

SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

**RESURFACING PLAN
SHELBY COUNTY - RALEIGH LAGRANGE ROAD
TDOT PROJECT NO. 79LPLM-F0-352
PIN: 119863.00
PROJECT No. STP-M-5134(10)**

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	2

NO.	ITEM	DESCRIPTION	UNIT	QUANTITY
1	202-03.03	REMOVAL OF ASPHALT PAVEMENT	C.Y.	400
② ①	2	303-02 MINERAL AGGREGATE (TYPE B BASE/GRADING A)	TON	400
①	3	307-03.01 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	260
	4	403-01 BITUMINOUS MATERIAL FOR TACK COAT	TON	10
③	5	411-01.10 ASPHALTIC CONCRETE SURFACE (PG64-22) (1.5") GRADING D	TON	2,510
	6	415-01.02 COLD PLANING BITUMINOUS PAVEMENT	S.Y.	16,106
	7	701-01.01 CONCRETE SIDEWALK 4" REMOVE AND REPLACE	S.F.	1,200
	8	701-02.01 CONCRETE HANDICAP RAMP (RETROFIT)	S.F.	2,600
	9	712-01 TRAFFIC CONTROL	L.S.	1
	10	712-04.01 FLEXIBLE DRUMS (CHANNELIZING)	EACH	200
④	11	712-06 SIGNS (CONSTRUCTION)	S.F.	472
	12	712-08.03 ARROW BOARD (TYPE C)	EACH	1
	13	713-02.34 DELINEATORS	EACH	12
	14	713-11.01 "U" SECTION STEEL POST (3 LBS./FT. AVG. 12 FT.)	LBS.	1,080
	15	713-13.01 FLAT SHEET ALUMINUM SIGNS (0.064" THICK)	S.F.	207
	16	713-15 REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
⑤	17	716-02.01 PLASTIC PAVEMENT MARKING (4" LINE) (YELLOW)	L.M.	2.5
⑤	18	716-02.03 PLASTIC PAVEMENT MARKING (CROSS-WALK)	L.F.	260
⑤	19	716-02.04 PLASTIC PAVEMENT MARKING (4" WHITE) (CHANNELIZATION STRIPING)	S.Y.	10
⑤	20	716-02.05 PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	137
⑤	21	716-02.06 PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	3
⑤	22	716-03.01 PLASTIC WORD PAVEMENT MARKINGS (ONLY)	EACH	3
⑥	23	716-05.01 PAINTED PAVEMENT MARKING (4" LINE) (WHITE)	L.M.	2.7
	24	717-01 MOBILIZATION	L.S.	1

FOOTNOTES:

- ① TO BE USED IN BREAKOUT SECTION.
- ② FOR REPLACEMENT OF QUANTITY REMOVED UNDER ITEM 202-03.03. FOR USE ON MAINLINE ONLY.
- ③ INCLUDES 160 TONS FOR SIDE STREETS, PRIVATE DRIVES, BUSINESS ENTRANCES: 150 TONS FOR SPOT LEVELING.
- ④ QUANTITY INCLUDES:
 - 2 ROAD WORK NEXT 1.3 MILE (G20-1)
 - 2 END ROAD WORK (G20-2A)
 - 2 UNEVEN LANES (W8-11)
 - 14 ROAD WORK AHEAD (W20-1)
 - 2 ROAD WORK 1500 FT. (W20-1)
 - 2 ROAD WORK 1000 FT. (W20-1)
 - 2 ROAD WORK 500 FT. (W20-1)
 - 2 FLAGGER AHEAD (W20-7A)
 - 2 FRESH OIL (W21-2)

THIS CONSTRUCTION SIGNING IS TO BE AS A MINIMUM. OTHER SIGNS AS DIRECTED BY THE ENGINEER MAY BE REQUIRED DURING DIFFERENT TIMES.

- ⑤ FOR FINAL PAVEMENT MARKING ONLY.
- ⑥ FOR USE AS TEMPORARY LINE MARKINGS.

ADA RAMP LOCATIONS

INTERSECTION	NE QUAD.	SE QUAD.	SW QUAD.	NW QUAD.
RALEIGH LAGRANGE RD @ NOLAN LN	1	1		
RALEIGH LAGRANGE RD @ GOLDEN NUGGET LN			1	1
RALEIGH LAGRANGE RD @ COUNTRY WALK DR			1	1
RALEIGH LAGRANGE RD @ BRADY HILL DR			1	
RALEIGH LAGRANGE RD @ AMBERLY WAY DR	1	1	1	
RALEIGH LAGRANGE RD @ AMBERLY VILLAGE DR				1
RALEIGH LAGRANGE RD @ LAGRANGE HILL DR				
RALEIGH LAGRANGE RD @ LAGRANGE HILL RD	1	1	1	1
RALEIGH LAGRANGE RD @ BERINGER DR	1	1		
RALEIGH LAGRANGE RD @ ESTACADA WAY	1	1		
RALEIGH LAGRANGE RD @ LAGRANGE PINES RD	1	1		
TOTALS	6	6	5	4

ENGINEERS SEAL



SHELBY COUNTY
ENGINEERING DEPARTMENT

**ESTIMATED
ROADWAY
QUANTITIES**

SHELBY COUNTY	ENGINEERING DEPARTMENT	FILE NO.
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GENERAL NOTES

GRADING

1. ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

UTILITIES

2. THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
3. UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
5. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FROM THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.
6. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

MISCELLANEOUS

7. ALL DETOUR, ACCESS, SERVICE AND FRONTAGE ROADS SHALL BE CONSTRUCTED WITH A MINIMUM OF ONE (1) COURSE OF BASE MATERIAL BEFORE TRAFFIC IS INTERRUPTED ON EXISTING ROADS.
8. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.
9. NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

10. TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS BEFORE DARK HOURS. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

11. ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
12. IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO. 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
13. A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
14. TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
15. ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

EROSION CONTROL

16. DUE TO PROJECT SCOPE, A SWPPP IS NOT REQUIRED. BEST MAINTENANCE PRACTICES (BMP) SHALL BE EMPLOYED AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE WORK AREA.
17. EROSION PREVENTION SEDIMENT CONTROL IS INCIDENTAL TO THE CONTRACT.

SPECIAL NOTES

18. ALL STRIPING (PAINT) SHALL BE COMPLETED 24 HOURS AFTER OVERLAY IS COMPLETE. ALL OTHER PLASTIC PAVEMENT MARKINGS SHALL BE COMPLETE WITHIN 14 DAYS.
19. THE ASPHALT CONCRETE SURFACE SHALL CONTAIN ALL NEW MATERIALS. USE OF RAP WILL NOT BE PERMITTED FOR SURFACE MIXES.
20. OVERLAP EXISTING ASPHALT LONGITUDINAL JOINTS A MINIMUM OF 12". MILL ALL BRIDGE APPROACHES EQUAL TO SURFACE COURSE DEPTH.
21. ADDITIONAL BUSHING AND CONDITIONING REQUIRED OF MILLED AREAS LEFT UNPAVED MORE THAN SEVEN (7) DAYS SHALL BE PAID FOR AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE REQUIRED TO PATCH STREETS AS NEEDED.
22. UNLESS OTHERWISE DIRECTED BY ENGINEER, PERMANENT STRIPING SHALL BE REPLACED TO MATCH THE EXISTING STRIPING PRIOR TO MILLING.
23. UNLESS OTHERWISE DIRECTED BY ENGINEER, PAVING LIMITS AT NON-SIGNALIZED INTERSECTIONS SHOULD EXTEND TO THE END OF RADIUS OF THE SIDE ROAD. AT SIGNALIZED INTERSECTIONS, THE PAVING LIMITS SHOULD EXTEND TO TRAFFIC SIGNAL DETECTION LOOPS.
24. THE CONTRACTOR SHALL PROPERLY ADJUST ALL MANHOLE, ALL UTILITY VALVE STRUCTURES, AND LIKE STRUCTURES TO THE FINISHED GRADE OF THE PAVEMENT. ADJUSTMENTS TO MANHOLE AND UTILITY VALVE STRUCTURES ARE INCIDENTAL TO 411-01.10.

GRADING

23. THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR BY OFF-COUNTY-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NOT WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

HANDICAP RAMPS

24. PAYMENT FOR HANDICAP RAMPS SHALL BE PAID WHEN ASPHALT IS IN PLACE. ASPHALT MUST BE IN PLACE AT THE HANDICAP RAMP WITHIN TWO (2) WEEKS OF RAMP INSTALLATION.
25. ALL EXISTING CURB, GUTTER, AND SIDEWALK SHALL BE SAW CUT AND REMOVED FOR CURB RAMP CONSTRUCTION.
26. THE CONTRACTOR SHALL NOT INCREASE PRICE DUE TO SPECIAL PROVISION REGARDING PRICE ADJUSTMENT FOR BITUMINOUS MATERIAL.
27. CONSTRUCTION OF HANDICAP RAMPS SHALL CONFORM TO TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED JANUARY 1, 2015.
28. CONTACT ADA COORDINATOR AT (901) 576-6907 PRIOR TO POURING CONCRETE FOR CURB RAMPS.
29. PROVIDE 48 INCHES DISTANCE BETWEEN POLE AND ANY EDGE OF WHEELCHAIR RAMPS.

TRAFFIC CONTROL

30. SEE PAGE 6F-7 OF THE STATE OF TENNESSEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR HEIGHT AND LATERAL LOCATION OF SIGNS.
31. THE CONTRACTOR SHALL COMPLY WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REGARDING TEMPORARY TRAFFIC CONTROL AND THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
32. CONTRACTOR SHALL BE REQUIRED TO NOTIFY SHELBY COUNTY CONSTRUCTION INSPECTION DEPARTMENT (901-222-7705) AND TRAFFIC ENGINEERING DEPARTMENT (901-222-7705) A MINIMUM OF 24 HOURS PRIOR TO COMMENCING CONSTRUCTION OR IMPLEMENTING A TRAFFIC CONTROL PLAN. ALL TRAFFIC CONTROL DEVICES MUST BE IN PLACE BEFORE CONSTRUCTION ACTIVITY BEGINS.
33. SIZES OF ALL SIGNS SHALL COMPLY WITH STATE OF TENNESSEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
34. ALL TRAFFIC CONTROL DEVICES AND THEIR INSTALLATION SHALL MEET THE STANDARD PRESCRIBED IN THE STATE OF TENNESSEE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SHALL COMPLY WITH THE STATE OF TENNESSEE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 712 TEMPORARY TRAFFIC CONTROL.
35. ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.
36. SIDE STREET, DRIVEWAY ACCESS, AND SAFE PEDESTRIAN WAYS SHALL BE MAINTAINED AT ALL TIMES.
37. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC, UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN THIRTY (30) FEET OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS THIRTY (30) FEET SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
38. USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
39. ALL SIGNS WHICH INTERFERE WITH CONSTRUCTION WILL BE RELOCATED OUTSIDE LIMITS OF CONSTRUCTION BY THE CONTRACTOR. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR WILL RESTORE THE SIGNS TO THE ORIGINAL LOCATION. COST TO BE INCLUDED IN ITEM NO. 712-06.
40. IF THE CONTRACTOR'S WORK PHASES REQUIRE ADDITIONAL ARROW BOARDS OTHER THAN INCLUDED WHAT ARE IN ESTIMATE, THEIR COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

PAVEMENT EDGE DROP-OFF TRAFFIC CONTROL NOTES

41. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:
 - 41.1 DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 0.75 INCH AND NOT EXCEED 2 INCHES:
 - 41.1.a WARNING SIGNS, UNEVEN PAVEMENT (W8-11) AND/OR SHOULDER DROP-OFF SIGN (W8-9A), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
 - 41.1.b DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
 - 41.1.c DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.
 - 41.1.d WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN SEVEN WORKDAYS AFTER THE CONDITION IS CREATED.
 - 41.2 DIFFERENCES IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 2 INCHES AND NOT EXCEEDING 6 INCHES. TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.
 - 41.2.a SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:
 - 41.2.a.1 WHERE POSTED SPEEDS ARE 50 MPH OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 100 FEET.
 - 41.2.a.2 WHERE POSTED SPEEDS ARE LESS THAN 50 MPH, THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN FEET SHALL NOT EXCEED TWICE THE POSTED SPEED IN MILES PER HOUR OF 50 FEET, WHICHEVER SPACING IS GREATER.
 - 41.2.b IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 2 INCHES OR LESS BY WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3.5 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH a. REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.
 - 41.2.c WHEN THE DIFFERENCE IN ELEVATION BETWEEN THE THROUGH TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 3.5 INCHES, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH a. REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 2,000 FEET WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS, THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 2 MILES IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE, A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	3

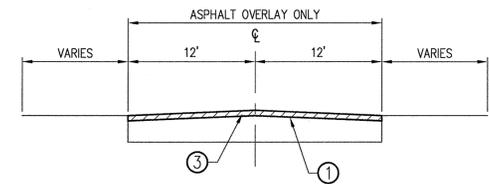
ENGINEERS SEAL



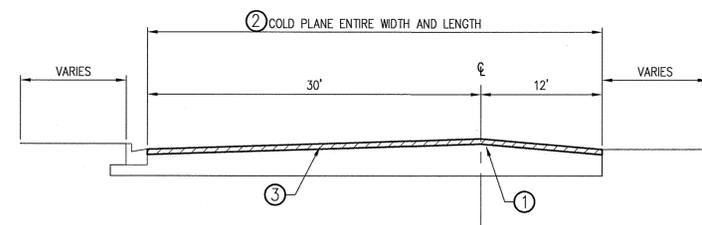
SHELBY COUNTY
ENGINEERING DEPARTMENT

GENERAL
AND
SPECIAL
NOTES

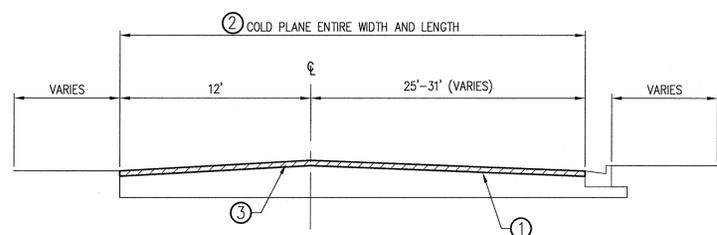
TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	4



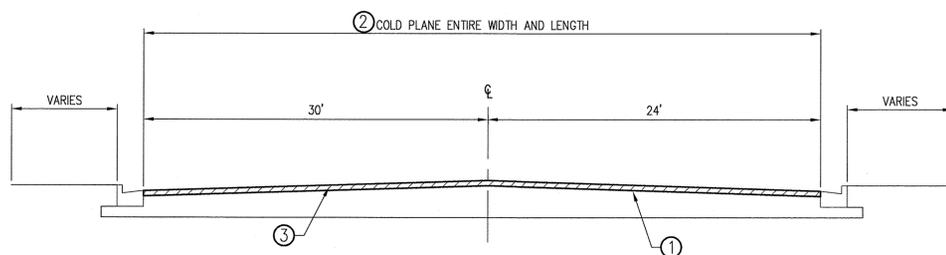
STA 11+62 TO STA 14+00
STA 17+70 TO STA 22+45
STA 34+08 TO STA 39+60
STA 41+84 TO STA 50+10
STA 73+72 TO STA 77+88
NOT TO SCALE



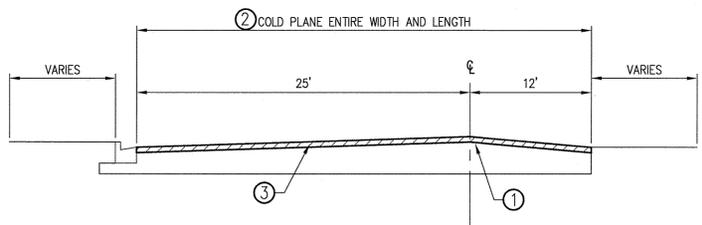
STA 39+60 TO STA 41+84
NOT TO SCALE



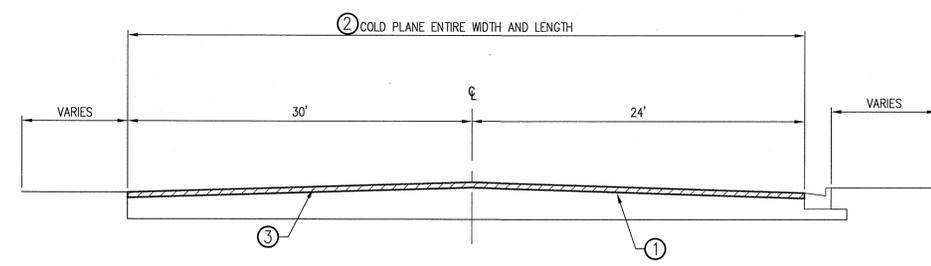
STA 14+00 TO STA 17+70
NOT TO SCALE



STA 50+10 TO STA 53+92
STA 60+60 TO STA 61+78
NOT TO SCALE



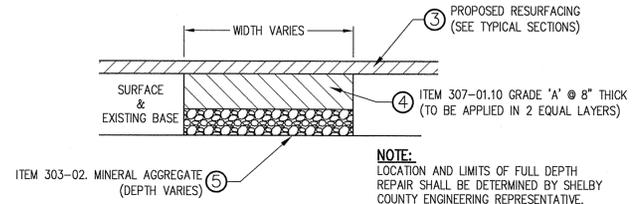
STA 22+45 TO STA 34+08
NOT TO SCALE



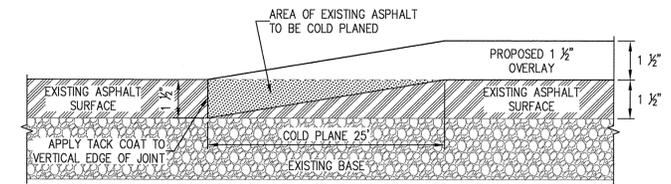
STA 53+92 TO STA 58+28
NOT TO SCALE

TYPICAL ROADWAY CROSS SECTIONS

PROPOSED PAVEMENT SCHEDULE	
①	TACK COAT (TC) ITEM 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.10 GAL./S.Y.)
②	COLD PLANING @ 1.5" THICK, MINIMUM ITEM 415-01.02 COLD PLANING BITUMINOUS PAVEMENT
③	ASPHALTIC CONCRETE SURFACE (ASC) @ 1.5" THICK ITEM 411-01.10 ACS MIX (PG64-22) GRADING "D"
④	BITUMINOUS BASE COURSE (BLACK BASE) @ 8" THICK ITEM 307-03.10 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "A"
⑤	MINERAL AGGREGATE BASE @ 3" THICK FOR ROADWAY ITEM 303-02 MINERAL AGGREGATE, TYPE "B" BASE, GRADING "A"



FULL DEPTH REPAIR DETAIL
NOT TO SCALE



STA. 11+62 AND STA. 77+88
RALEIGH LAGRANGE RD. TIE-IN
TO EXISTING ASPHALT PAVEMENT
NOT TO SCALE

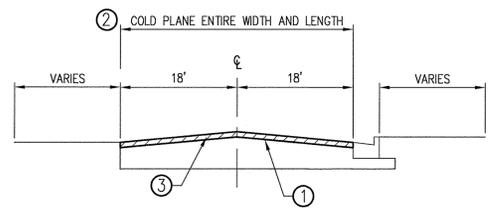
ENGINEERS SEAL

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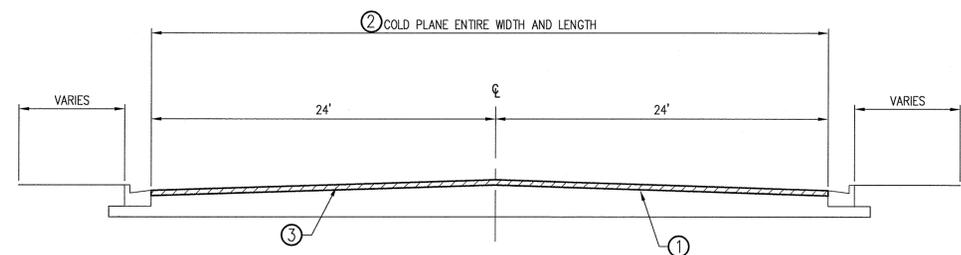
TYPICAL
SECTIONS AND
PAVING
SCHEDULE

SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

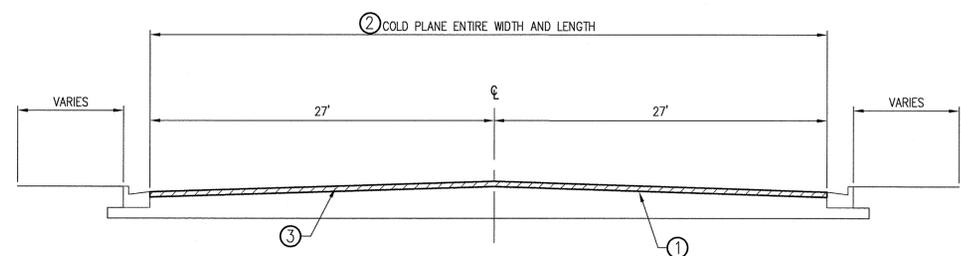
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RE-SURF.	2015	STP-M-5134(10)	5



STA 58+28 TO STA 60+60
STA 72+08 TO STA 73+72
NOT TO SCALE



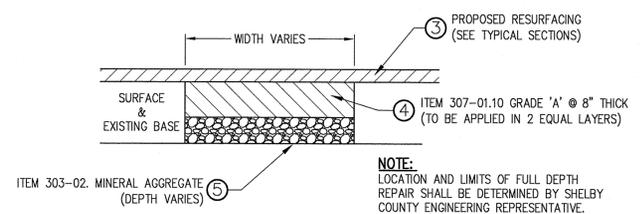
STA 61+78 TO STA 69+76
NOT TO SCALE



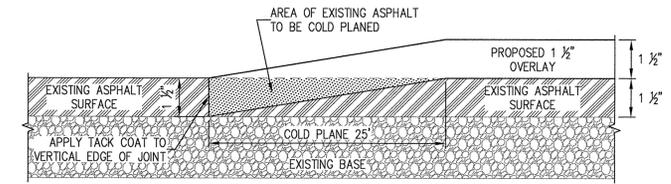
STA 69+76 TO STA 72+08
NOT TO SCALE

TYPICAL ROADWAY CROSS SECTIONS

PROPOSED PAVEMENT SCHEDULE	
①	TACK COAT (TC) ITEM 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.10 GAL./S.Y.)
②	COLD PLANING @ 1.5" THICK, MINIMUM ITEM 415-01.02 COLD PLANING BITUMINOUS PAVEMENT
③	ASPHALTIC CONCRETE SURFACE (ASC) @ 1.5" THICK ITEM 411-01.10 ACS MIX (PG64-22) GRADING "D"
④	BITUMINOUS BASE COURSE (BLACK BASE) @ 8" THICK ITEM 307-03.10 ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING "A"
⑤	MINERAL AGGREGATE BASE @ 3" THICK FOR ROADWAY ITEM 303-02 MINERAL AGGREGATE, TYPE "B" BASE, GRADING "A"



FULL DEPTH REPAIR DETAIL
NOT TO SCALE



STA. 11+62 AND STA. 77+88
RALEIGH LAGRANGE RD. TIE-IN
TO EXISTING ASPHALT PAVEMENT
NOT TO SCALE

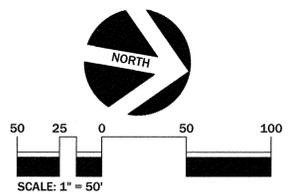
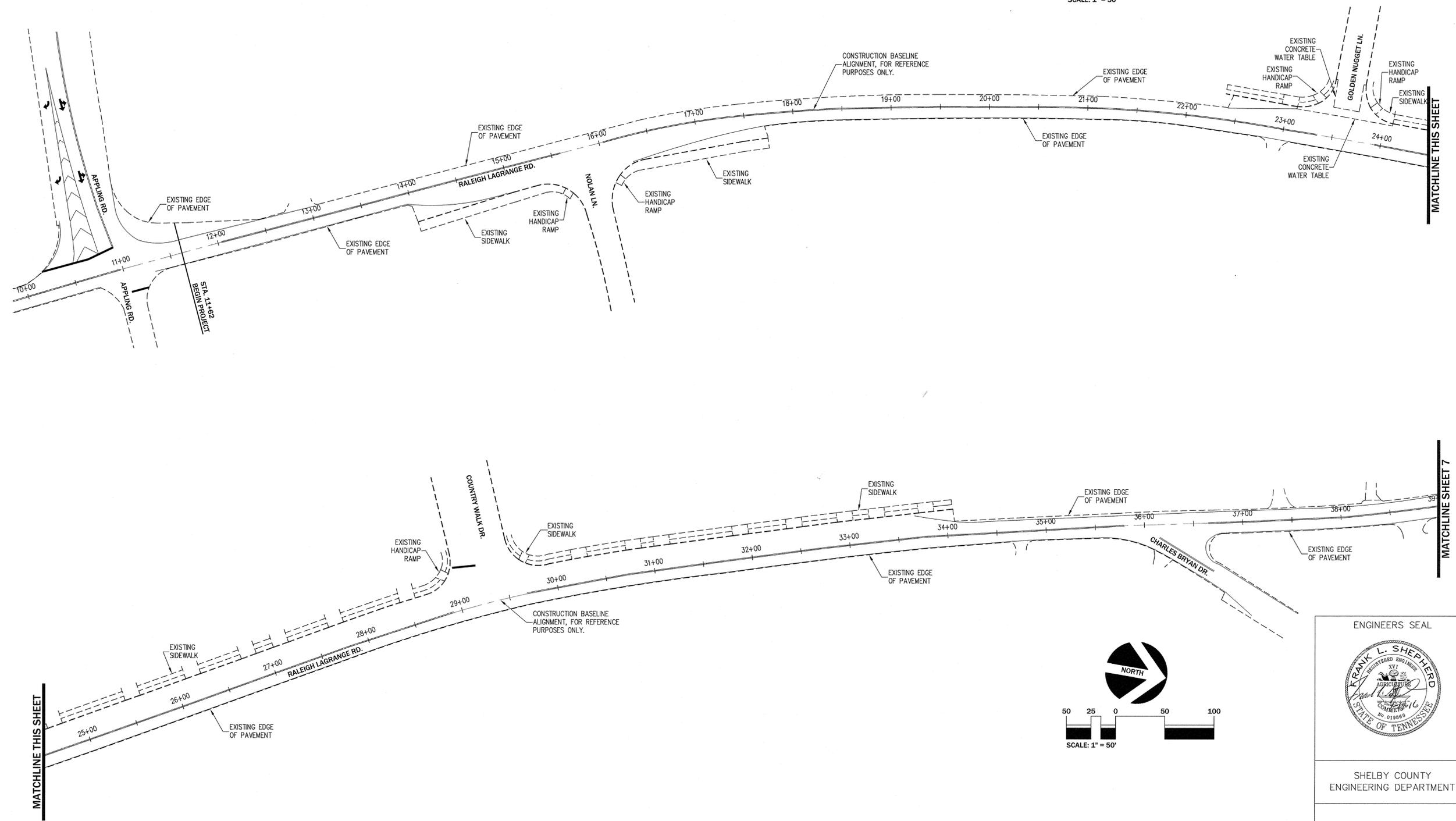
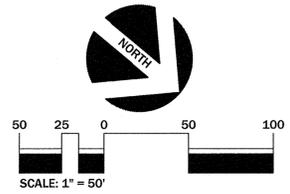
ENGINEERS SEAL

SHELBY COUNTY
ENGINEERING DEPARTMENT

TYPICAL
SECTIONS AND
PAVING
SCHEDULE

SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	6



ENGINEERS SEAL

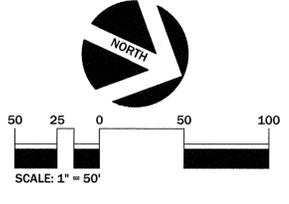
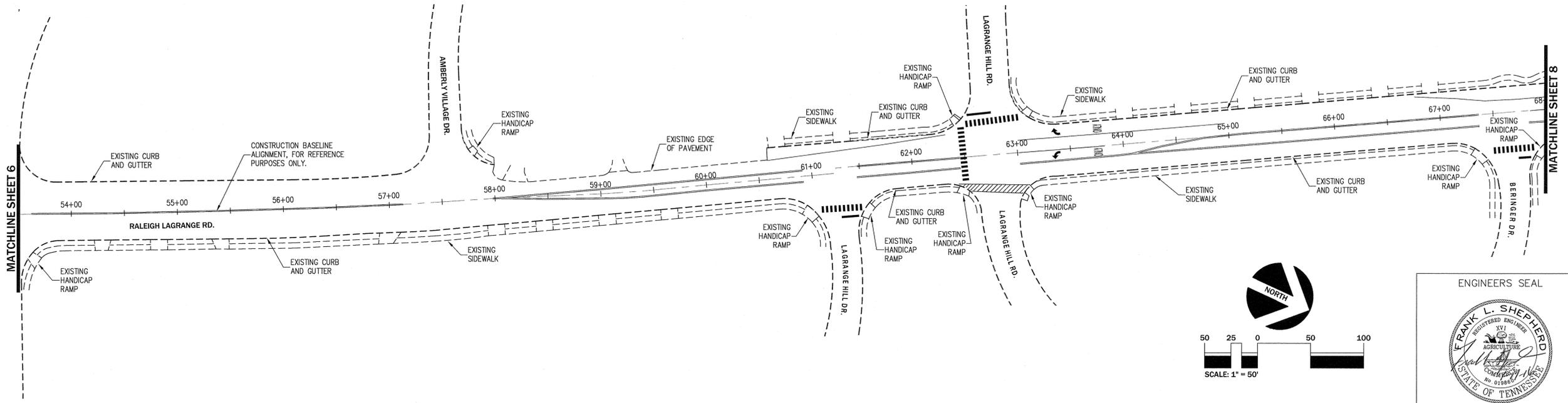
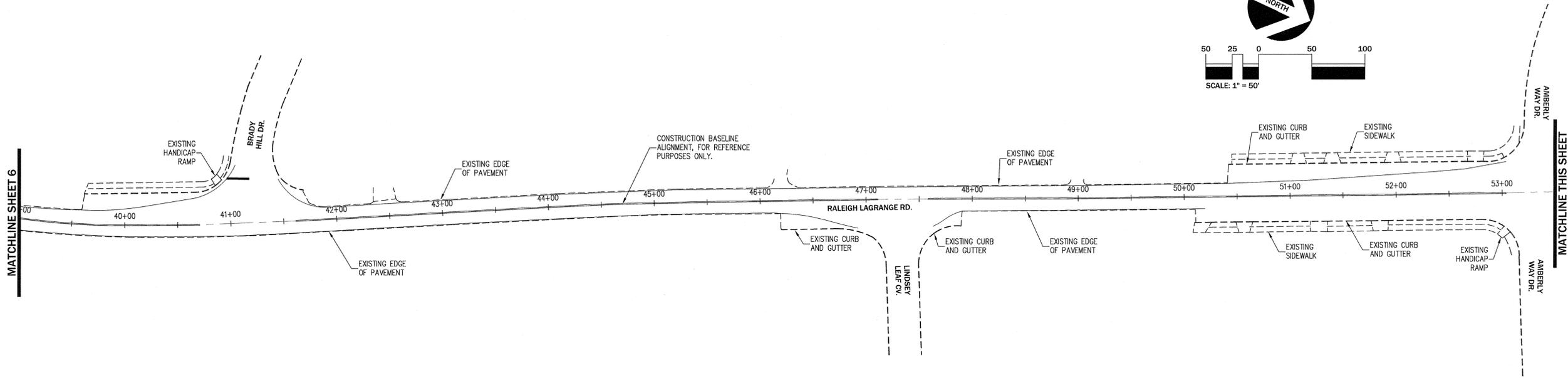
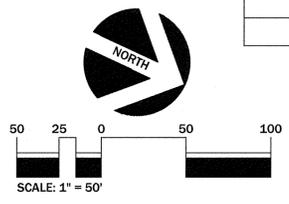
SHELBY COUNTY
ENGINEERING DEPARTMENT

PRESENT
LAYOUT

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SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	7

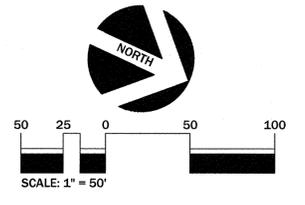
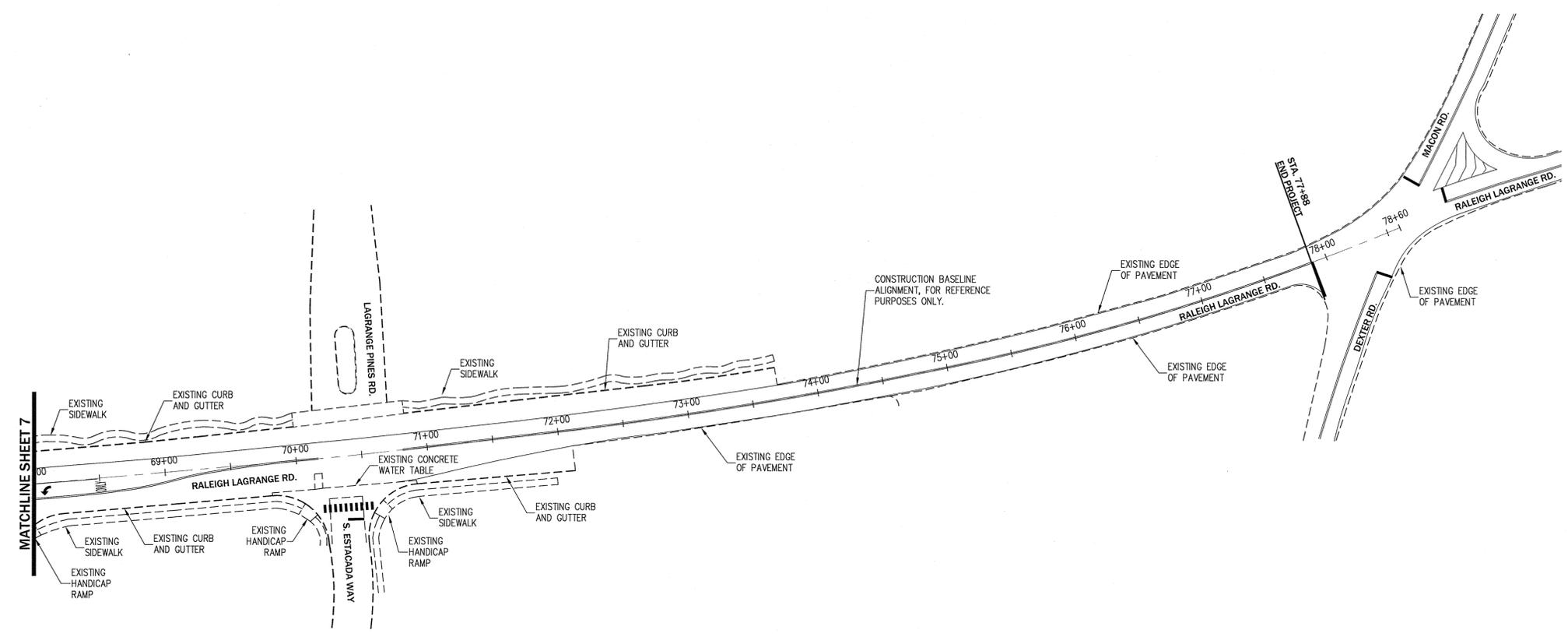


SHELBY COUNTY
ENGINEERING DEPARTMENT

PRESENT
LAYOUT

SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	8



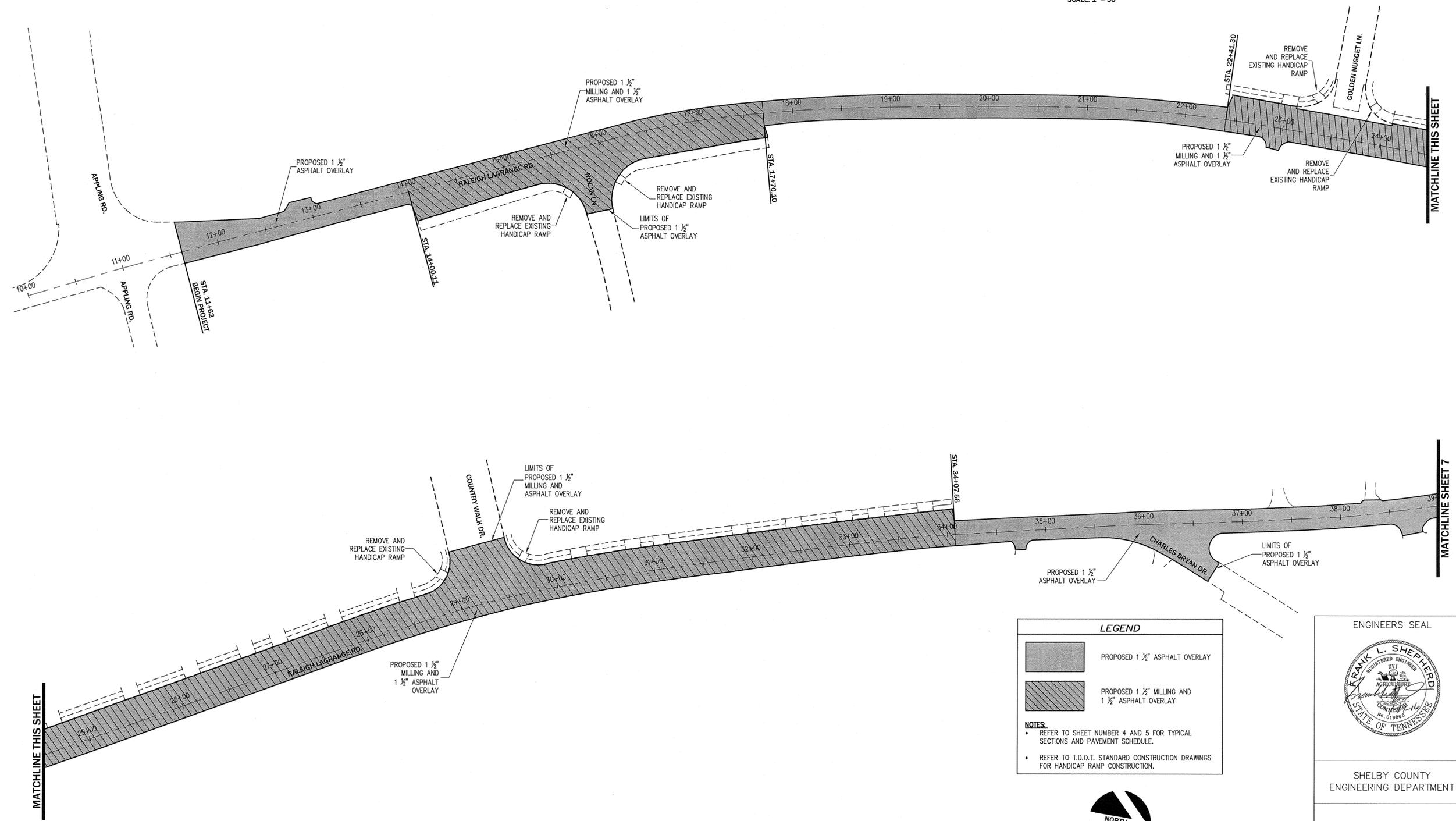
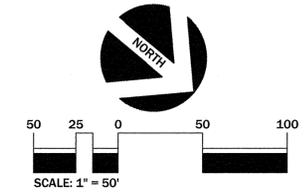
ENGINEERS SEAL

SHELBY COUNTY
ENGINEERING DEPARTMENT

PRESENT
LAYOUT

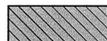
SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	9



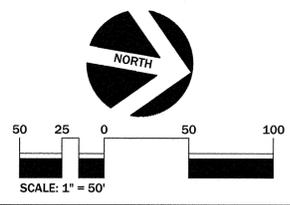
LEGEND

 PROPOSED 1 1/2" ASPHALT OVERLAY

 PROPOSED 1 1/2" MILLING AND 1 1/2" ASPHALT OVERLAY

NOTES:

- REFER TO SHEET NUMBER 4 AND 5 FOR TYPICAL SECTIONS AND PAVEMENT SCHEDULE.
- REFER TO T.D.O.T. STANDARD CONSTRUCTION DRAWINGS FOR HANDICAP RAMP CONSTRUCTION.



ENGINEERS SEAL

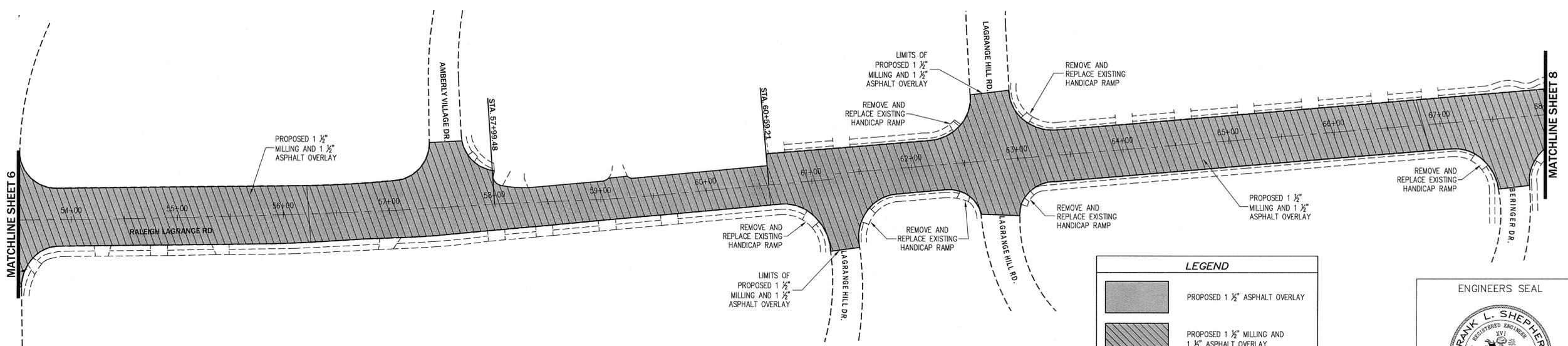
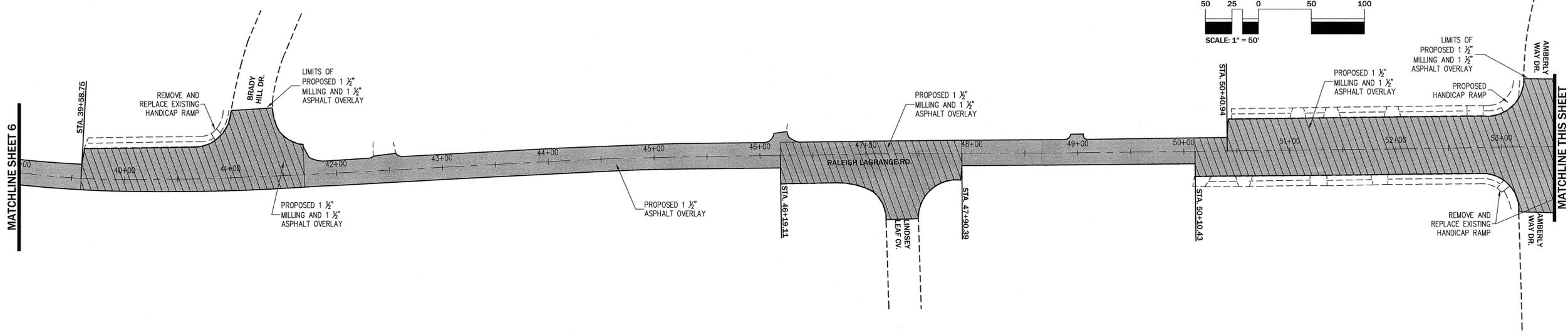
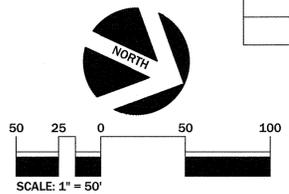


SHELBY COUNTY
ENGINEERING DEPARTMENT

**PROPOSED
LAYOUT**

SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	10



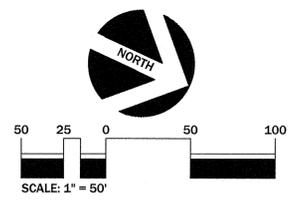
LEGEND

 PROPOSED 1 1/2" ASPHALT OVERLAY

 PROPOSED 1 1/2" MILLING AND 1 1/2" ASPHALT OVERLAY

NOTES:

- REFER TO SHEET NUMBER 4 AND 5 FOR TYPICAL SECTIONS AND PAVEMENT SCHEDULE.
- REFER TO T.D.O.T. STANDARD CONSTRUCTION DRAWINGS FOR HANDICAP RAMP CONSTRUCTION.



ENGINEERS SEAL



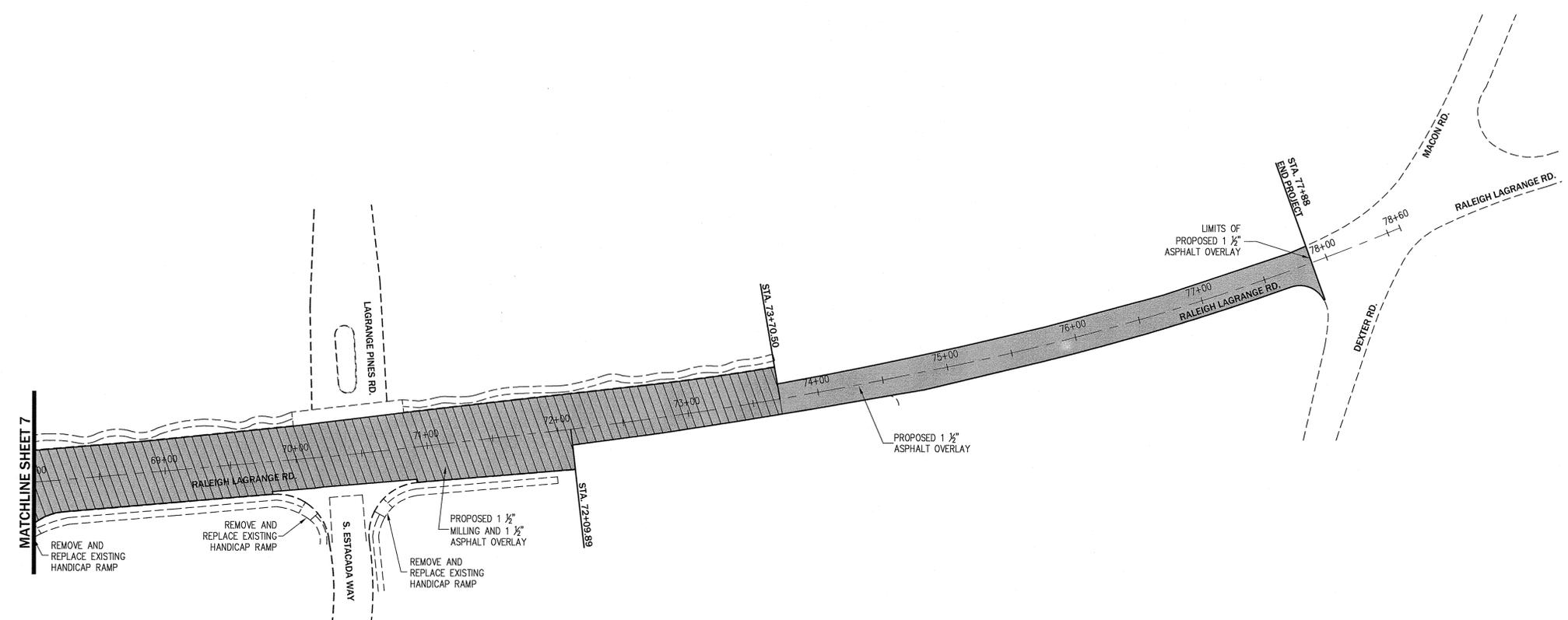
SHELBY COUNTY
ENGINEERING DEPARTMENT

**PROPOSED
LAYOUT**

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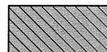
SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	11



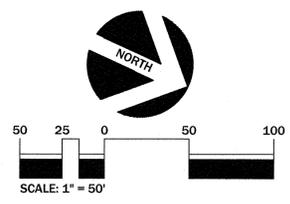
LEGEND

 PROPOSED 1 1/2" ASPHALT OVERLAY

 PROPOSED 1 1/2" MILLING AND 1 1/2" ASPHALT OVERLAY

NOTES:

- REFER TO SHEET NUMBER 4 AND 5 FOR TYPICAL SECTIONS AND PAVEMENT SCHEDULE.
- REFER TO T.D.O.T. STANDARD CONSTRUCTION DRAWINGS FOR HANDICAP RAMP CONSTRUCTION.



ENGINEERS SEAL

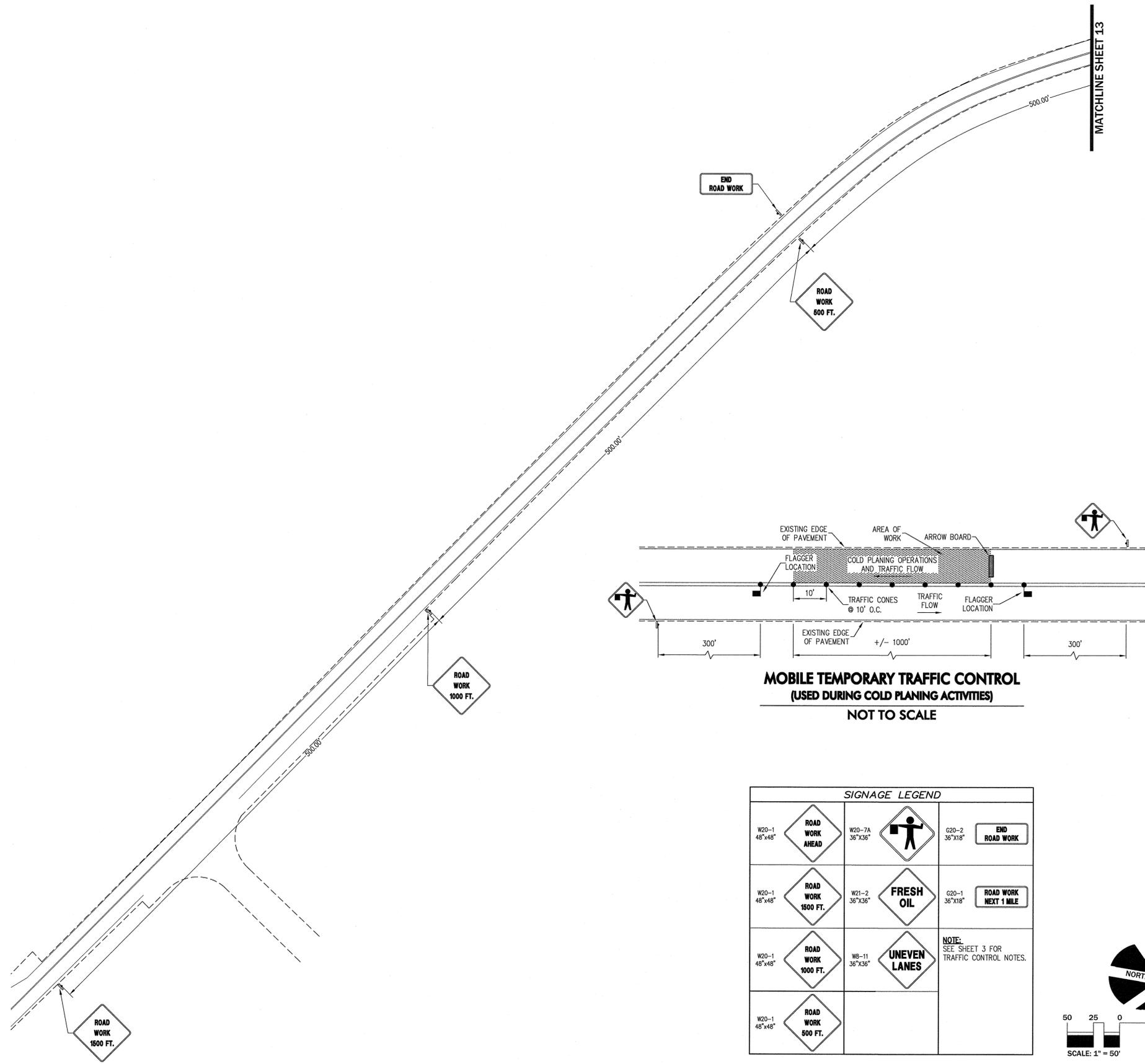


SHELBY COUNTY
ENGINEERING DEPARTMENT

**PROPOSED
LAYOUT**

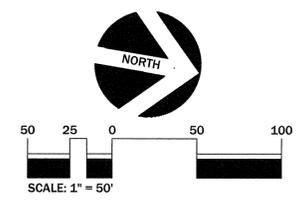
SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	12



MOBILE TEMPORARY TRAFFIC CONTROL
(USED DURING COLD PLANING ACTIVITIES)
NOT TO SCALE

SIGNAGE LEGEND		
W20-1 48"x48" 	W20-7A 36"x36" 	G20-2 36"x18"
W20-1 48"x48" 	W21-2 36"x36" 	G20-1 36"x18"
W20-1 48"x48" 	W8-11 36"x36" 	NOTE: SEE SHEET 3 FOR TRAFFIC CONTROL NOTES.
W20-1 48"x48" 		



ENGINEERS SEAL

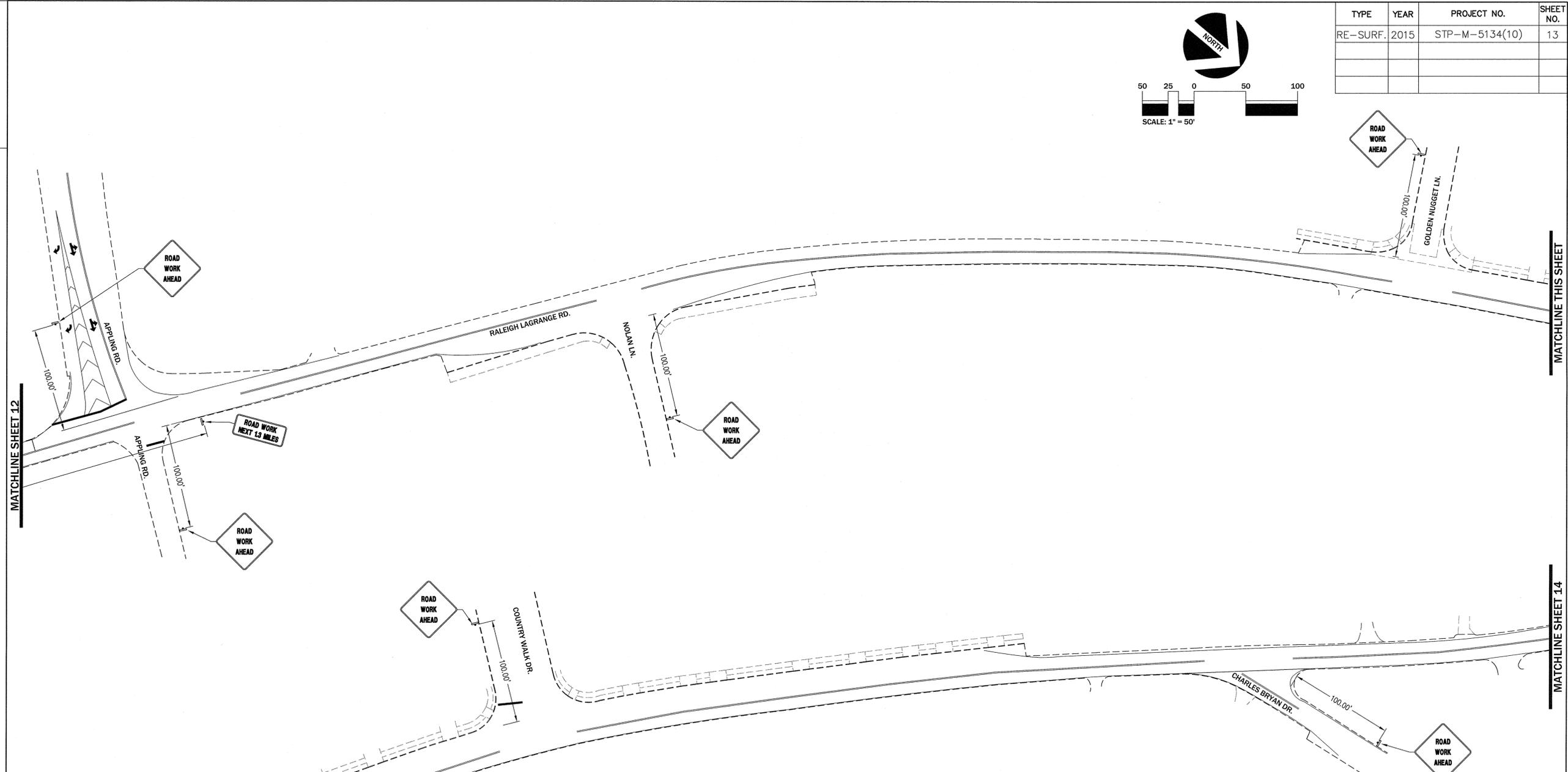
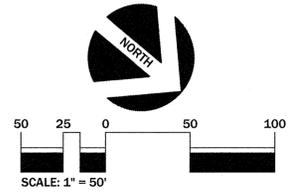
SHELBY COUNTY
ENGINEERING DEPARTMENT

TRAFFIC CONTROL PLAN

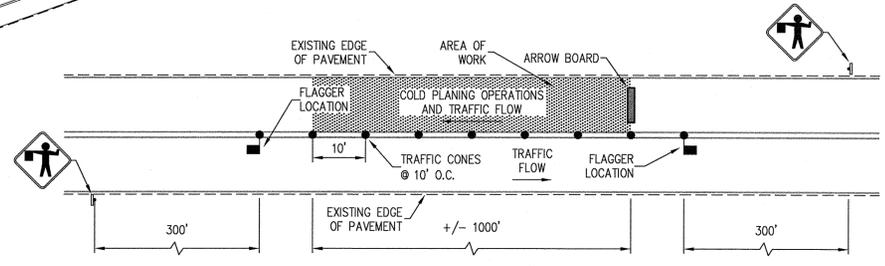
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SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	13

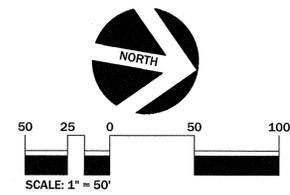


MATCHLINE THIS SHEET



MOBILE TEMPORARY TRAFFIC CONTROL
(USED DURING COLD PLANING ACTIVITIES)
NOT TO SCALE

SIGNAGE LEGEND					
W20-1 48"x48"		W20-7A 36"x36"		G20-2 36"x18"	
W20-1 48"x48"		W21-2 36"x36"		G20-1 36"x18"	
W20-1 48"x48"		W8-11 36"x36"		NOTE: SEE SHEET 3 FOR TRAFFIC CONTROL NOTES.	
W20-1 48"x48"					

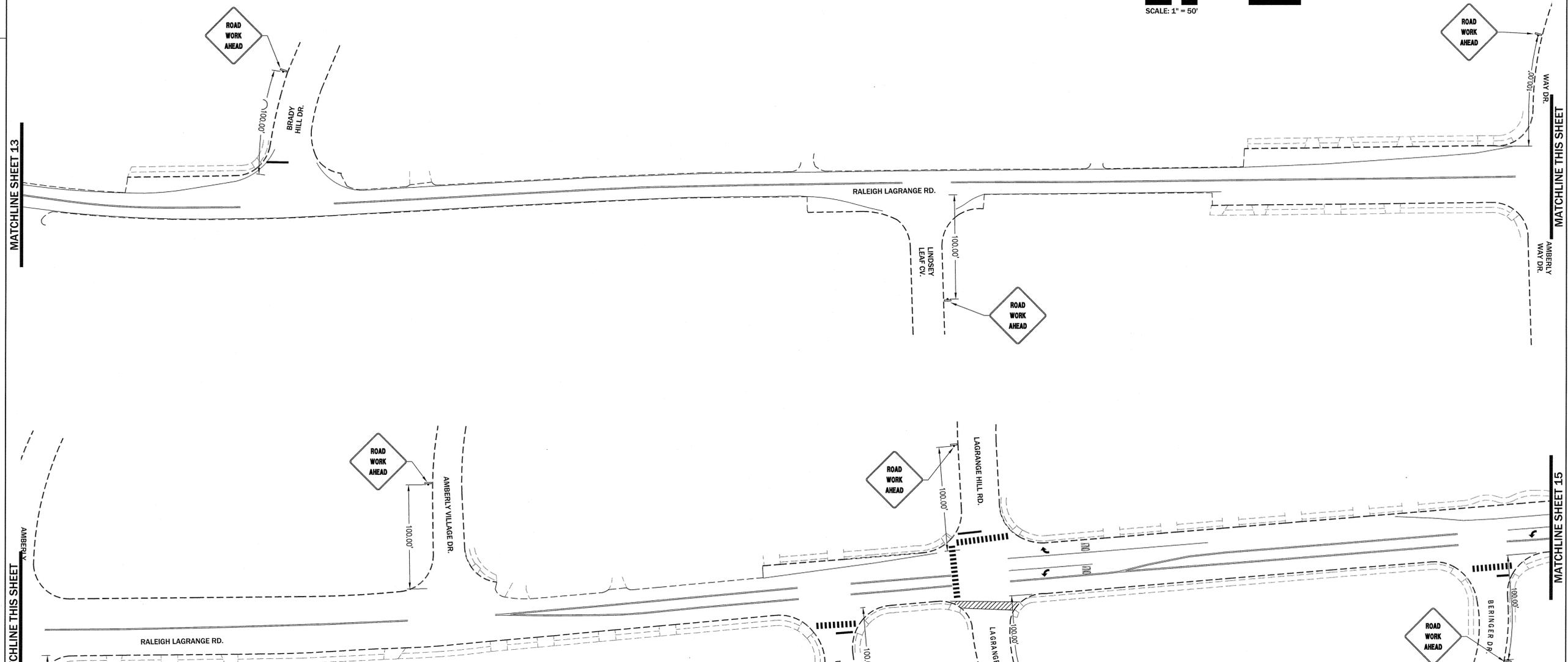
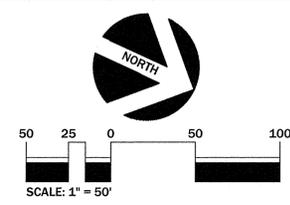


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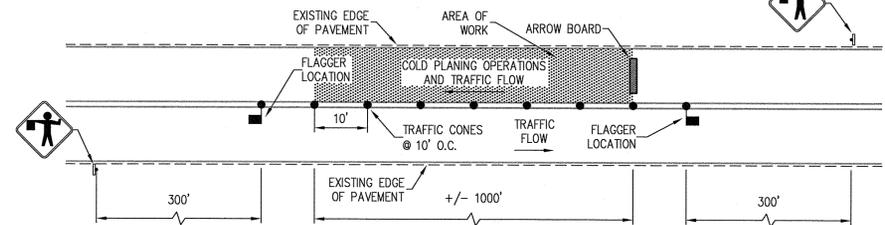
SHELBY COUNTY
ENGINEERING DEPARTMENT

TRAFFIC CONTROL PLAN

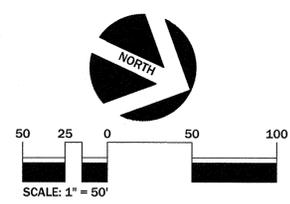
TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	14



SIGNAGE LEGEND			
W20-1 48"x48"		W20-7A 36"x36"	
W20-1 48"x48"		W21-2 36"x36"	
W20-1 48"x48"		W8-11 36"x36"	
W20-1 48"x48"		G20-2 36"x18"	
NOTE: SEE SHEET 3 FOR TRAFFIC CONTROL NOTES.			
G20-1 36"x18" 			



MOBILE TEMPORARY TRAFFIC CONTROL
(USED DURING COLD PLANING ACTIVITIES)
NOT TO SCALE



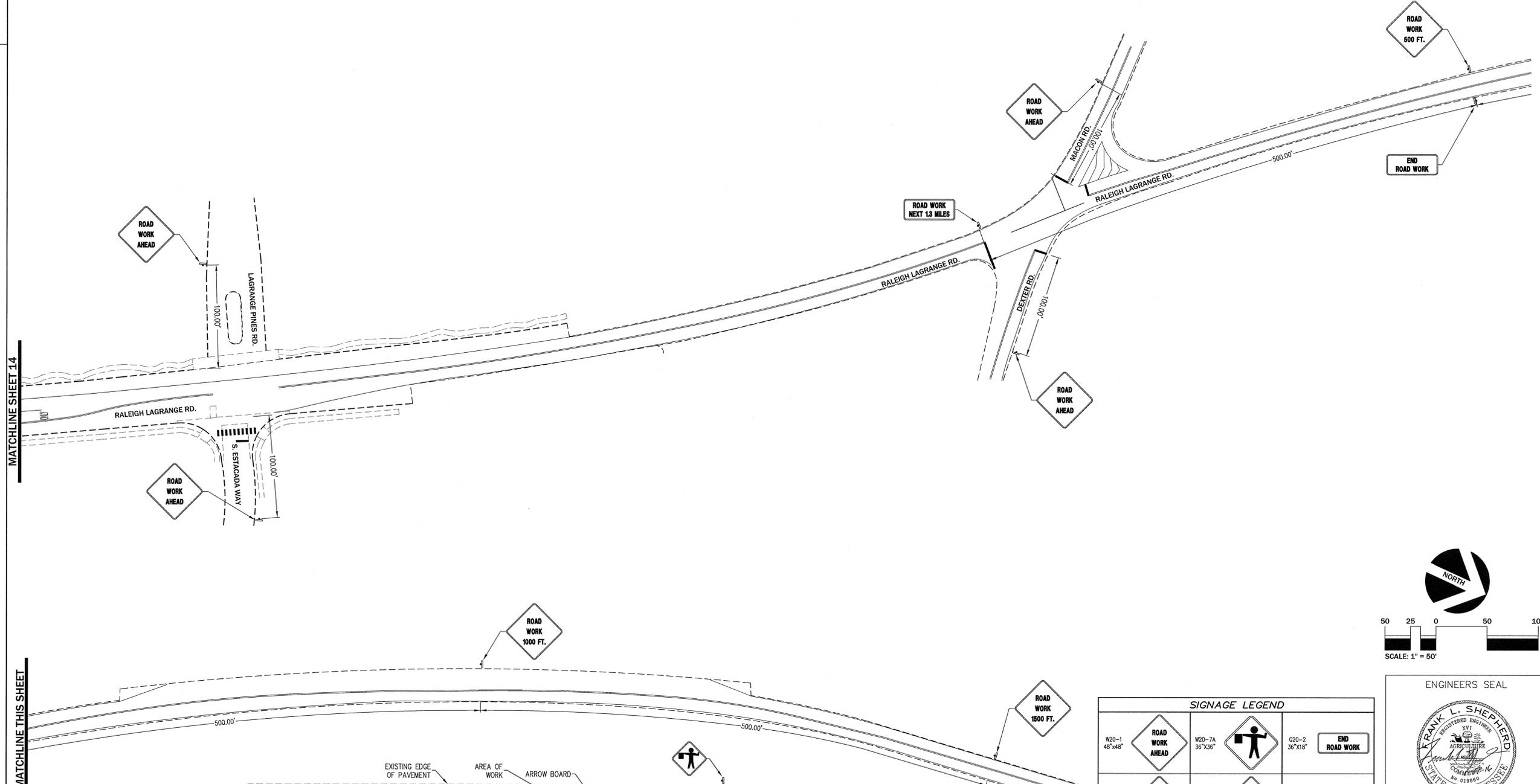
ENGINEERS SEAL

SHELBY COUNTY
ENGINEERING DEPARTMENT

TRAFFIC CONTROL PLAN

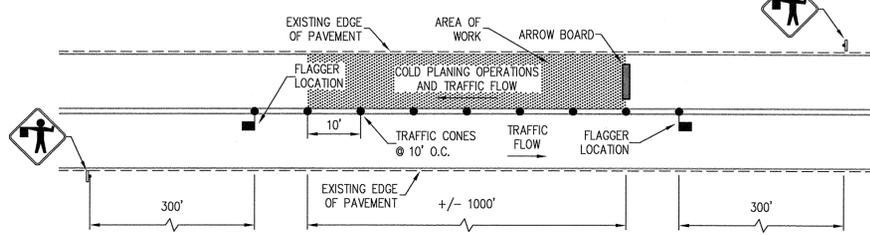
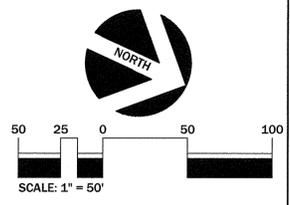
SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	15



MATCHLINE SHEET 14

MATCHLINE THIS SHEET



**MOBILE TEMPORARY TRAFFIC CONTROL
(USED DURING COLD PLANING ACTIVITIES)**
NOT TO SCALE

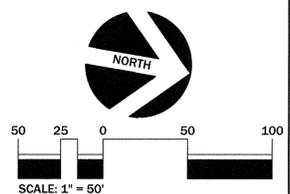
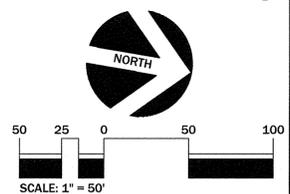
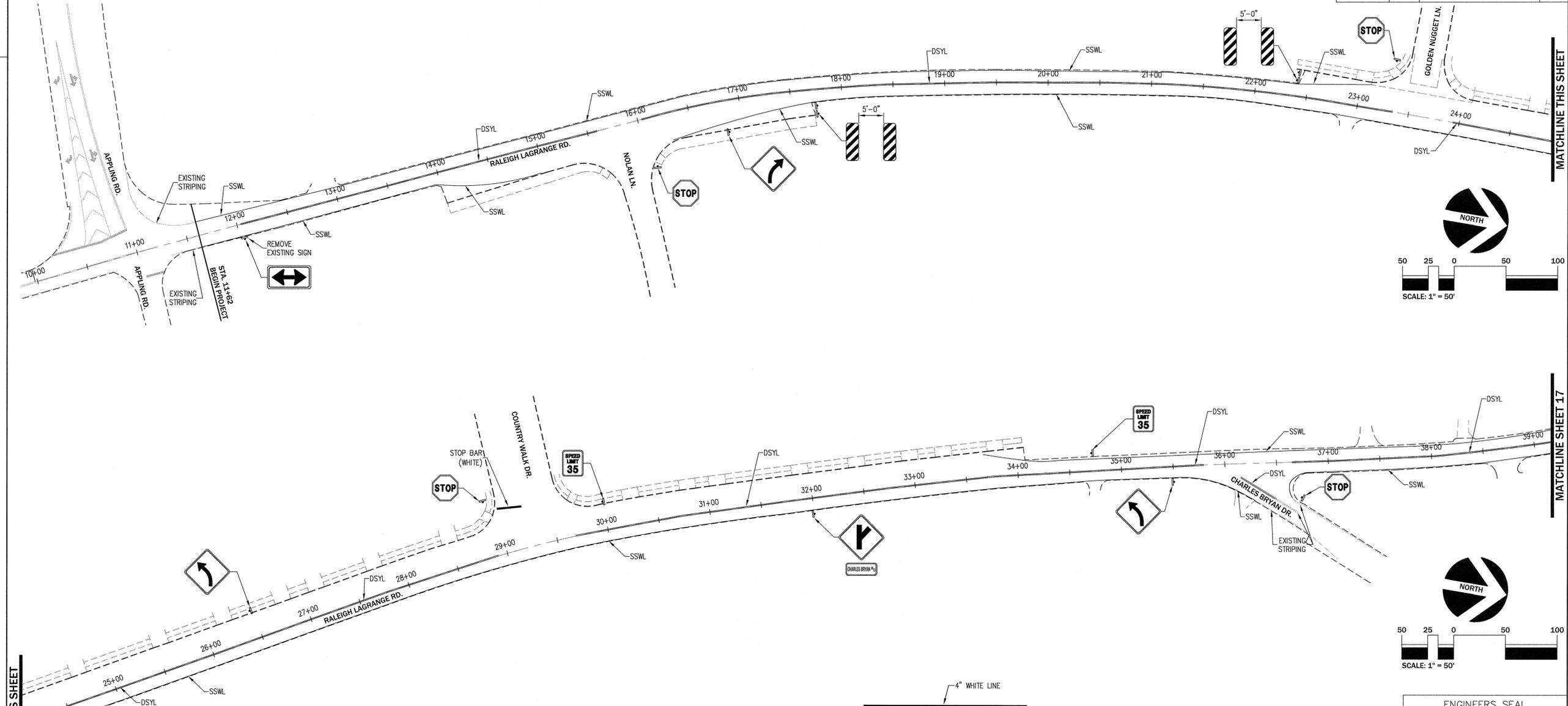
SIGNAGE LEGEND		
W20-1 48"x48" 	W20-7A 36"x36" 	G20-2 36"x18"
W20-1 48"x48" 	W21-2 36"x36" 	G20-1 36"x18"
W20-1 48"x48" 	W8-11 36"x36" 	NOTE: SEE SHEET 3 FOR TRAFFIC CONTROL NOTES.
W20-1 48"x48" 		

ENGINEERS SEAL

SHELBY COUNTY
ENGINEERING DEPARTMENT

TRAFFIC CONTROL PLAN

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	16

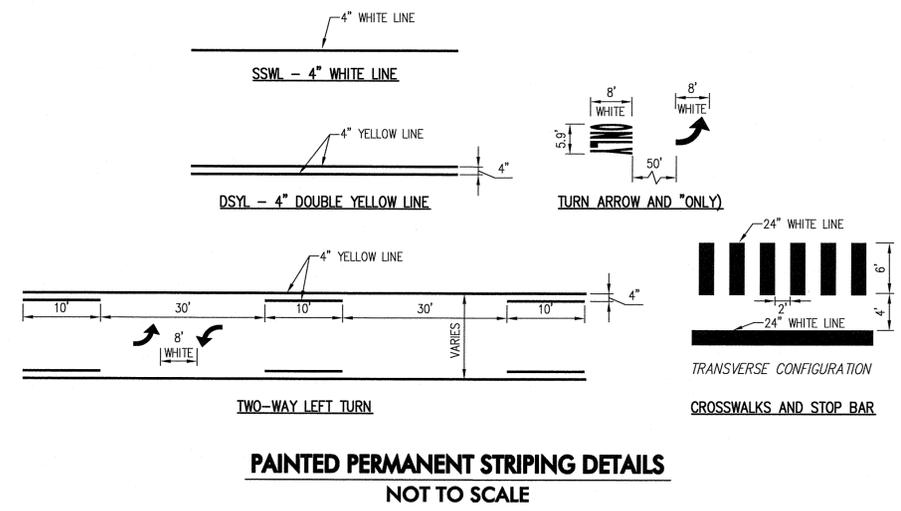


MATCHLINE THIS SHEET

MATCHLINE SHEET 17

SIGNAGE LEGEND			
OM-3 36"x12" 	W2-3R 30"x30" 	S5-2 24"x30" 	W16-7P(R) 24"x12"
R1-1 30"x30" 	W2-3 30"x30" 	W1-4L 30"x30" 	W16-8 24"x12"
R2-1 24"x30" 	W3-3 30"x30" 	W1-2R 30"x30" 	W16-9P 30"x18"
S1-1 30"x30" 	W16-7P(L) 24"x12" 		

- NOTES:**
- CONTRACTOR SHALL DELIVER ALL EXISTING SIGNS AND SIGN POSTS TO THE SHELBY COUNTY ENGINEERING OFFICE.
 - ALL EXISTING STREET NAME SIGNS ARE TO BE REINSTALLED IN THEIR ORIGINAL LOCATION AND POSITION.
 - REFER TO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CURRENT EDITION) FOR SIGN INSTALLATION SPECIFICATIONS.



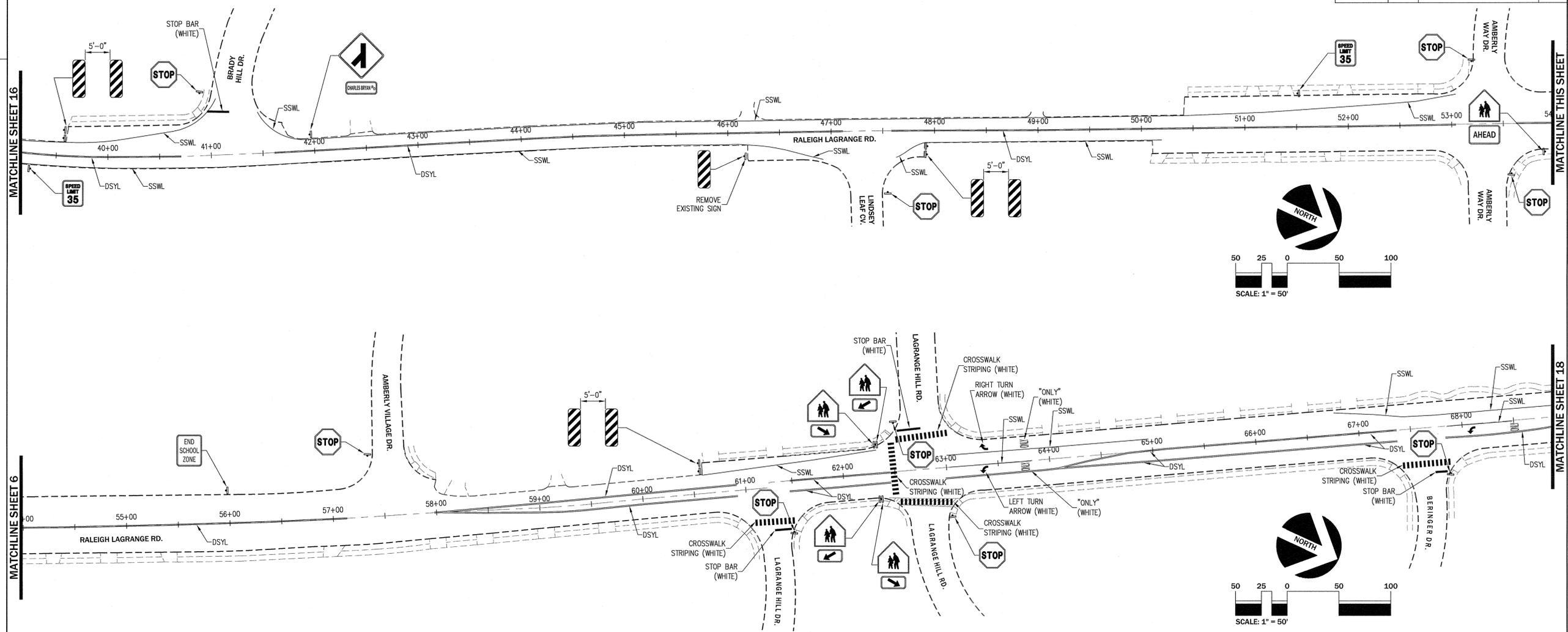
ENGINEERS SEAL

SHELBY COUNTY
ENGINEERING DEPARTMENT

**SIGNAGE
AND
STRIPING
PLAN**

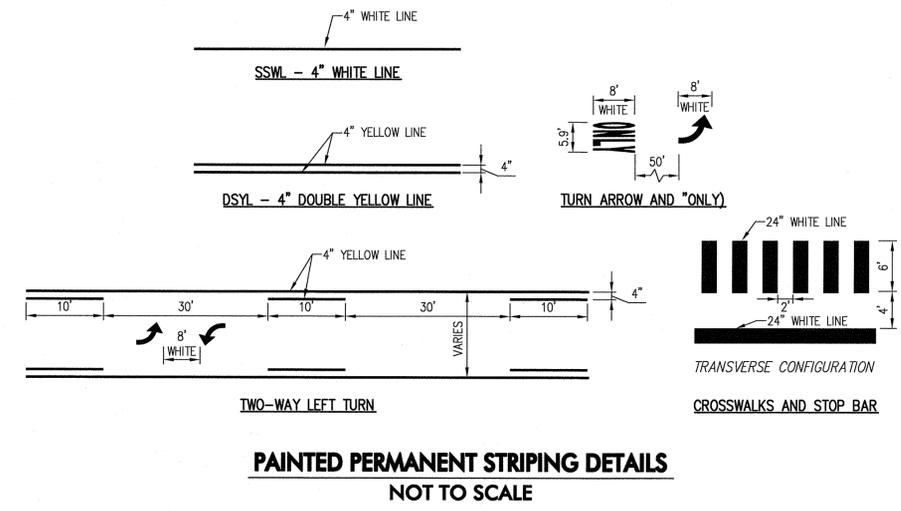
SHELBY COUNTY
ENGINEERING DEPARTMENT
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	17



SIGNAGE LEGEND			
QM-3 36"x12" 	W2-3R 30"x30" 	S5-2 24"x30" 	W16-7P(R) 24"x12"
R1-1 30"x30" 	W2-3 30"x30" 	W1-4L 30"x30" 	W16-8 24"x12"
R2-1 24"x30" 	W3-3 30"x30" 	W1-2R 30"x30" 	W16-9P 30"x18"
S1-1 30"x30" 	W16-7P(L) 24"x12" 		

- NOTES:**
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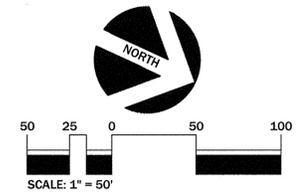
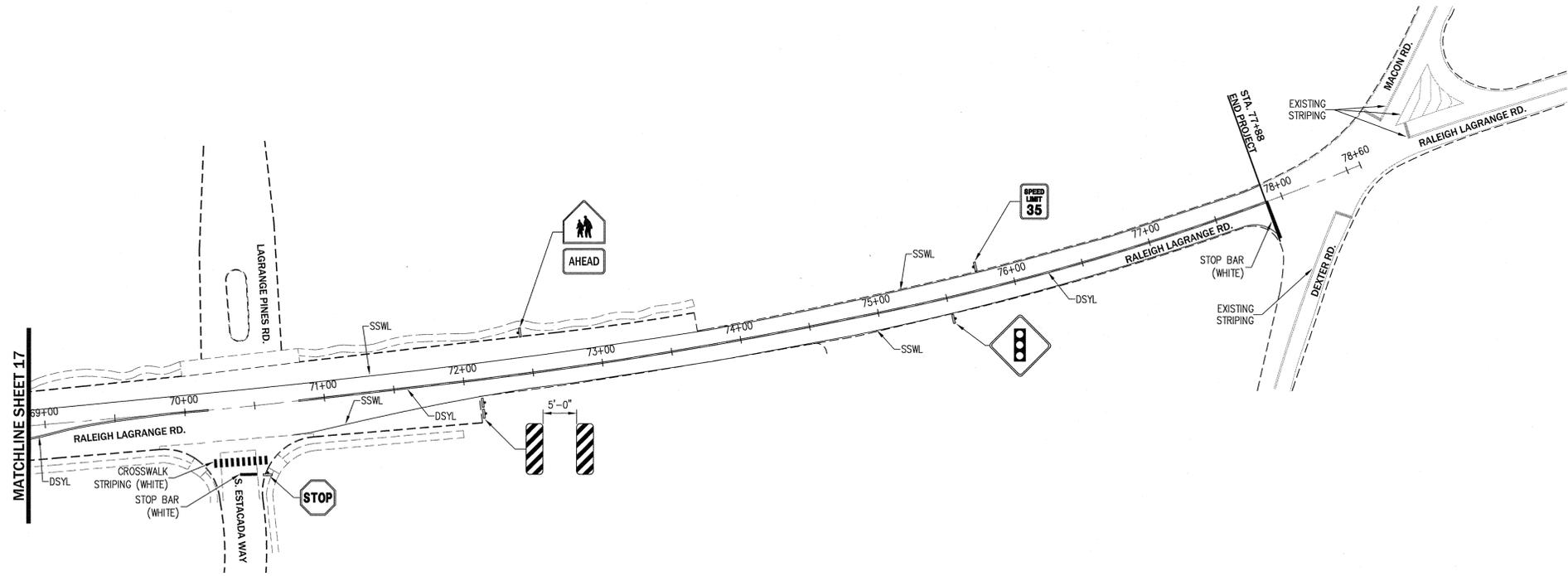
ENGINEERS SEAL

SHELBY COUNTY
ENGINEERING DEPARTMENT

**SIGNAGE
AND
STRIPING
PLAN**

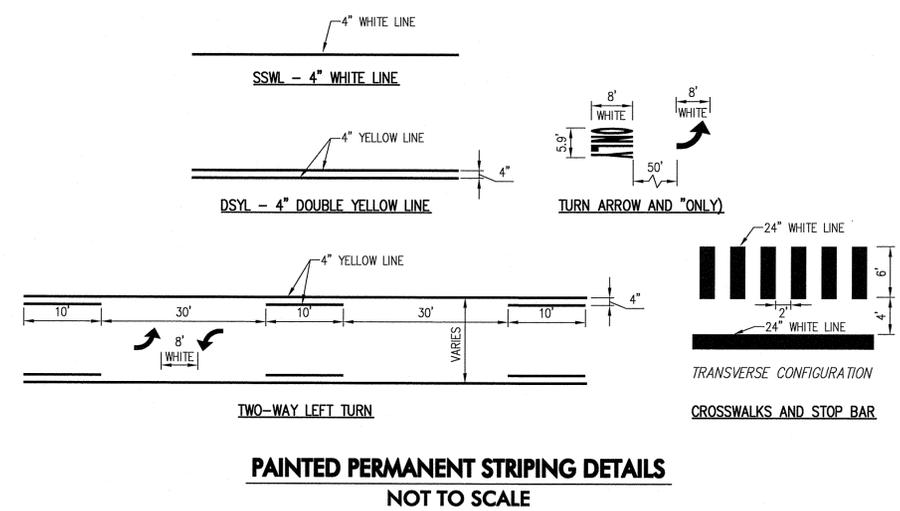
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TYPE	YEAR	PROJECT NO.	SHEET NO.
RE-SURF.	2015	STP-M-5134(10)	18



SIGNAGE LEGEND			
OM-3 36"X12" 	W2-3R 30"X30" 	S5-2 24"X30" 	W16-7P(R) 24"X12"
R1-1 30"X30" 	W2-3 30"X30" 	W1-4L 30"X30" 	W16-8 24"X12"
R2-1 24"X30" 	W3-3 30"X30" 	W1-2R 30"X30" 	W16-9P 30"X18"
S1-1 30"X30" 	W16-7P(L) 24"X12" 		

- NOTES:**
- CONTRACTOR SHALL DELIVER ALL EXISTING SIGNS AND SIGN POSTS TO THE SHELBY COUNTY ENGINEERING OFFICE.
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ENGINEERS SEAL

SHELBY COUNTY
ENGINEERING DEPARTMENT

**SIGNAGE
AND
STRIPING
PLAN**