

TRAFFIC CONTROL AND PAVEMENT MARKING PLAN

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 18, 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
1101.05	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 PANELS
1135.01	CONES
1130.01	DRUM
1145.01	BARRICADES - TYPE III
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION - REFLECTIVE END TREATMENT
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR - DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - DIVIDED AND UNDIVIDED ROADWAYS
1205.03	PAVEMENT MARKINGS - INTERCHANGES
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1253.01	SNOWPLOWABLE RAISED PAVEMENT MARKERS
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1267.01	FLEXIBLE DELINEATOR INSTALLATION
1267.02	FLEXIBLE DELINEATOR SPACING
1267.03	FLEXIBLE DELINEATORS - INTERCHANGES

INDEX OF SHEETS

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TCP-4 THRU TCP-14	TRAFFIC CONTROL PHASE 1
TCP-15 THRU TCP-25	TRAFFIC CONTROL PHASE 2
TCP-26 THRU TCP-27	ADVANCED WARNING SIGNS
PM-1 THRU PM-3	PAVEMENT MARKING PLANS

LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - UNDER CONSTRUCTION
 - REMOVAL OF EXISTING PAVEMENT
 - SHEET PILING
- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
 - TYPE II BARRICADE
 - TYPE III BARRICADE
 - PORTABLE CONCRETE BARRIER
 - 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

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TIP PROJECT: R-505

PPB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

APPROVED: DATE: 1/3/08
SEAL:

TRAFFIC CONTROL PLAN

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

GENERAL NOTES

ADAPT THE TRAFFIC CONTROL PLANS, WHEN DIRECTED BY THE ENGINEER, TO MEET FIELD CONDITIONS TO PROVIDE SAFE AND EFFICIENT TRAFFIC MOVEMENT. CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE, OR RESULT IN DUPLICATE, OR UNDESIRABLE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES.

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 AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 25 / I-26	7:00 AM TO 7:00 PM MONDAY THRU SUNDAY

B) DO NOT STOP TRAFFIC FOR MORE THAN 15 MINUTES AS FOLLOWS:

ROAD NAME	OPERATION
US 25 / I-26	TRAFFIC SHIFTS

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

ROAD NAME
US 25 / I-26

HOLIDAY

- FOR ANY EVENT THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 P.M. DECEMBER 31st TO 7:00 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A SATURDAY OR A SUNDAY, THEN UNTIL 7:00 A.M. THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 7:00 P.M. THURSDAY AND 7:00 A.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY TO 7:00 A.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 A.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A SATURDAY OR SUNDAY, THEN BETWEEN THE HOURS OF 7:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 P.M. FRIDAY AND 7:00 A.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 P.M. TUESDAY TO 7:00 A.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 A.M. THE FOLLOWING MONDAY AFTER THE WEEK OF CHRISTMAS.
- NO LANE CLOSURES ON WEEKENDS IN THE MONTH OF OCTOBER FROM 12:00 NOON, FRIDAY TO 7:00 AM MONDAY.

C1) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	OPERATION AND DURATION
US 176 (-Y2-)	4:00 AM TO 9:00 AM MONDAY THRU FRIDAY	HANGING BRIDGE GIRDERS,
US 176 (-Y2-)	3:00 PM TO 9:00 PM MONDAY THRU FRIDAY	HANGING BRIDGE GIRDERS,

D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR OTHERWISE DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- 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 WITHIN 15 FT OF 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.
 - 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.
- 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.
 - DO NOT WORK SIMULTANEOUSLY, WITHIN 15 FT. ON BOTH SIDES OF AN OPEN TRAVELWAY, WITHIN THE SAME LOCATION, ON A TWO-LANE, TWO-WAY ROAD.
 - DO NOT PERFORM WORK INVOLVING HEAVY EQUIPMENT WITHIN 15 FT OF THE EDGE OF TRAVELWAY WHEN WORK IS BEING PERFORMED BEHIND A LANE CLOSURE ON THE OPPOSITE SIDE OF THE TRAVELWAY.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- 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 A 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.
- DO NOT EXCEED A DIFFERENCE OF 1.5 inches IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC. INSTALL ADVANCE WARNING UNEVEN LANES SIGNS (W8-11) 500 FT IN ADVANCE AND A MINIMUM OF ONCE EVERY MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 100 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

WHEN NO WORK IS BEING CONDUCTED FOR A PERIOD LONGER THAN ONE WEEK, REMOVE OR COVER ALL ADVANCE WORK ZONE WARNING SIGNS, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE TOWN.
- PROVIDE PERMANENT SIGNING.
- PROVIDE DETOUR SIGNING WITHIN THE PROJECT LIMITS.
- THE CONTRACTOR WILL COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.
- ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

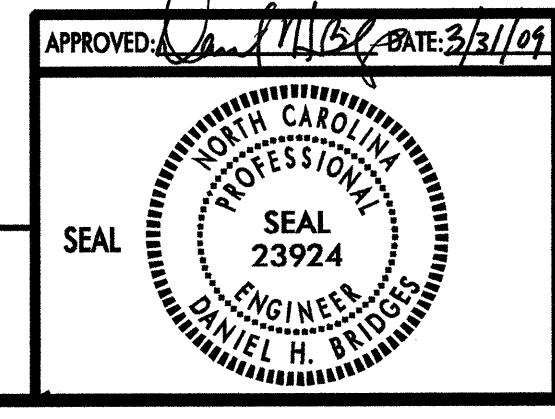
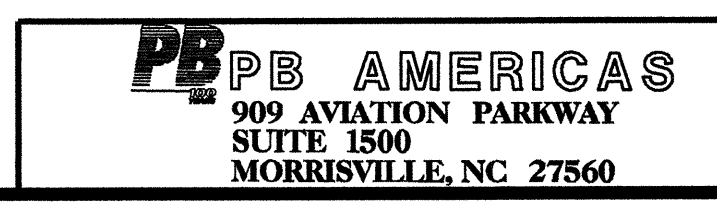
- INSTALL MOVABLE/PORTABLE CONCRETE BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE MOVABLE/PORTABLE CONCRETE BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.
- ONCE MOVABLE/PORTABLE CONCRETE BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE MOVABLE/PORTABLE CONCRETE BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET MOVABLE/PORTABLE CONCRETE BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS, BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.
- PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED IMPACT ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.
- OFFSET THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER A MINIMUM OF 40 FT. FROM ONCOMING TRAFFIC OR PROTECT AT ALL TIMES BY A TEMPORARY CRASH CUSHION.
- INSTALL MOVABLE/PORTABLE CONCRETE BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE MOVABLE/PORTABLE CONCRETE BARRIER AGAINST THE TRAFFIC FLOW, BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.
- INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP CLOSED THE SECTION OF THE ROADWAY UNTIL THE BARRIER CAN BE PLACED OR AFTER BARRIER IS REMOVED.
- 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.
- PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY. STAGGER OR OVERLAP BARRICADES TO ALLOW FOR INGRESS OR EGRESS.
- PLACE SETS OF THREE DRUMS PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC. THESE DRUMS SHALL BE IN ADDITION TO CHANNELIZING DEVICES.
- INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS.

ROAD NAME	MARKING	MARKER
-L- AND ALL -Y- LINES	THERMOPLASTIC	SNOW/PLOWABLE MARKERS
-L- BRIDGE DECKS	COLD APPLIED PLASTIC, TYPE 3	PERMANENT RAISED MARKERS

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

ROAD NAME	MARKING	MARKER
-L- AND ALL -Y- LINES	PAINT	TEMPORARY RAISED MARKERS
-L- BRIDGE DECKS	COLD APPLIED PLASTIC, TYPE 4	TEMPORARY RAISED MARKERS

*****SYTIME*****
*****SUBSERNAME*****



GENERAL NOTES		REVISIONS
SCALE:		
DATE:	7/25/08	
DWG. BY:	RCC	
DESIGN BY:	RCC	
REVIEWED BY:	DHB	

PROJECT PHASING

PROJ. REFERENCE NO.	SHEET NO.
R-505	TCP-3

PHASE 1

NOTE: CONTRACTOR MAY WORK ON PHASE I, STEPS 2 THROUGH 7 CONCURRENTLY.

STEP 1: CONTRACTOR SHALL MAINTAIN TRAFFIC IN EXISTING PATTERNS AND USING RDWY. STD. DWG. NO. 1101.02, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON EXISTING I-26, US 25 AND ALL -Y- LINES AS SHOWN ON SHEETS TCP-3 THRU TCP-14.

STEP 1B: SEE PROJECT NOTE BELOW *

STEP 2: NOTE: COMPLETE THE WORK IN PHASE I, STEP 2. (SEE SPECIAL PROVISIONS)

2A) CLOSE ALL DRIVEWAY ACCESS TO -L- ON THE WEST SIDE OF -L-.

2B) CLOSE ACCESS FROM SR 1829 (KAY ROAD) TO -L- AND REMOVE PAVEMENT AS SHOWN IN THE CONSTRUCTION PLANS.

2C) CLOSE ACCESS FROM SR 1807 (OAK GROVE ROAD) TO -L- AND REMOVE PAVEMENT AS SHOWN IN THE CONSTRUCTION PLANS.

2D) CLOSE -Y1- AT STATION 10+00 +/- . CONSTRUCT THE TURN AROUND ON -Y1- AS SHOWN IN THE CONSTRUCTION PLANS AND SHEET TCP -17

STEP 3: NOTE: COMPLETE THE WORK IN PHASE I, STEP 3 THROUGH 5. (SEE SPECIAL PROVISIONS)

PERFORM THE FOLLOWING:

3A) USING RDWY. STD. DWG. 1101.02, SHEET 1 OF 9 AND FLAGGERS, CONSTRUCT -Y51A- AND ACCESS ROAD 12 FROM STA. 14+50 +/- TO STA. 44+64 +/- UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE. PLACE TRAFFIC BACK IN THE EXISTING PATTERN AT THE END OF EACH WORKDAY. (SEE TCP-6 THRU TCP-8)

3B) USING RDWY. STD. DWG. 1101.02 AS NECESSARY, CONSTRUCT ACCESS ROAD 3 FROM STA. 772+44 +/- TO STA. 825+00 +/- UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE. USING RDWY. STD. DWG. 1101.02 AS NECESSARY, CONSTRUCT -Y4- FROM STA. 10+00 +/- TO STA. 15+23 +/- AS FOLLOWS (SEE TCP-8 THRU TCP-11):

1. CONSTRUCT RETAINING WALL 30 FEET LEFT OF -Y4REV- FROM STA. 12+45 +/- TO STA. 14+35 +/- AS SHOWN IN THE CONSTRUCTION PLANS.

NOTE: COMPLETE THE WORK OF PHASE I, STEP 3B-2 IN 7 CONSECUTIVE DAYS. (SEE SPECIAL PROVISIONS)

2. CONSTRUCT -Y4REV- AS FOLLOWS:

- a. WEDGE EXISTING ROAD.
- b. RAISE UP PROPOSED -Y4REV- WITH INCIDENTAL STONE EACH DAY.
- c. PLACE TRAFFIC BACK ON EXISTING PATTERN AT THE END OF EACH DAY UNTIL TRAFFIC IS SHIFTED ONTO ACCESS ROAD 3 AND -Y4REV-.

3C) USING RDWY. STD. DWG. NO. 1101.02, SHEET 1 OF 9, MAINTAIN -Y5- AND -Y6- TRAFFIC USING FLAGGERS AS NECESSARY AND CONSTRUCT ACCESS ROAD 3, -Y5-, AND -Y6-, WEDGING THE EXISTING ROADWAYS UP TO THE EDGE AND ELEVATION OF ACCESS ROAD 3 UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE. (SEE SHEET TCP-10)

3D) USING RDWY. STD. DWG. NO. 1101.02, SHEET 1 OF 9, MAINTAIN MAINTAIN -Y7- AND -Y8- TRAFFICE USING FLAGGERS AS NECESSARY AND CONSTRUCT ACCESS ROAD 3 FROM STA. 828+60 +/- TO STA. 849+42 +/-, -Y7REV- FROM ACCESS RODA 3 TO STA. 13+75 +/- AND -Y8-, WEDGING THE EXISTING ROADWAYS UP TO THE EDGE AND ELEVATION OF ACCESS ROAD 3. (SEE SHEET TCP-11 AND TCP-12)

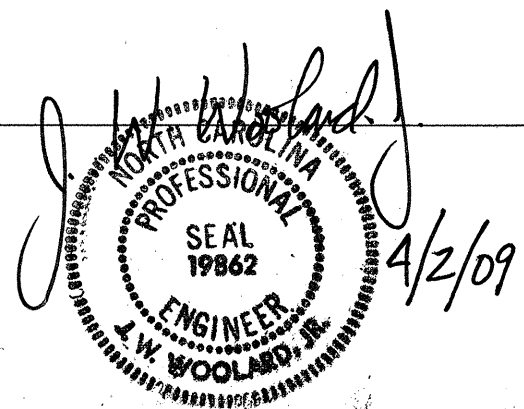
USING RDWY. STD. DWG. NO. 1101.02, SHEET 1 OF 9, TIE EXISTING -Y7- TO -Y7REV- FROM STA. 13+75 +/- TO STA. 15+50.73 +/- USING FLAGGERS AS APPROPRIATE AND REMOVE EXISTING -Y7- PAVEMENT. CONSTRUCT ACCESS ROAD 3 FROM STA. 825+00 +/- TO STA. 828+60 +/- UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE. (SEE SHEET TCP-11 AND TCP -12)

STEP 4: COMPLETE CONSTRUCTION OF ALL OF ACCESS ROAD 3 AND ACCESS ROAD 12 UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE, INSTALL TEMPORARY PAVEMENT MARKINGS AND SHIFT -Y4REV-, -Y5-, -Y6-, -Y7-, AND -Y8- TRAFFIC TO ACCESS ROAD 3 AND -Y51A- TO ACCESS ROAD 12.

STEP 5: CLOSE OFF ALL ACCESS TO -L- ON THE PROJECT EXCEPT FOR INTERCHANGE AT -Y2-.

* NOTE: CONSTRUCT LEFT TURN LANES INCLUDING MARKINGS AS DIRECTED BY THE ENGINEER AT THE FOLLOWING LOCATIONS:

- ZIRCONIA RD / LAURAL CREEK / US 25 INTERSECTION
- KAY RD / GENERAL HILL RD / US 25 INTERSECTION
- TABOR RD / US 25 INTERSECTION



THIS SEAL FOR * NOTE ONLY

STEP 6: USING RDWY. STD. DWG. NO. 1101.04, SHEET 1 OF 1, CONTRACTOR SHALL PLACE DRUMS AND RELATED TRAFFIC CONTROL ITEMS ON -Y2- AND -L- AS SHOWN IN TCP-4 THRU TCP-14 UPON COMPLETION OF STEP 1.

CONTRACTOR SHALL MAINTAIN THE REGULAR TRAFFIC PATTERN AND BEGIN CONSTRUCTION OF THE PROPOSED N.B. LANES, INSIDE SHOULDERS, MEDIAN, AND THE N.B. BRIDGE FROM THE FOLLOWING STATIONS;

- L- STA. 722+50 +/- TO -L- STA. 764+00 +/-
- L- STA. 769+00 +/- TO -L- STA. 787+00 +/-
- L- STA. 789+50 +/- TO -L- STA. 854+00 +/-

UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE. THE WORK CAN BE CONDUCTED ON-GOING WITH THE WORK IN STEPS 1-7, BUT FINISHED PRIOR TO STEP 8.

THE CONTRACTOR SHALL MAINTAIN THE ACCESS FROM THE FOLLOWING -Y- LINES AS DESCRIBED BELOW:

-Y2-

USING RDWY. STD. DWG. NO. 1101.02, SHEET 4 OF 9, CONSTRUCT -Y2- PROPOSED ISLANDS FROM STA. 34+89 TO STA. 42+08 UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE (SEE SHEET TCP-8).

STEP 7: CONTRACTOR SHALL COMPLETE THE CONSTRUCTION OF THE PROPOSED N.B. LANES FROM -L- STA. 769+00 +/- TO 787+00 +/- UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE AND COMPLETE THE CONSTRUCTION OF THE PROPOSED N.B. BRIDGE (SEE SHEET TCP-8).

STEP 8: REMOVE THE EXISTING PAVEMENT AS SHOWN IN THE CONSTRUCTION PLANS, COMPLETE THE CONSTRUCTION OF THE PROPOSED -L- MEDIAN AND THE CUT DITCH BETWEEN THE -L- N.B. LANES AND ACCESS ROAD 3 AND ACCESS ROAD 12 (SEE SHEETS TCP-6 THRU TCP-13).

STEP 9: USING RDWY. STD. DWG. 1101.02, RELOCATE THE DRUMS ALONG -L- WHILE MAINTAINING EXISTING TRAFFIC PATTERN AND CONSTRUCT THE N.B. LANES FROM -L- STA. 715+00 TO 722+00 AND -L- STA. 854+00 TO 861+00 UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE (SEE SHEETS TCP-4, TCP-5, AND TCP-14).

STEP 10: WHILE MAINTAINING ACCESS FROM -L- N.B. LANE TO RAMP C AND RAMP D, WEDGE THE EXISTING RAMPS UP TO THE EDGE AND ELEVATION OF -L- N.B. LANES AND COMPLETE THE CONSTRUCTION OF -L- STA. 764+00 TO 769+00 AND -RAMP- FROM STA. 2+40.88 +/- TO STA. 8+66 +/- UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE. ALSO, COMPLETE THE CONSTRUCTION OF -L- 787+00 TO 792+00 AND -RAMPD- FROM STA. 1+91.38 +/- TO STA. 9+00 UP TO BUT NOT INCLUDING THE FINAL WEARING SURFACE (SEE SHEET TCP-7 THRU TCP-9).

STEP 11: ONCE CONSTRUCTION OF THE PROPOSED N.B. LANES, RAMP C, AND RAMP D ARE COMPLETED, CONSTRUCT Crossover 1 (SHEETS TCP-15 AND TCP-16) AND Crossover 2 (SHEETS TCP-24 AND TCP-25). PLACE TEMPORARY PAVEMENT MARKINGS ALONG THE NEWLY CONSTRUCTED SECTION IN ORDER TO ALLOW A TWO LANE, TWO WAY PATTERN. USING RDWY. STD. DWG. 1101.03, SHEET 6 OF 9 TO SHIFT TRAFFIC USING CROSSOVERS, SHIFT THE EXISTING TRAFFIC PATTERN TO THE NEWLY CONSTRUCTED SECTIONS WHILE MAINTAINING ACCESS TO RAMP A AND RAMP B (SEE SHEET TCP-15 THRU TCP-25).

PHASE 2

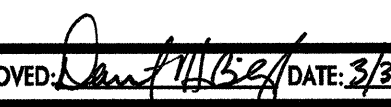


STEP 1: CONTRACTOR SHALL CONSTRUCT THE PROPOSED S.B. LANES FROM STA. 715+00 TO STA. 861+00 INCLUDING INSIDE AND OUTSIDE SHOULDERS, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AND CONSTRUCT THE PROPOSED S.B. LANE BRIDGE (SEE SHEET TCP-15 THRU TCP-25).

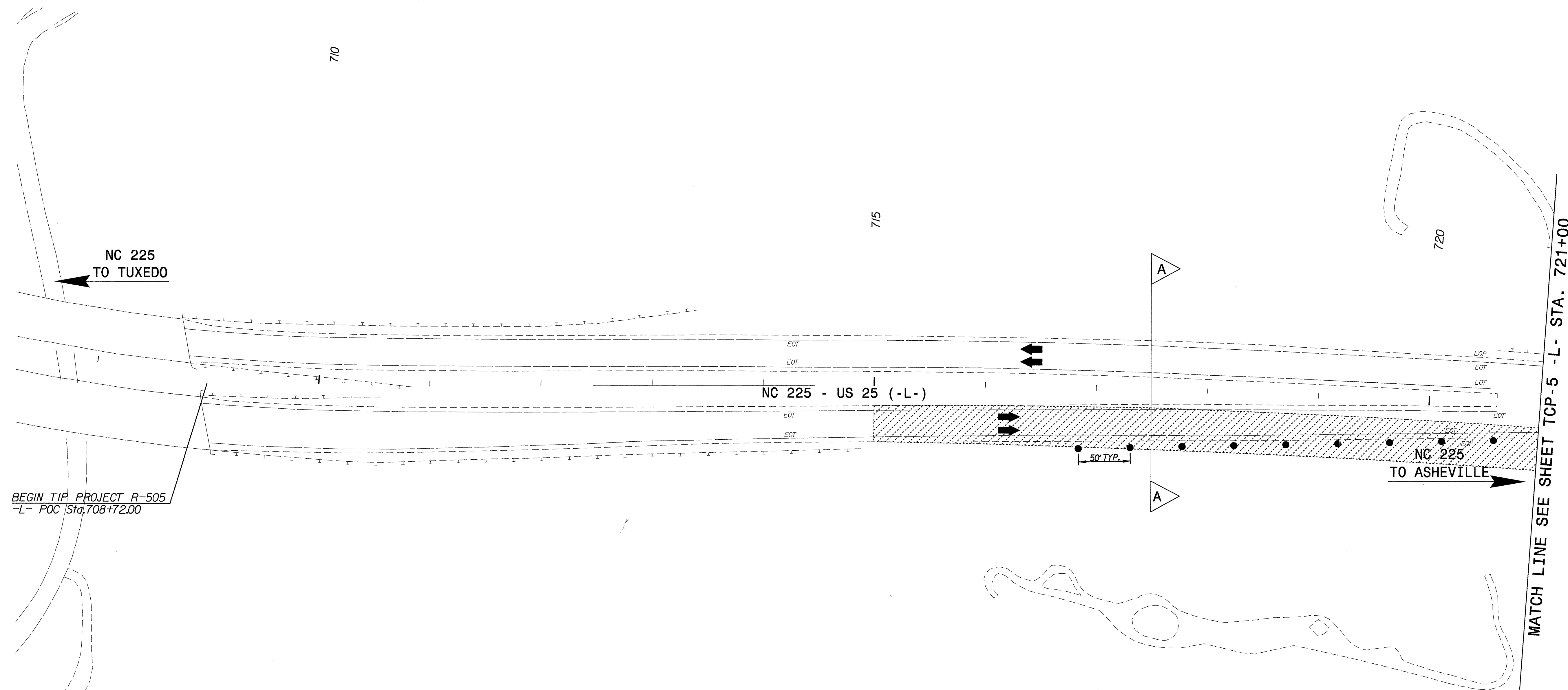
USING RDWY. STD. DWG. NO. 1101.03, SHEET 1 OF 9, CONSTRUCT -Y1- COMPLETELY ALONG WITH RETAINING WALL AND FALSE CUT. REMOVE EXISTING -Y1- PAVEMENT AND CONNECTION TO THE -L- LINE (SEE SHEET TCP-17). CONSTRUCT NOISEWALL (NW1) AS SHOWN ON TCP-24.

PHASE 3

STEP 1: USING RDWY. STD. DWG. NO. 1101.02, PLACE THE FINAL LAYER OF SURFACE COURSE ON THE PROPOSED N.B. AND S.B. LANES; ACCESS ROADS 3 AND 12; -Y1- THRU -Y8-, -Y51-; RAMPS "A", "B", "C" AND "D"; RAMPS "2A", "2B", "2D", AND LOOP "2D" (UP TO GORE AREA ON I-26). PLACE THERMOPLASTIC PAVEMENT MARKINGS AND SNOWPLOWABLE PAVEMENT MARKERS ON PROPOSED N.B. AND S.B. LANES; ACCESS ROADS 3 AND 12; RAMPS "A", "B", "C" AND "D"; RAMPS "2A", "2B", "2D", AND LOOP "2D"; -Y1- THRU -Y8- AND -Y51- AS SHOWN IN THE PAVEMENT MARKING PLAN (SEE SHEET PM-1 THRU PM-11).

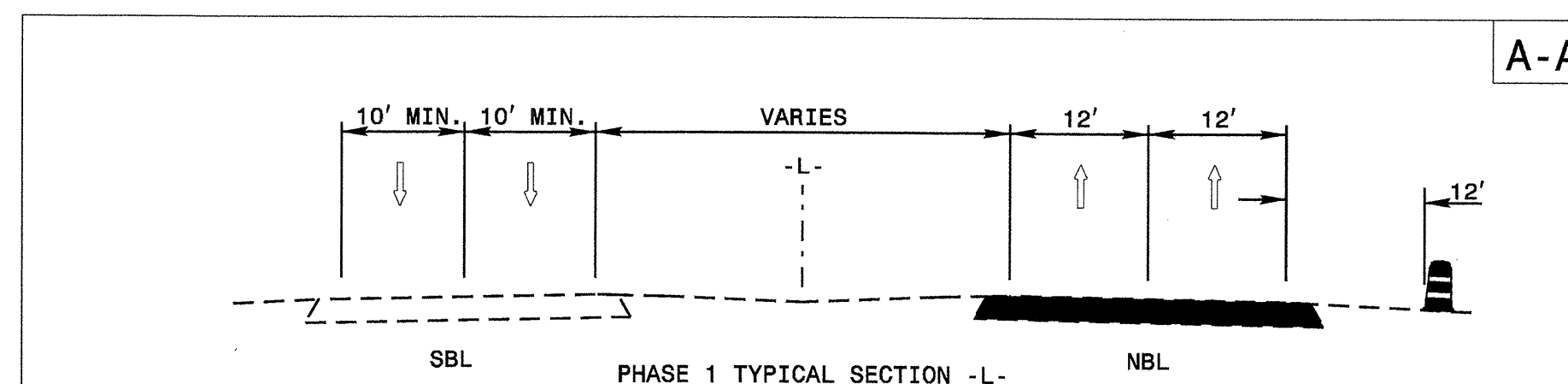
STEP 2: OPEN ALL LANES IN THE FINAL PATTERN AND REMOVE ALL WORK ZONE WARNING SIGNS AND DEVICES.

APPROVED:  DATE: 3/31/09 	<h3 style="margin: 0;">PHASING</h3>	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; height: 20px;"></td> <td style="width: 50%;"></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> </table>						
	SCALE: DATE: 7/25/08 DWG. BY: RCC DESIGN BY: RCC REVIEWED BY: DHB	CADD DATE						



BEGIN TIP PROJECT R-505
-L- POC Sta. 708+72.00

MATCH LINE SEE SHEET TCP-5 -L- STA. 721+00

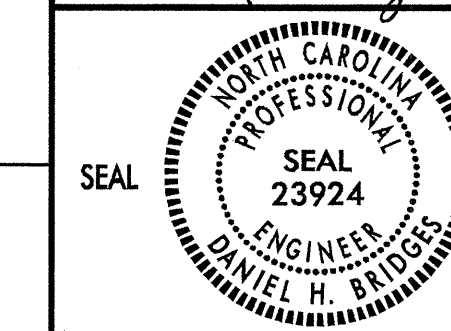


LEGEND

UNDER CONSTRUCTION

PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

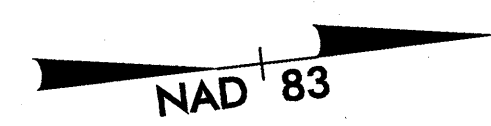
APPROVED: *[Signature]* DATE: 1/5/08



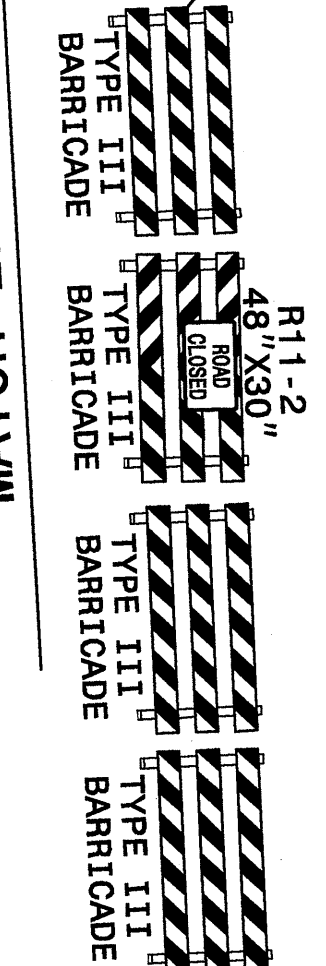
PHASE 1
(N.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DESIGN BY: RCC	
REVIEWED BY: DHB	

05-JAN-2009 12:10
C:\Projects\700295\A-R-505\Traffic\TrafficControl\TCP\R505_rdy_tcp_04.dgn
Combs - A - P-CHL-CVOI



MATCH LINE SEE SHEET TCP-4 -L- STA. 721+00



NC 225
TO TUXEDO

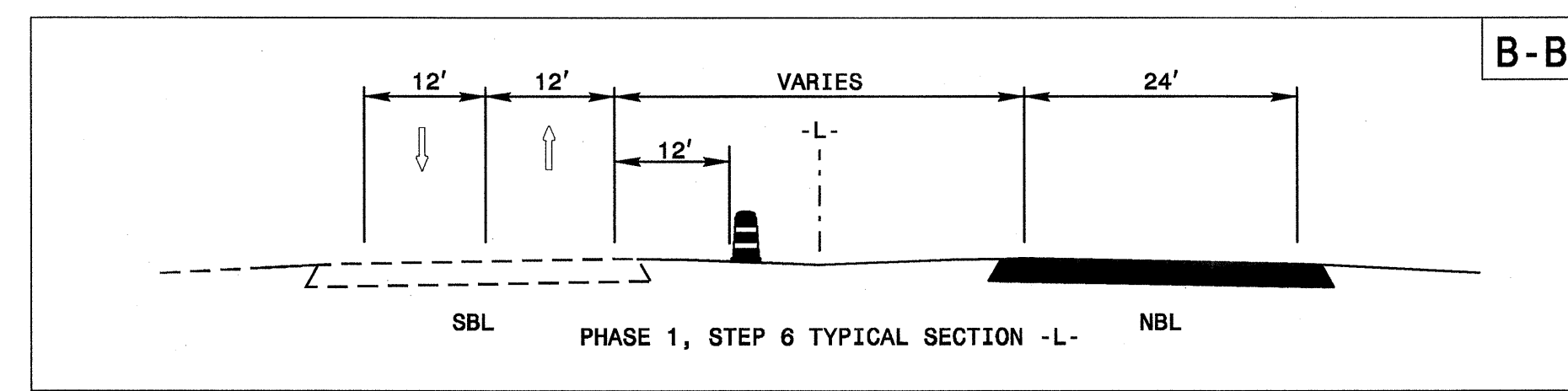
-L- STA 722+00

NC 225 (-L-)

50' TYP.

NC 225
TO ASHEVILLE

MATCH LINE SEE SHEET TCP-6 -L- STA. 735+00



LEGEND
 UNDER CONSTRUCTION

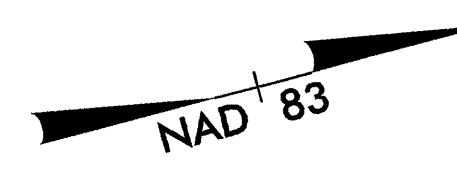
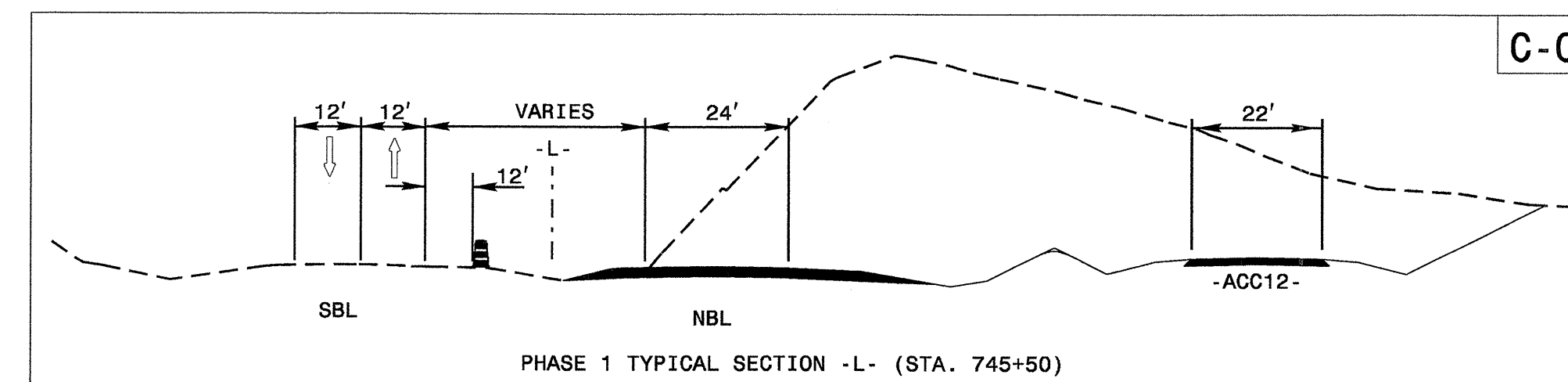
PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 2-16-09
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 DANIEL H. BRIDGES
 23924

PHASE 1
 (N.B. ROADWAY CONSTRUCTION)

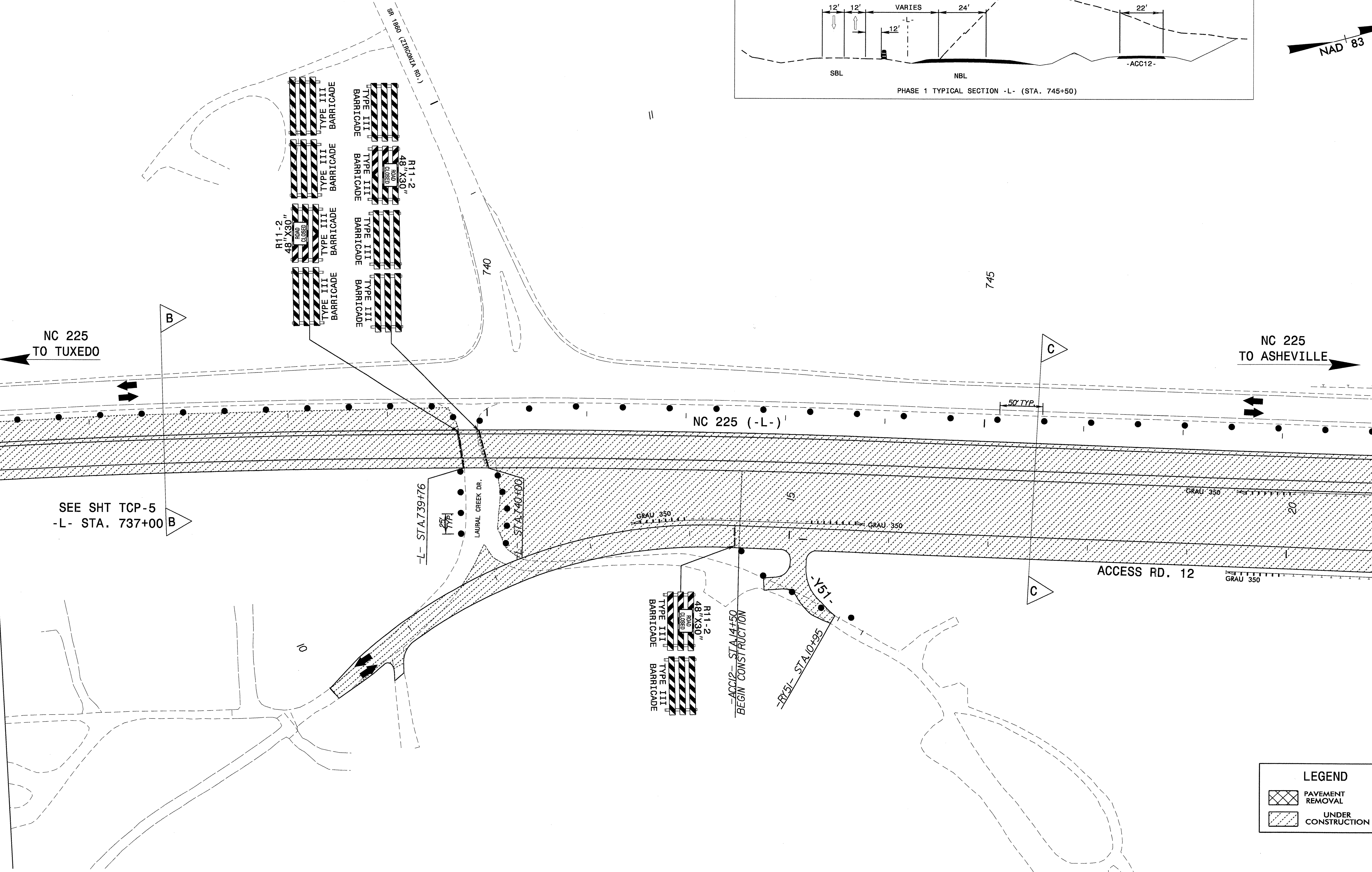
SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

13-FEB-2009 13:38
 G:\Projects\700295\N-505\TrafficControl\TCP\R505_rdy_tcp_05.dgn
 Combs AT W-CHL-CIV01



MATCH LINE SEE SHEET TCP-5 -L- STA. 735+00

MATCH LINE SEE SHEET TCP-7 -L- STA. 749+00



SEE SHT TCP-5
-L- STA. 737+00

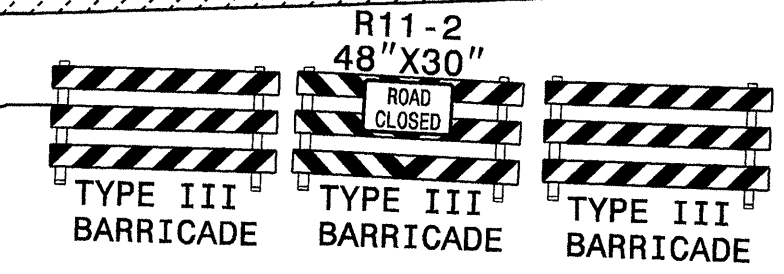
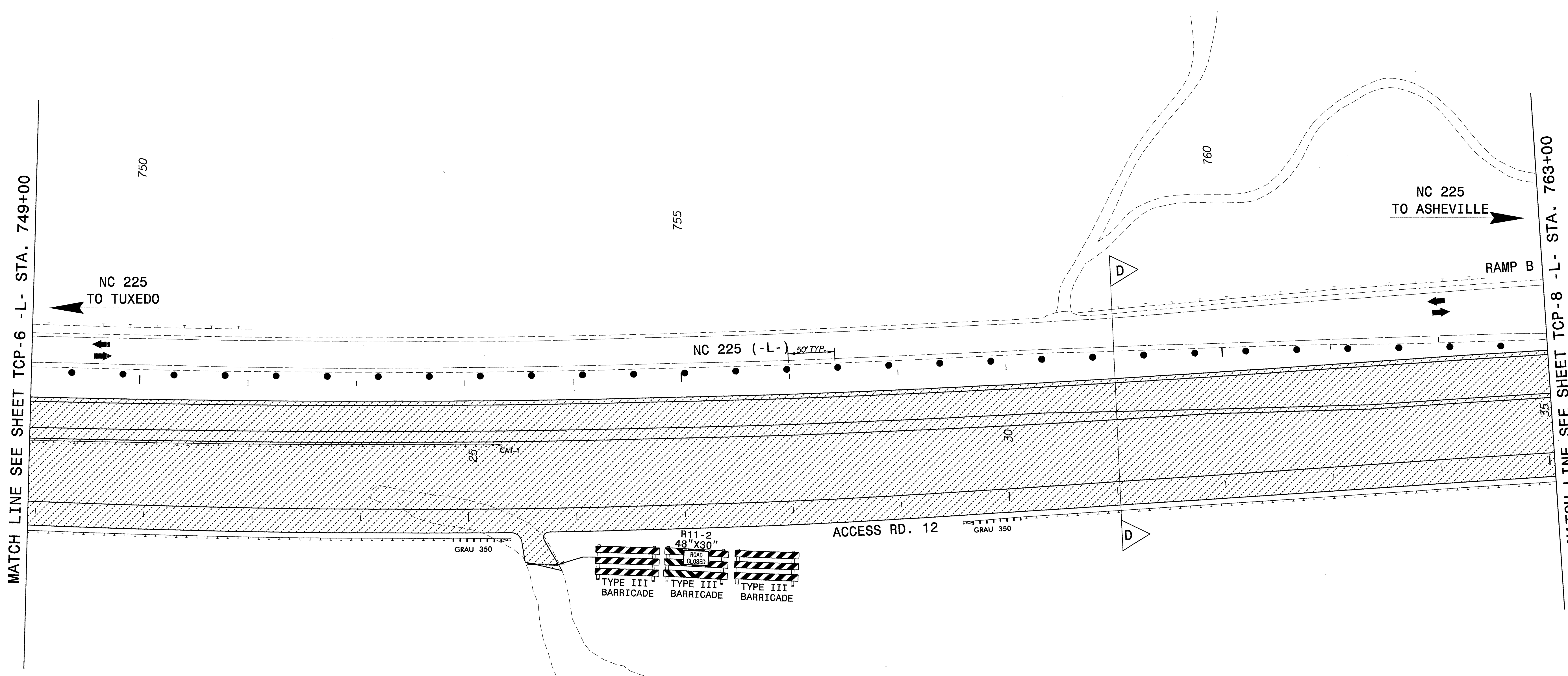
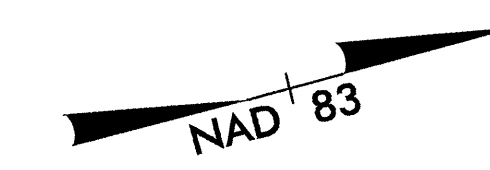
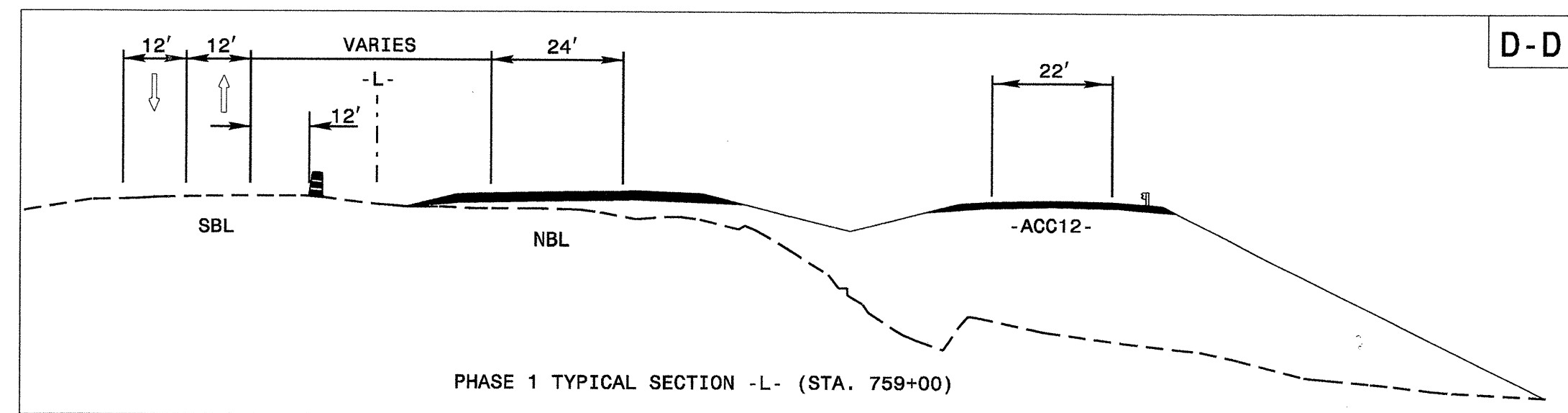
LEGEND	
	PAVEMENT REMOVAL
	UNDER CONSTRUCTION

05-JAN-2009 12:10
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Combs AT WCHL-CV01

PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/5/08

PHASE 1 (N.B. ROADWAY CONSTRUCTION)	
SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	



LEGEND
 UNDER CONSTRUCTION

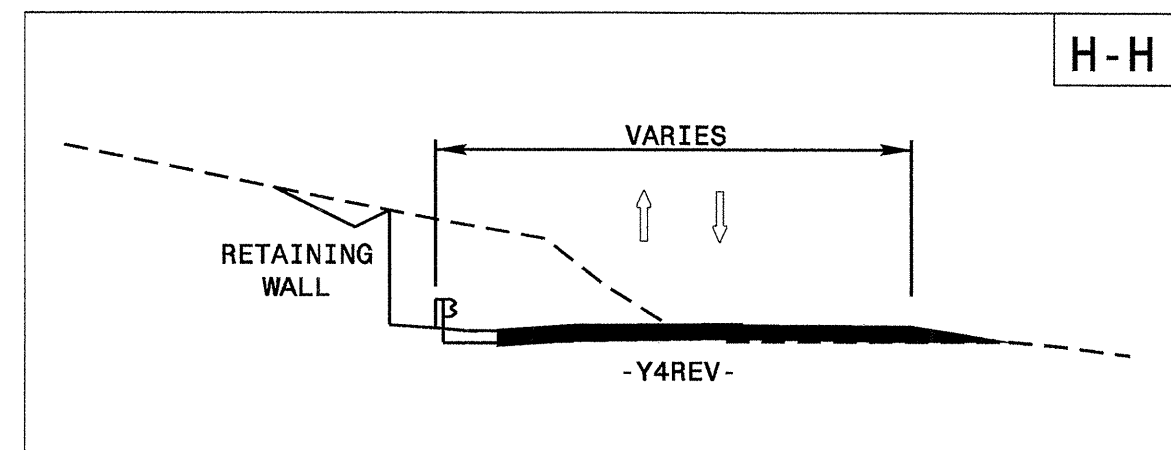
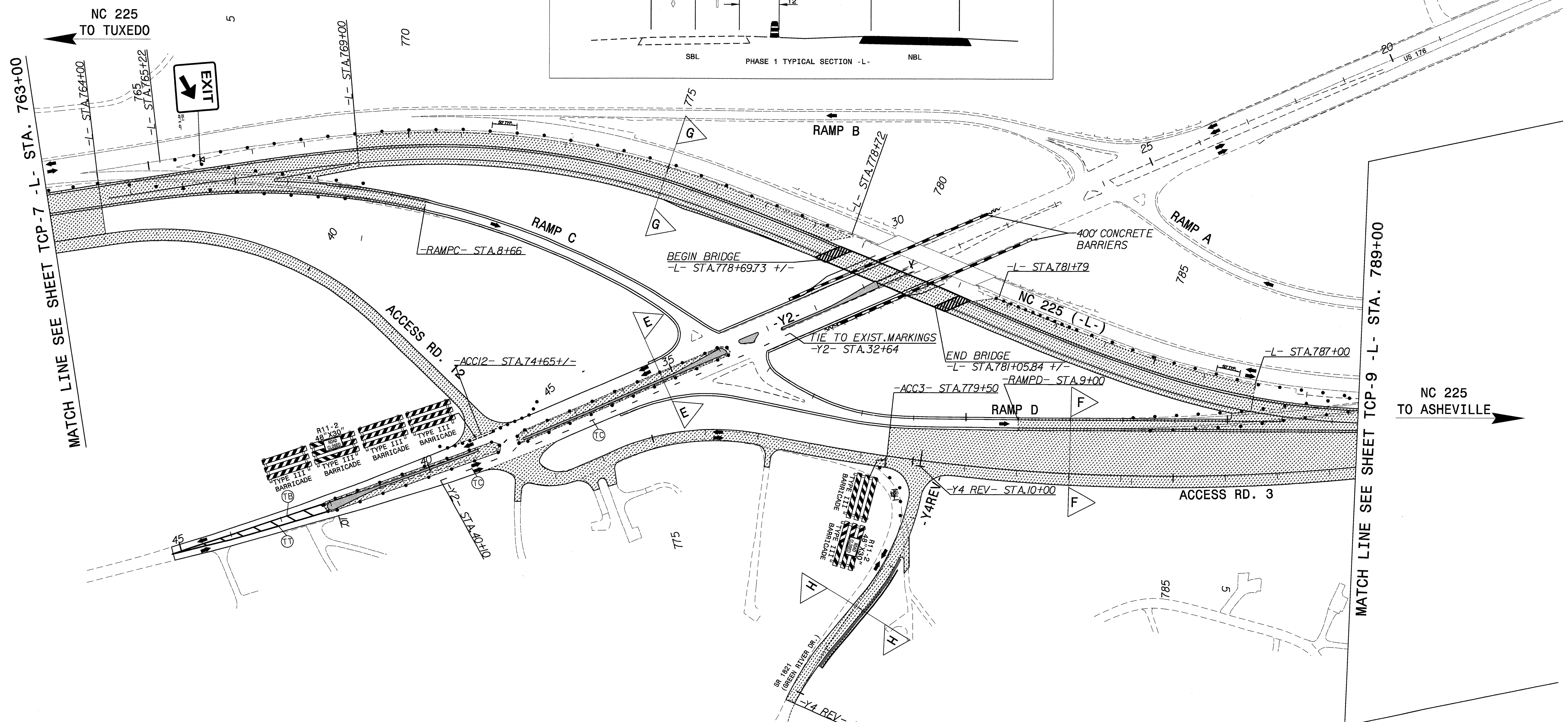
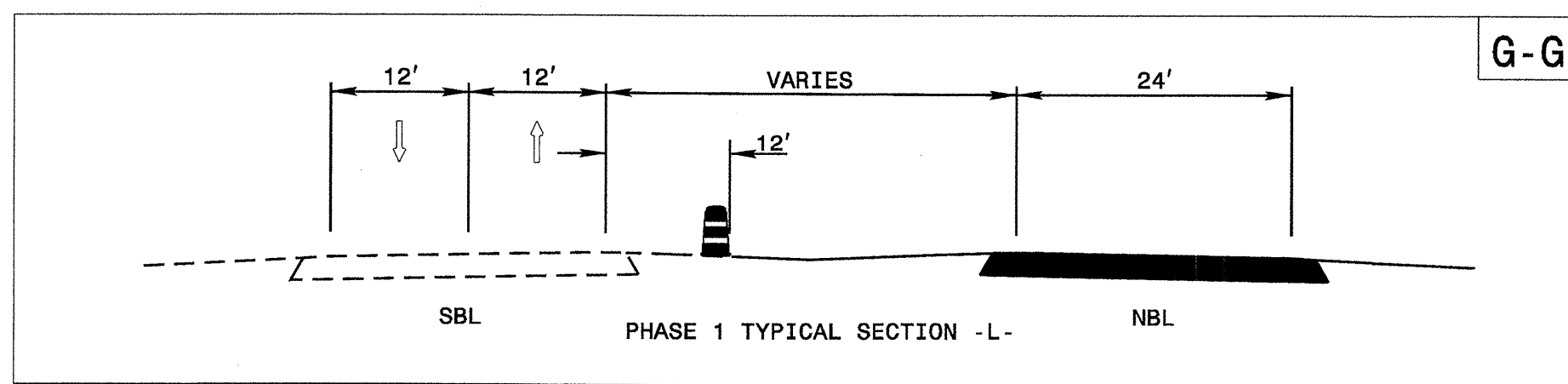
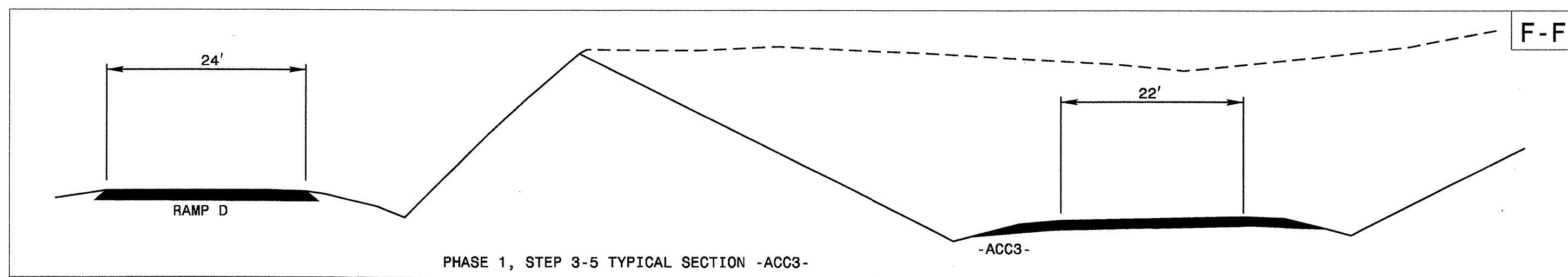
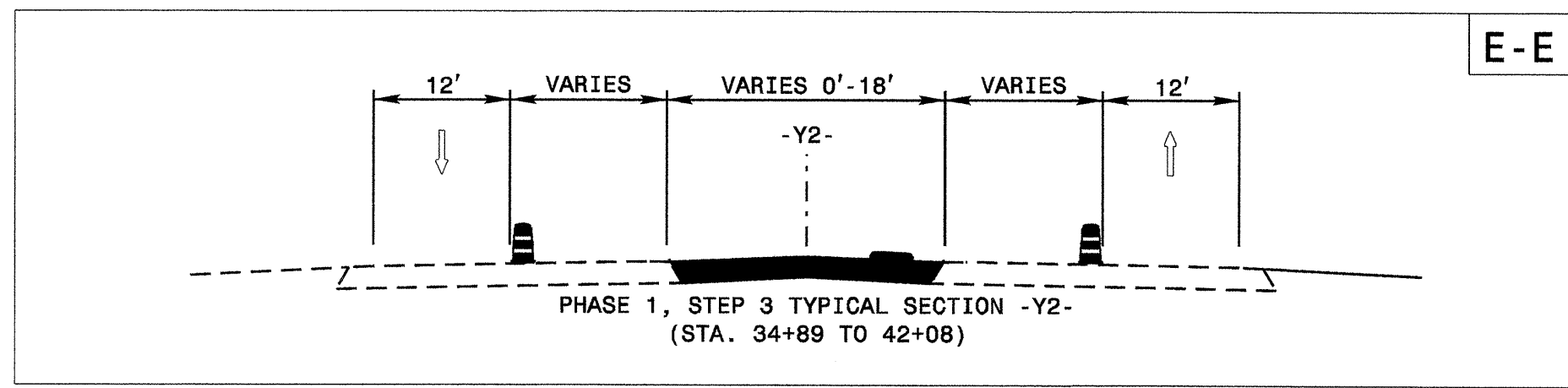
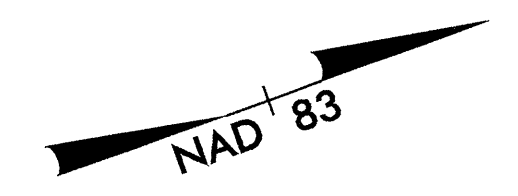
PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/5/08
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 DANIEL H. BRIDGES
 23924

PHASE 1
 (N.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	CAD

05-JAN-2009 12:10
 G:\Projects\700295\N-505\TrafficControl\TCP\RS05_rdy_top_07.dgn
 Combs AT W-CHE-CIVIL

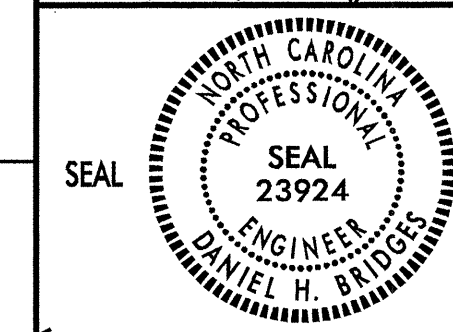


LEGEND

 UNDER CONSTRUCTION

 PCB

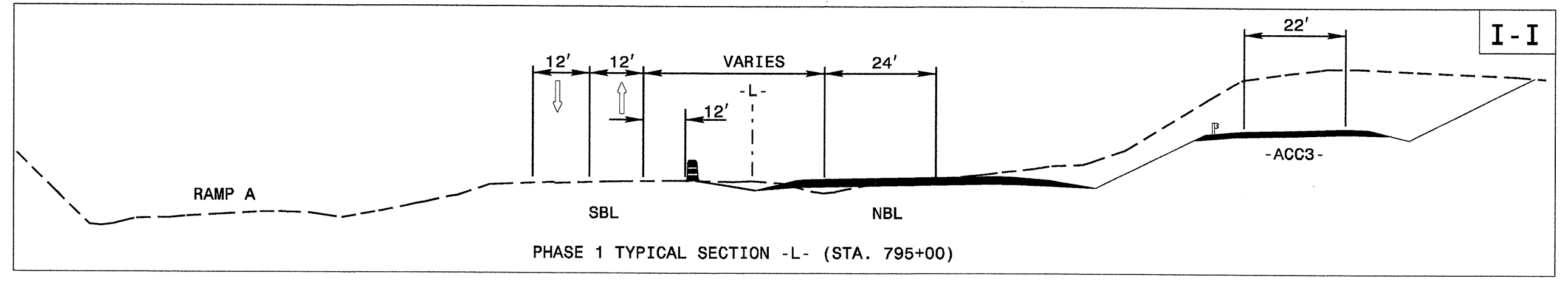
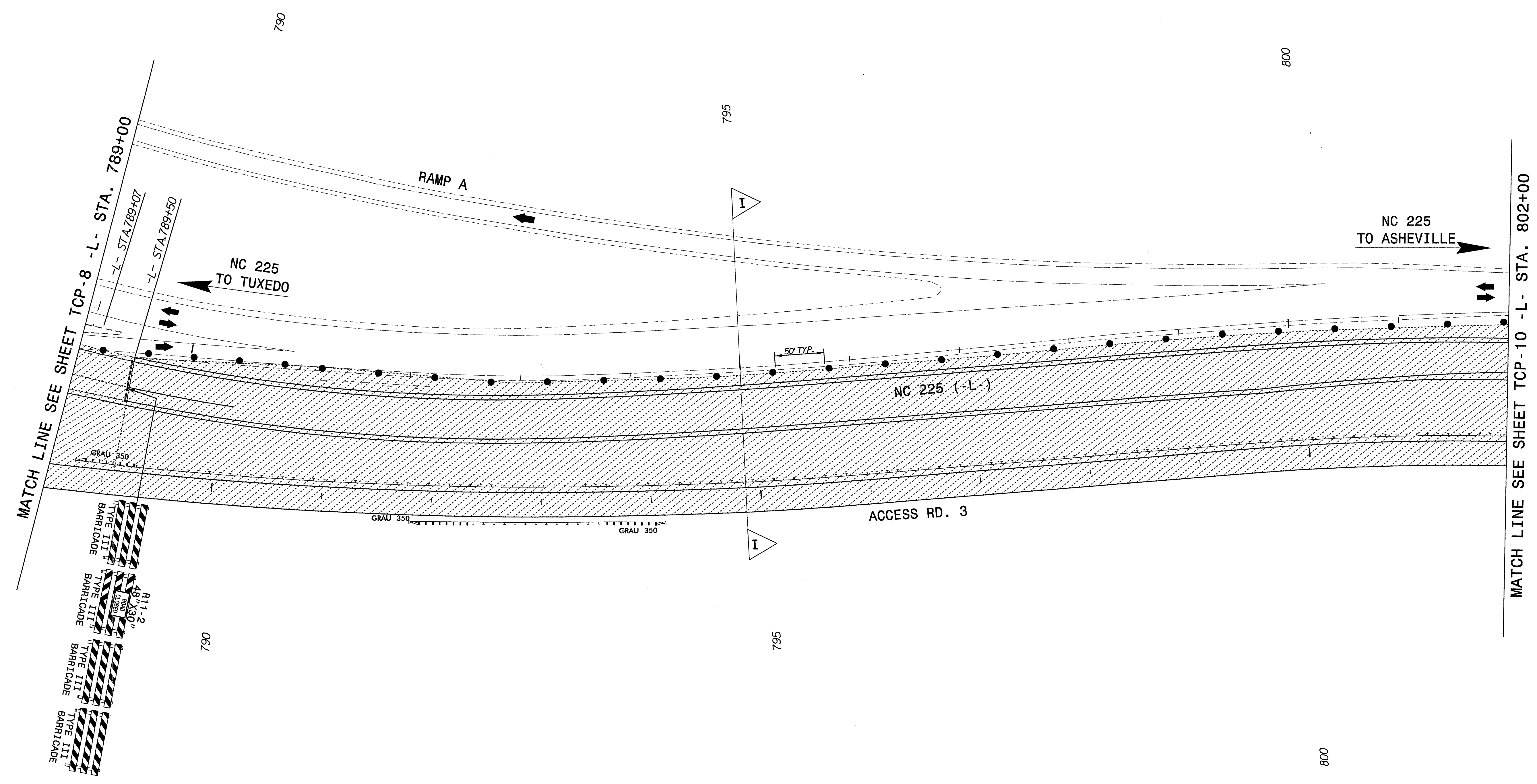
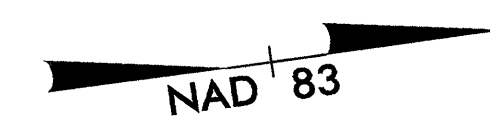
APPROVED: *[Signature]* DATE: 1/6/08



PHASE 1
(N.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DESIGN BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560



LEGEND

UNDER CONSTRUCTION

PPB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

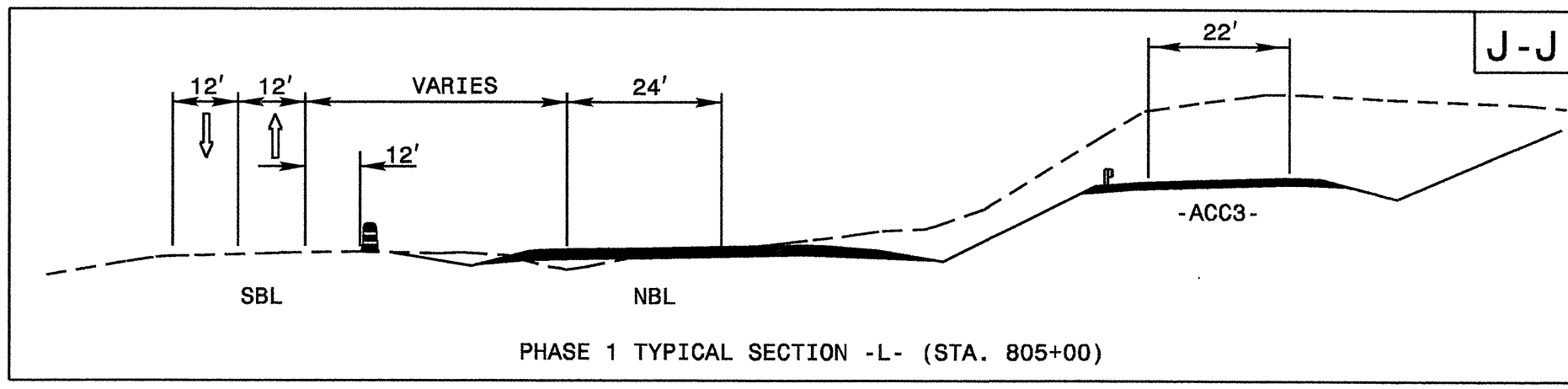
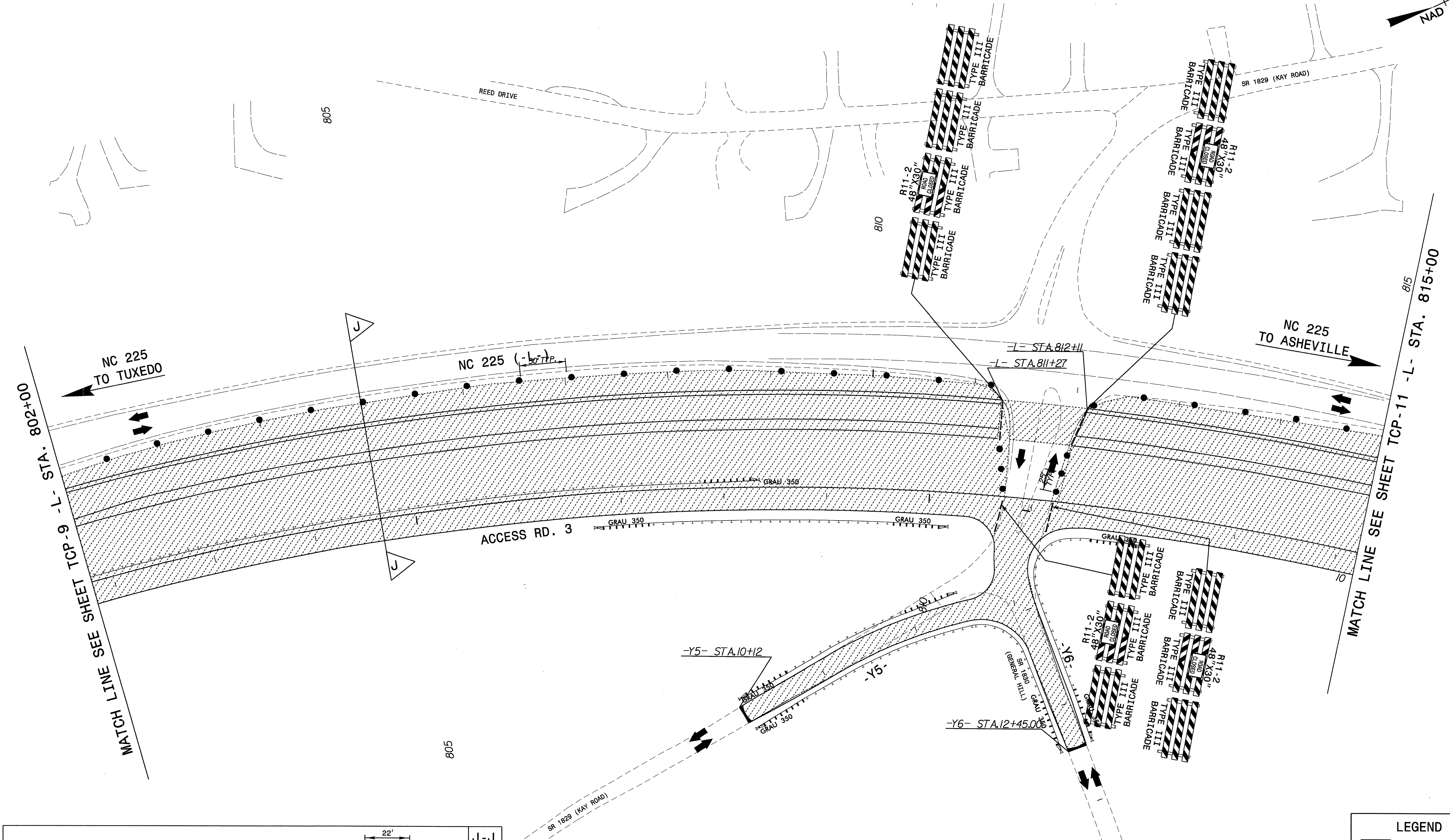
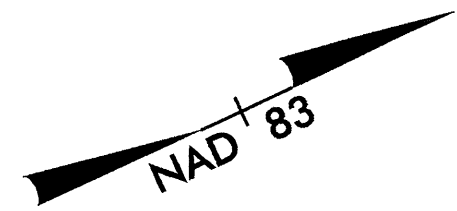
APPROVED: *[Signature]* DATE: 1/13/08

SEAL
 NORTH CAROLINA
 PROFESSIONAL
 ENGINEER
 23924
 DANIEL H. BRIDGES

PHASE 1
 (N.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

05 JAN 2008 12:41:00 2929505\Traffic\TrafficControl\TCP\505_rdy_tcp_09.dgn
 Combs AT W-CHL-CVOI



LEGEND
 UNDER CONSTRUCTION

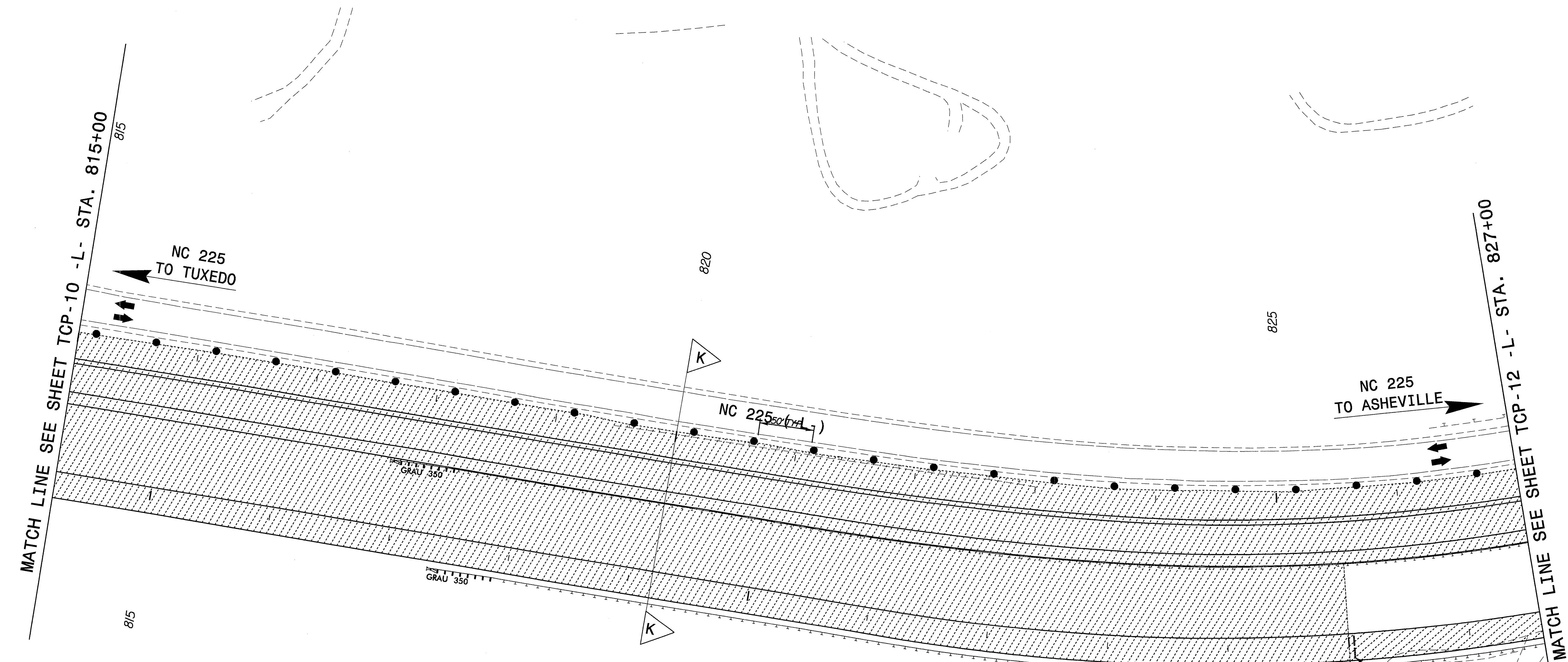
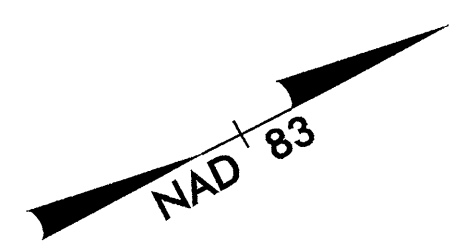
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 Combs A1 W-CHL-CVOI

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

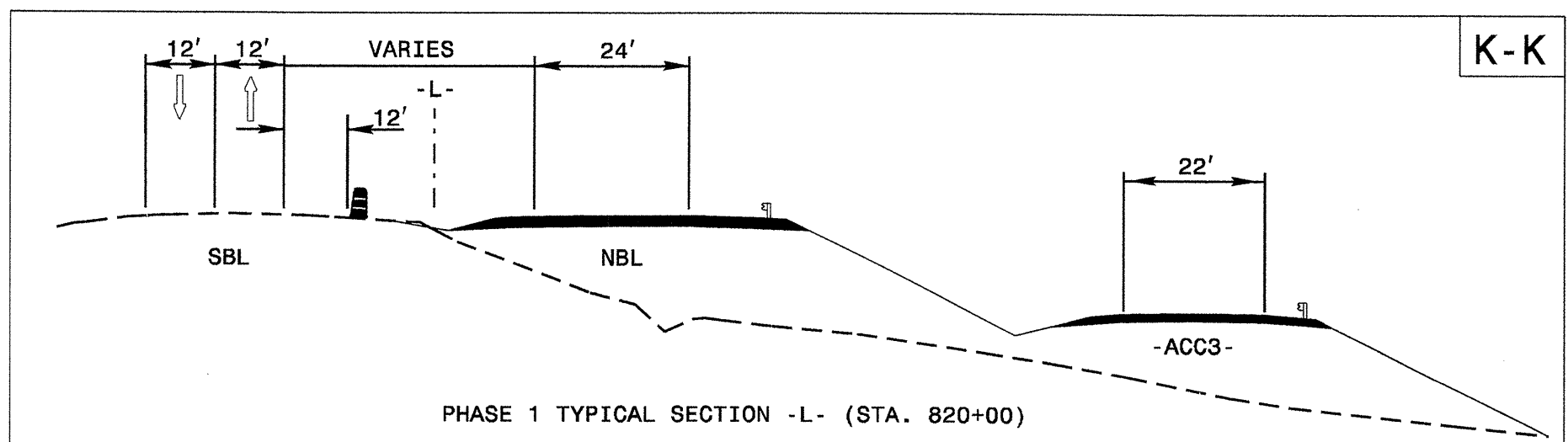
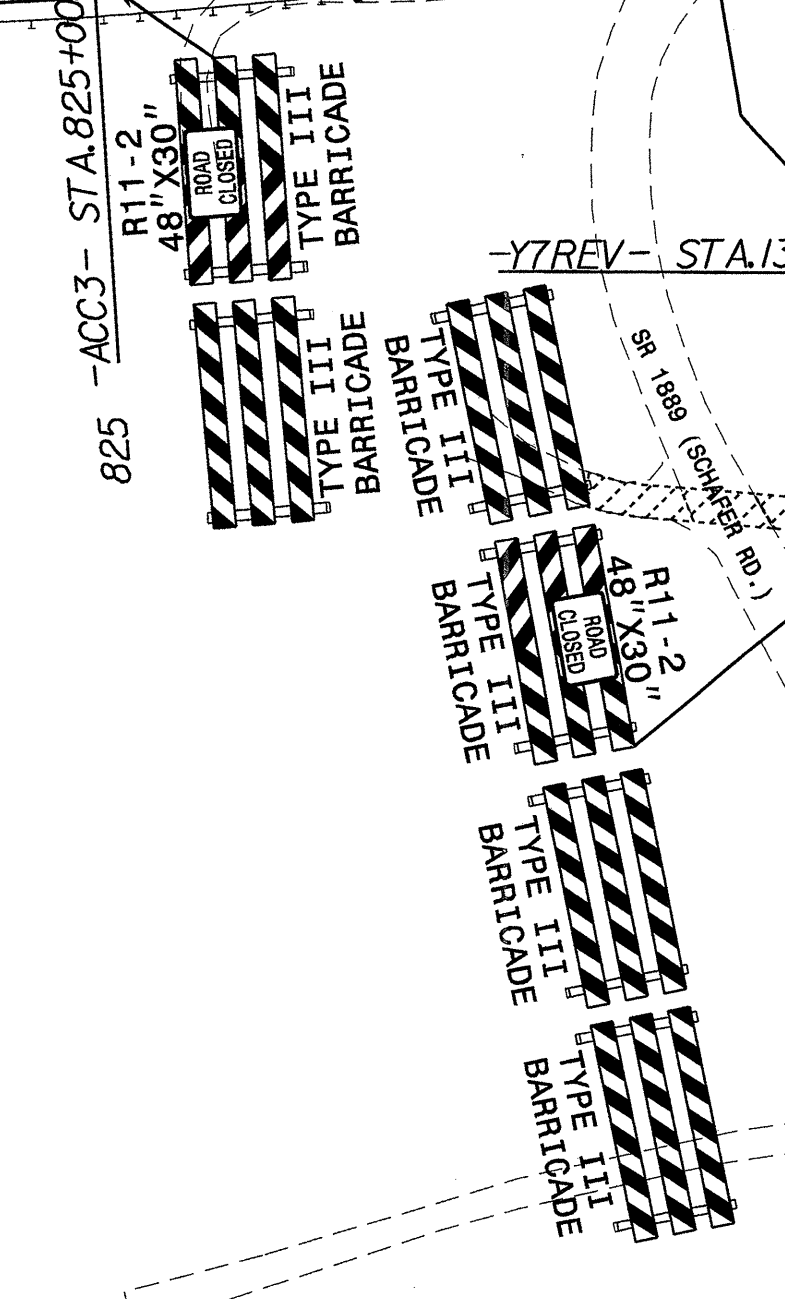
APPROVED: *[Signature]* DATE: 1/5/08
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 23924
 DANIEL H. BRIDGE

PHASE 1
 (N.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	



ACCESS RD. 3



LEGEND
 UNDER CONSTRUCTION

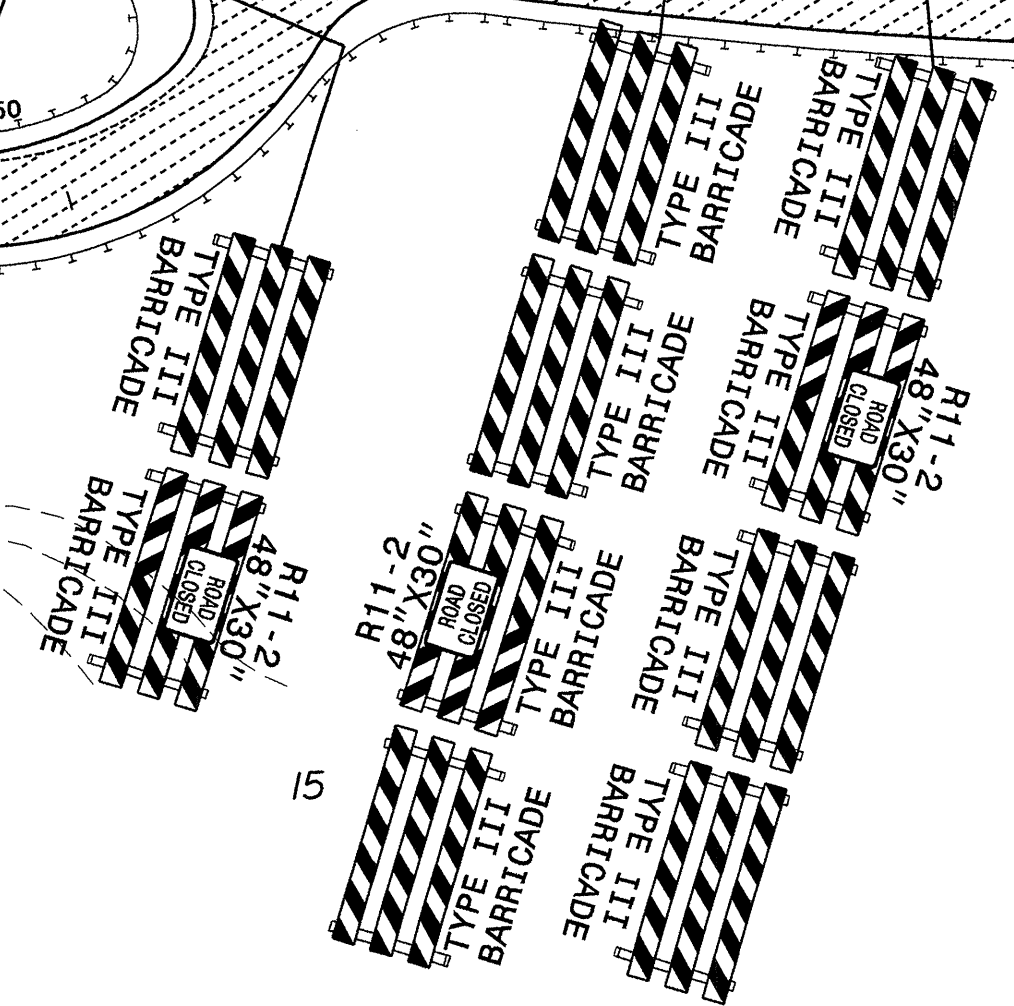
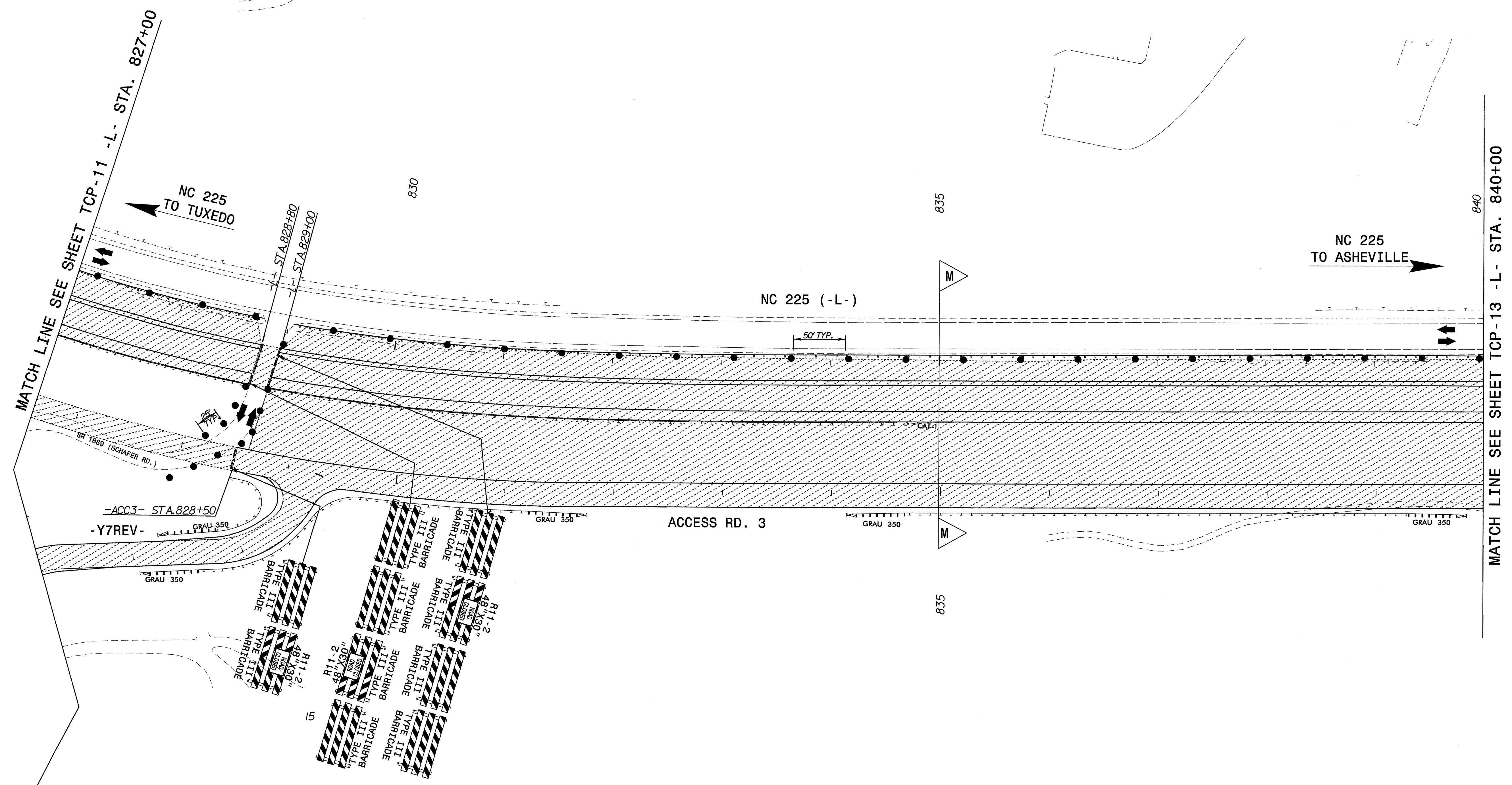
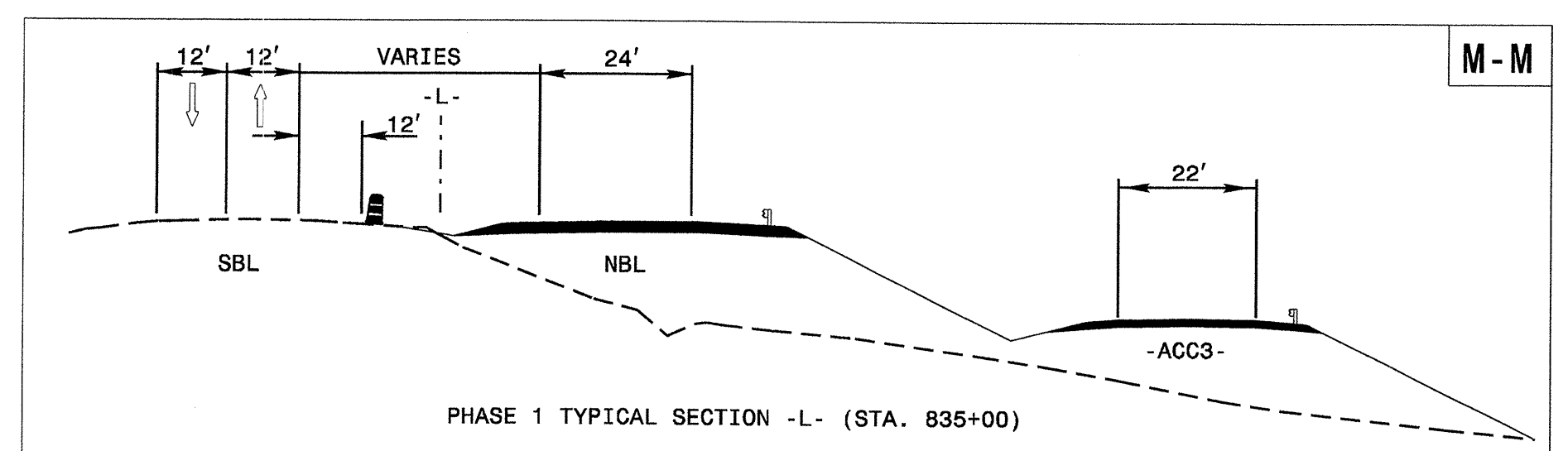
PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/5/08
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 23924
 DANIEL H. BRIDGES

PHASE 1
 (N.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	APP. FILE

05-JAN-2009 12:11:00 2009R-505-TrafficControl\TCP\505_rdy_tcp.lldgn
 C:\projects\505\TrafficControl\TCP\505_rdy_tcp.lldgn
 Combs ATW GLE CIVIL



LEGEND
 UNDER CONSTRUCTION

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 7/5/08

 SEAL
 DANIEL H. BRIDGES
 ENGINEER
 NO. 23924
 STATE OF NORTH CAROLINA

PHASE 1
 (N.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

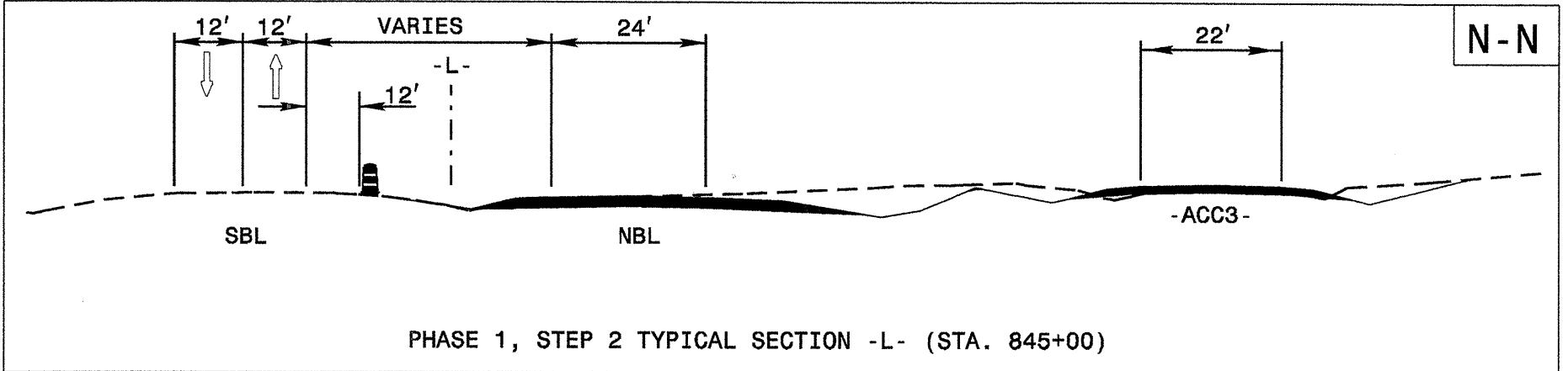
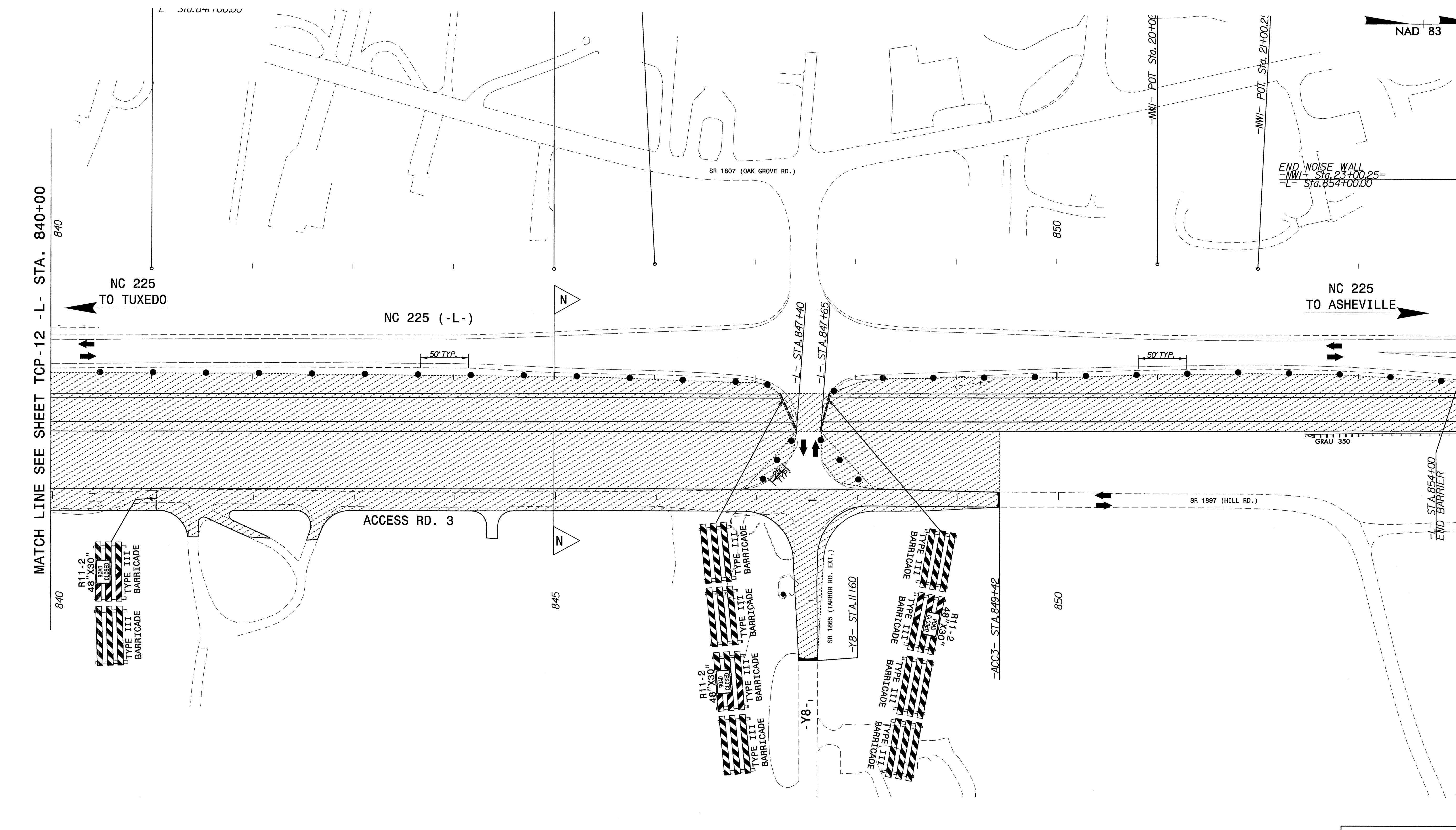
CADD FILE

05-JAN-2009 12:11
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 Combs A. W. CHL - CIVIL

NAD '83

MATCH LINE SEE SHEET TCP-12 -L- STA. 840+00

MATCH LINE SEE SHEET TCP-14 -L- STA. 854+00



LEGEND

UNDER CONSTRUCTION

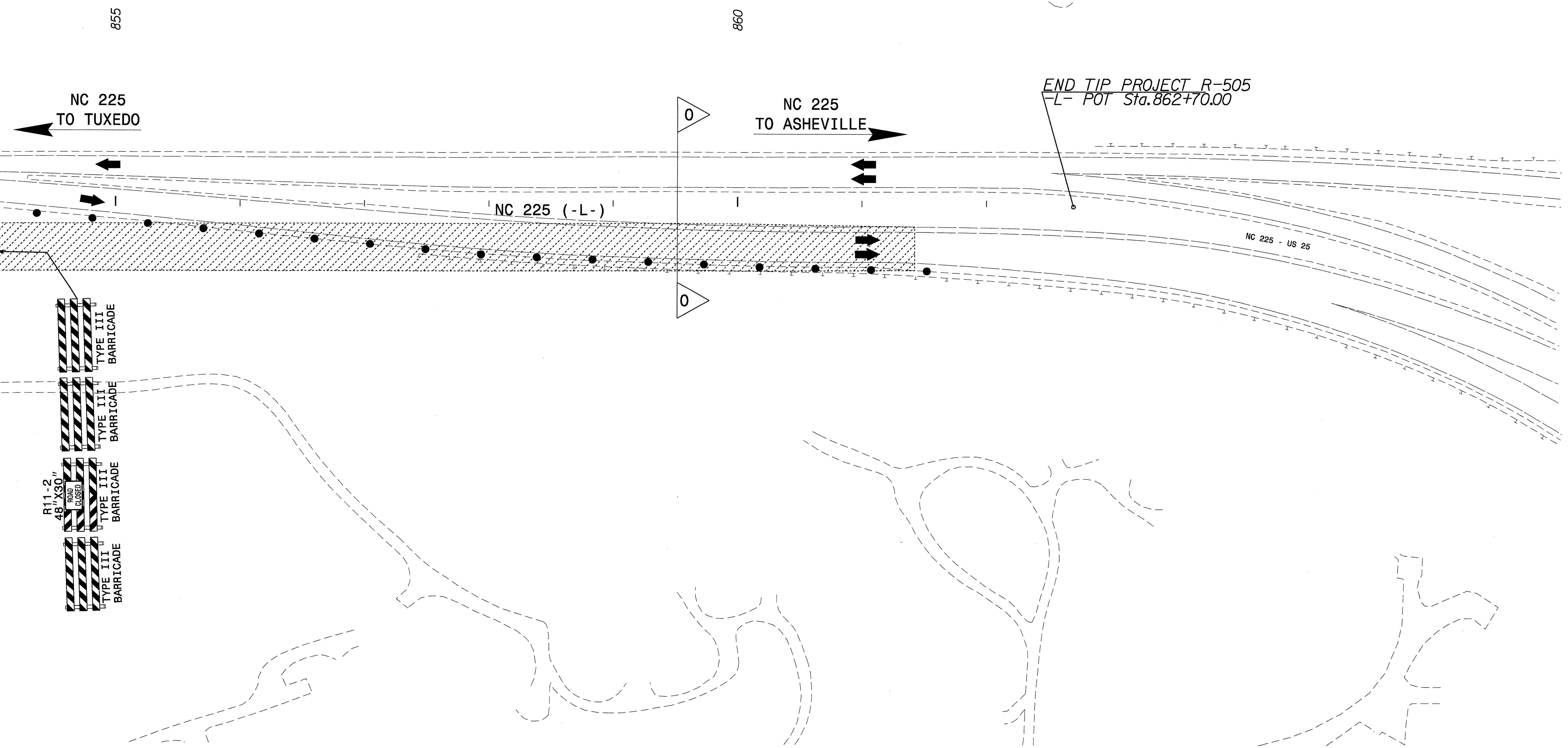
APPROVED: <i>Daniel H. Bridges</i> DATE: 1/5/08		<p>PHASE 1 (N.B. ROADWAY CONSTRUCTION)</p>								
SCALE: NONE	DATE: 7/25/08	<table border="1"> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	REVISIONS							
REVISIONS										
DWG. BY: RCC	DESIGN BY: RCC									
REVIEWED BY: DHB										

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

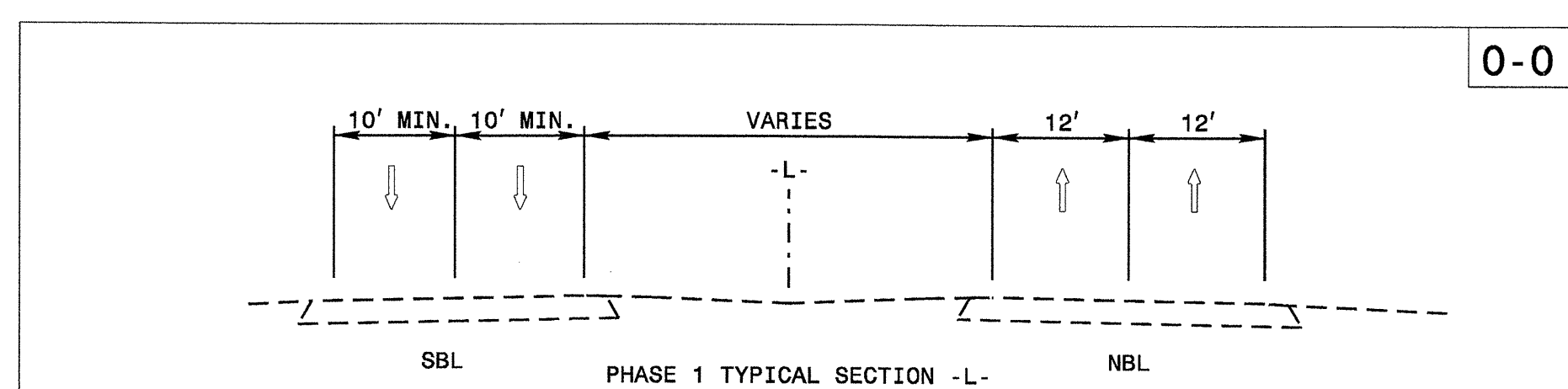
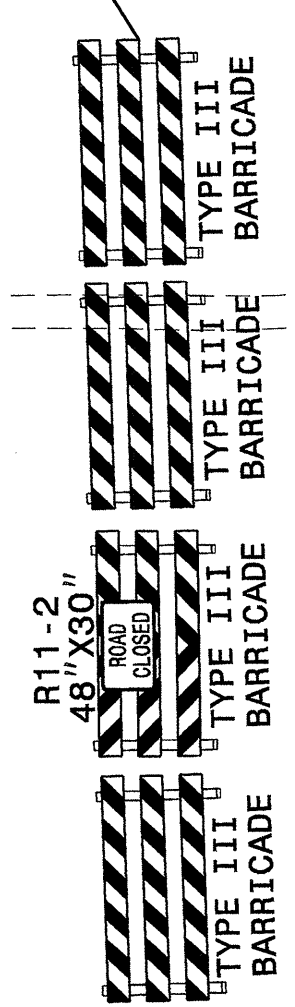
05-JAN-2009 12:11 G:\Projects\700295\N-505\TrafficControl\TCP-R505_rdy_tcp_13.dgn Combs AT: W-CHI-CVOI



MATCH LINE SEE SHEET TCP-13 -L- STA. 854+00



END TIP PROJECT R-505
-L- POT Sta. 862+70.00



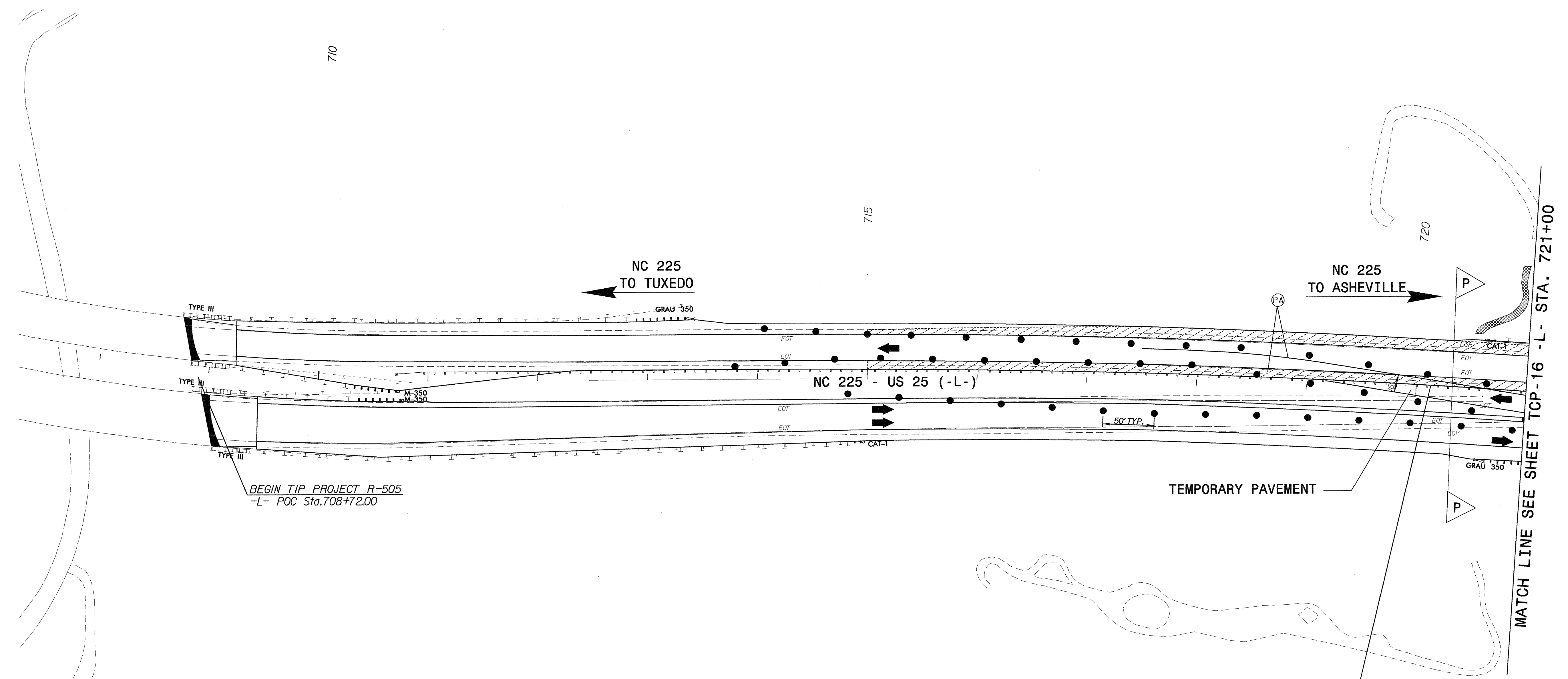
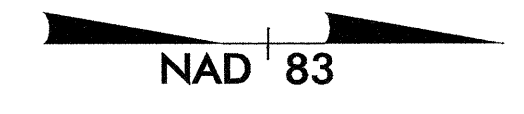
LEGEND
 UNDER CONSTRUCTION

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/5/08
 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 DANIEL H. BRIDGES
 23924

PHASE 1 (N.B. ROADWAY CONSTRUCTION)	
SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

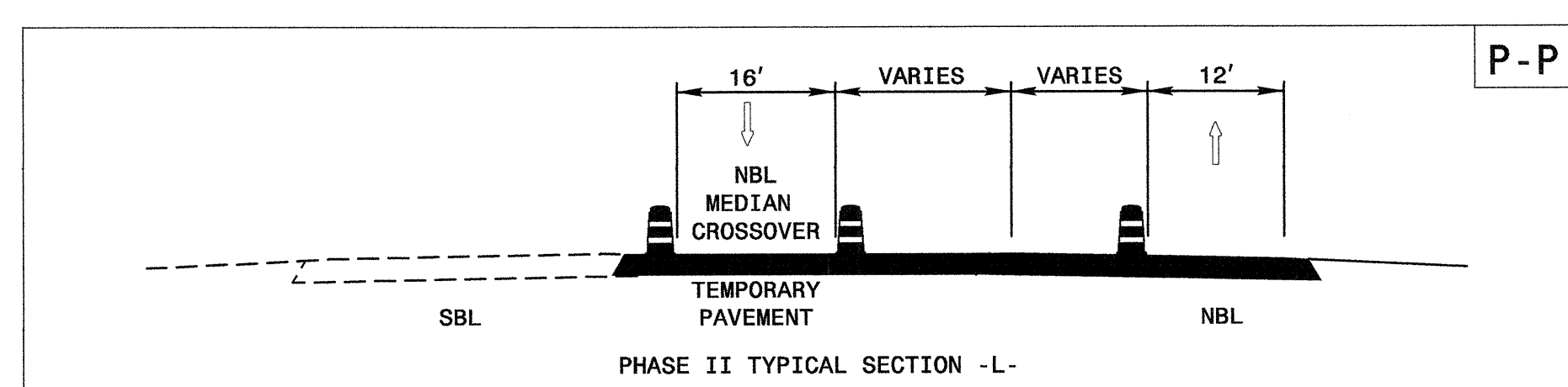
PAINT SCHEDULE	
PA	PAVEMENT MARKING LINES TEMPORARY WHITE EDGELINE



BEGIN TIP PROJECT R-505
-L- POC Sta. 708+72.00

CONSTRUCT CROSSOVER NO. 1 ACCORDING
TO RDWY. STD. DWG. 1101.03 SHEET 6 OF 9
SEE RDWY. SHEET 2G FOR CROSSOVER ALIGNMENT

LEGEND	
	UNDER CONSTRUCTION
	PAVEMENT REMOVAL



02-FEB-2009 08:46
C:\Projects\100295\15-505\Traffic\TrafficControl\TCP-R505-rdy_tcp-15.dgn
Combs AT W-CHL-C101

PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

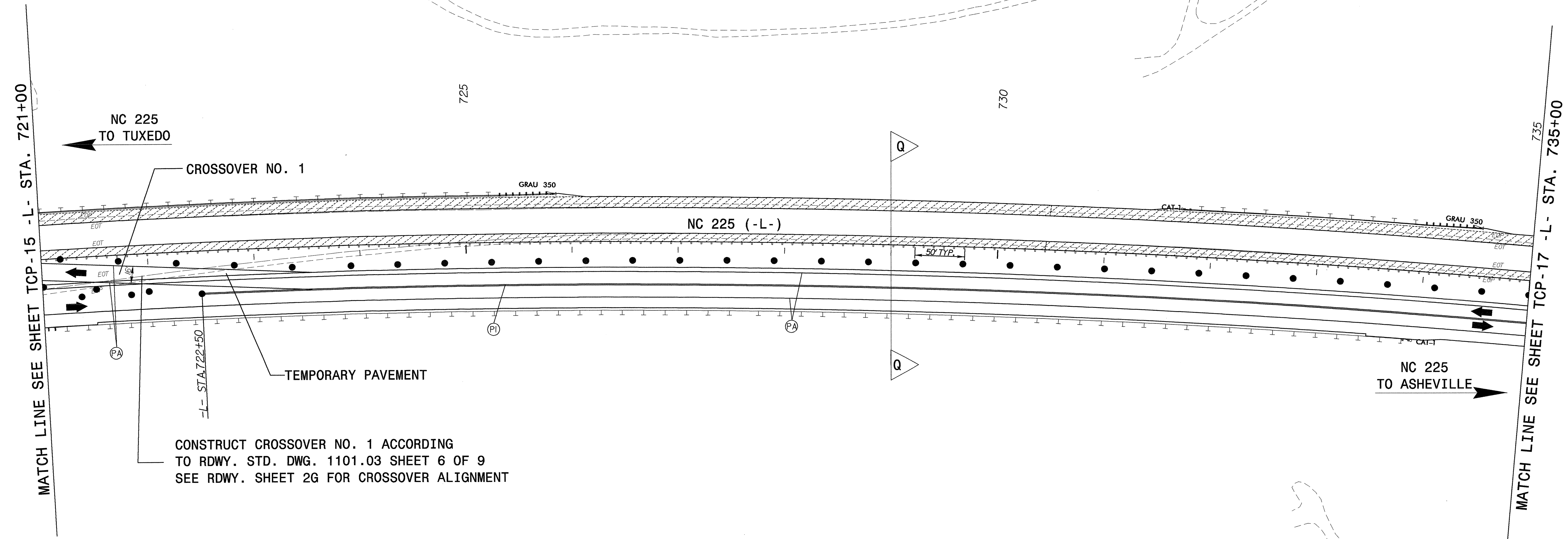
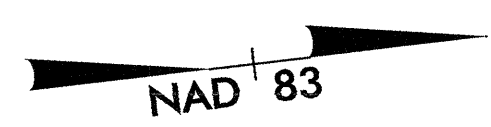
APPROVED: *[Signature]* DATE: 7/2/09

PHASE 2

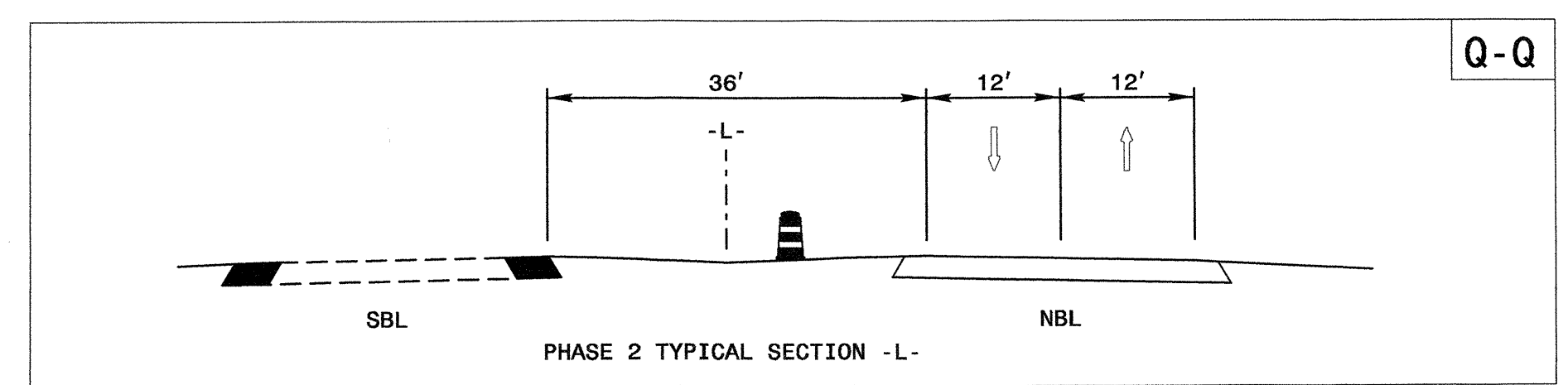
(S.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	CADD FILE

PAINT SCHEDULE	
	PAVEMENT MARKING LINES
PA	TEMPORARY WHITE EDGELINE
PI	TEMPORARY DOUBLE YELLOW



CONSTRUCT CROSSOVER NO. 1 ACCORDING TO RDWY. STD. DWG. 1101.03 SHEET 6 OF 9 SEE RDWY. SHEET 2G FOR CROSSOVER ALIGNMENT



LEGEND	
	UNDER CONSTRUCTION
	PAVEMENT REMOVAL

APPROVED: *[Signature]* DATE: 2/3/09

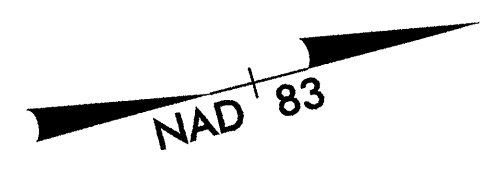
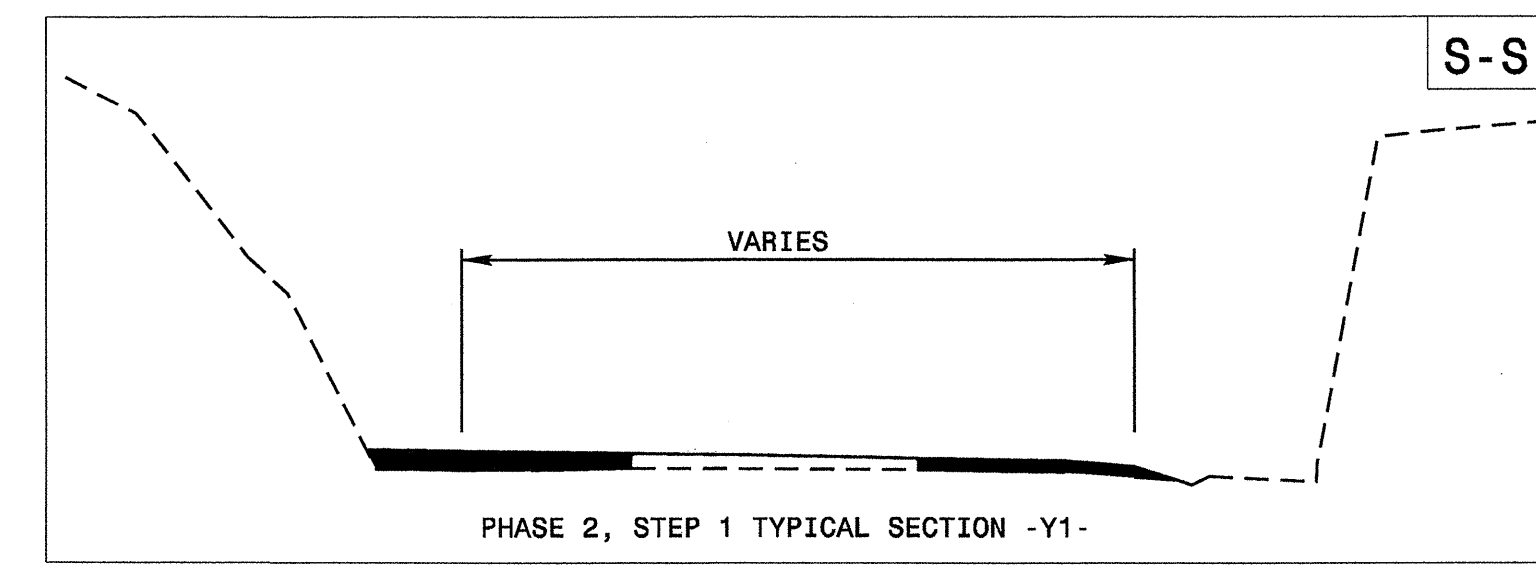
SEAL

PHASE 2 (S.B. ROADWAY CONSTRUCTION)	
SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

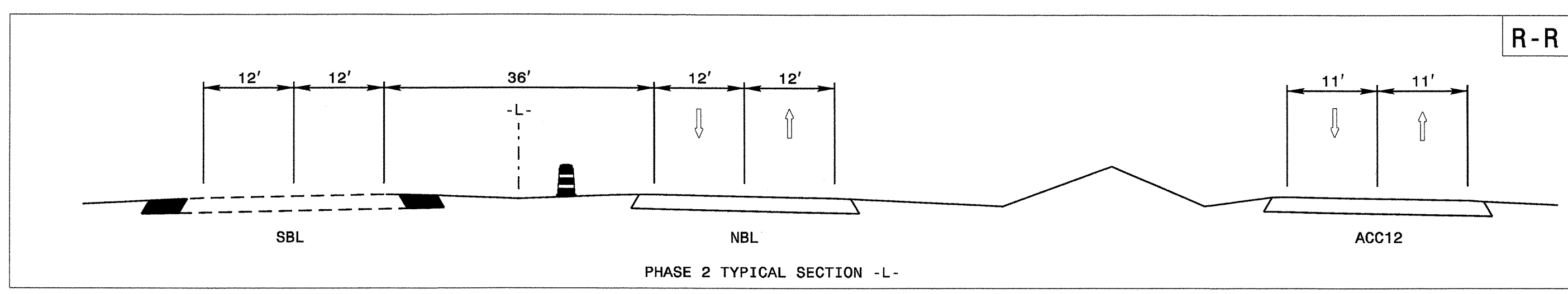
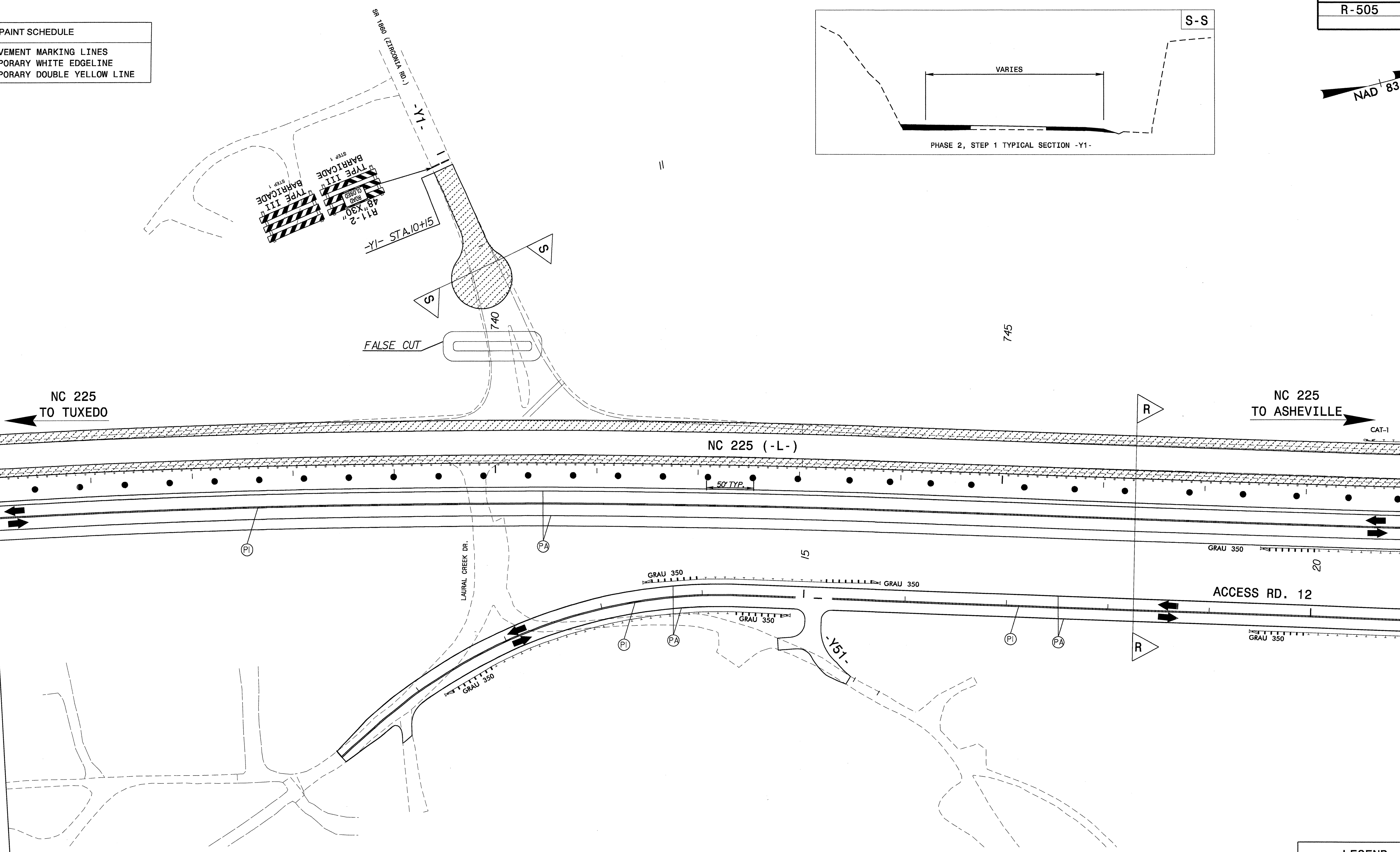
02-FEB-2009 08:38 G:\Projects\700295\AR-505\Traffic\TrafficControl\TCP\AR505_rdy_tcp_16.dgn Combs AT W-CHL-CIV01

PAINT SCHEDULE	
PA	TEMPORARY WHITE EDGELINE
PI	TEMPORARY DOUBLE YELLOW LINE



MATCH LINE SEE SHEET TCP-16 -L- STA. 735+00

MATCH LINE SEE SHEET TCP-18 -L- STA. 749+00



LEGEND	
	UNDER CONSTRUCTION
	PAVEMENT REMOVAL

05-JAN-2009 12:11
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Combs AT W-CHL-CIVIL

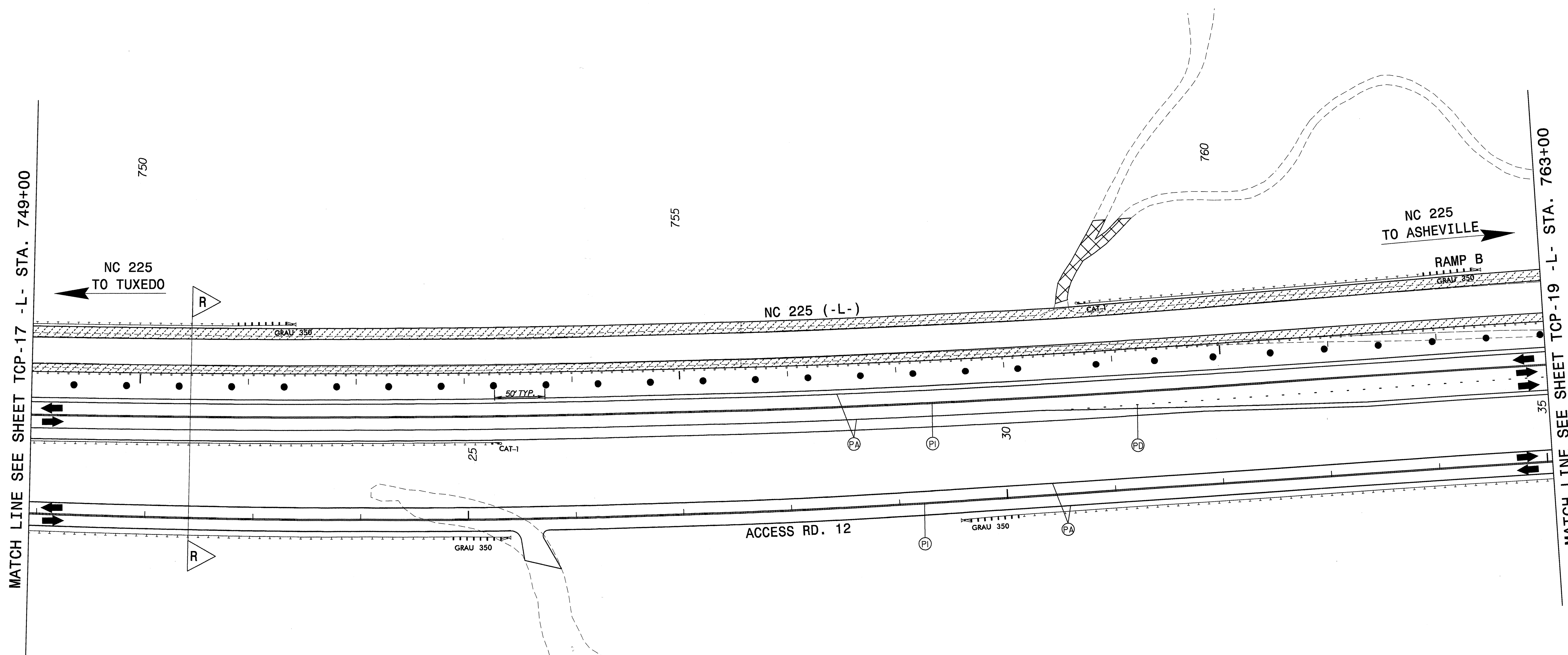
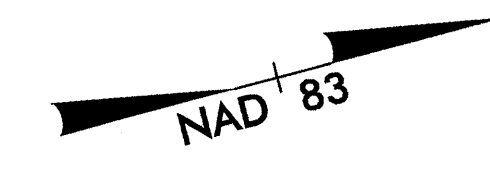
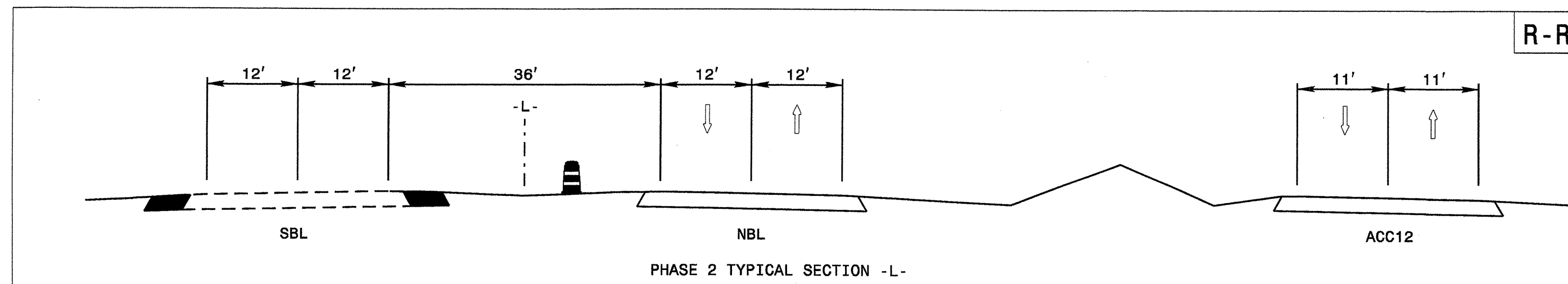
PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/5/08

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
DANIEL H. BRIDGES
23924

PHASE 2
(S.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	



MATCH LINE SEE SHEET TCP-17 -L- STA. 749+00

MATCH LINE SEE SHEET TCP-19 -L- STA. 763+00

PAINT SCHEDULE	
PA	PAVEMENT MARKING LINES
PA	TEMPORARY WHITE EDGELINE
PI	TEMPORARY DOUBLE YELLOW LINE
PD	TEMPORARY 13' WHITE MINI SKIP LINE

LEGEND	
	UNDER CONSTRUCTION
	PAVEMENT REMOVAL

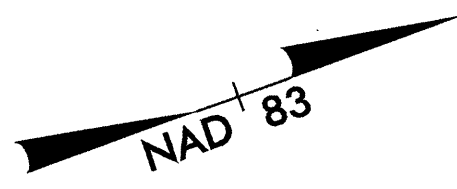
APPROVED: *[Signature]* DATE: 7/5/08

SEAL

PHASE 2	
(S.B. ROADWAY CONSTRUCTION)	
SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

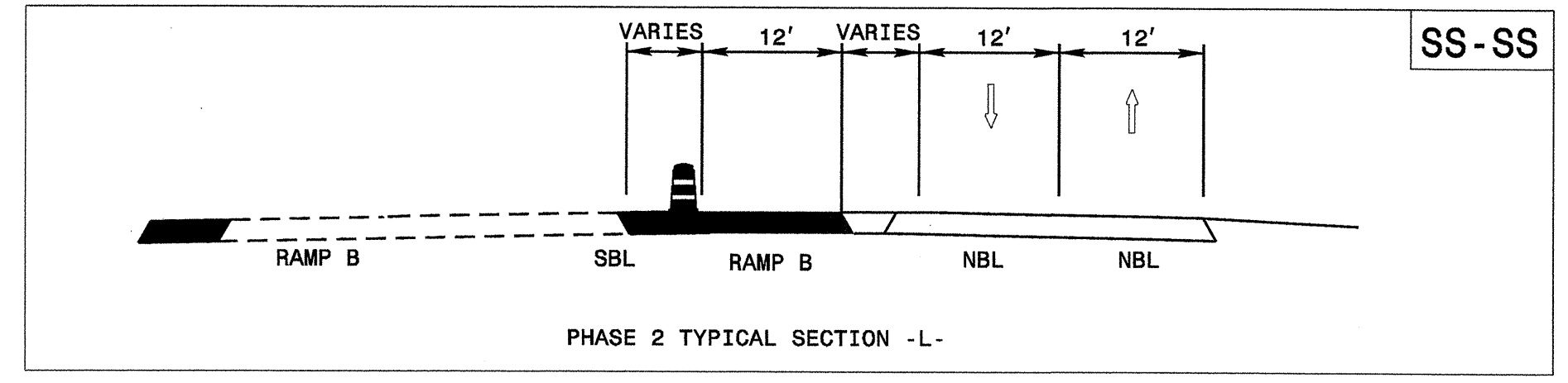
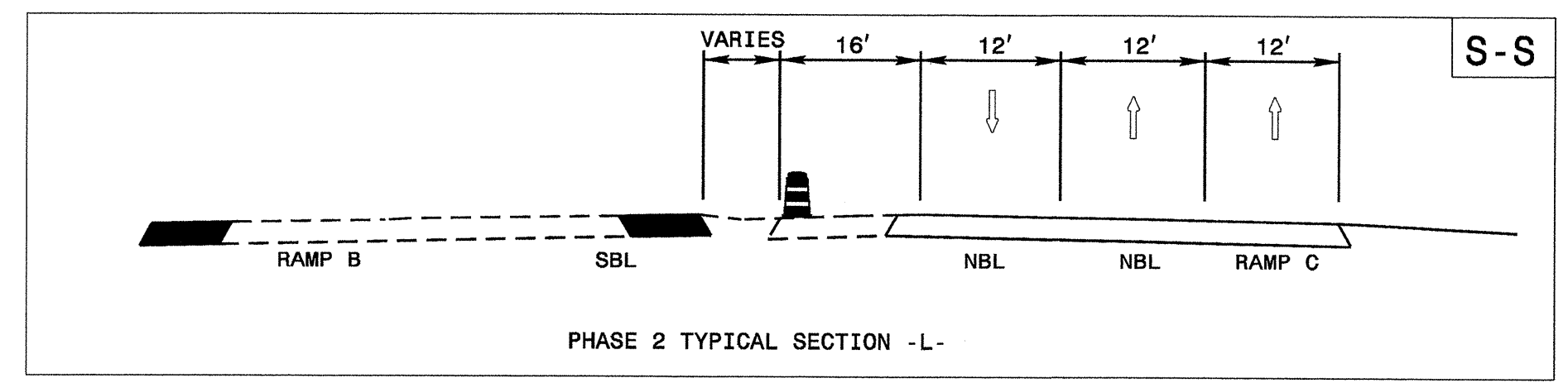
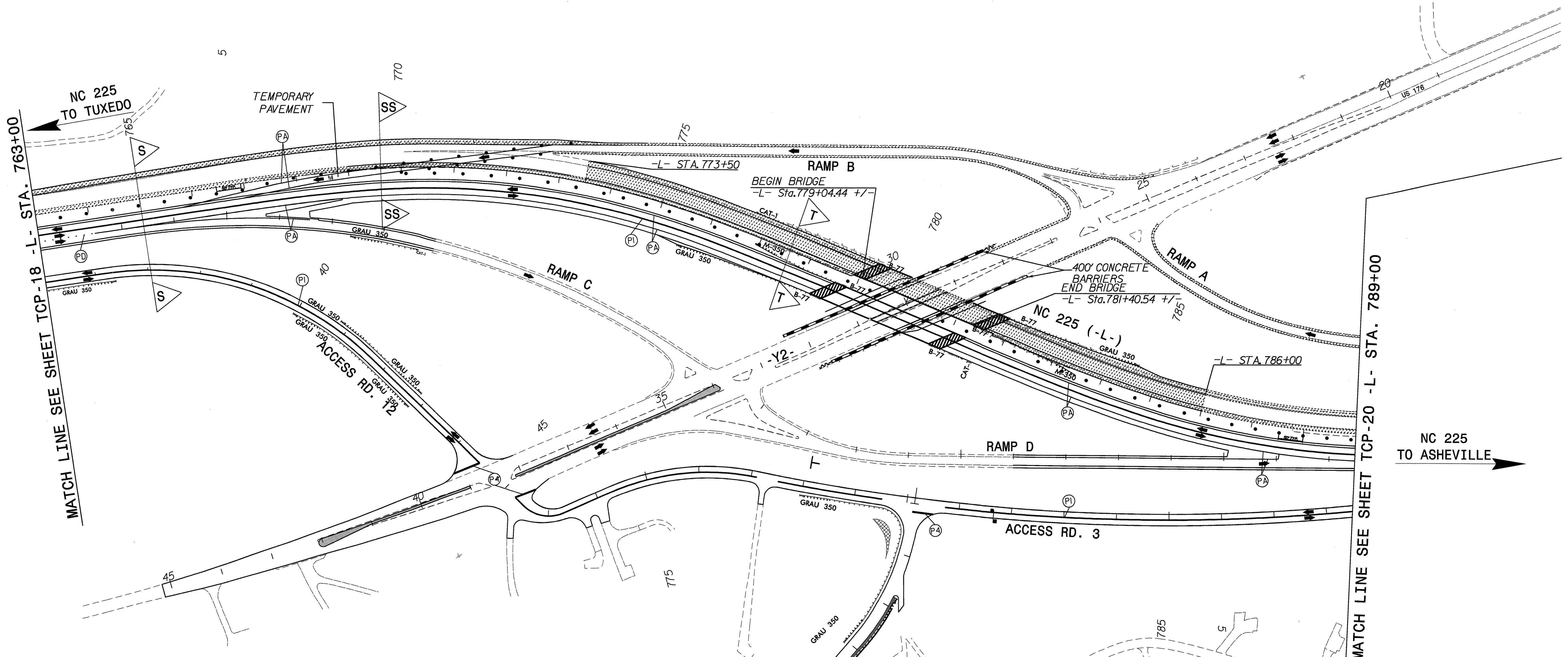
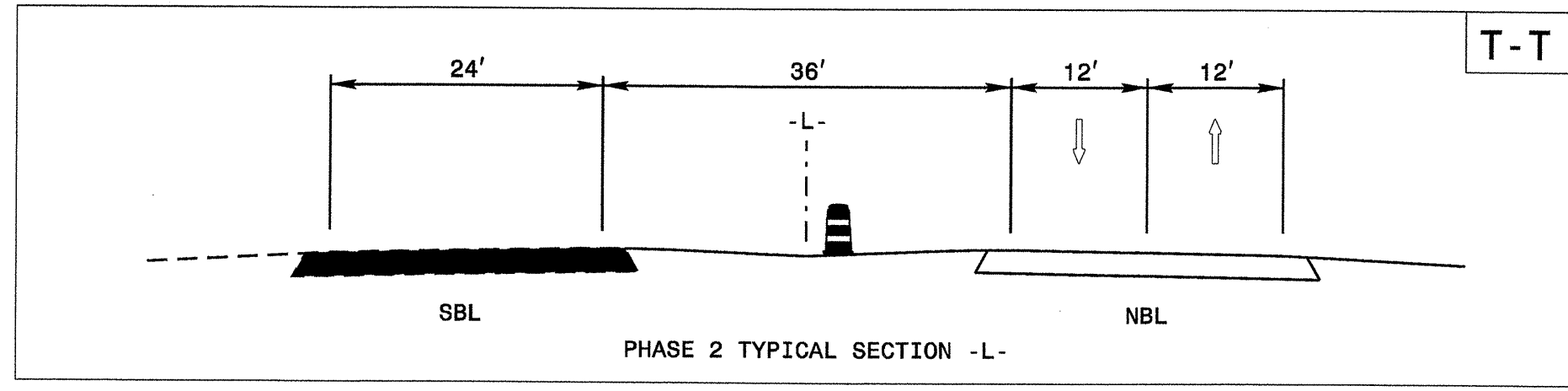
PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

05-JAN-2009 12:11 G:\Projects\700295\R-505\TrafficControl\TCP\R505_rdy_tcp_18.dgn Combs AT W-CHL-CIV01



PAINT SCHEDULE

PA	PAVEMENT MARKING LINES
PD	TEMPORARY WHITE EDGELINE
PI	TEMPORARY WHITE MINI SKIP LINE
P1	TEMPORARY DOUBLE YELLOW LINE
P4	TEMPORARY STOP BAR



LEGEND

	UNDER CONSTRUCTION
	PCB

APPROVED: *[Signature]* DATE: 1/15/08

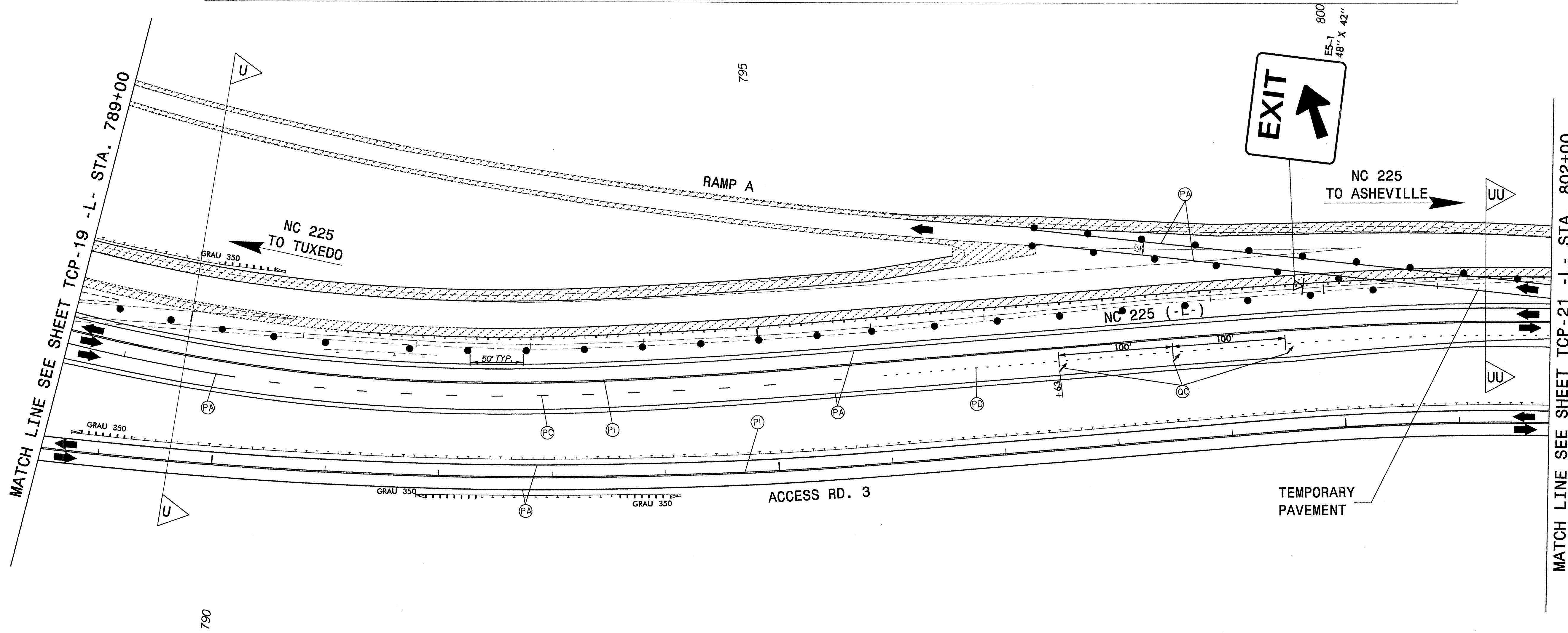
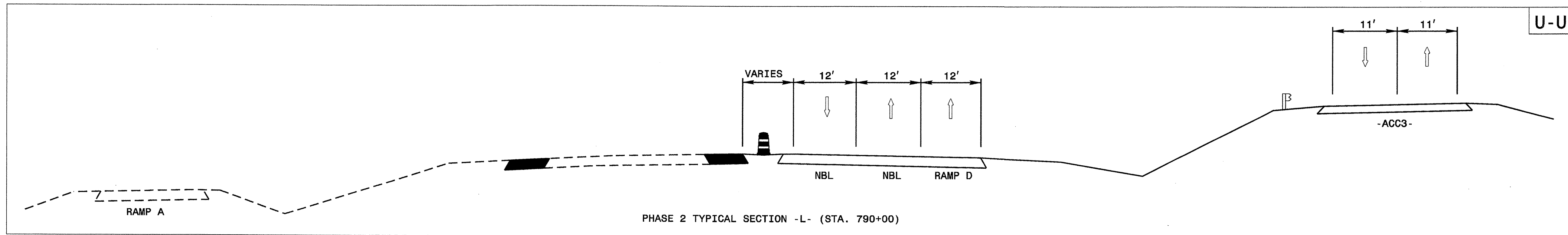
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
DANIEL H. BRIDGES
23924

PHASE 2
(S.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

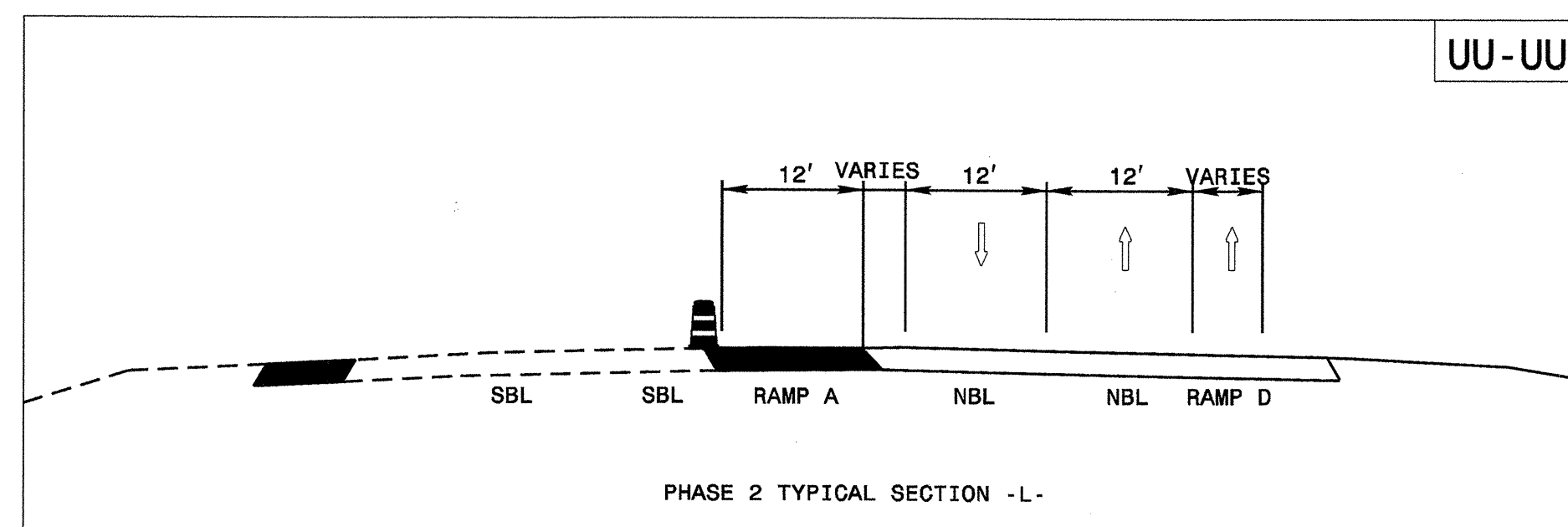
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MATCH LINE SEE SHEET TCP-19 -L- STA. 789+00

MATCH LINE SEE SHEET TCP-21 -L- STA. 802+00

PAINT SCHEDULE	
PA	PAVEMENT MARKING LINES
PC	TEMPORARY WHITE EDGELINE
PD	TEMPORARY 10' WHITE SKIP LINE
PI	TEMPORARY MINI SKIP LINE
PI	TEMPORARY DOUBLE YELLOW LINE
QC	TEMPORARY LANE MERGE ARROW



LEGEND	
	UNDER CONSTRUCTION

05-JAN-2009 12:11 C:\Projects\700295\5-505\Traffic\TrafficControl\TCP\RE05_rdy_tcp-20.dgn

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

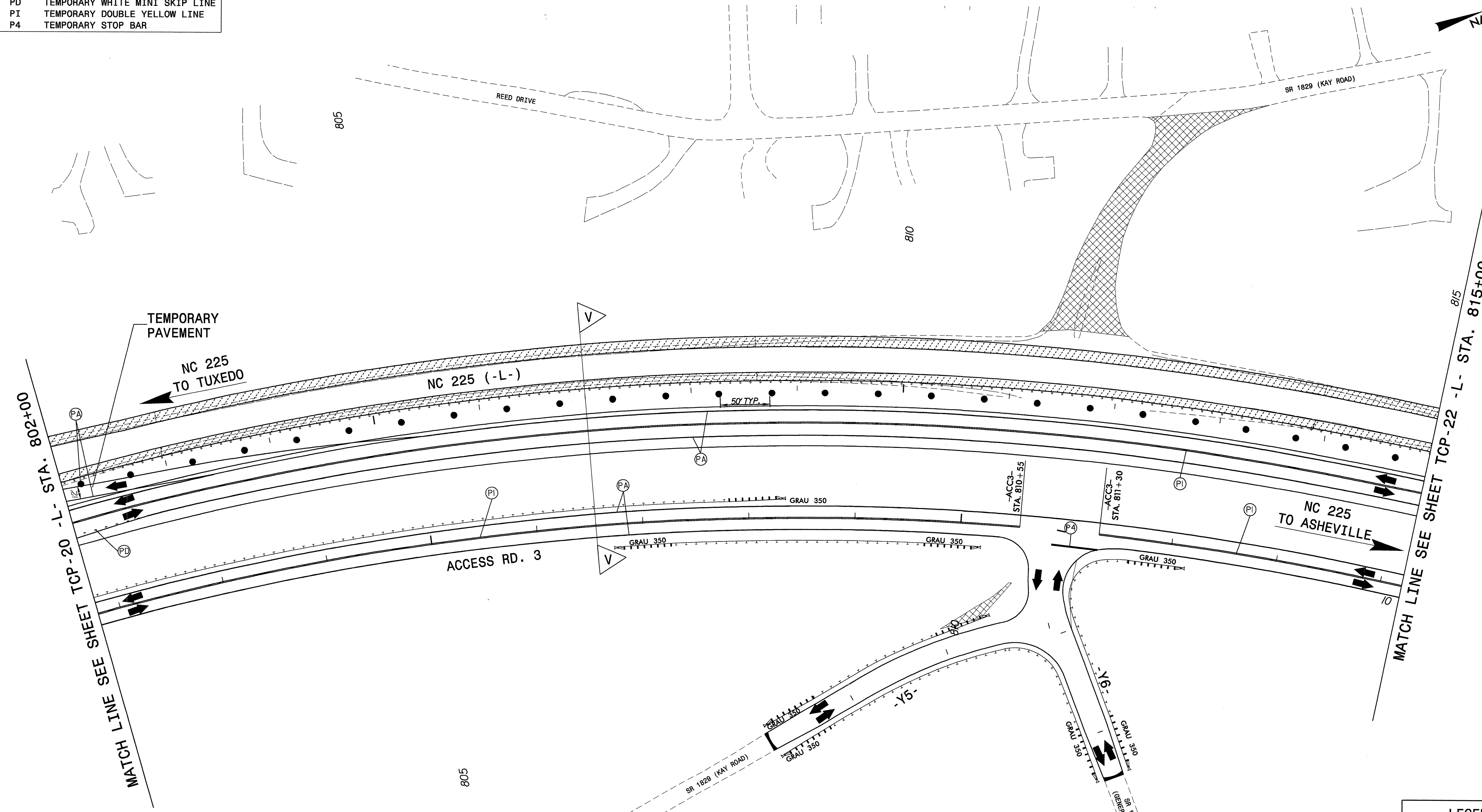
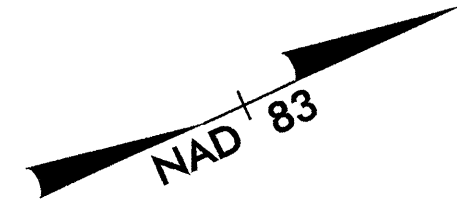
APPROVED: *[Signature]* DATE: 1/6/08

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 NORTH CAROLINA PROFESSIONAL ENGINEER
 23924
 DANIEL H. BRIDGES

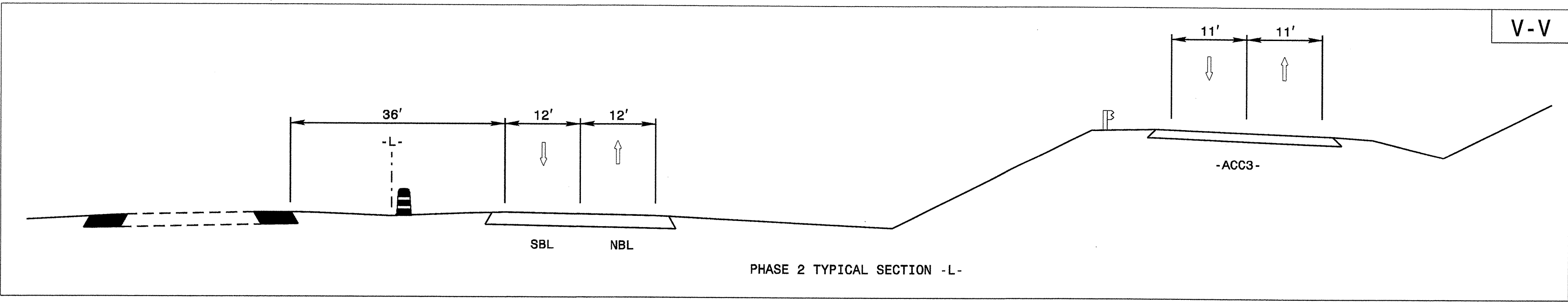
PHASE 2
 (S.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	CAD FILE

PAINT SCHEDULE	
PAVEMENT MARKING LINES	
PA	TEMPORARY WHITE EDGELINE
PD	TEMPORARY WHITE MINI SKIP LINE
PI	TEMPORARY DOUBLE YELLOW LINE
P4	TEMPORARY STOP BAR



LEGEND	
	UNDER CONSTRUCTION
	PAVEMENT REMOVAL

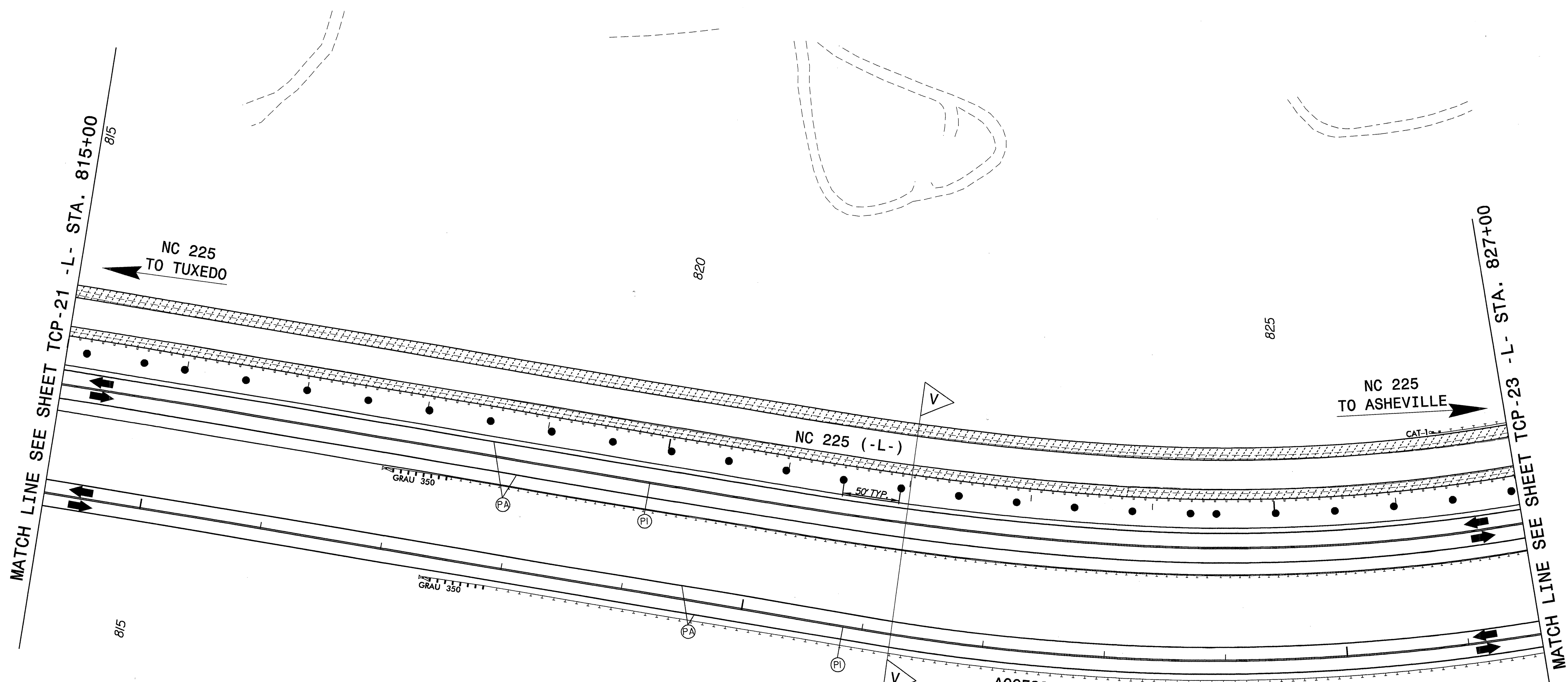
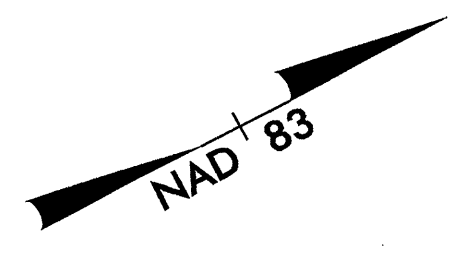


05-JAN-2009 12:11
 C:\Proje\505\Traffic\TrafficControl\TCP\R505_rdy_tcp_21.dgn
 Combs AT W-CHL-CNOI

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/6/08
 SEAL:

PHASE 2 (S.B. ROADWAY CONSTRUCTION)		REVISIONS
SCALE: NONE	DATE: 7/25/08	
DESIGN BY: RCC	DESIGN BY: RCC	
REVIEWED BY: DHB		



MATCH LINE SEE SHEET TCP-21 -L- STA. 815+00

MATCH LINE SEE SHEET TCP-23 -L- STA. 827+00

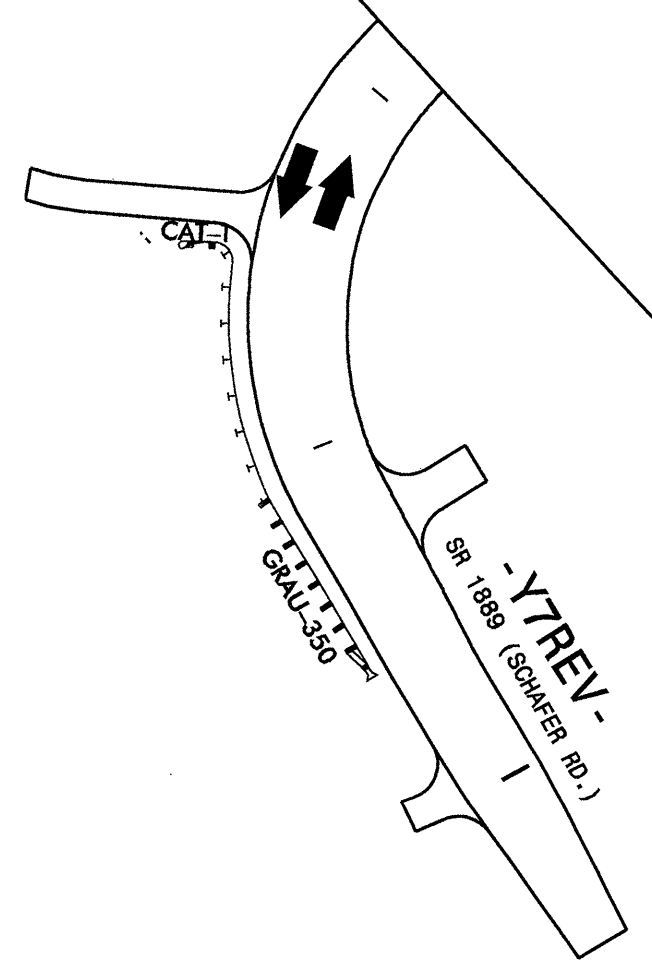
NC 225 TO TUXEDO

NC 225 TO ASHEVILLE

NC 225 (-L-)

ACCESS RD. 3

SEE SHEET TCP-21



05 JAN-2009 12:11:00 00950505\TrafficControl\TCP\R505_rdy_tcp_22.dgn
C:\Users\ATM\Documents\ATM\GILL-0110

PAINT SCHEDULE	
PA	PAVEMENT MARKING LINES
PI	TEMPORARY WHITE EDGELINE
PI	TEMPORARY DOUBLE YELLOW LINE

LEGEND
 UNDER CONSTRUCTION

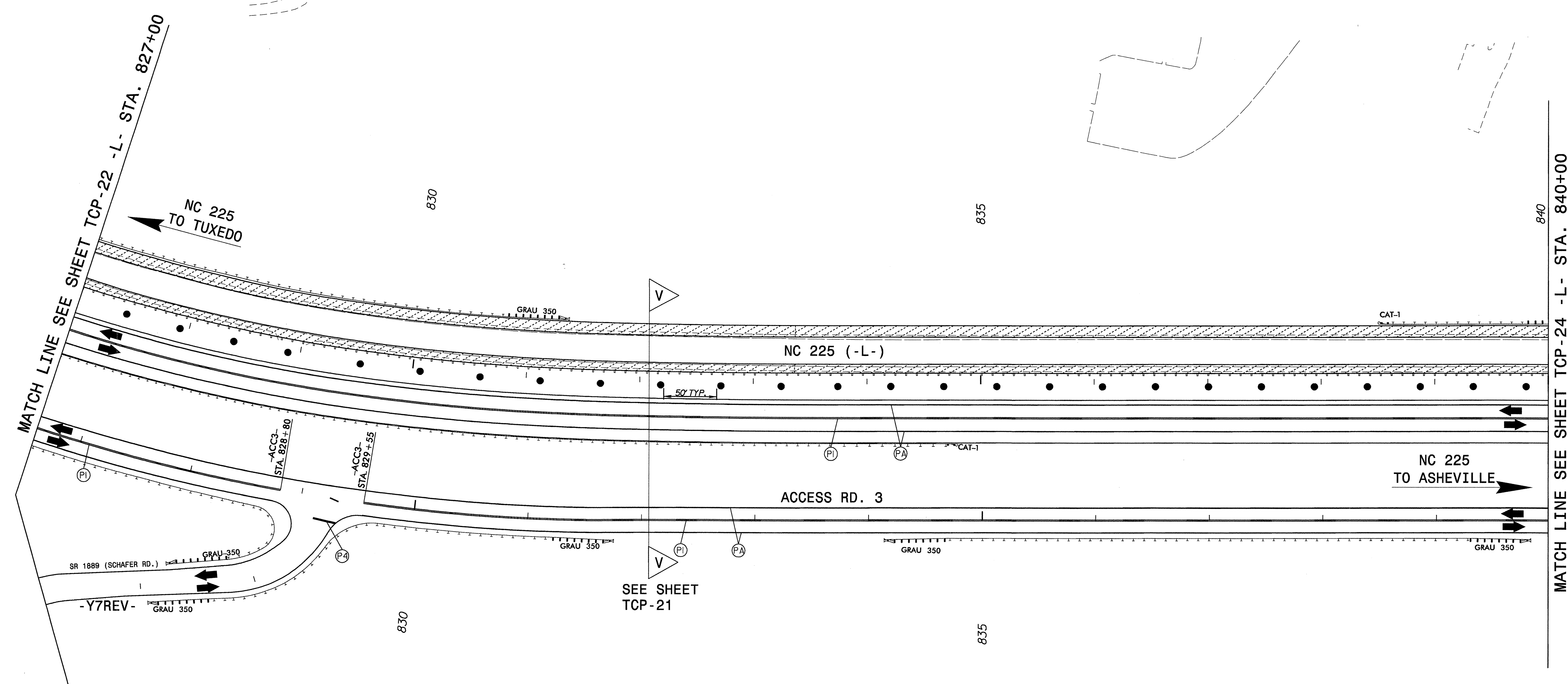
PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/16/08

 SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 DANIEL H. BRIDGES
 23924

PHASE 2
 (S.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	CHD FILE

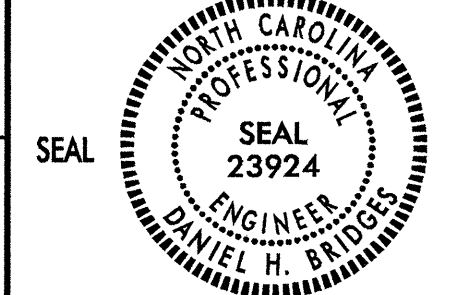


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 G:\Projects\505\TrafficControl\TCP-R505_rdy_top_23.dgn
 Combs AT W-CHL-DIV01

PAINT SCHEDULE	
PA	PAVEMENT MARKING LINES
PI	TEMPORARY WHITE EDGELINE
P4	TEMPORARY DOUBLE YELLOW LINE
	TEMPORARY STOP BAR

LEGEND
 UNDER CONSTRUCTION

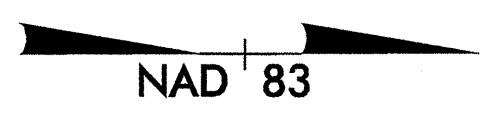
APPROVED: *Daniel H. Bridge* DATE: 1/6/08



PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

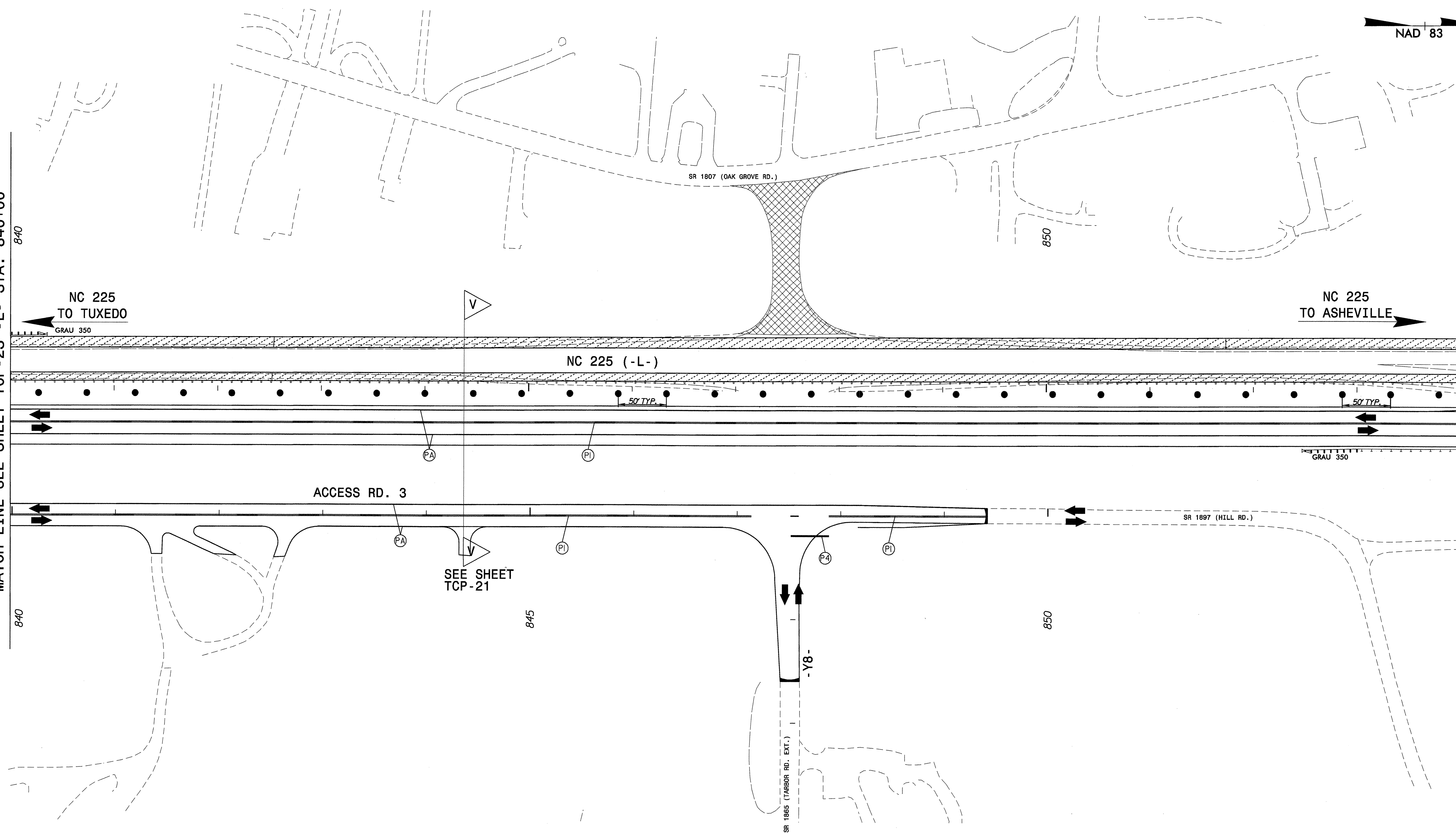
PHASE 2
 (S.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	



MATCH LINE SEE SHEET TCP-23 - L- STA. 840+00

MATCH LINE SEE SHEET TCP-25 - L- STA. 854+00



SEE SHEET
TCP-21

LEGEND	
	UNDER CONSTRUCTION
	PAVEMENT REMOVAL

PAINT SCHEDULE	
PA	PAVEMENT MARKING LINES
PI	TEMPORARY WHITE EDGELINE
P4	TEMPORARY DOUBLE YELLOW LINE
	TEMPORARY STOP BAR

05-JAN-2009 12:11
G:\Projects\700295\R-505\TrafficControl\TCP\R505_rdy_tcp_24.dgn
Combs AT W-CHL-CIV01

PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/8/08

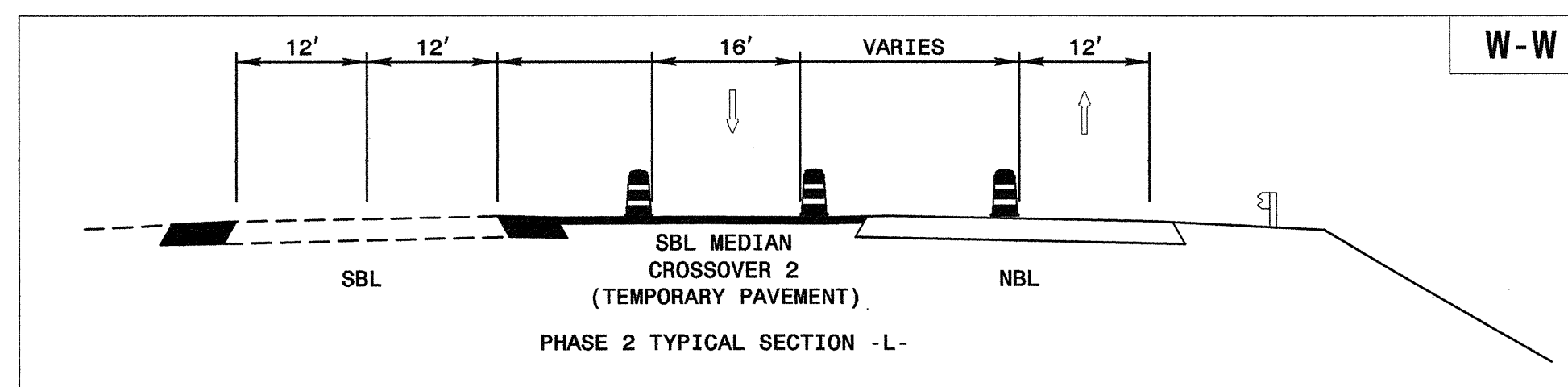
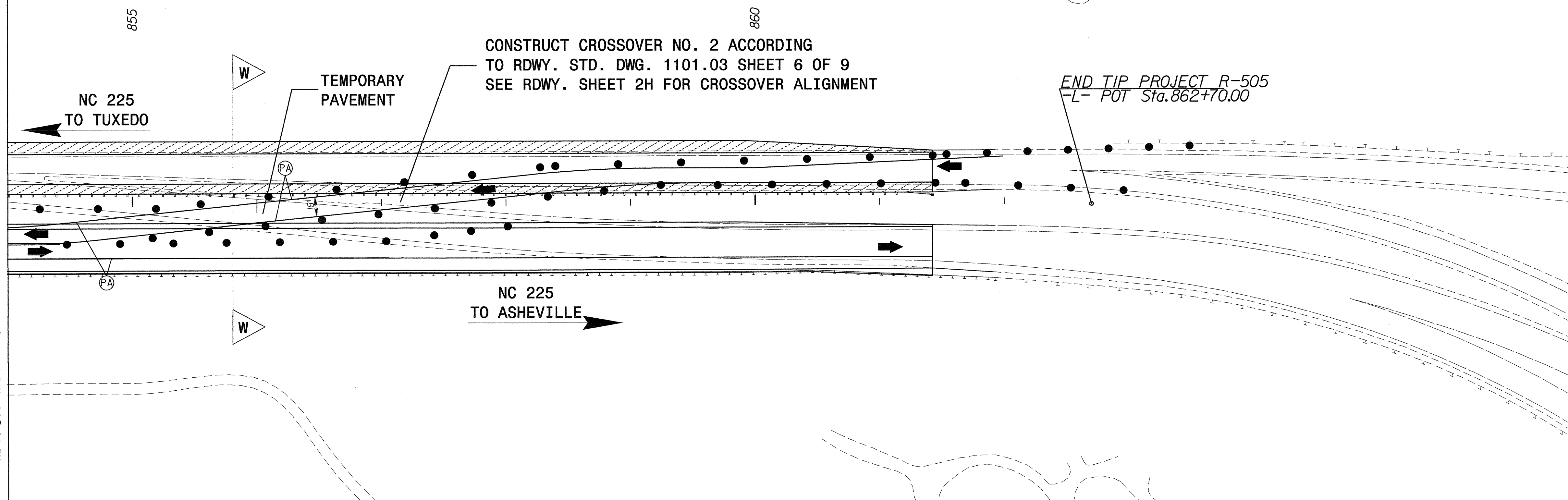
SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
DANIEL H. BRIDGE
23924

PHASE 2
(S.B. ROADWAY CONSTRUCTION)

SCALE: NONE		REVISIONS
DATE: 7/25/08		
DWG. BY: RCC		
DESIGN BY: RCC		
REVIEWED BY: DHB		



MATCH LINE SEE SHEET TCP-24 -L- STA. 854+00



LEGEND	
	UNDER CONSTRUCTION

PAINT SCHEDULE	
PA	PAVEMENT MARKING LINES
PI	TEMPORARY WHITE EDGELINE
	TEMPORARY DOUBLE YELLOW

02-FEB-2009 08:38 C:\Projects\700295\R-505\Traffic\TrafficControl\TCP\R505_rdy_top_25.dgn Comds AT W-CHL-CV01

PB AMERICAS
 909 AVIATION PARKWAY
 SUITE 1500
 MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 2/3/09

SEAL
 NON-CAROLINA PROFESSIONAL ENGINEER
 SEAL 23924
 DANIEL H. BRIDGE

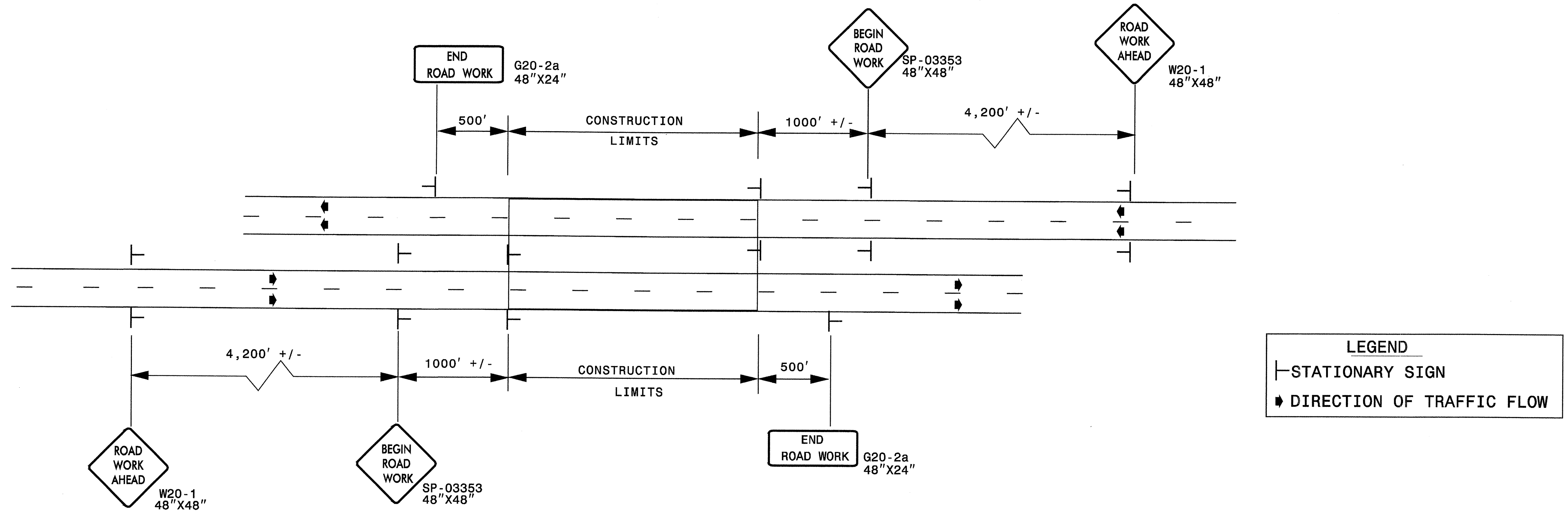
PHASE 2
 (S.B. ROADWAY CONSTRUCTION)

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	CADD

ADVANCED WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

PROJ. REFERENCE NO.	SHEET NO.
R-505	TCP-26

DETAIL A



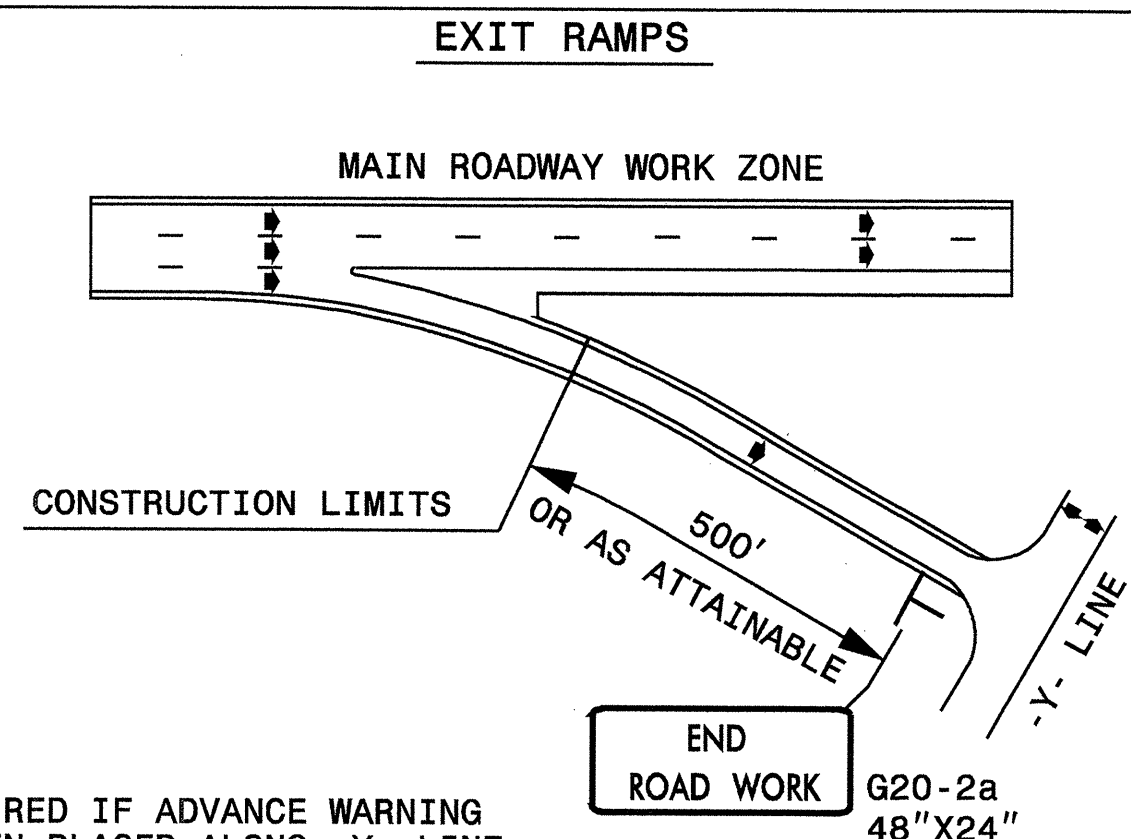
LEGEND

— STATIONARY SIGN

▸ DIRECTION OF TRAFFIC FLOW

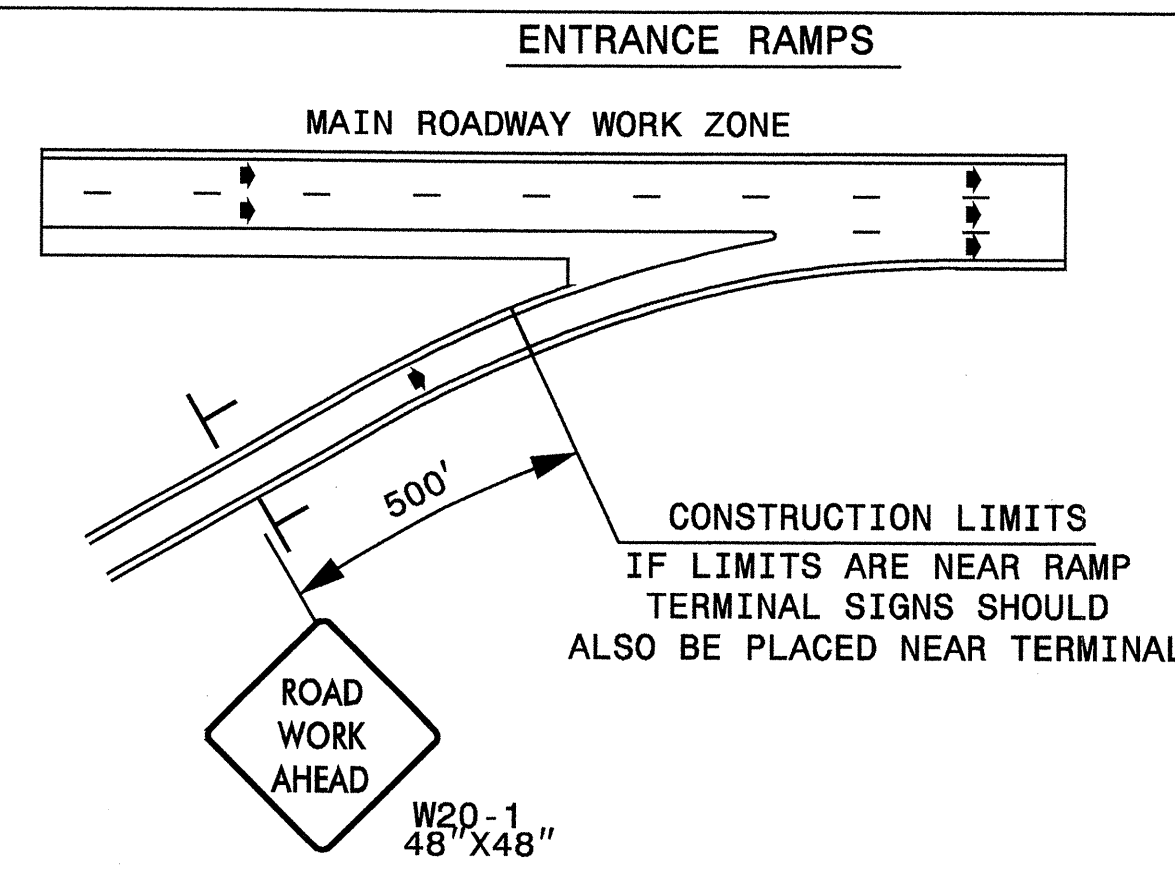
* USE THE "\$250 SPEEDING PENALTY" SIGN, SPEED LIMIT SIGN, AND ORANGE PANEL; ONLY WHEN A "\$250 SPEEDING PENALTY" ORDINANCE HAS BEEN ISSUED BY THE REGIONAL TRAFFIC ENGINEER.

DETAIL B

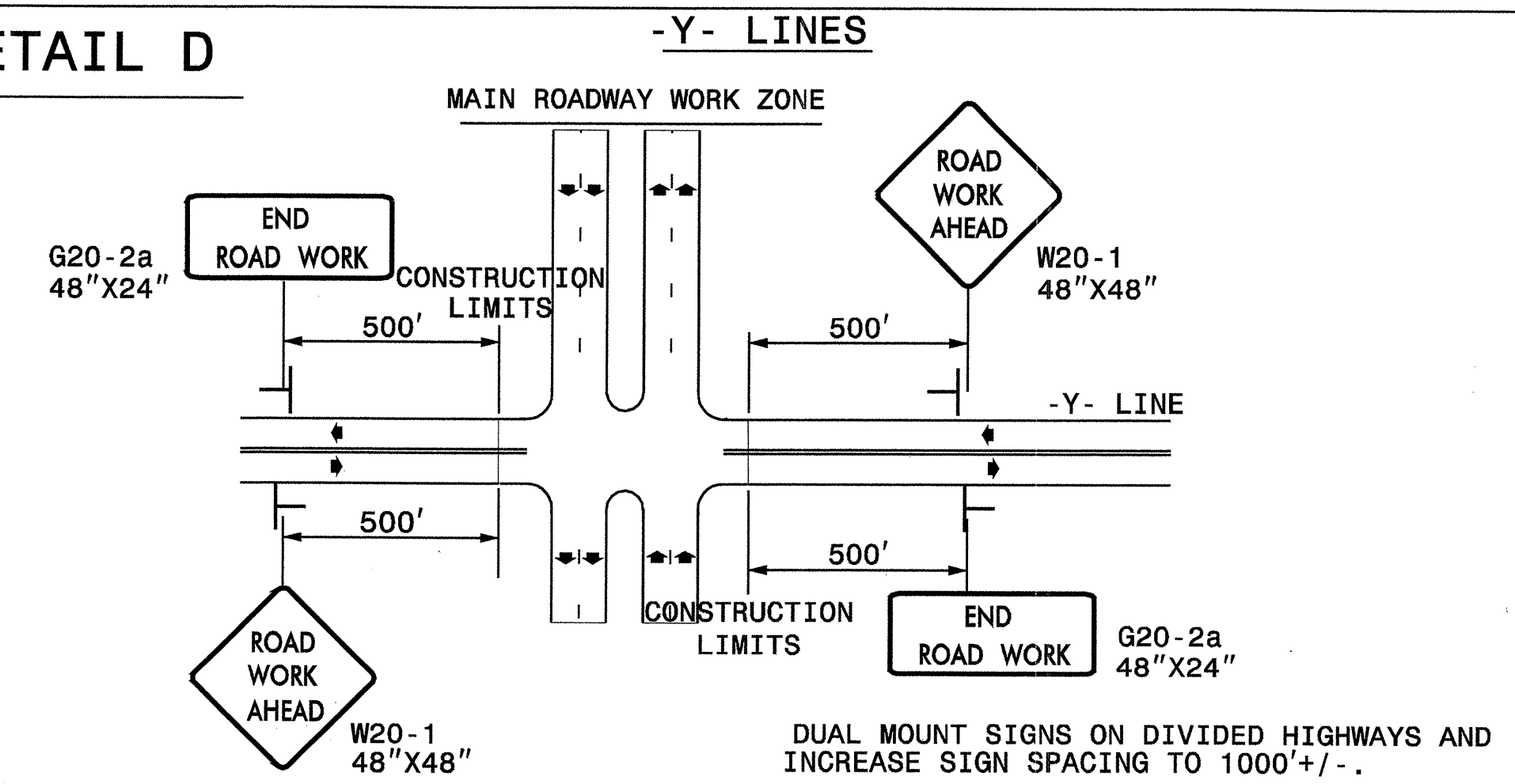


NOTE: SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

DETAIL C



DETAIL D



DUAL MOUNT SIGNS ON DIVIDED HIGHWAYS AND INCREASE SIGN SPACING TO 1000'+/-.

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.

05-JAN-2009 15:34 G:\Projects\700295\R-505\TrafficControl\TCP\R505_rdy_tcp_26.dgn Combs AT W-CHL-CVO

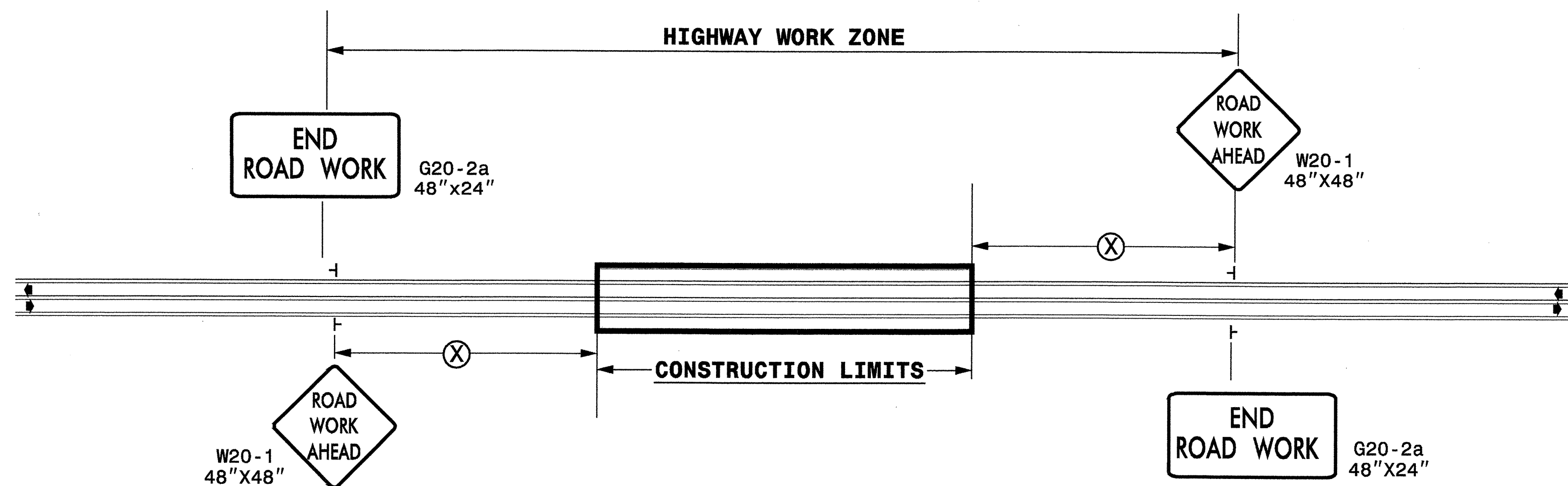
PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

APPROVED: *[Signature]* DATE: 1/5/08

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
DANIEL H. BRIGGS
23924

ADVANCED WORK ZONE WARNING SIGNS FOR FREEWAYS (4 LANES OR GREATER)		
SCALE: NONE	03/04	REVISIONS
DATE: 7/25/08		
DWG. BY: RCC		
DESIGN BY: RCC		
REVIEWED BY: DHB		

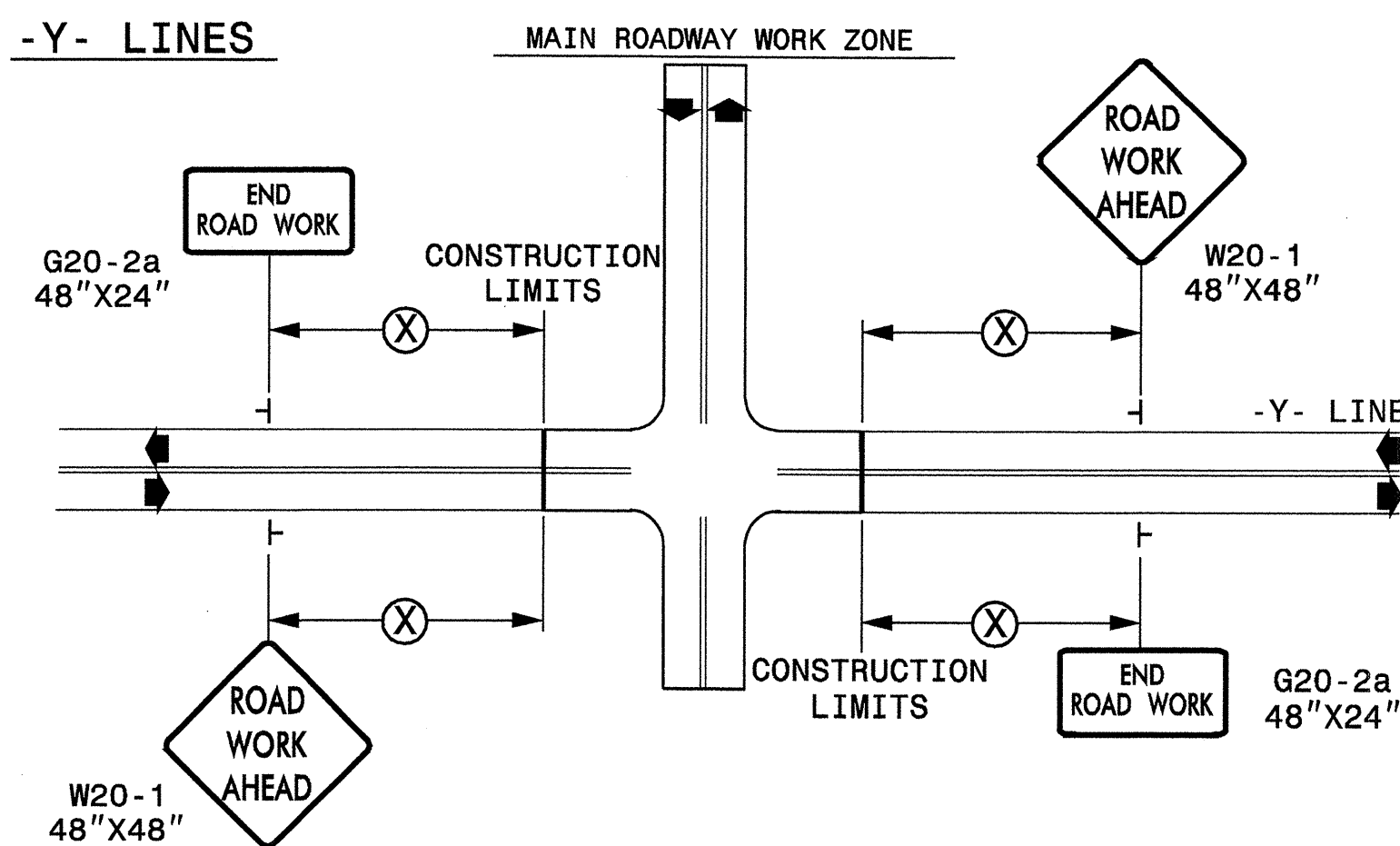
TWO-WAY UNDIVIDED ** (L-LINES)



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	500'
≥ 55	1000'

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



DETAIL DRAWING FOR
TWO-WAY UNDIVIDED
WORK ZONE WARNING SIGNS

GENERAL NOTES

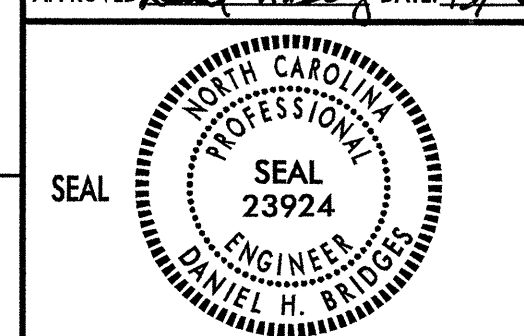
- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

┆ STATIONARY SIGN

◄ DIRECTION OF TRAFFIC FLOW

APPROVED: *D. H. Bridges* DATE: 11/10/08



DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS

SCALE: NONE	REVISIONS
DATE: 7/25/08	
DWG. BY: RCC	
DESIGN BY: RCC	
REVIEWED BY: DHB	

PB AMERICAS
909 AVIATION PARKWAY
SUITE 1500
MORRISVILLE, NC 27560

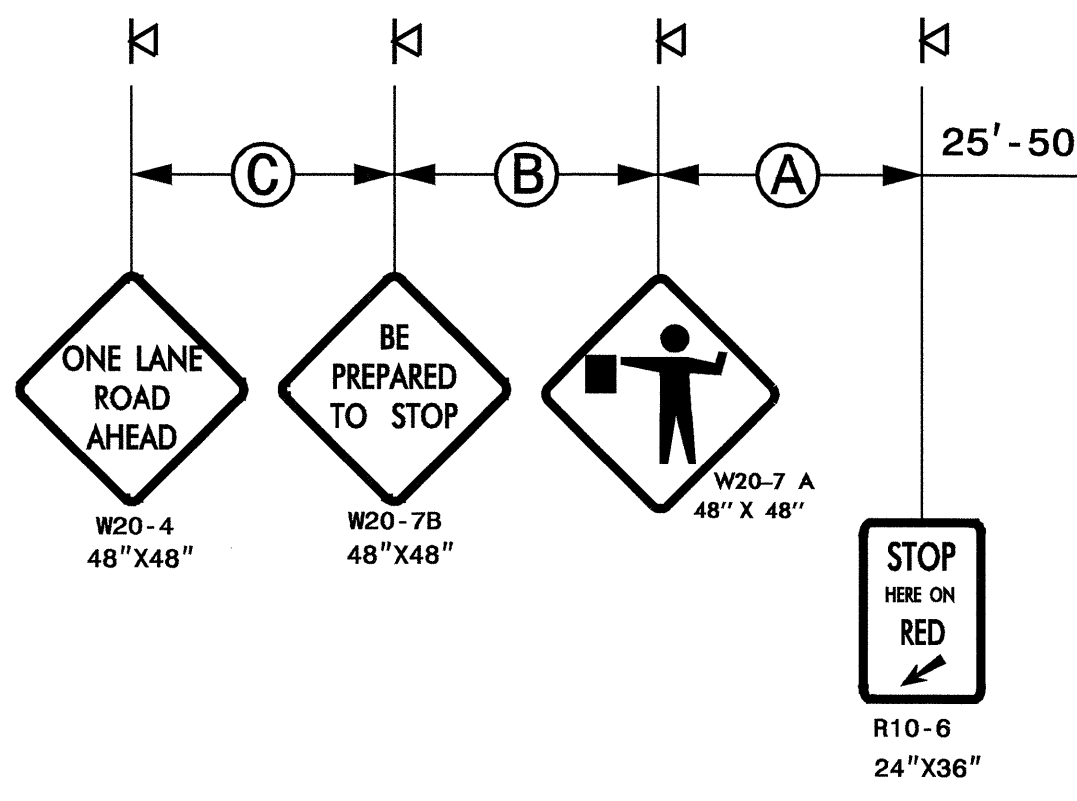
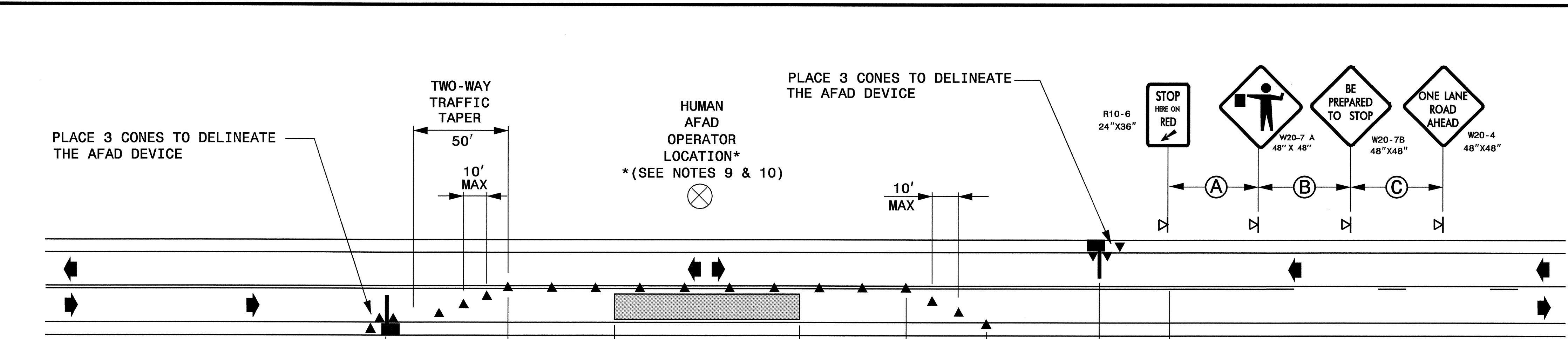
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STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

DETAIL DRAWING FOR
TEMPORARY LANE CLOSURES USING
AUTOMATED FLAGGING ASSISTANCE DEVICES

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

DETAIL DRAWING FOR
TEMPORARY LANE CLOSURES USING
AUTOMATED FLAGGING ASSISTANCE DEVICES



ADVANCE WARNING SIGN SPACING CHART			
POSTED SPEED LIMIT (MPH)	RECOMMENDED DISTANCE BETWEEN SIGNS FEET (+/-) SEE NOTE #1		
	(A)	(B)	(C)
≤ 35	200	200	200
40-50	350	350	350
55	500	500	500

LEGEND	
▲	CONES OR SKINNY DRUMS
■	AFAD (Automated Flagging Assistance Device w/ Gatearm)
⊏	PORTABLE SIGN
←	DIRECTION OF TRAFFIC FLOW

- GENERAL NOTES**
- 1- INSTALLATION AND REMOVAL OF THE AFAD DEVICES REQUIRES A NORMAL FLAGGING SET UP AS SHOWN ON THE DETAIL. IN ORDER TO SAFELY INSTALL THE TAPER AND DEVICES, PLACE THE SYSTEM IN THE "ALL RED"/"ALL STOP" CONDITION TO STOP BOTH DIRECTIONS OF TRAFFIC. ONCE THE DEVICES ARE INSTALLED AND WORKERS SAFELY AWAY FROM THE LANE, BEGIN CONTROLLING TRAFFIC WITH THE AFADS. REFER TO SIGN SPACING CHART BELOW FOR SIGN SPACING. ALL SPACING DIMENSIONS ARE APPROXIMATE. FIELD ADJUST AS VARIOUS CONDITIONS OCCUR, SUCH AS LIMITED SIGHT DISTANCE, OBSTRUCTIONS, ETC.
 - 2- INSTALL LANE CLOSURES WITH THE DIRECTION OF THE TRAFFIC FLOW; REMOVE LANE CLOSURES AGAINST THE DIRECTION OF THE TRAFFIC FLOW.
 - 3- PLACE CONES OR SKINNY DRUMS FROM THE TWO WAY TRAFFIC TAPER TO THE DOWNSTREAM TAPER ON EQUAL SPACING NO GREATER THAN TWO TIMES THE POSTED SPEED LIMIT. USE EITHER ALL CONES OR ALL SKINNY DRUMS AROUND AFAD AND FOR APPROACH TAPER.
 - 4- THE BOTTOM OF THE SIGNAL HEAD HOUSING OR SIGN DISPLAYS SHALL BE A MINIMUM OF 7' ABOVE PAVEMENT.
 - 5- AN AFAD SHALL BE OPERATED ONLY BY A QUALIFIED FLAGGER WHO HAS RECEIVED TRAINING FOR THE OPERATION OF THE SPECIFIC AFAD DEVICE THEY ARE OPERATING. THE FLAGGER OPERATING THE AFAD(S) SHALL NOT LEAVE THE AFAD(S) UNATTENDED AT ANY TIME WHILE THEY ARE BEING USED TO ASSIGN THE RIGHT-OF-WAY.
 - 6- THE AFAD SHOULD BE PARKED 2 FEET OUTSIDE OF THE LANE BEING CONTROLLED UNLESS THERE IS NOT ENOUGH SHOULDER. IF THERE IS LIMITED ROOM OUTSIDE THE LANE BEING CONTROLLED, THE AFAD MAY BE POSITIONED PARTIALLY WITHIN THE LANE AS NECESSARY WITH THE GATE ARM REACHING AT LEAST TO THE CENTER OF THE LANE BUT NOT EXCEEDING THE LANE WIDTH.
 - 7- WHEN WORK IS NOT PURSUED FOR 30 MINUTES OR LONGER, ALL PARTS OF THE AFAD UNIT SHALL BE REMOVED FROM THE TRAVEL LANE A MINIMUM OF 2' FROM THE EDGELINE. THE GATE ARMS SHALL BE IN THE UPRIGHT POSITION, REMOVE ALL TRAFFIC CONTROL DEVICES FROM ROAD, PLACE 2 CONES BY EACH AFAD UNIT AND ALL SIGNS ASSOCIATED WITH THE AFAD SYSTEM SHALL BE LAID DOWN EXCEPT THE "ROAD WORK AHEAD" SIGNS. EACH AFAD UNIT SHALL BE PLACED IN THE "CAUTION MODE", EITHER FLASHING YELLOW SIGNAL DISPLAY OR THE "SLOW" SIGN INDICATED AND YELLOW BEACON FLASHING.
 - 8- IN THE EVENT THAT ONE OR BOTH AFAD UNITS BECOME INOPERATIVE, BE PREPARED AT ALL TIMES TO REPLACE THE UNIT OR SYSTEM WITH THE SAME TYPE AND MODEL OF AFAD, OR REVERT TO NORMAL FLAGGING OPERATIONS, OR TERMINATE ALL CONSTRUCTION ACTIVITIES REQUIRING THE USE OF THE AFAD UNTIL THE AFAD IS OPERATIVE OR QUALIFIED HUMAN FLAGGERS ARE AVAILABLE.
 - 9- A SINGLE FLAGGER MAY SIMULTANEOUSLY OPERATE TWO AFADS AS LONG AS THE FLAGGER HAS AN UNOBSTRUCTED VIEW OF BOTH AFADS; THE FLAGGER HAS AN UNOBSTRUCTED VIEW OF THE APPROACHING TRAFFIC IN BOTH DIRECTIONS; AND THE AFADS ARE NO GREATER THAN 800 FT APART.
 - 10- IF THE AFADS ARE SPACED GREATER THAN 800 FT APART, THEN A QUALIFIED FLAGGER MUST BE ASSIGNED TO AND CONTROL EACH INDIVIDUAL AFAD.
 - 11- AFAD OPERATORS MAY CONTROL TRAFFIC AT SIDE STREETS OR DRIVEWAYS BETWEEN THE AFAD UNITS WHILE OPERATING THE AFAD SYSTEM IF APPROVED BY THE ENGINEER. AFAD UNITS MUST CONTINUE TO BE WITHIN CLEAR SIGHT OF THE OPERATOR DURING THIS WORK ACTIVITY.

02-APR-2009 09:58
 C:\DOT\DESIGN\PROJECTS\R\0505\TrafficControl\top\Final\Revised AFAD drawing.dgn
 JMOldg AT WZTC24740

APPROVED: <i>[Signature]</i> DATE: 4/2/09	SCALE: NONE		REVISIONS
SEAL	DATE: 4/09		
	DWG. BY:		
	DESIGN BY:		
	REVIEWED BY:		