

WBS ELEMENT: 37897

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
CATAWBA COUNTY**

STATE WBS PROJECT REFERENCE NO.	SHEET NO.
37897-A	TCP-1

ROADWAY STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 2006 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
1101.02	Temporary Lane Closures
1101.03	Temporary Road Closures
1101.04	Temporary Shoulder Closures
1101.11	Traffic Control Design Tables
1110.01	Stationary Work Zone Signs
1110.02	Portable Work Zone Signs
1130.01	Drums
1135.01	Cones
1145.01	Barricades
1150.01	Flaggers Devices
1180.01	Skinny - Drum
1205.01	Pavement Markings - Line Types and Offsets
1205.02	Pavement Markings - 2 Lane and Multilane Roadways
1205.04	Pavement Markings - Intersections
1205.05	Pavement Markings - Turn Lanes
1205.08	Pavement Markings - Symbols and Word Messages
1205.09	Pavement Markings - Painted Islands
1205.10	Pavement Markings - School Areas
1250.01	Pavement Marker Spacing
1253.01	Snowplowable Raised Pavement Markers
1261.01	Guardrail and Barrier Delineator Spacing
1261.02	Guardrail and Barrier Delineator Types
1262.01	Guardrail End Delineation

INDEX OF SHEETS

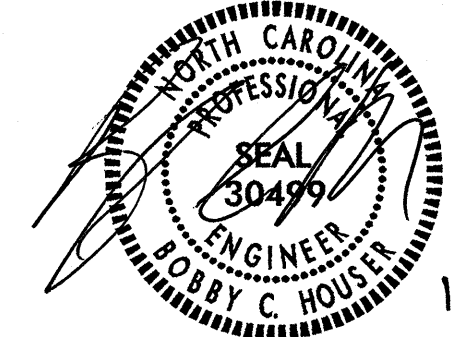
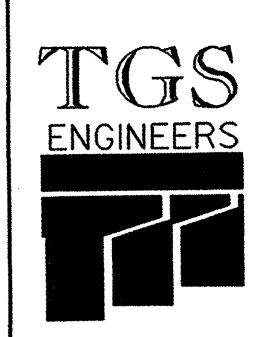
SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, INTERMEDIATE PAVEMENT MARKINGS & INDEX OF SHEETS
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PM-1	PAVEMENT MARKING PLAN
NCMA-1	DETAIL DRAWING FOR ADVANCE WARNING WORK ZONE SIGNS
NCMA-2	SIGN DESIGN FOR CONTRACTORS COMPANY NAME

INTERMEDIATE PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAY ITEM	QUANTITY BREAKDOWN	TOTAL QUANTITY
PAVEMENT MARKINGS LINES				
P4	WHITE STOPBAR	PAINT (24")	11 LF	
			TOTAL	11 LF
PD	2 FT. WHITE MINISKIP	PAINT (4")	67 LF	
PE	WHITE SOLD LANE LINE		195 LF	
PI	YELLOW DOUBLE CENTER		3192 LF	
			TOTAL	3454 LF
PV	YELLOW DIAGNOL	PAINT (8)	50 LF	
			TOTAL	50 LF
PAINTMARKING SYMBOLS				
QA	LEFT TURN ARROW		1 EA	
QB	RIGHT TURN ARROW		1 EA	
			TOTAL	2 EA

LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - WORK AREA
 - REMOVAL OF EXISTING PAVEMENT
- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
 - TYPE II BARRICADE
 - TYPE III BARRICADE
 - CONE
 - DRUM
 - FLASHING ARROW PANEL (TYPE C)
 - TYPE 'B' WARNING LIGHT
 - STATIONARY SIGN
 - PORTABLE SIGN
 - STATIONARY OR PORTABLE SIGN
 - WARNING FLAGS
 - CRASH CUSHION
 - CHANGEABLE MESSAGE SIGN
 - TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
 - POLICE
 - FLAGGER
- PAVEMENT MARKINGS**
- CRYSTAL/CRYSTAL PAVEMENT MARKER
 - YELLOW/YELLOW PAVEMENT MARKER
 - CRYSTAL/RED PAVEMENT MARKER
 - PAVEMENT MARKING SYMBOLS

APPROVED: _____ DATE: _____	PLAN PREPARED FOR N.C.D.O.T. BY:
 11/29/07	 TGS ENGINEERS TGS ENGINEERS SUITE 141 975 WALNUT STREET CARY, NC 27511 PH (919) 319-8850
	C. L. FLOWE, PE PROJECT ENGINEER B. C. HOUSER, PE DESIGN ENGINEER _____ DESIGN TECHNICIAN

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$DON\$\$\$\$\$
\$\$\$\$\$SERNAME\$\$\$\$\$

PROJECT NOTES

W.B.S. REFERENCE NO.	SHEET NO.
37897-A	TCP-2
MA12042R-A	

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.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME

NC HWY 10

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 8:00 A.M. DECEMBER 31st TO 8:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 8:00 A.M. THURSDAY AND 8:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 8:00 A.M. FRIDAY TO 8:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 8:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 8:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 8:00 FRIDAY AND 8:00 P.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 8:00 A.M. TUESDAY TO 8:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 8:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) 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.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- D) 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.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 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.
- E) 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.
- F) 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.

G) DO NOT INSTALL MORE THAN 1000 FT OF LANE CLOSURE ON NC HWY 10 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) 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.

I) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 350' IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- K) 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.
- L) STATE FORCES WILL BE RESPONSIBLE FOR PERMANENT SIGNING.
- M) STATE FORCES WILL BE RESPONSIBLE FOR DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- N) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.
- O) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350' IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

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

PAVEMENT MARKINGS AND MARKERS

T) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NC HWY10	THERMOPLASTIC	SNOWPLOWABLE RAISED
SR 2031	THERMOPLASTIC	SNOWPLOWABLE RAISED
SR 2032	THERMOPLASTIC	SNOWPLOWABLE RAISED
CONLEY ST	THERMOPLASTIC	SNOWPLOWABLE RAISED
-DR1- & -DR2-	THERMOPLASTIC	

U) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NC HWY10	PAINT	
SR2031	PAINT	
SR2032	PAINT	
CONLEY ST	PAINT	

V) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

W) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

X) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

Y) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 350' AND 350' RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

LOCAL NOTES

THE FOLLOWING LOCAL NOTES APPLY ONLY AT THE TIMES THEY ARE REFERENCED IN THE PLAN.

- 1) MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES USING INCIDENTAL STONE.
- 2) 37897 PART B MUST BE COMPLETED BEFORE WORK ON 37897 PART A CAN BEGIN.




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*****SERIAL*****

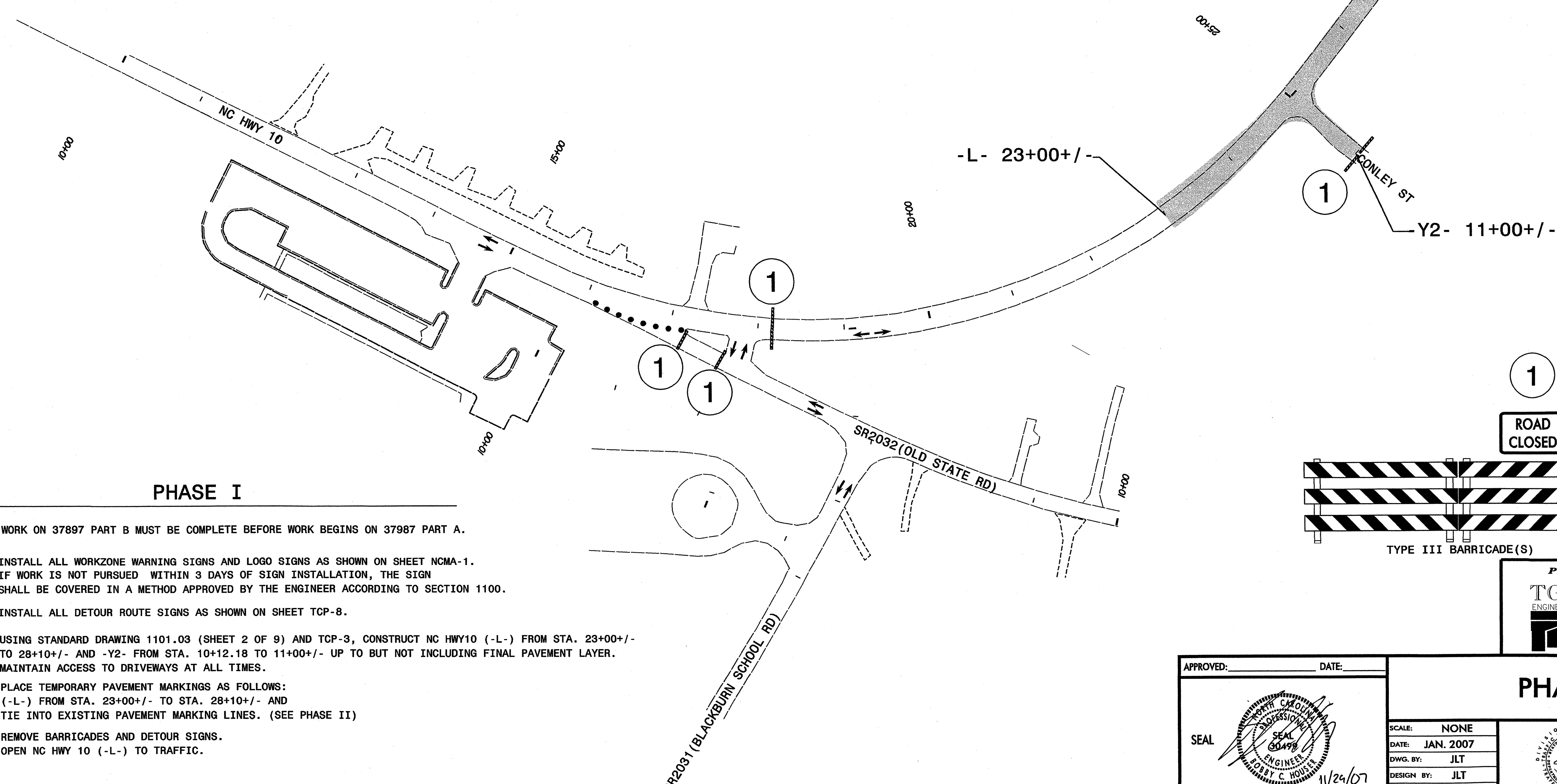
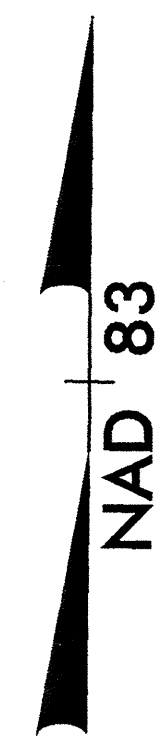
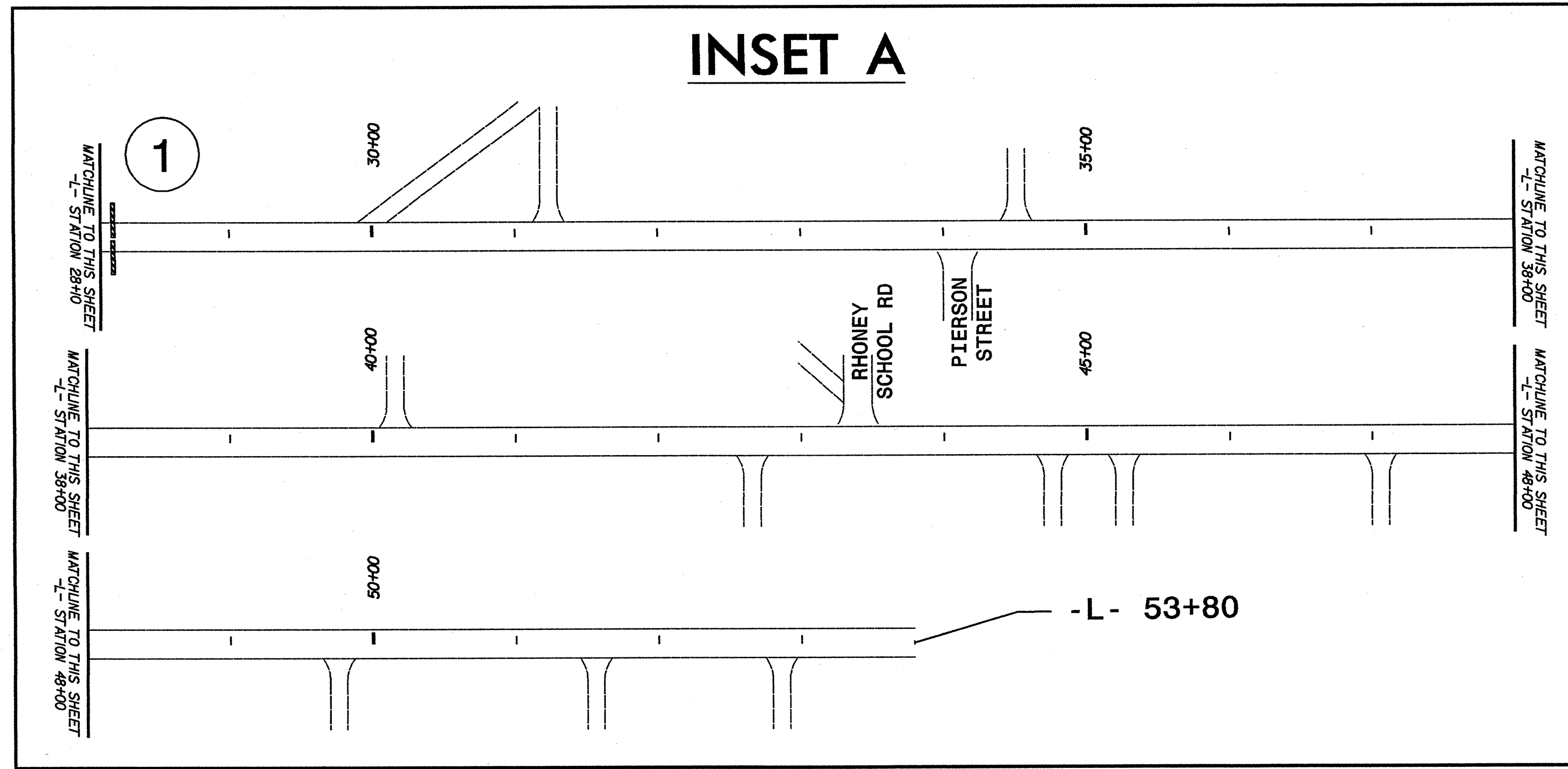
PLANS PREPARED BY:

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APPROVED: _____ DATE: _____ 	<h2 style="margin: 0;">PROJECT NOTES</h2>								
SCALE: NONE DATE: JAN 2007 DWG. BY: JLT DESIGN BY: JLT REVIEWED BY: BCH	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>								

LEGEND

-  PROPOSED CONSTRUCTION
-  EXISTING PAVEMENT REMOVAL
-  DRUMS

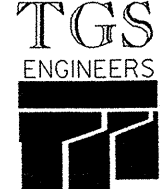


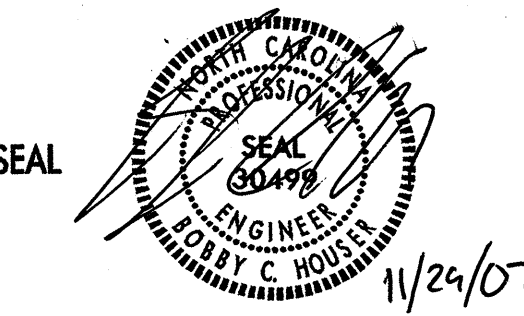
PHASE I

NOTE: ALL WORK ON 37897 PART B MUST BE COMPLETE BEFORE WORK BEGINS ON 37987 PART A.

- STEP 1: INSTALL ALL WORKZONE WARNING SIGNS AND LOGO SIGNS AS SHOWN ON SHEET NCMA-1. IF WORK IS NOT PURSUED WITHIN 3 DAYS OF SIGN INSTALLATION, THE SIGN SHALL BE COVERED IN A METHOD APPROVED BY THE ENGINEER ACCORDING TO SECTION 1100. INSTALL ALL DETOUR ROUTE SIGNS AS SHOWN ON SHEET TCP-8.
- STEP 2: USING STANDARD DRAWING 1101.03 (SHEET 2 OF 9) AND TCP-3, CONSTRUCT NC HWY10 (-L-) FROM STA. 23+00+/- TO 28+10+/- AND -Y2- FROM STA. 10+12.18 TO 11+00+/- UP TO BUT NOT INCLUDING FINAL PAVEMENT LAYER. MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
- STEP 3: PLACE TEMPORARY PAVEMENT MARKINGS AS FOLLOWS: (-L-) FROM STA. 23+00+/- TO STA. 28+10+/- AND TIE INTO EXISTING PAVEMENT MARKING LINES. (SEE PHASE II)
- STEP 4: REMOVE BARRICADES AND DETOUR SIGNS. OPEN NC HWY 10 (-L-) TO TRAFFIC.


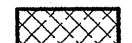

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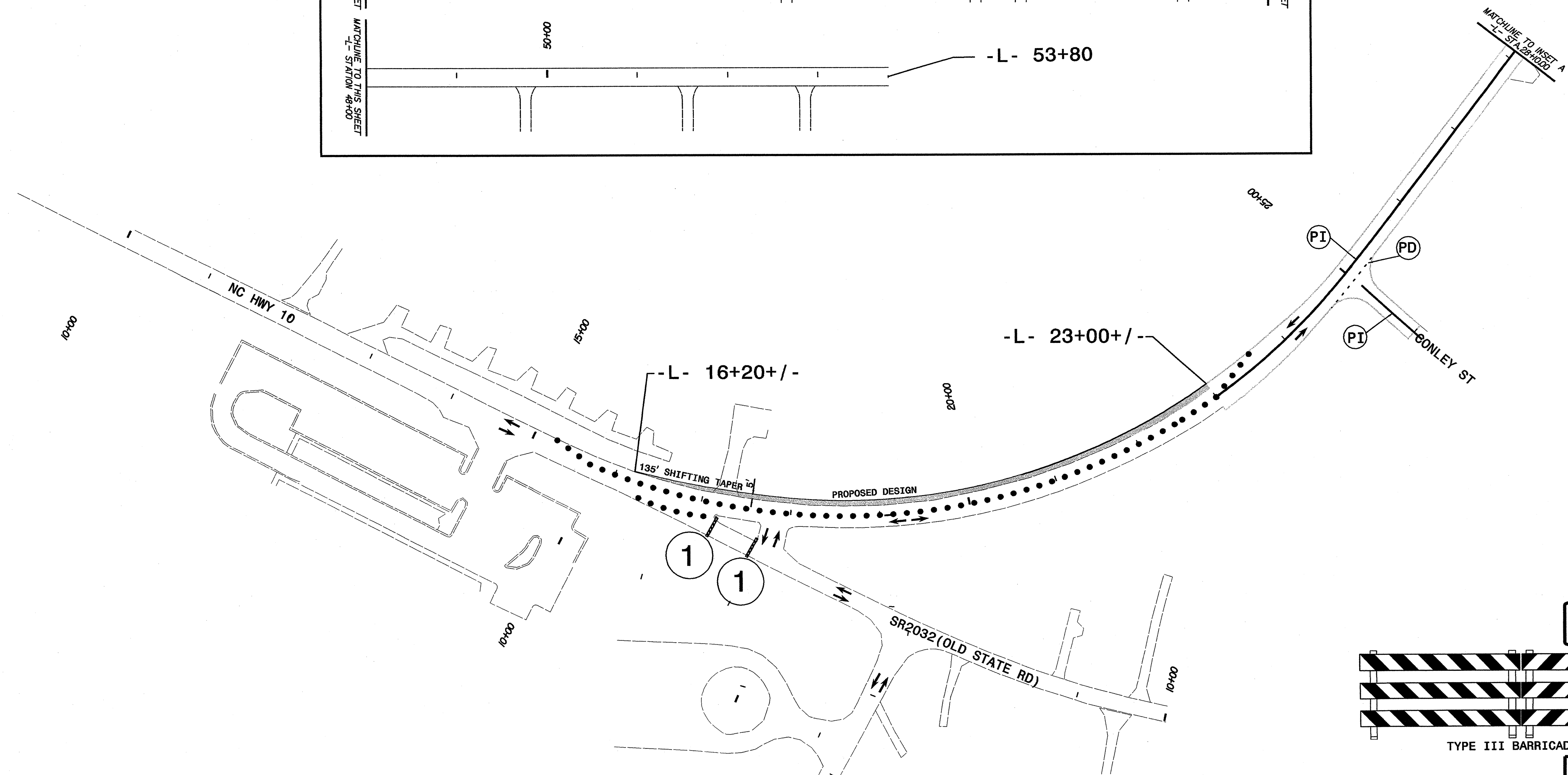
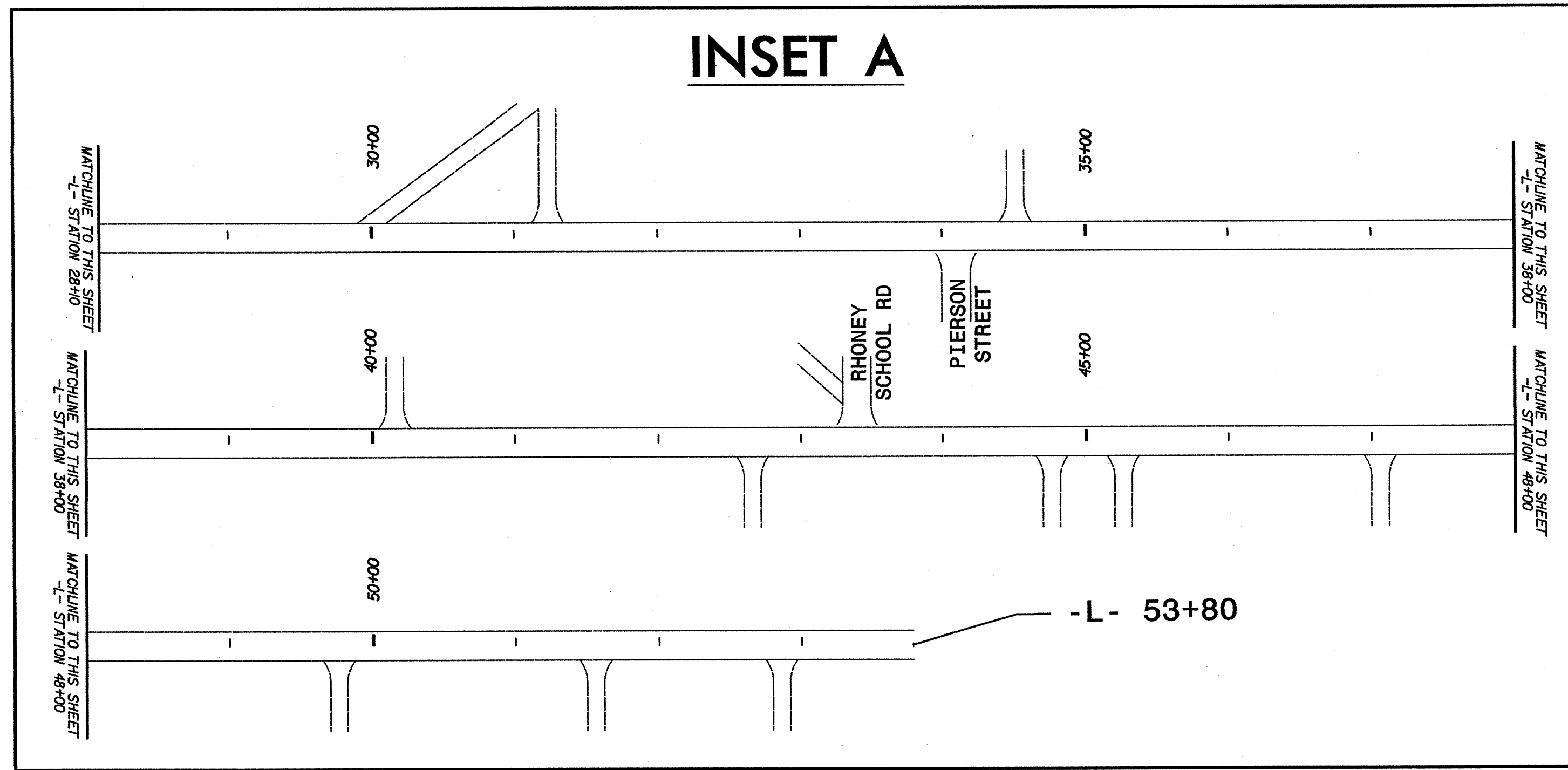
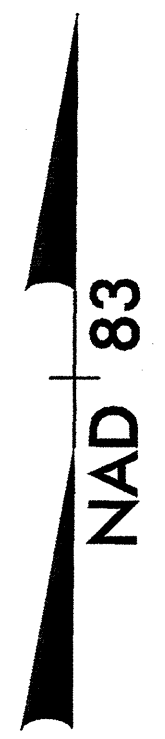
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APPROVED: _____ DATE: 11/24/07


PHASE I	
SCALE: NONE	REVISIONS
DATE: JAN. 2007	11/07
DWG. BY: JLT	
DESIGN BY: JLT	
REVIEWED BY: BCH	

LEGEND

-  PROPOSED CONSTRUCTION
-  EXISTING PAVEMENT REMOVAL
-  DRUMS



1

ROAD CLOSED R11-2
48" X 30"

TYPE III BARRICADE(S)

PHASE II

- STEP 1: INSTALL AND COVER ALL DETOUR ROUTE SIGNS AS SHOWN ON SHEET TCP-9.
- STEP 2: USING STANDARD DRAWING 1101.02 (SHEET 1 OF 9) AND TCP-4, WIDEN -L- FROM STA. 16+20+/- TO 23+00+/-, UP TO EXISTING PAVEMENT EDGE AND ELEVATION. USE FLAGGERS AT BOTH ENDS OF THE WORK ZONE AND AT THE INTERSECTIONS OF SR2032/OLD STATE RD AND NC HWY 10 (-L-). MAINTAIN ACCESS TO DRIVEWAYS AT ALL TIMES.
- STEP 3: PLACE TEMPORARY PAVEMENT MARKINGS AS FOLLOWS:
(-L-) FROM STA. 16+20+/- TO STA. 23+00+/- AND TIE INTO EXISTING PAVEMENT MARKING LINES. (SEE PHASE III)
- STEP 4: REMOVE DRUMS AND SHIFT TRAFFIC INTO NEW PATTERN (SEE PHASE III).

PLANS PREPARED BY:

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SEAL




11/29/07

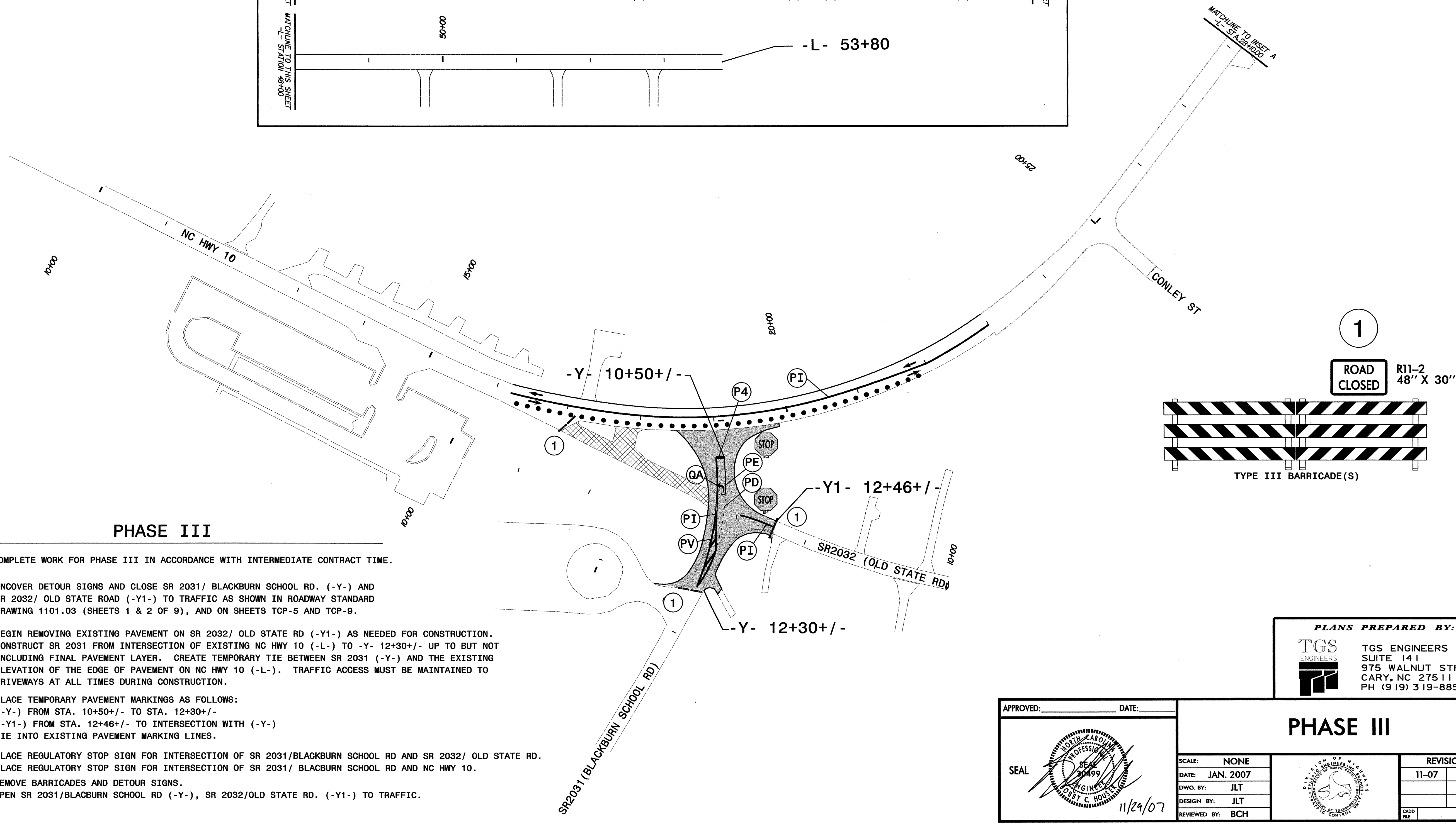
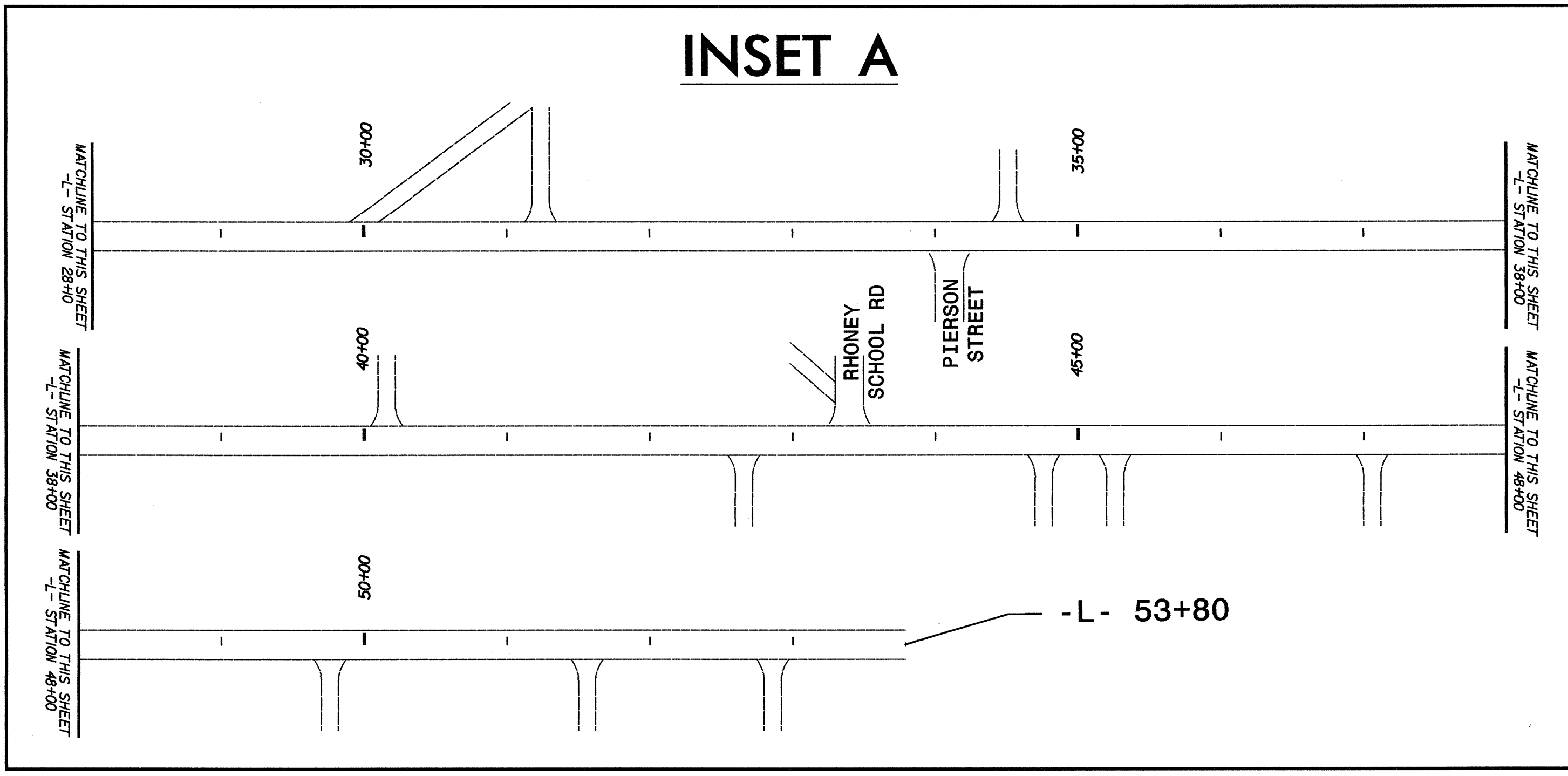
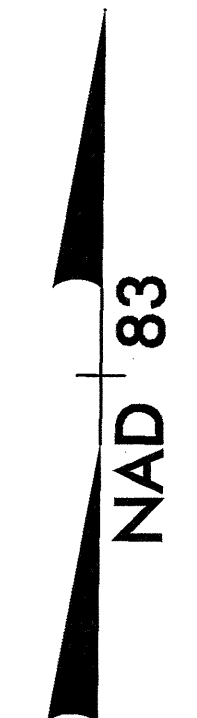
PHASE 2

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DATE: JAN. 2007		11-07
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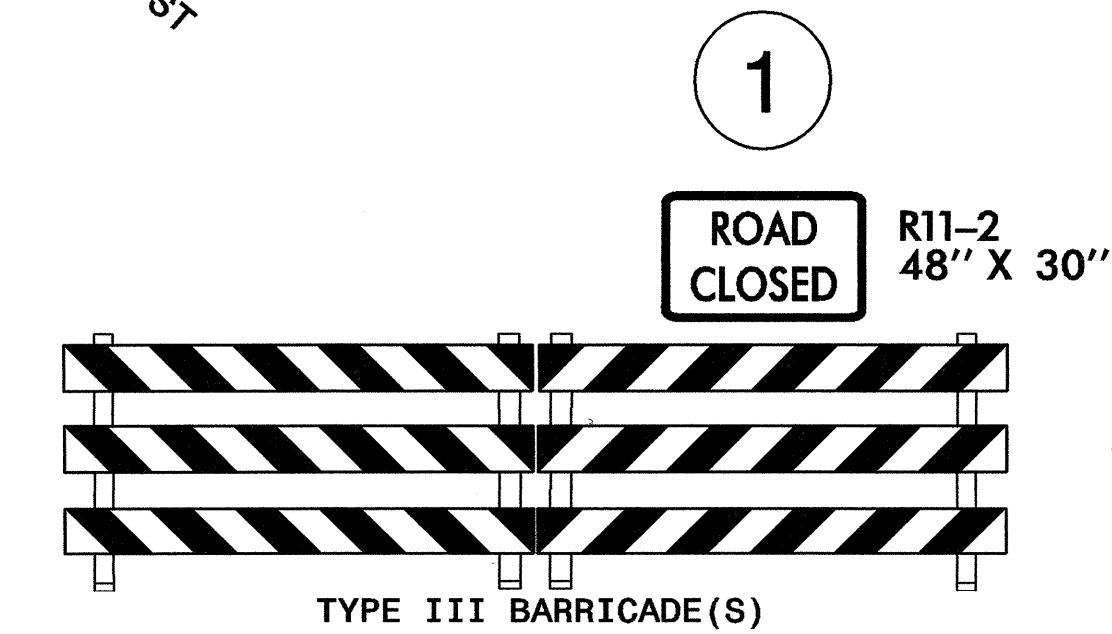
LEGEND

-  PROPOSED CONSTRUCTION
-  EXISTING PAVEMENT REMOVAL
-  DRUMS

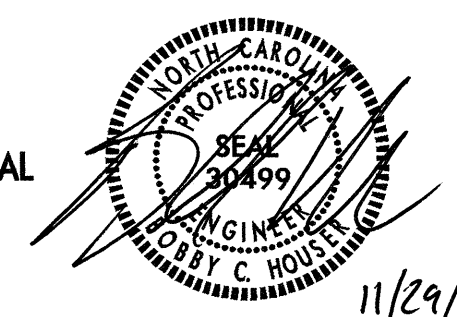
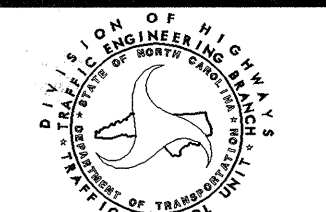


PHASE III

- NOTE: COMPLETE WORK FOR PHASE III IN ACCORDANCE WITH INTERMEDIATE CONTRACT TIME.
- STEP 1: UNCOVER DETOUR SIGNS AND CLOSE SR 2031/ BLACKBURN SCHOOL RD. (-Y-) AND SR 2032/ OLD STATE ROAD (-Y1-) TO TRAFFIC AS SHOWN IN ROADWAY STANDARD DRAWING 1101.03 (SHEETS 1 & 2 OF 9), AND ON SHEETS TCP-5 AND TCP-9.
 - STEP 2: BEGIN REMOVING EXISTING PAVEMENT ON SR 2032/ OLD STATE RD (-Y1-) AS NEEDED FOR CONSTRUCTION. CONSTRUCT SR 2031 FROM INTERSECTION OF EXISTING NC HWY 10 (-L-) TO -Y- 12+30+/- UP TO BUT NOT INCLUDING FINAL PAVEMENT LAYER. CREATE TEMPORARY TIE BETWEEN SR 2031 (-Y-) AND THE EXISTING ELEVATION OF THE EDGE OF PAVEMENT ON NC HWY 10 (-L-). TRAFFIC ACCESS MUST BE MAINTAINED TO DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
 - STEP 3: PLACE TEMPORARY PAVEMENT MARKINGS AS FOLLOWS:
 (-Y-) FROM STA. 10+50+/- TO STA. 12+30+/-
 (-Y1-) FROM STA. 12+46+/- TO INTERSECTION WITH (-Y-)
 TIE INTO EXISTING PAVEMENT MARKING LINES.
 - STEP 4: PLACE REGULATORY STOP SIGN FOR INTERSECTION OF SR 2031/BLACKBURN SCHOOL RD AND SR 2032/ OLD STATE RD.
 PLACE REGULATORY STOP SIGN FOR INTERSECTION OF SR 2031/ BLACKBURN SCHOOL RD AND NC HWY 10.
 - STEP 5: REMOVE BARRICADES AND DETOUR SIGNS.
 OPEN SR 2031/BLACKBURN SCHOOL RD (-Y-), SR 2032/OLD STATE RD. (-Y1-) TO TRAFFIC.






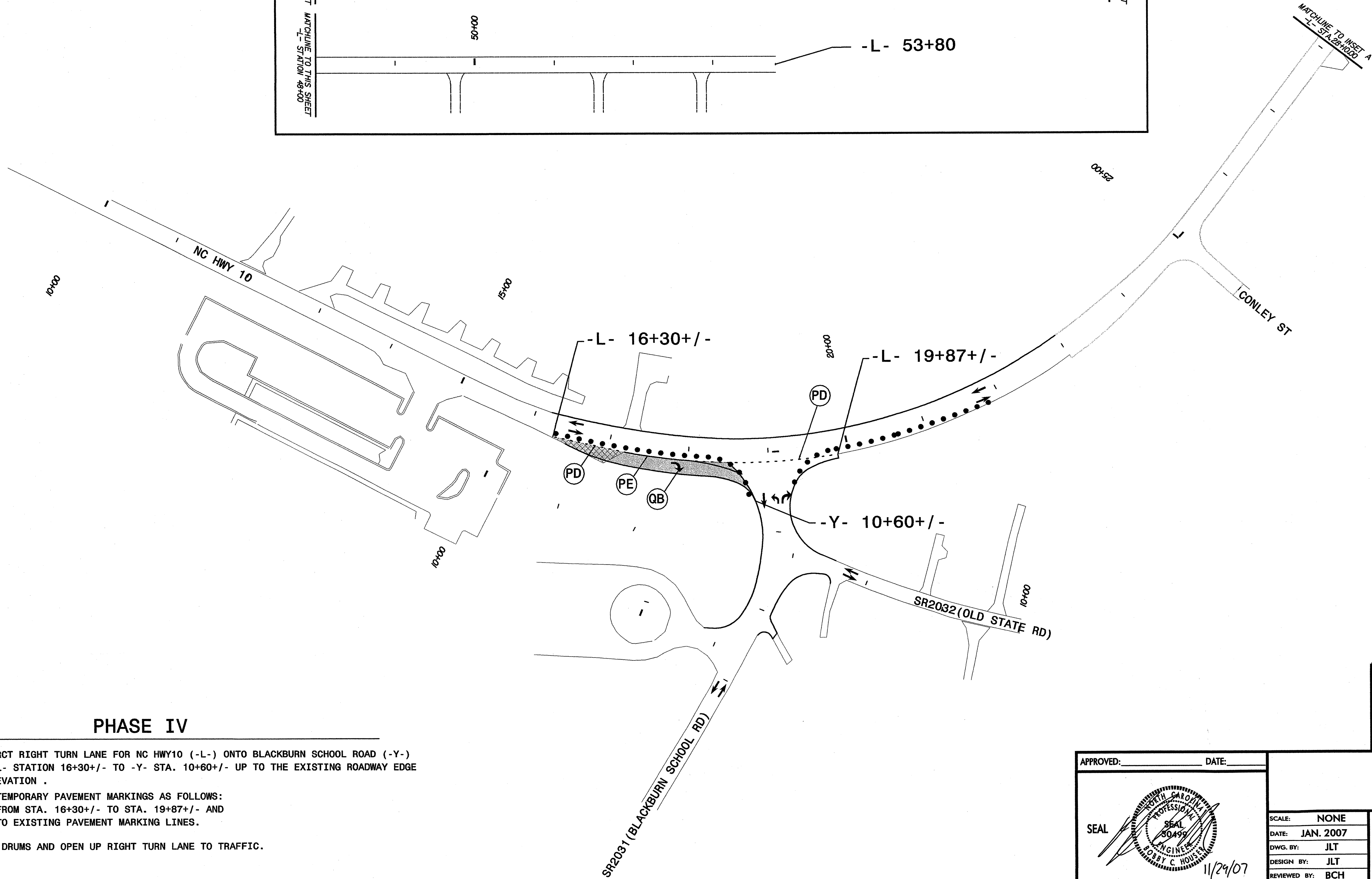
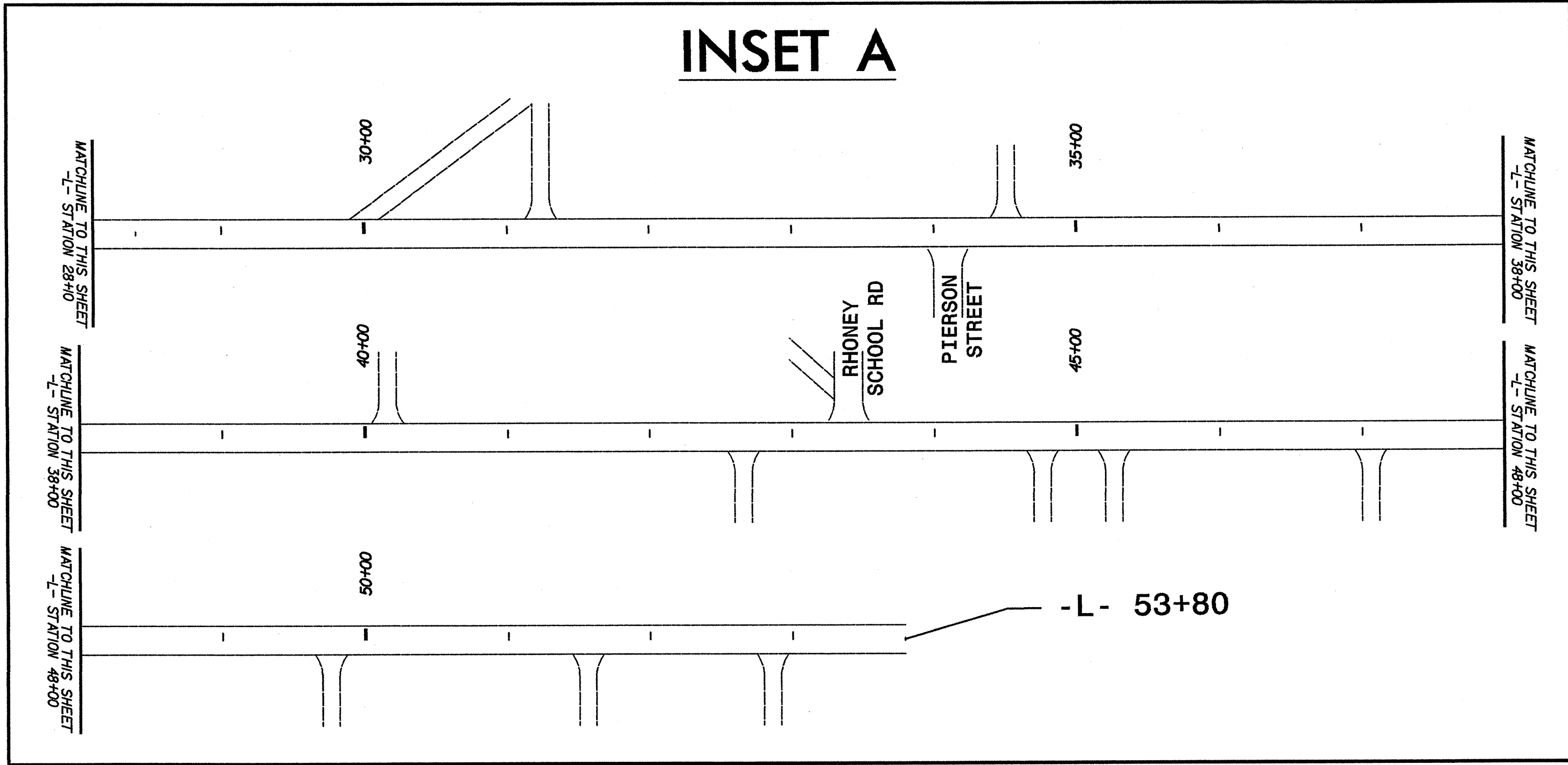
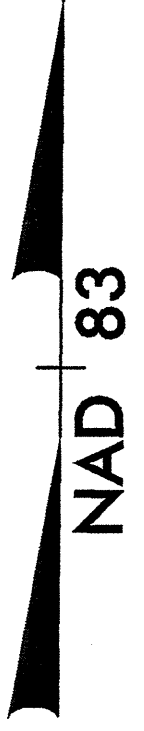
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APPROVED:	DATE:	PHASE III	
			
SCALE: NONE	DATE: JAN. 2007		REVISIONS
DWG. BY: JLT	DESIGN BY: JLT		11-07
REVIEWED BY: BCH			

SYSTEMS DESIGN SERVICES
 11/29/07

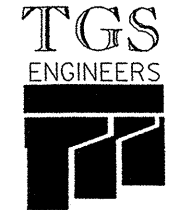
LEGEND

-  PROPOSED CONSTRUCTION
-  EXISTING PAVEMENT REMOVAL
-  DRUMS

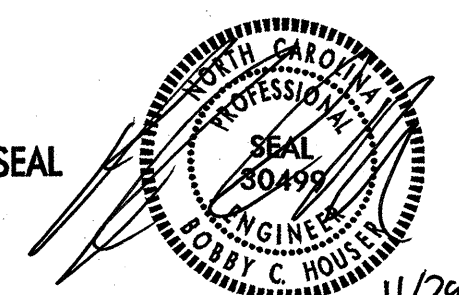


PHASE IV

- STEP 1: CONSTRUCT RIGHT TURN LANE FOR NC HWY10 (-L-) ONTO BLACKBURN SCHOOL ROAD (-Y-) FROM -L- STATION 16+30+/- TO -Y- STA. 10+60+/- UP TO THE EXISTING ROADWAY EDGE AND ELEVATION .
- STEP 2: PLACE TEMPORARY PAVEMENT MARKINGS AS FOLLOWS: (-L-) FROM STA. 16+30+/- TO STA. 19+87+/- AND TIE INTO EXISTING PAVEMENT MARKING LINES.
- STEP 3: REMOVE DRUMS AND OPEN UP RIGHT TURN LANE TO TRAFFIC.

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 PH (919) 319-8850

APPROVED: _____ DATE: _____






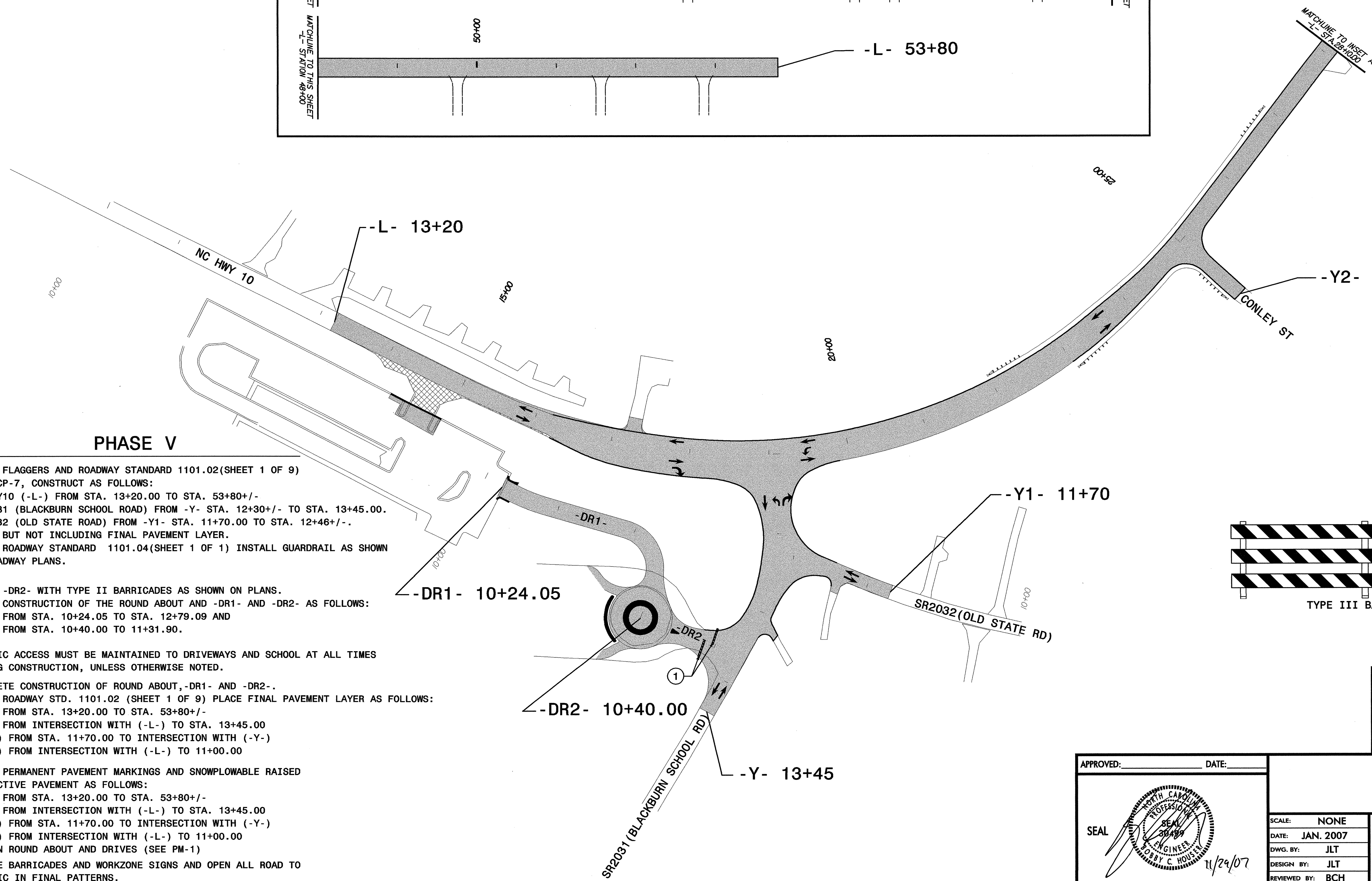
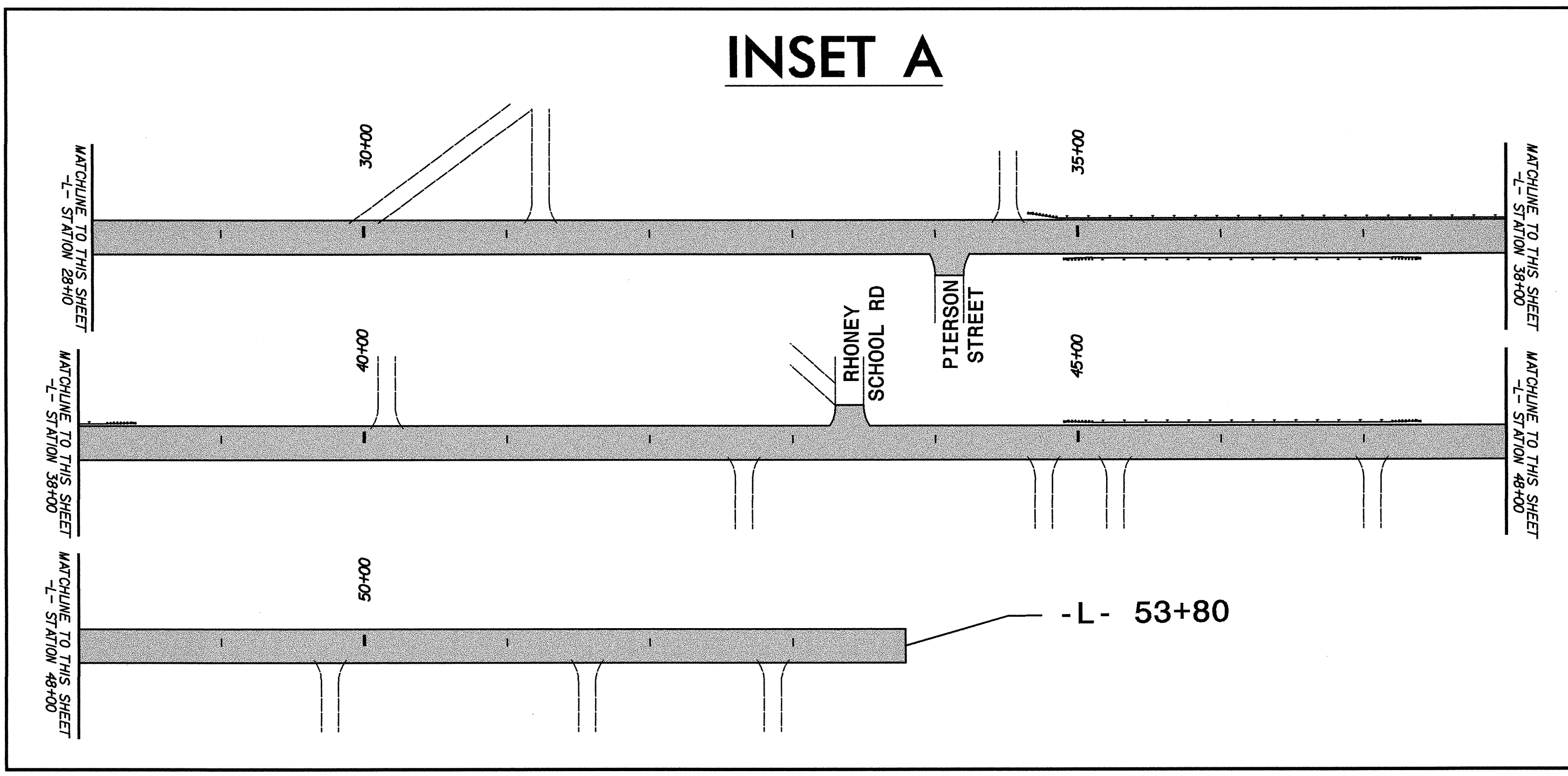
11/29/07

PHASE IV	
SCALE: NONE	REVISIONS
DATE: JAN. 2007	
DWG. BY: JLT	
DESIGN BY: JLT	
REVIEWED BY: BCH	
	CADD FILE

\$\$\$\$\$SYTIME\$\$\$\$\$
 \$\$\$\$DCN\$\$\$\$\$
 \$\$\$USERNAME\$\$\$\$\$

LEGEND

-  PROPOSED CONSTRUCTION
-  EXISTING PAVEMENT REMOVAL
-  DRUMS



PHASE V

STEP 1: USING FLAGGERS AND ROADWAY STANDARD 1101.02(SHEET 1 OF 9) AND TCP-7, CONSTRUCT AS FOLLOWS:
 NC HWY10 (-L-) FROM STA. 13+20.00 TO STA. 53+80+/-
 SR 2031 (BLACKBURN SCHOOL ROAD) FROM -Y- STA. 12+30+/- TO STA. 13+45.00.
 SR 2032 (OLD STATE ROAD) FROM -Y1- STA. 11+70.00 TO STA. 12+46+/-.
 UP TO BUT NOT INCLUDING FINAL PAVEMENT LAYER.
 USING ROADWAY STANDARD 1101.04(SHEET 1 OF 1) INSTALL GUARDRAIL AS SHOWN ON ROADWAY PLANS.

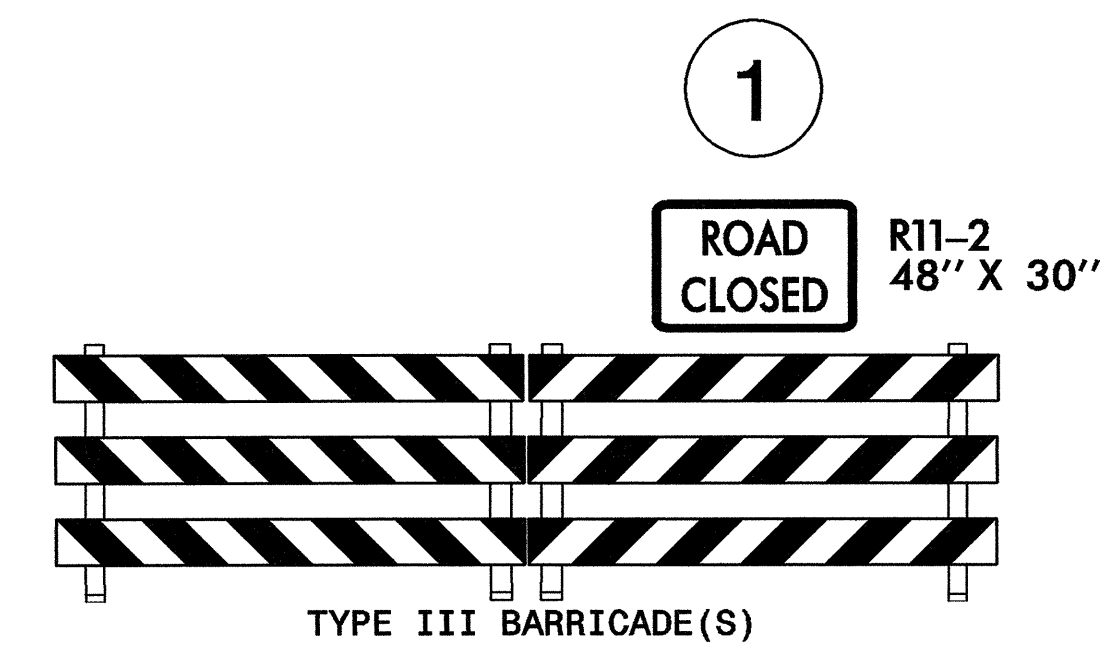
CLOSE -DR2- WITH TYPE II BARRICADES AS SHOWN ON PLANS.
 BEGIN CONSTRUCTION OF THE ROUND ABOUT AND -DR1- AND -DR2- AS FOLLOWS:
 -DR1- FROM STA. 10+24.05 TO STA. 12+79.09 AND
 -DR2- FROM STA. 10+40.00 TO 11+31.90.

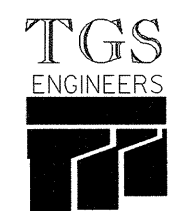
TRAFFIC ACCESS MUST BE MAINTAINED TO DRIVEWAYS AND SCHOOL AT ALL TIMES DURING CONSTRUCTION, UNLESS OTHERWISE NOTED.

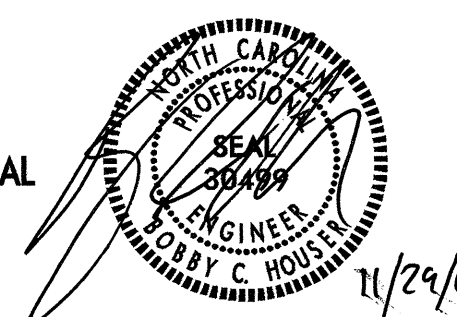
STEP 2: COMPLETE CONSTRUCTION OF ROUND ABOUT, -DR1- AND -DR2-.
 USING ROADWAY STD. 1101.02 (SHEET 1 OF 9) PLACE FINAL PAVEMENT LAYER AS FOLLOWS:
 (-L-) FROM STA. 13+20.00 TO STA. 53+80+/-
 (-Y-) FROM INTERSECTION WITH (-L-) TO STA. 13+45.00
 (-Y1-) FROM STA. 11+70.00 TO INTERSECTION WITH (-Y-)
 (-Y2-) FROM INTERSECTION WITH (-L-) TO 11+00.00

STEP 2: PLACE PERMANENT PAVEMENT MARKINGS AND SNOWPLOWABLE RAISED REFLECTIVE PAVEMENT AS FOLLOWS:
 (-L-) FROM STA. 13+20.00 TO STA. 53+80+/-
 (-Y-) FROM INTERSECTION WITH (-L-) TO STA. 13+45.00
 (-Y1-) FROM STA. 11+70.00 TO INTERSECTION WITH (-Y-)
 (-Y2-) FROM INTERSECTION WITH (-L-) TO 11+00.00
 AND ON ROUND ABOUT AND DRIVES (SEE PM-1)

STEP 3: REMOVE BARRICADES AND WORKZONE SIGNS AND OPEN ALL ROAD TO TRAFFIC IN FINAL PATTERNS.

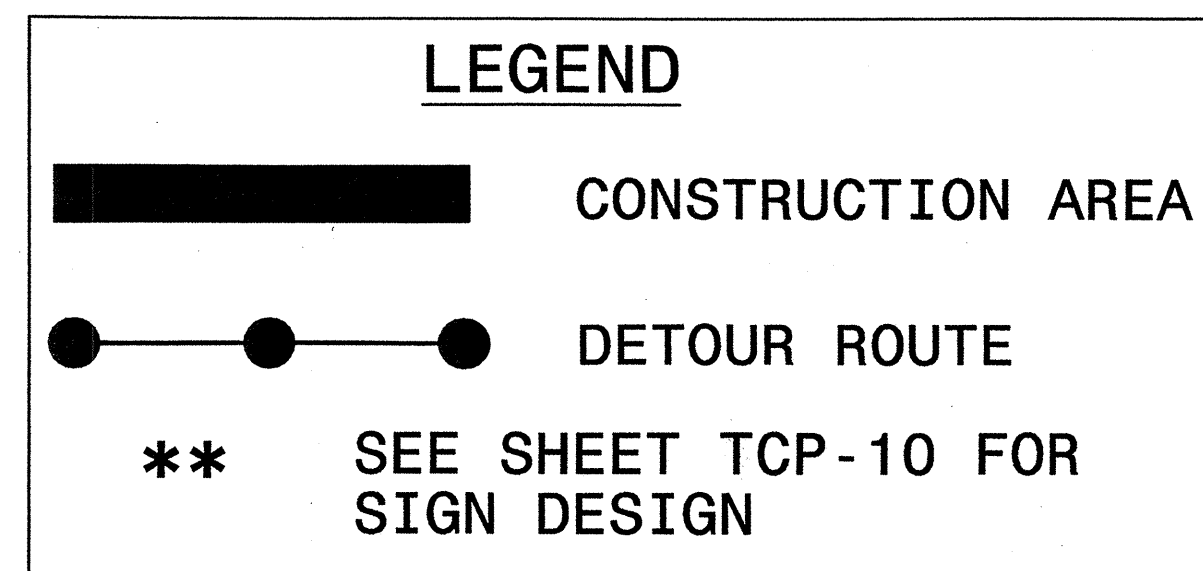
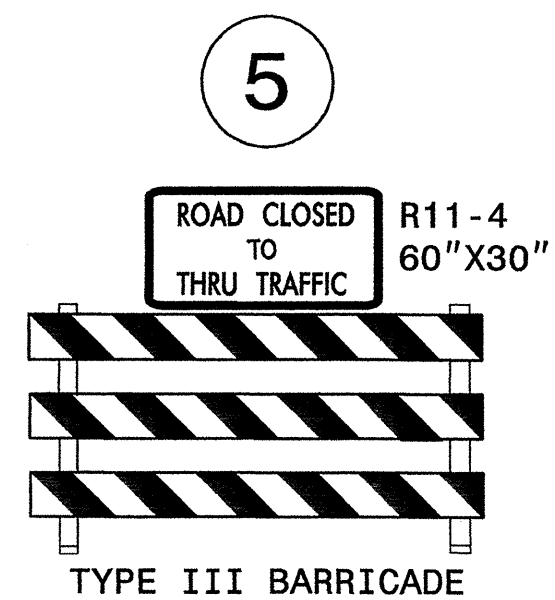
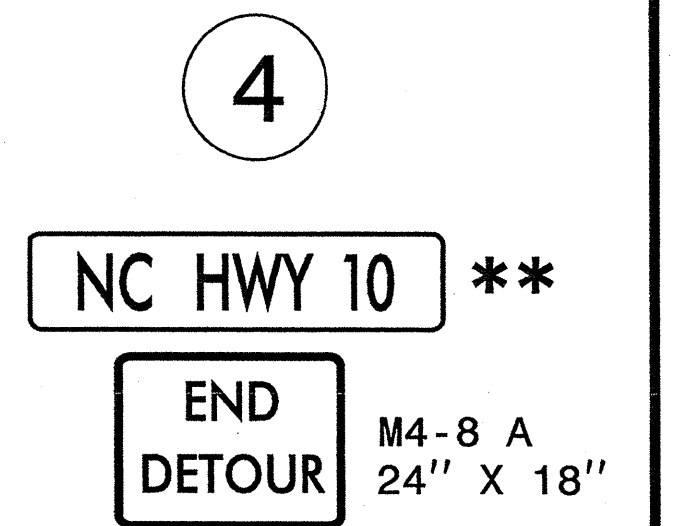
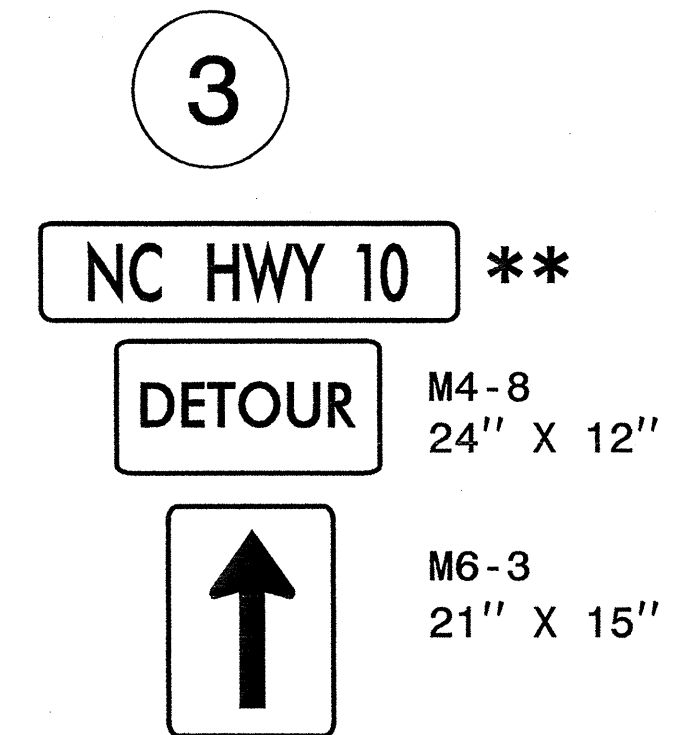
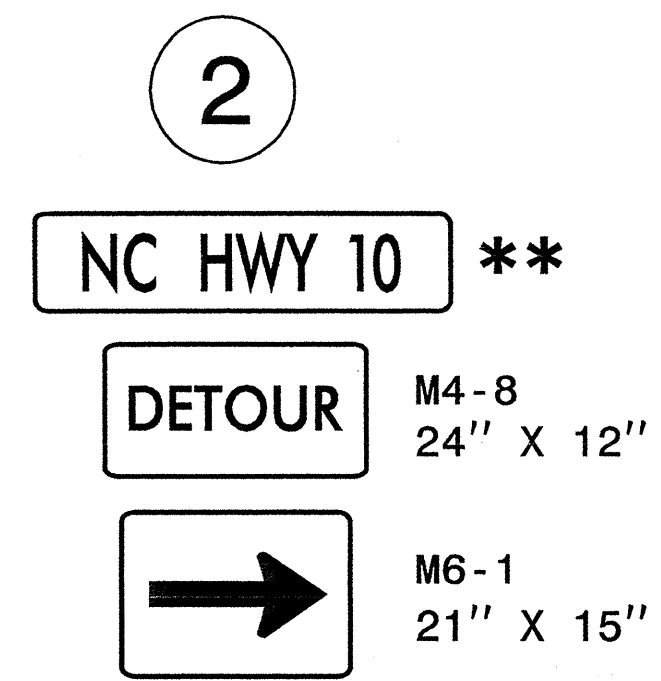
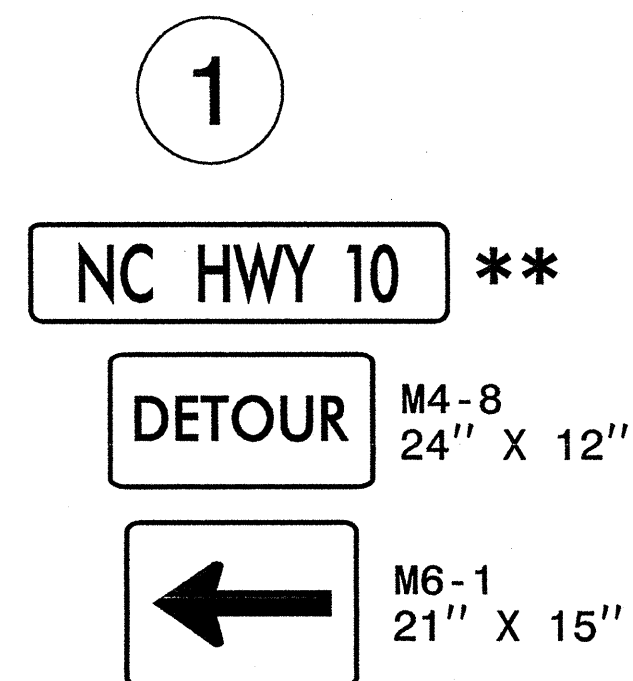
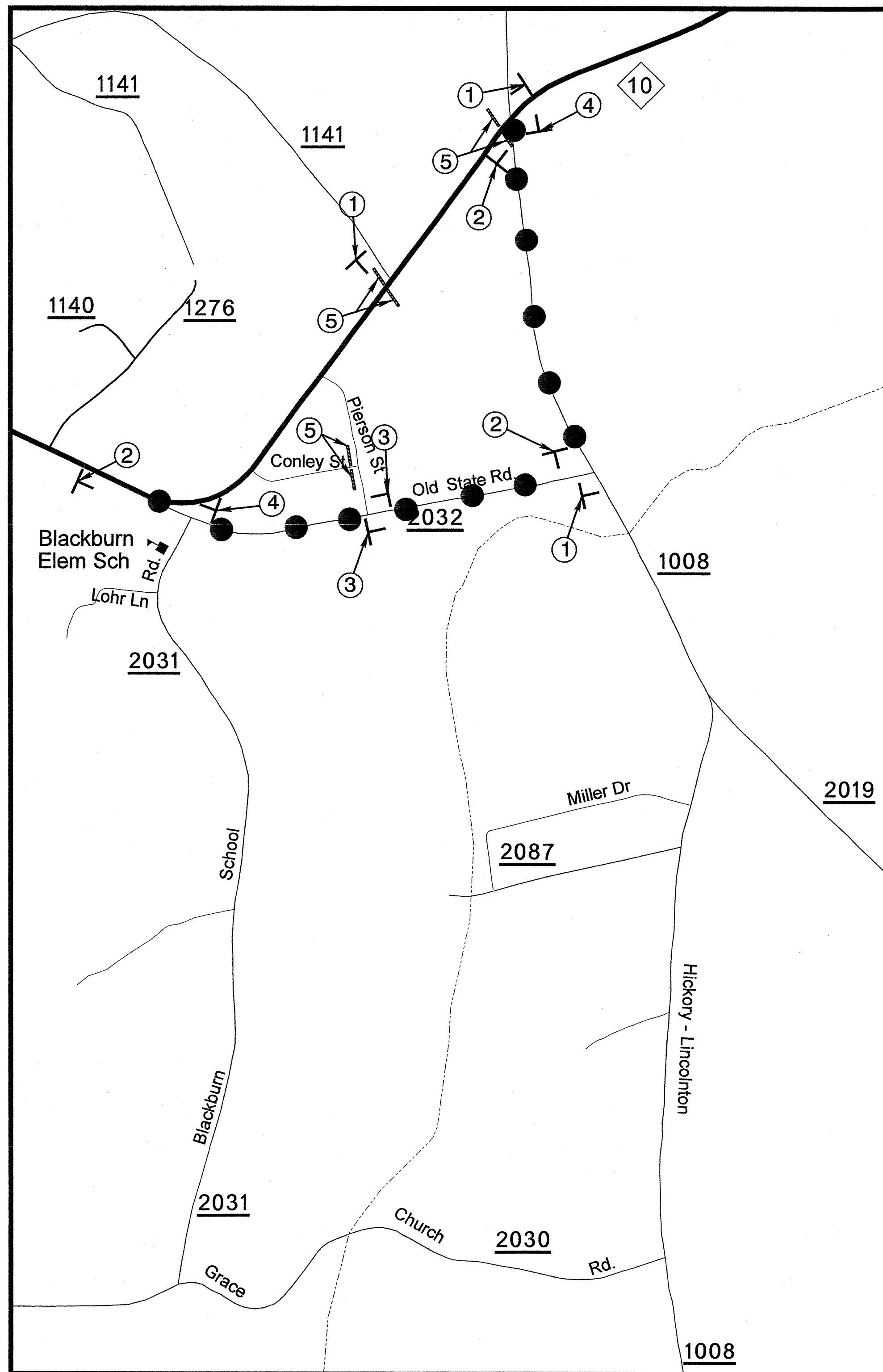


PLANS PREPARED BY:
 TGS ENGINEERS
 SUITE 141
 975 WALNUT STREET
 CARY, NC 27511
 PH (919) 319-8850

APPROVED: _____ DATE: _____

 SEAL

PHASE V	
SCALE: NONE	REVISIONS
DATE: JAN. 2007	11-07
DWG. BY: JLT	
DESIGN BY: JLT	
REVIEWED BY: BCH	

\$\$\$ SYSTEMS \$\$\$
 \$\$\$ DONSON \$\$\$
 \$\$\$ USERNAME \$\$\$

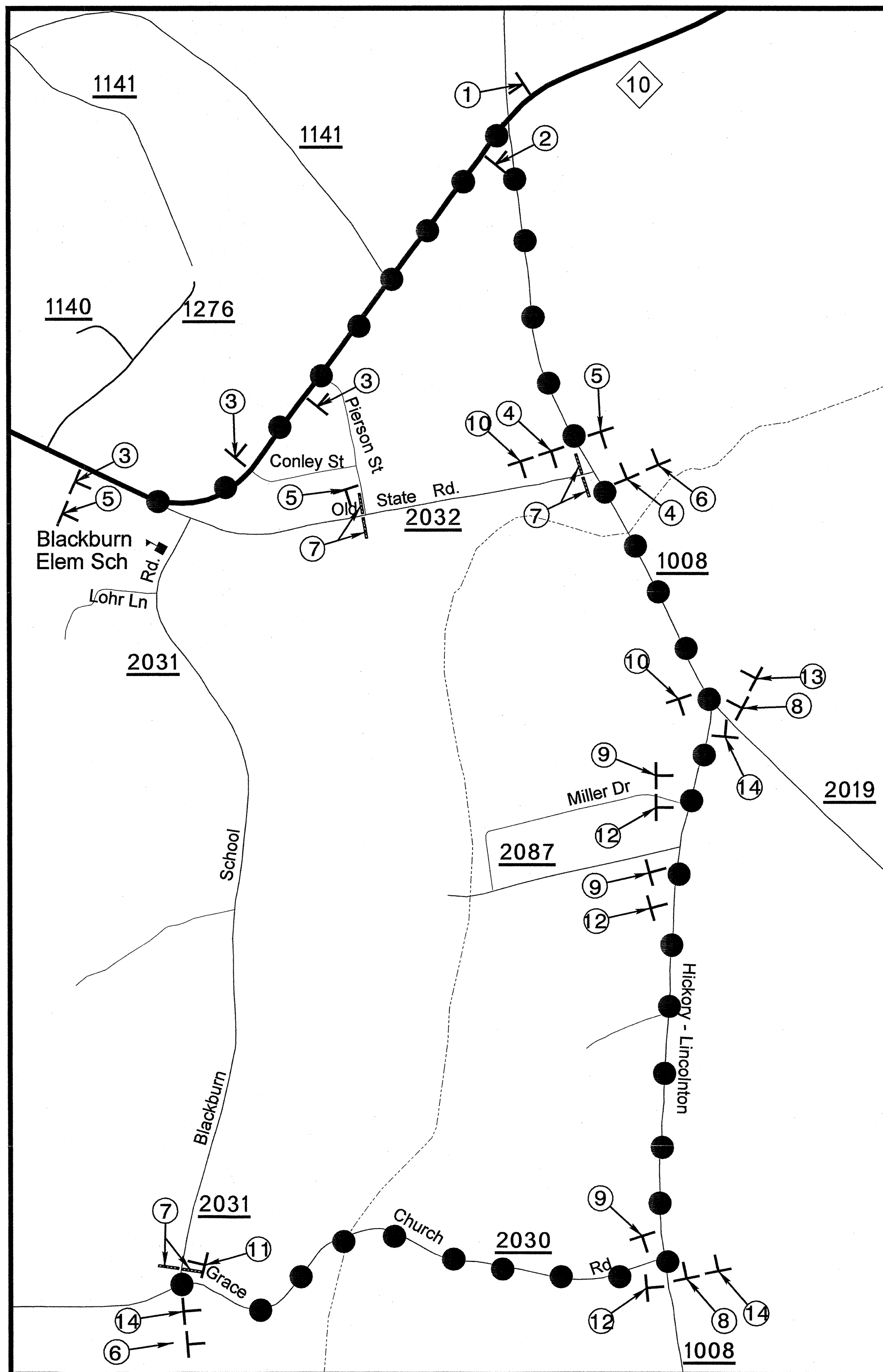


\$\$\$\$\$ SYSTEMS\$\$\$\$\$
\$\$\$\$\$ USER NAME\$\$\$\$\$

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SUITE 141
975 WALNUT STREET
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PH (919) 319-8850

APPROVED: _____	DATE: _____	DETOUR	
SCALE: NONE	DATE: JAN, 2007		REVISIONS
DWG. BY: JLT	DESIGN BY: JLT		
REVIEWED BY: BCH			



LEGEND

CONSTRUCTION AREA

DETOUR ROUTE

** SEE SHEET TCP-11 FOR SIGN DESIGN

*** SEE SHEET TCP-12 FOR SIGN DESIGN

1

BLACKBURN SCHOOL RD **

OLD STATE RD ***

DETOUR M4-8 24" X 12"

M6-1 21" X 15"

2

BLACKBURN SCHOOL RD **

OLD STATE RD ***

DETOUR M4-8 24" X 12"

M6-1 21" X 15"

3

BLACKBURN SCHOOL RD **

OLD STATE RD ***

DETOUR M4-8 24" X 12"

M6-3 21" X 15"

4

OLD STATE RD ***

END DETOUR M4-8 A 24" X 18"

5

ROAD CLOSED W20-3 48" X 48"

SP-4R 42" X 12"

6

ROAD CLOSED W20-3 48" X 48"

SP-4L 42" X 12"

7

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

TYPE III BARRICADE

8

BLACKBURN SCHOOL RD **

DETOUR M4-8 24" X 12"

M6-1 21" X 15"

9

BLACKBURN SCHOOL RD **

DETOUR M4-8 24" X 12"

M6-1 21" X 15"

10

BLACKBURN SCHOOL RD **

DETOUR M4-8 24" X 12"

M6-3 21" X 15"

11

BLACKBURN SCHOOL RD **

END DETOUR M4-8 A 24" X 18"

12

OLD STATE RD ***

DETOUR M4-8 24" X 12"

M6-1 21" X 15"

13

OLD STATE RD ***

DETOUR M4-8 24" X 12"

M6-1 21" X 15"

14

OLD STATE RD ***

DETOUR M4-8 24" X 12"

M6-3 21" X 15"

PLANS PREPARED BY:

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 CARY, NC 27511
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APPROVED: _____ DATE: _____

SEAL

10/11/07

DETOUR	
SCALE: NONE	REVISIONS
DATE: JAN, 2007	
DWG. BY: JLT	
DESIGN BY: JLT	
REVIEWED BY: BCH	

SYSTEMS TIME SERVICES

SIGN NUMR: DET-3 TSv3.31 DESIGN BY: JLT CK BY: CLF STD #: 0 VERTICAL
 TYPE: D BACKG ORANGE PROJECT ID: WBS 37897 DIV:12 DATE: 01/23/07 SPACING

SIGN WIDTH: 42 INCHES MAJ. COPY SERIES: C
 HEIGHT: 24 INCHES
 TOTALAREA :(S.F.) 7.00 ROUTE MARKERS:

BORDR TYPE: RECESSED
 RECESS 0.38 INCHES
 WIDTH: 0.63 INCHES ARROW TYPES:
 RADII: 1.50 INCHES

NO. Z BARS: #N/A VHB:
 LENGTH: #N/A INCHES MAT'L: 0.080 " ALUMINUM



MOUNTED ON 2 U POST

5.13 SPACE
 5.00 LINE 1
 C 10.1
 3.75 SPACE
 5.00 LINE 2
 C 18.9
 5.13 SPACE
 0.00
 0.00
 0.00
 0.00
 0.00
 0.00

TOTAL: 24 0.00

SIZE/SERIES	LT MARGIN	SIGN COPY														RT MARGIN	
CHAR: 5.00 INCH		B	L	A	C	K	B	U	R	N							
TYPE: C	5.10	3.79	2.78	3.97	3.58	3.58	3.79	3.79	3.79	2.74	0.00	0.00	0.00	0.00	0.00	0.00	
#/LC: 5.00 INCH	[x]	5.1	8.9	11.7	15.6	19.2	22.8	26.6	30.4	34.2	36.9	0.0	0.0	0.0	0.0	0.0	
SPCE: 1.00 FACTOR																	
LINE 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
CHAR: 5.00 INCH		S	C	H	O	O	L		R	D							
TYPE: C		3.58	3.58	3.79	3.73	3.94	2.50	4.10	3.79	2.74	0.00	0.00	0.00	0.00	0.00		
#/LC: 5.00 INCH	[x]		3.6	7.2	11.9	14.7	18.6	21.1	25.2	29.0	31.7	0.0	0.0	0.0	0.0		
SPCE: 1.00 FACTOR																	
LINE 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.25	
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

 SYSTEMS

APPROVED: _____	DATE: _____	DETOUR SIGN LAYOUT	
SCALE: NONE	DATE: JAN. 2007		REVISIONS
DWG. BY: JLT	DESIGN BY: JLT		
REVIEWED BY: BCH			

