS INSTALL INITIALLY ½ MILE FROM INTERSECTION NO ER SP 13107 48" X 48" AND SPACE 1 MILE APART THEREAFTER. $\Box$ IGNING - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. **ROAD** - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. UNDER - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES S ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE. END PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN ROAD WORK WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION. G20–2 A 48" X 24"

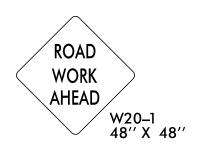
#### NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE

-Y- LINE SIGNING

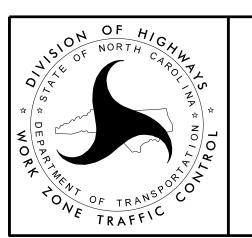
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.





PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.



RESURFACING ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2 LANE ROADWAYS