WBS NO.: 35008.2.ST1

TIP NO.: U-4007B

STATE PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-1

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED TRAFFIC CONTROL

ONSLOW COUNTY

LOCATION: WESTERN PARKWAY FROM SOUTH OF COUNTRY CLUB RD. TO WESTERN BLVD.

TYPE OF WORK: GRADING, PAVING, DRAINAGE, SIGNALS, CURB, GUTTER, STRUCTURES & CULVERTS.

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED 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
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1150.01	FLAGGING DEVICES
1135.01	CONES
1145.01	BARRICADES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
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
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING(TEMPORARY)
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES(TEMPORARY)

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND INDEX OF SHEETS
TCP-2, 2A	GENERAL NOTES
TCP-2B	TEMPORARY PAVEMENT MARKING SCHEDULE
TCP-3	TRAFFIC CONTROL PLAN AREA DESIGNATIONS
TCP 3A-3D	TRAFFIC CONTROL PLAN PHASING
TCP 4-4A	AREA 1-PHASE I OVERVIEW
TCP 4B-4G	AREA 1-PHASE I-DETAIL SHEETS
TCP-5	AREA 1-PHASE II-STEP 1 OVERVIEW
TCP 5A-5D	AREA 1-PHASE II-STEP 1 DETAIL SHEETS
TCP-6	AREA 1-PHASE II-STEP 2 OVERVIEW
TCP 6A	AREA 1-PHASE II-STEP 2 DETAIL SHEET
TCP-7	AREA 1-PHASE II-STEP 3 OVERVIEW
TCP 7A-7B	AREA 1-PHASE II-STEP 3 DETAIL SHEETS
TCP-8	AREA 1-PHASE II-STEP 4 OVERVIEW
TCP 8A-8D	AREA 1-PHASE II-STEP 4 DETAIL SHEETS
TCP 8E	AREA 1-PHASE II-STEP 4 OFFSITE DETOUR
TCP-9	AREA 1-PHASE II-STEP 5 OVERVIEW
TCP 9A-9C	AREA 1-PHASE II-STEP 5 DETAIL SHEETS
TCP-10	AREA 1-PHASE II-STEP 6 OVERVIEW
TCP 10A-10B	AREA 1-PHASE II-STEP 6 DETAIL SHEETS
TCP 11-11A	AREA 1-PHASE III-OVERVIEW
TCP 11B	AREA 1-PHASE III-DETAIL SHEET
TCP 12	AREA 2-PHASE I (Y-4/Y-4A) DETAIL SHEETS
TCP 12A-12B	AREA 2-PHASE II (Y-4/Y-4A) DETAIL SHEETS
TCP 12C-12D	AREA 2-PHASE III (Y-4/Y-4A) DETAIL SHEETS
TCP 13-13A	AREA 3 (Y-5) DETAIL SHEETS
TCP 14-14A	TYPICAL LANE CLOSURES WITH SHIFT
TCP-15	WORK ZONE ADVANCE WARNING SIGNS
TCP-16	WORK ZONE ADVANCE WARNING SIGN DESIGN

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- PROPOSED PVMT. --------- EXIST. PVMT.
- WORK AREA
- REMOVAL OF EXISTING PAVEMENT

TRAFFIC CONTROL DEVICES

- TYPE III BARRICADE(S)
- CONE
- DRUM / SKINNY DRUM
- FLASHING ARROW PANEL (TYPE C)
- STATIONARY SIGN
- PORTABLE SIGN
- STATIONARY OR PORTABLE SIGN
- CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- POLICE
- FLAGGER
- PORTABLE CONCRETE BARRIER
- SIGNALIZED INTERSECTION

PAVEMENT MARKINGS

- CRYSTAL/CRYSTAL PAVEMENT MARKER
- YELLOW/YELLOW PAVEMENT MARKER
- CRYSTAL/RED PAVEMENT MARKER
- PAVEMENT MARKING SYMBOLS

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL LIST OF CONTACTS

S. BOURNE, P.E.	*STATE TRAFFIC MANAGEMENT ENGINEER*
S. KITE, P.E.	*TRAFFIC CONTROL PROJECT ENGINEER*
	TRAFFIC CONTROL PROJECT DESIGN ENGINEER
R. GARRETT	*TRAFFIC CONTROL DESIGN ENGINEER*

APPROVED: Betsy L Watson
DATE: August 20, 2010

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

PLAN PREPARED BY:

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BETSY L. WATSON, PE — *TRAFFIC CONTROL ENGINEER*

GEORGE KARAGEORGE — *TRAFFIC CONTROL DESIGNER*

8/23/2010
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gkarageorge

GENERAL NOTES

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

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

LANE CLOSURE TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
WESTERN BLVD. (1)	5:30 A.M.- 8:00 P.M. MONDAY THRU FRIDAY
MARINE BLVD.	5:30 A.M.- 8:00 P.M. MONDAY THRU FRIDAY
US 17 NB/SB	6:00 A.M.- 8:30 A.M. MONDAY THRU FRIDAY
COUNTRY CLUB RD.	4:00 P.M.- 6:00 P.M. MONDAY THRU FRIDAY
MOOSEHAVEN RD.	

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

ROAD NAME
ALL ROADS

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 5:30 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 5:30 A.M. THURSDAY AND 8:00 P.M. MONDAY.

4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 5:30 A.M. FRIDAY TO 8:00 P.M. TUESDAY.

5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 5:30 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 5:30 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 5:30 A.M. FRIDAY AND 8:00 P.M. TUESDAY.

7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 5:30 A.M. TUESDAY TO 8:00 P.M. MONDAY.

8) FOR CHRISTMAS, BETWEEN THE HOURS OF 5:30 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

9) FOR PRESIDENTS DAY, BETWEEN THE HOURS OF 5:30 A.M. FRIDAY TO 8:00 P.M. TUESDAY.

10) FOR VETERAN'S DAY PARADE BETWEEN THE HOURS OF 5:30 A.M. TO 3:00 P.M. THE SATURDAY BEFORE VETERAN'S DAY.

11) FOR CHRISTMAS PARADE BETWEEN THE HOURS OF 5:30 A.M. TO 3:00 P.M. THE SATURDAY BEFORE THANKSGIVING DAY.

C) DO NOT STOP TRAFFIC AS FOLLOWS DURING OVERHEAD WORK OPERATIONS SUCH AS GIRDER ERECTION, OVERHEAD SIGN ERECTION AND REMOVAL, AND TRAFFIC SIGNAL WORK:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION
ALL ROADS	5:30 A.M.-11:00 P.M. MONDAY THRU SUNDAY	30 MIN.

D) DO NOT CONDUCT SINGLE OR MULTI-VEHICLE HAULING AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
ALL ROADS	5:30 A.M.-8:30 A.M. MONDAY THRU FRIDAY 4:00 P.M.- 8:00 P.M. MONDAY THRU FRIDAY

E) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

F) 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.

G) 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 OR A LANE CLOSURE IS INSTALLED.

H) 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.

I) 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.

J) 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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

K) 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.

L) 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)IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

N) 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.

O) PROVIDE PERMANENT SIGNING. COVER ANY INSTALLED PERMANENT SIGNING UNTIL IT IS REQUIRED.

P) PROVIDE DETOUR SIGNING WITHIN AND/OR OFF THE PROJECT LIMITS.

Q) COVER OR REMOVE ALL DETOUR SIGNS OUTSIDE THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.

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

S) MAINTAIN ALL EXISTING SIGNING ON PROJECT (WARNING, REGULATORY AND GUIDE SIGNS). WHERE CONSTRUCTION AFFECTS THE LOCATION OF A SIGN, RELOCATE AS NECESSARY, OR INSTALL REPLACEMENT SUCH THAT THE FUNCTION OF THE SIGN IS MAINTAINED AT ALL TIMES.

T) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT. IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

SEAL APPLIES TO THE PLAN REVISION NO. 1 ONLY DATED 10/01/10 AS DESCRIBED BELOW.

SIGNATURE 10/4/2010 DATE

NORTH CAROLINA PROFESSIONAL SEAL 022104 ENGINEER JOHN S. KITE III

REV. NO.	DATE	DESCRIPTION	DWG. BY	DES'D BY	REV'D BY
1	10/01/10	REMOVED REFERENCE TO US 17 BUS./US 17	/	/	RMG

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APPROVED:_____ DATE:_____

THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY BETSY L. WATSON LICENSE NO. 29449 ON JUNE 25, 2010 THIS MEDIUM SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

PROJECT NOTES
GENERAL NOTES

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

CADD FILE

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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-2A

GENERAL NOTES (CONT'D)

TRAFFIC BARRIER

U) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY 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.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY 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 THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

V) 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.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45-50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

W) UNLESS OTHERWISE NOTED IN THE PLANS, 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. SPACE CHANNELIZING DEVICES AT 10 FT. WHEN THEY ARE USED TO CLOSE A DRIVEWAY OR ROADWAY. IN ALL CASES, CHANNELIZING DEVICES ARE TO BE SPACED IN SUCH A MANNER AS TO POSITIVELY ACHIEVE THE INTENDED VISUAL CHANNELIZATION.

WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

X) WHEN CLOSING A PROPOSED OR EXISTING ROADWAY OR DRIVEWAY PLACE TYPE III BARRICADES COMPLETELY ACROSS THE ROADWAY OR FROM CURB TO CURB. ATTACH BARRICADE MOUNTED "ROAD CLOSED" SIGN R11-2 AT ALL CLOSURE LOCATIONS. IF LOCAL TRAFFIC IS TO BE MAINTAINED STAGGER THE BARRICADES TO ALLOW ACCESS.

Y) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

Z) INSTALL PAVEMENT MARKINGS AND MARKERS ON THE FINAL SURFACE AS SHOWN IN THE PAVEMENT MARKING PLAN.

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

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	RAISED

BB) 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.

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

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

TEMPORARY / FINAL SIGNALS

EE) NOTIFY THE ENGINEER TWO (2) MONTHS BEFORE A TRAFFIC SIGNAL INSTALLATION IS REQUIRED.

FF) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

MISCELLANEOUS

GG) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.

HH) UNLESS OTHERWISE STATED, ALL PROPOSED PAVEMENT CONSTRUCTION MENTIONED IN THE TRAFFIC CONTROL PHASING IS TO BE CONSTRUCTED EXCLUDING THE FINAL LAYER OF SURFACE COURSE. THE FINAL LAYER OF SURFACE COURSE IS PAVED IN PHASE III AS A LAST ORDER OF WORK AS DIRECTED BY THE ENGINEER.

II) ALL DIMENSIONS AND STATIONING IN THE TRAFFIC CONTROL PLAN ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.

JJ) MAINTAIN DRIVEWAY ACCESS WITHIN PROJECT LIMITS USING INCIDENTAL STONE.

KK) COMPLETE ANY PROPOSED CONSTRUCTION IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

LL) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE INCLUDING THE FOLLOWING AREAS OF CONCERN:

A. LANE CLOSURE RESTRICTIONS.

B. DETOURS OFFSITE AND ONSITE.

C. AREAS OF CONSTRICTED HORIZONTAL CLEARANCES (NARROW LANES OR LANES BORDERED ALONG THE OUTSIDE WITH EITHER PCB OR GUARDRAIL).

MM) CHANGEABLE MESSAGE SIGN WORD MESSAGES AND LOCATIONS SHOWN IN THE PLANS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTING. ADDITIONAL MESSAGES MAY BE NECESSARY FOR ADVANCE PUBLIC INFORMATION AS REQUIRED BY THE ENGINEER.

NN) COORDINATE ALL WORK WITH PROPERTY AND BUSINESS OWNERS AS DIRECTED BY THE ENGINEER.

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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L WATSON

PROJECT NOTES
GENERAL NOTES

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

CADD FILE

6/14/2010
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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-2B

TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	TOTAL QUANTITY	UNIT	PAY ITEM QUANTITY
	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE 4 (4")	**531**	**LF**	
CB	YELLOW EDGELINE			425
CC	10 FT. WHITE SKIP			106
	PAINT PAVEMENT MARKING LINES, (4")	**130,825**	**LF**	
PA	WHITE EDGELINE			73,290
PB	YELLOW EDGELINE			37,060
PC	10 FT. WHITE SKIP			17,608
PD	2 FT. WHITE MINISKIP			1,547
PE	WHITE SOLID LANE LINE			1,320
	PAINT PAVEMENT MARKING LINES, (8")	**9,720**	**LF**	
PR	WHITE GORELINE			9,720
	PAINT PAVEMENT MARKING LINES, (24")	**372**	**LF**	
P4	WHITE STOPBAR			372
	PAINT PAVEMENT MARKING SYMBOLS	**56**	**EA**	
QA	LEFT TURN ARROW			12
QB	RIGHT TURN ARROW			4
QC	STRAIGHT ARROW			36
QE	COMBINATION STRAIGHT/RIGHT ARROW			4
	PAINT PAVEMENT MARKING CHARACTERS	**16**	**EA**	
QI	ALPHANUMERIC CHARACTERS			16
	TEMPORARY RAISED PAVEMENT MARKERS	**75**	**EA**	
MI	CRYSTAL & RED			75

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APPROVED Betsy L. Watson DATE 6/25/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TEMPORARY PAVEMENT MARKING SCHEDULE

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH

REVISIONS	
CADD FILE	

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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-3

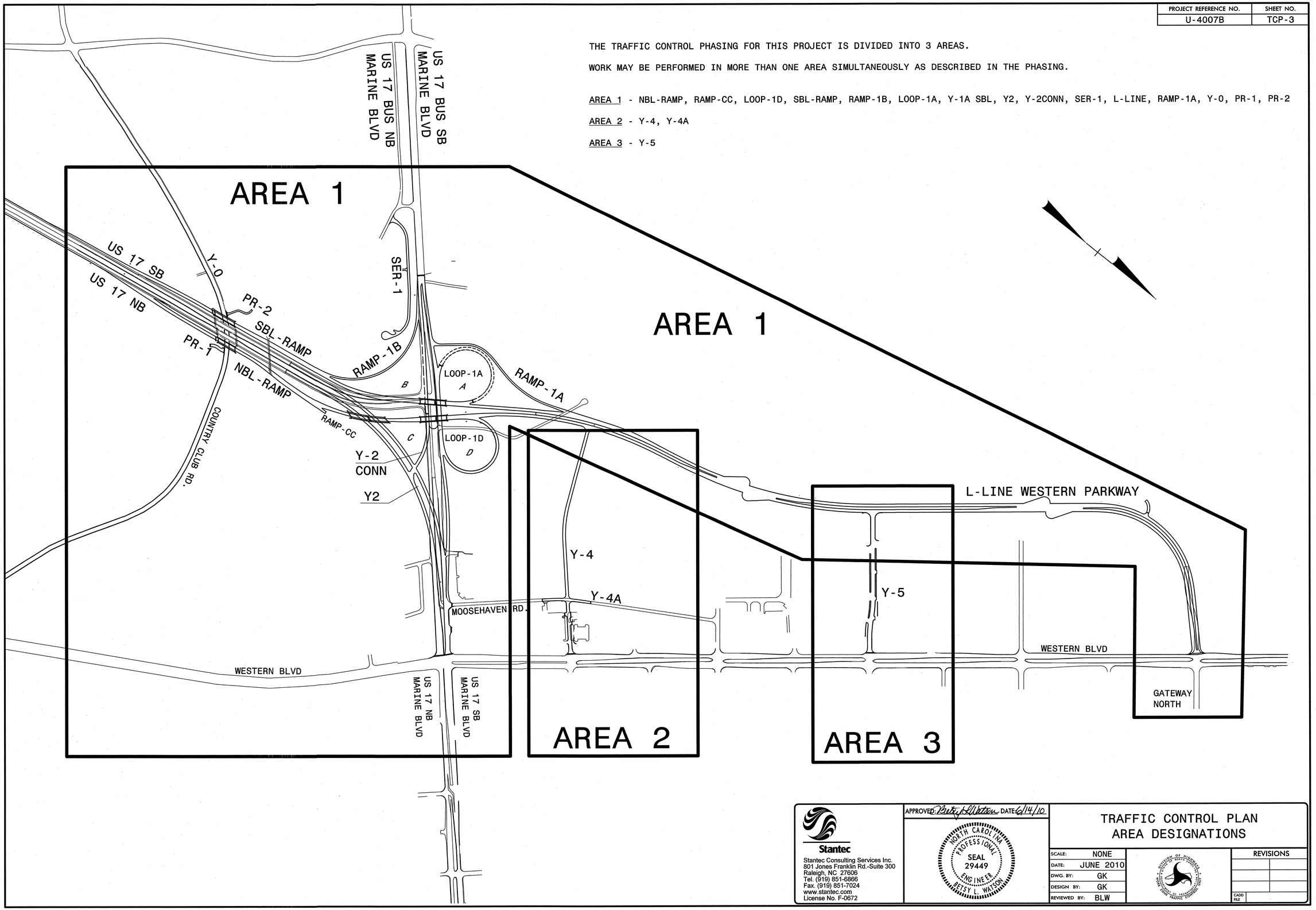
THE TRAFFIC CONTROL PHASING FOR THIS PROJECT IS DIVIDED INTO 3 AREAS.

WORK MAY BE PERFORMED IN MORE THAN ONE AREA SIMULTANEOUSLY AS DESCRIBED IN THE PHASING.

AREA 1 - NBL-RAMP, RAMP-CC, LOOP-1D, SBL-RAMP, RAMP-1B, LOOP-1A, Y-1A SBL, Y2, Y-2CONN, SER-1, L-LINE, RAMP-1A, Y-0, PR-1, PR-2

AREA 2 - Y-4, Y-4A

AREA 3 - Y-5



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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TRAFFIC CONTROL PLAN
AREA DESIGNATIONS

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
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gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-3A

NOTES:

FOR THE WORK IN ALL PHASES REQUIRING LANE CLOSURES USE THE FOLLOWING:

-FOR LANE CLOSURES ON US 17/US 17 BUS REFER TO STD. 1101.02, SHEET 3 OF 9. SHEETS TCP-14, 14A MAY BE USED WHEN LANE CLOSURE SHIFTS ARE USED.

-FOR LANE CLOSURES ON COUNTRY CLUB RD. REFER TO STD. 1101.02, SHEET 1 OF 9.

-DURING LANE CLOSURES WHERE ROLLING ROAD BLOCKS ARE REQUIRED, OR FOR OPERATIONS WHERE TRAFFIC IS TO BE STOPPED SUCH AS FOR OVERHEAD SIGN AND SIGNAL WORK OR OVERHEAD BRIDGE GIRDER ERECTION, REFER TO ROADWAY STANDARD DRAWING 1101.03, SHEET 9 OF 9.

AREA 1
PHASE I

REFER TO SHEETS TCP 4-4G

PRIOR TO ANY CONSTRUCTION OPERATIONS, INSTALL WORK ZONE ADVANCE WARNING SIGNS [TCP-15].

STEP 1:

BEGIN THE FOLLOWING WORK IN PREPARATION FOR CONSTRUCTION OPERATIONS:

-INSTALL PCB ON EXISTING SHOULDERS OF US 17 SB FROM 49+00 Y-2 AND US 17 NB FROM 48+00 Y-2 TO NEAR THE US 17 INTERSECTION, AS DIRECTED BY THE ENGINEER. [TCP-4B, 4C, 4D, 4F]

-INSTALL PCB ON THE EXISTING SHOULDERS OF COUNTRY CLUB RD. [Y-0] IN PREPARATION FOR THE NBL-RAMP/SBL-RAMP BRIDGE WORK. [TCP-4C]

-CLOSE HAWKSIDE RD. USING TYPE III BARRICADES. [TCP-4F]

-CLOSE DRIVEWAYS TO FORMER CAR DEALERSHIP MICHAEL J. PADGETT PARCEL USING TYPE III BARRICADES. [TCP-4F]

-CLOSE DRIVEWAY ENTRANCE TO CAPE FEAR MEDICAL CENTER USING TYPE III BARRICADES & BEGIN PARKING LOT CURB WORK. [TCP-4G]

-REVISE WHITE EDGELINE PAVEMENT MARKING TO NARROW THE EXISTING US 17 SB OUTSIDE LANE TO A 10′ LANE WIDTH FROM 49+33 - 77+05 Y-1A SBL. AND INSTALL PCB ON THE OUTSIDE SHOULDER OF US 17 SB FROM Y-1A SBL 53+00-75+65.[TCP-4E, 4F, 4G]

-CLOSE THE EXISTING DRIVEWAY AT HOME DEPOT USING TYPE III BARRICADES AND REMOVE THE EXISTING DRIVEWAY PAVEMENT.[TCP-4G]

-MODIFY EXISTING SIGNAL AT THE INTERSECTION OF US 17 AND US 17 BUS [TCP-4F]. REFER TO SIGNAL PLAN FOR TEMPORARY SIGNAL.

-CLOSE THE EXISTING ROADWAY AT INTERSECTION OF L-LINE [GATEWAY NORTH] AND WESTERN BLVD. USING TYPE III BARRICADES AND ROAD CLOSED SIGNS. [TCP-4A].

STEP 2:

-CONSTRUCT RAMP-1B TYING IN TO THE EDGE & ELEVATION OF EXISTING PAVEMENT AT US 17 BUS NB AND MAINTAIN CLOSED. [TCP-4D, 4E]

-CONSTRUCT SERVICE RD. [SER-1] AT MIRACLE DR. FROM 10+10 TO 22+35 THRU THE FINAL SURFACE COURSE AND OPEN TO TRAFFIC.[TCP-4E]

-CONSTRUCT BARREL CULVERT EXTENSIONS AT NBL AND SBL RAMPS.[TCP-4C]

-BEHIND PCB CONSTRUCT Y-2 SBL 50+00-62+00 AND SBL-RAMP 10+00-33+10. BEGIN SBL-RAMP FROM 43+03-50+81.[TCP-4, 4B, 4C, 4D, 4F]

-BEHIND PCB CONSTRUCT SBL-RAMP BRIDGE OVER COUNTRY CLUB RD. USE STD. 1101.03, SHEET 8 OF 9 WHEN ERECTING BRIDGE GIRDERS OVER COUNTRY CLUB RD. [TCP-4C]

-CONSTRUCT SBL-RAMP AND NBL-RAMP NORTH SIDE END BENTS AND SLOPE PROTECTION FOR BRIDGE OVER US 17 MARINE BLVD. [TCP-4F].

-CONSTRUCT DRIVEWAYS PR-1 AND PR-2 AT COUNTRY CLUB RD. [TCP-4C]

-BEHIND PCB BEGIN NBL-RAMP FROM 10+00-40+54 AND FROM 42+89-50+54 INCLUDING Y-2 [RT] 50+00-63+28 AND RAMP-CC 10+00-12+71.[TCP-4, 4B, 4C, 4D, 4F]. PROVIDE TEMPORARY DRAINAGE FOR PIPE UNDER FILL EMBANKMENT BETWEEN NBL-RAMP AND US 17 NB [TCP-4F]

-BEGIN NBL-RAMP SOUTH SIDE END BENT FOR BRIDGE OVER US 17 MARINE BLVD.[TCP-4F] [SLOPE PROTECTION IN PHASE II]

-CONSTRUCT NBL-RAMP BRIDGE OVER Y-2 AT LEAST THRU THE ERECTION OF GIRDERS [TCP-4D].

-BEHIND PCB BEGIN NBL-RAMP BRIDGE OVER COUNTRY CLUB RD. USE STD. 1101.03, SHEET 8 OF 9 WHEN ERECTING BRIDGE GIRDERS OVER COUNTRY CLUB RD. COMPLETE THE EARTHWORK FILL PORTION OF NBL-RAMP FROM 23+50-34+07 BRINGING AT LEAST TO SUBGRADE ELEVATION AND COMPLETE THE PROPOSED EMBANKMENT SLOPES.[TCP-4C, 4D]

-INSTALL TEMPORARY GROUND MOUNTED GUIDE SIGNS TO REPLACE EXISTING OVERHEAD SIGN STRUCTURE ON US 17, THEN REMOVE EXISTING OVERHEAD SIGN STRUCTURE ACROSS US 17 LOCATED NEAR Y-2 CONN 12+00. [USE RIGHT AND LEFT LANE CLOSURES PER STD. 1101.02, SHEET 3 OF 9 AND TRAFFIC STOPPAGES PER STD. 1101.03, SHEET 9 OF 9] [TCP-4F] -SEE SIGNING PLANS.

-BEGIN L-LINE 10+00 - 76+58 [END PROJECT].[TCP-4, 4A]

-BEGIN RAMP-1A.[TCP-4, 4E]

STEP 2 CONTINUED:

-CONSTRUCT Y-2 CONN. 10+00-15+34 TYING IN TO THE EDGE & ELEVATION OF EXISTING PAVEMENT AT US 17 NB AND MAINTAIN CLOSED.[TCP-4F]

-CONSTRUCT PROPOSED TRAFFIC SIGNAL AT Y-2/Y-2 CONN INTERSECTION, AND COVER. [TCP-4F]

-CONSTRUCT TEMPORARY SIGNAL AT US 17(MARINE BLVD.) AND MOOSEHAVEN RD. AND COVER. [TCP-4G]

-BEHIND PCB CONSTRUCT Y-2 NBL/SBL RIGHT & LEFT SIDES 88+00-98+00 FROM US 17 NB AND TIE IN TO THE EDGE & ELEVATION OF EXISTING PAVEMENT AT US 17 NB [MARINE]. CONSTRUCT TO COMPLETION THE PROPOSED RETAINING WALL AND PROPOSED CONCRETE BARRIER ALONG THE RIGHT SIDE OF Y-2 NBL.[TCP-4D, 4F]

-BEHIND PCB REMOVE EXISTING SHOULDER BERM GUTTER ALONG Y-2 NBL AND Y-2 SBL AND REVISE GUARDRAIL.[TCP-4C, 4D]

-BEHIND PCB CONSTRUCT Y-1A SBL FROM 49+33-77+30 CONSTRUCTING UP TO THE EDGE & ELEVATION OF EXISTING PAVEMENT OF US 17 SB. [TCP-4E, 4F, 4G]

-REMOVE EXISTING CONCRETE ISLANDS IN THE MEDIAN OF US 17 (MARINE BLVD.) STA.106+15-107+35 Y-2 AND REPAIR PAVEMENT.[TCP-4G]

-BEGIN LOOP-1D.[TCP-4F]

-BEGIN LOOP-1A.[TCP-4E, 4F]

-BEGIN OVERHEAD SIGN CONSTRUCTION AND RELATED GUARDRAIL. MAINTAIN SIGNS COVERED UNTIL THEY ARE REQUIRED TO BE PLACED IN OPERATION.

OVERHEAD SIGN OVER US 17 BUS (MARINE BLVD.) AT 51+00 Y-1ASBL IS REQUIRED TO BE COMPLETED IN THIS PHASE AND READY FOR THE OPENING OF RAMP-1B IN PHASE II-STEP 1.[TCP-4E]

OVERHEAD SIGN OVER US 17 SB (MARINE BLVD.) AT 105+00 Y-2 IS REQUIRED TO BE COMPLETED IN THIS PHASE AND READY FOR WHEN Y-2 SBL IS OPENED IN PHASE II-STEP 6. USE PCB ALONG THE MEDIAN OF US 17 DURING CONSTRUCTION OF THIS SIGN SINCE PROPOSED GUARDRAIL INTERFERES WITH THE EXISTING TRAFFIC. [TCP-4G]

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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TRAFFIC CONTROL PLAN PHASING
AREA 1-PHASE I

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

CADD FILE

6/14/2010
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gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-3B

AREA 1
PHASE II

REFER TO SHEETS TCP 5-5D, 6-6A, 7-7B, 8-8E, 9-9C, 10-10B

STEP 1: OPEN RAMP-1B AND SBL-RAMP AS FOLLOWS: [TCP-5, 5A-5D]

1A) -COMPLETE PROPOSED SIGNING FOR RAMP-1B AND MAINTAIN COVERED.
-USING A RIGHT LANE CLOSURE REMOVE PCB FROM EXISTING SHOULDER OF US 17 SB FROM Y-2 60+00-85+00 AND REPLACE WITH DRUMS.
-PLACE TEMPORARY PAVEMENT MARKINGS ON SBL-RAMP AND RAMP-1B.

1B) IN A CONTINUOUS OPERATION REMOVE BARRICADES AND DRUMS THEN UNCOVER PROPOSED SIGNS AND OPEN RAMP-1B/SBL-RAMP TO TRAFFIC FROM US 17 BUS NB TO US 17 SB. [TCP 5A-5D]

STEP 2: SHIFT US 17 BUS NB ONTO Y-2 CONN & Y-2(RT) NBL AS FOLLOWS: [TCP-6, 6A]

COMPLETE STEPS 2A-2B IN A CONTINUOUS OPERATION.

2A) USING RIGHT & LEFT LANE CLOSURES US 17 BUS NB (MARINE BLVD.) CONSTRUCT Y-2 CONN 10+00-15+34 AND Y-2(RT) NBL 98+00-105+00 TIE-IN TO US 17 NB (MARINE BLVD.). PLACE TEMPORARY PAVEMENT MARKINGS AND UNCOVER AND ACTIVATE PROPOSED TRAFFIC SIGNAL AT Y2/Y-2 CONN.

2B) REMOVE LANE CLOSURE DEVICES AND OPEN US 17 BUS NB (MARINE BLVD.) TO TWO LANES OPERATING ON Y-2 CONN AND Y-2(RT) NBL. LANES ARE SHIFTED 4' ONTO Y-2 CONN OUTSIDE SHOULDER DURING THIS STEP IN PREPARATION FOR MEDIAN WORK IN STEPS 4 AND 6.

2C) BEGIN Y-2(LT) SBL US 17 SB 97+00-103+00.

STEP 3: SHIFT US 17 NB ONTO Y-2(RT) NBL AS FOLLOWS: [TCP-7, 7A-7B]

3A) USING A RIGHT LANE CLOSURE ON US 17 NB REMOVE PCB FROM EXISTING SHOULDER Y-2 NBL 80+00 TO INTERSECTION WITH MARINE BLVD. AND REPLACE WITH DRUMS AND BARRICADES MAINTAINING Y-2 CLOSED.

INSTALL US 17 NB TO US 17 BUS SB DETOUR SIGNS & COVER [TCP-7B].

COMPLETE STEPS 3B-3C IN A CONTINUOUS OPERATION.

3B) USING A LEFT AND RIGHT LANE CLOSURES ON US 17 NB, PAVE Y-2(RT) NBL 81+00-88+00 TYING IN TO US 17 NB AND DIRECT TRAFFIC ONTO Y-2 (RT) NBL CONTINUING TO US 17 NB (MARINE BLVD.)

PLACE TEMPORARY PAVEMENT MARKINGS ON Y-2(RT) NBL & REVISE PROPOSED TRAFFIC SIGNAL AT Y-2 CONN.[TCP 7A-7B]

SIMULTANEOUSLY UNCOVER DETOUR SIGNS FOR US 17 NB TO US 17 SB WHICH WILL BE UTILIZING THE LEFT TURN/U-TURN BAY AT MOOSEHAVEN DR.[TCP-7B]

CLOSE EXISTING SECTION OF US 17 NB BETWEEN Y-2 AND US 17(MARINE BLVD.) USING TYPE III BARRICADES.[TCP-7A]

INSTALL (RESET) PCB ON THE NBL MEDIAN SHOULDER FROM Y-2 81+00-90+00. [TCP-7A]

3C) REMOVE LANE CLOSURE AND OPEN US 17 NB TRAFFIC TO TWO LANES OPERATING ON Y-2(RT) NBL.[TCP 7A-7B]

INTERMEDIATE CONTRACT TIME SPECIAL PROVISION

COMPLETE THE WORK REQUIRED OF PHASE II-STEPS 4 THRU 5 WITHIN A PERIOD OF 45 CALENDAR DAYS.

STEP 4: SHIFT US 17 SB & US 17 BUS SB ONTO Y-1A SBL AS FOLLOWS: [TCP-8, 8A-8E]

IN PREPARATION FOR THE TRAFFIC SHIFT BEGIN PLACING PCB ON Y-1A SBL THAT CAN BE PLACED AWAY FROM EXISTING TRAFFIC [TCP 8A-8C].

ENSURE US 17 SB DETOUR SIGNS ARE INSTALLED BY STATE FORCES AND COVERED.[TCP-8E]

COMPLETE STEPS 4A-4C IN A CONTINUOUS OPERATION

4A) USING RIGHT AND LEFT LANE CLOSURES ON US 17 SB CONSTRUCT Y-1A SBL 49+33-54+00 AND 73+00-79+00 TYING IN TO EXISTING US 17 SB. ENSURE US 17 SB DETOUR SIGNS ARE UNCOVERED AND SIMULTANEOUSLY IMPLEMENT US 17 SB DETOUR.[TCP-8E]

4B) REMOVE TRAFFIC CONTROL DEVICES AND OPEN Y-1A SBL TO US 17 SB AND US 17 BUS SB TRAFFIC [TCP 8A-8C].

4C) CLOSE EXISTING US 17 NB/SB AT THE INTERSECTION WITH US 17 BUS (MARINE BLVD.)[TCP-8B].

TRAFFIC IS NOW OPERATING AS FOLLOWS:
-US 17 BUS SB IS ON Y-1A SBL.
-US 17 BUS NB IS ON Y-2 CONN AND Y-2(RT) NBL.
-US 17 BUS NB TO US 17 SB IS ON RAMP 1-B/SBL-RAMP.
-US 17 NB IS ON Y-2(RT) NBL.
-US 17 NB TO US 17 BUS SB IS ON Y-2(RT) NBL & U-TURNS ONTO Y-1A SBL AT THE MOOSEHAVEN INTERSECTION.

-PREVIOUS DUAL LEFT TURN MOVE FROM US 17 SB (MARINE BLVD.) TO US 17 SB IS NOW DETOURED OFFSITE VIA Y-1A SBL TO US 17 BUS SB, LEFT ONTO CHANEY AVE., LEFT ONTO JOHNSON BLVD.TO LEJEUNE BLVD., RIGHT ONTO MONTFORD LANDING RD. AND BACK TO US 17 SB. [TCP-8E]

4D) WITH US 17 SB TRAFFIC OPERATING ON Y-1A SBL PERFORM THE FOLLOWING:

-COMPLETE CONSTRUCTION OF Y-2(LT) SBL 81+00-89+00 & 97+00-107+00.[TCP 8A-8C]

-MAY BEGIN MEDIAN PIERS FOR NBL/SBL-RAMP BRIDGES OVER US 17.[TCP-8B]
-MAY BEGIN MEDIAN AREA Y-1A SBL 50+00-71+00.[TCP 8A-8C]
-MAY BEGIN SBL-RAMP 33+10-40+71.50.[TCP-8B, 8D]

STEP 5: OPEN Y-2(LT) SBL TO TRAFFIC AS FOLLOWS:[TCP-9, 9A-9C]

IN PREPARATION FOR THE TRAFFIC SHIFT IN STEPS 5A-5B, BEGIN PLACEMENT OF PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES ON Y-2(LT) SBL LEFT SIDE-US 17 SB THAT CAN BE PLACED AWAY FROM TRAFFIC. INSTALL PCB ON OUTSIDE SHOULDER OF Y-2 (LT) SBL FROM 84+50-93+50. [TCP 9A-9C]

COMPLETE STEPS 5A-5B IN A CONTINUOUS OPERATION

5A) USING A LEFT LANE CLOSURE ON US 17 SB/Y-1A SBL REMOVE CONFLICTING MARKING AND PLACE PAVEMENT MARKINGS TYING Y-2(LT) SBL INTO EXISTING US 17 SB (MARINE BLVD.) [TCP 9B-9C]

5B) REMOVE TRAFFIC CONTROL DEVICES AND OPEN US 17 SB LANES OPERATING ON Y-2(LT) SBL AND Y-1A SBL. [TCP 9A-9C]

COVER AND/OR REMOVE THE US 17 SB OFFSITE DETOUR SIGNS THAT WERE INSTALLED EARLIER AS SHOWN ON SHEET TCP-8E.

STEP 6: SHIFT US 17 BUS NB LANES TOWARDS THE OUTSIDE AS FOLLOWS: [TCP-10, 10A-10B]

6A) USING A RIGHT LANE CLOSURE ON US 17 BUS NB REMOVE EXISTING PAVEMENT MARKINGS AND PLACE TEMPORARY WHITE EDGELINE MARKING SHIFTING THE RIGHT LANE 4' TO THE OUTSIDE. BEGIN OBLITERATION OF EXISTING OUTSIDE PAVEMENT ON US 17 NBL (MARINE BLVD.). INSTALL PCB ALONG THE RIGHT SIDE IN THE AREA OF THE BRIDGE END BENTS.

COMPLETE STEP 6B IN A CONTINUOUS OPERATION

6B) USING A LEFT LANE CLOSURE ON US 17 BUS NB REMOVE CONFLICTING EXISTING WHITE SKIP PAVEMENT MARKINGS. PLACE REMAINDER OF SHIFTED SKIP AND YELLOW EDGELINE TEMPORARY PAVEMENT MARKINGS.

6C) USING A LEFT LANE CLOSURE ON US 17 BUS NB INSTALL PCB ALONG THE MEDIAN LEFT SIDE OF US 17 BUS NB AND Y-2 CONN [TCP-10A, 10B].

6D) BEGIN REMAINDER OF BRIDGE CONSTRUCTION FOR SBL-RAMP AND NBL-RAMP BRIDGES OVER US 17.

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APPROVED: Betsy L Watson DATE: 6/28/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TRAFFIC CONTROL PLAN PHASING
AREA 1 - PHASE II

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

CADD FILE

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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-3C

AREA 1
PHASE III

REFER TO SHEETS TCP-11, 11A-11B

STEP 1:

-COMPLETE NBL-RAMP 10+00-50+54 Y-2 (RT) NBL 62+00-63+28 & RAMP-CC 10+00-12+71.

-COMPLETE PROPOSED SIGNING AND SIGNALS NECESSARY IN PREPARATION FOR OPENING NBL-RAMP AND NORTHBOUND L-LINE TO TRAFFIC IN THE NEXT STEP. COVER ANY PROPOSED SIGNS AND SIGNALS UNTIL THEY ARE NEEDED, AS DIRECTED BY THE ENGINEER.

-COMPLETE NBL-RAMP BRIDGE OVER Y-2.

-COMPLETE NBL-RAMP BRIDGE OVER US 17.

-COMPLETE LOOP-1D.

-COMPLETE L-LINE NORTHBOUND DIRECTION.

-BEGIN PLACEMENT OF PAINT PAVEMENT MARKINGS AWAY FROM TRAFFIC ON NBL-RAMP, LOOP-1D AND NB L-LINE IN PREPARATION FOR OPENING IN NEXT STEP. PLACE PAINT PAVEMENT MARKINGS IN THE SAME PATTERN AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN.

STEP 2: OPEN NBL-RAMP, LOOP-1D AND NORTHBOUND L-LINE TO TRAFFIC AS FOLLOWS: (TCP 11-11A)

COMPLETE STEPS 2A-2C IN A CONTINUOUS OPERATION.

2A) USING A RIGHT LANE CLOSURE ON US 17 NB REMOVE REMAINDER OF PCB FROM THE SHOULDER OF US 17 NB FROM 60+00-80+00 Y-2. UNCOVER PROPOSED OVERHEAD SIGN FOR NBL-RAMP TRAFFIC. IMPLEMENT TEMPORARY SIGNAL AT WESTERN BLVD. AT INTERSECTION WITH L-LINE. COMPLETE PLACEMENT OF PAVEMENT MARKINGS ON NBL-RAMP, LOOP-1D AND L-LINE NORTHBOUND. MAINTAIN L-LINE SOUTHBOUND CLOSED USING DRUMS AND BARRICADES.

2B) REMOVE DRUMS, BARRICADES, AND LANE CLOSURE AND OPEN NBL-RAMP, LOOP-1D, AND NORTHBOUND L-LINE TO TRAFFIC.

2C) USING DRUMS AND BARRICADES CLOSE US 17 LEFT TURN/U-TURN BAY AT MOOSEHAVEN RD. AND COVER AND/OR REMOVE US 17 BUS SOUTH DETOUR SIGNS. (REFER TO SHEET TCP-11B)

STEP 3:

BEGIN REMOVAL OF EXISTING LEFT TURN LANE AND BEGIN MEDIAN WORK ON US 17 (MARINE BLVD.) FROM Y-2 102+50 - 111+30. (TCP-11B)

NOTE: UPON COMPLETION OF Y-4 (AREA 2) AND Y-5 (AREA 3) REMOVE BARRICADES AND OPEN ACCESS TO L-LINE NORTHBOUND, AS DIRECTED BY THE ENGINEER.

STEP 4:

-COMPLETE SBL-RAMP.

-COMPLETE SBL-RAMP BRIDGE OVER Y-2.

-COMPLETE SBL-RAMP BRIDGE OVER US 17.

-COMPLETE L-LINE SOUTHBOUND DIRECTION.

-COMPLETE RAMP-1A.

-COMPLETE LOOP-1A.

-COMPLETE PROPOSED SIGNING AND SIGNALS NECESSARY IN PREPARATION FOR OPENING SBL-RAMP, RAMP-1A, AND SOUTHBOUND L-LINE TO TRAFFIC IN THE NEXT STEP. COVER ANY PROPOSED SIGNS AND SIGNALS UNTIL THEY ARE NEEDED, AS DIRECTED BY THE ENGINEER.

-INSTALL PAINT PAVEMENT MARKINGS ON SBL-RAMP, RAMP-1A AND SOUTHBOUND L-LINE IN PREPARATION FOR OPENING IN NEXT STEP. PLACE PAINT PAVEMENT MARKINGS IN THE SAME PATTERN AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN.

STEP 5: OPEN SOUTHBOUND L-LINE, SBL-RAMP AND RAMP-1A TO TRAFFIC AS FOLLOWS:

-UNCOVER ALL PROPOSED SIGNING, IMPLEMENT FINAL SIGNAL AT WESTERN BLVD. AT INTERSECTION WITH L-LINE, REMOVE DRUMS AND BARRICADES AT SOUTHBOUND L-LINE AT WESTERN BLVD. AND OPEN SOUTHBOUND L-LINE, SBL-RAMP, RAMP-1B TO TRAFFIC.

STEP 6:

-UPON COMPLETION OF ALL OTHER CONSTRUCTION OPERATIONS AS DIRECTED BY THE ENGINEER PAVE THE FINAL LAYER OF SURFACE COURSE ON THE PROJECT AND INSTALL FINAL PAVEMENT MARKINGS AND MARKERS.

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APPROVED Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TRAFFIC CONTROL PLAN PHASING
AREA 1 - PHASE III

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

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gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-3D

FOR ALL WORK IN AREAS 2 AND 3 THAT LANE CLOSURES ARE REQUIRED USE FLAGGER OPERATION LANE CLOSURES IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9 MODIFIED AS NEEDED AND AS APPROVED BY THE ENGINEER DUE TO SPACE REQUIREMENTS.

AREA 2 (Y-4/Y-4A) REFER TO SHEETS TCP 12-12E

DO NOT CLOSE LANES AT THE STATE EMPLOYEES CREDIT UNION DRIVEWAY DURING THE CREDIT UNION BUSINESS HOURS 8:30 A.M.-5:30 P.M. MONDAY THROUGH FRIDAY.

PHASE I

BEGIN CONSTRUCTION OF Y-4 10+35-25+00 / 25+50-26+30 AND MAINTAIN CLOSED.[TCP-12]

UNLESS OTHERWISE DIRECTED BY THE ENGINEER COMPLETE AREA 1-PHASE III WHERE L-LINE (WESTERN PARKWAY) IS OPEN TO TRAFFIC BEFORE PROCEEDING TO AREA 2-PHASE II.

PHASE II

INTERMEDIATE CONTRACT TIME SPECIAL PROVISION

COMPLETE THE WORK REQUIRED OF AREA 2-PHASE II-STEPS 1 THRU 3 WITHIN A PERIOD OF SEVEN (7) CONSECUTIVE CALENDAR DAYS.

STEP 1:
CLOSE EXISTING MOOSEHAVEN RD. AT Y-4A 12+75 AND 16+00 [TCP-12A]

STEP 2:
CONSTRUCT Y-4A 12+25-16+43 AND Y-4 10+35-26+00 UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER [TCP-12A].

STEP 3:
PLACE TEMPORARY PAINT MARKINGS ON Y-4/Y-4A, INSTALL PROPOSED AND TEMPORARY STOP SIGNS, THEN REMOVE ROAD CLOSURE AND OPEN MOOSEHAVEN RD. Y-4A AND Y-4 TO L-LINE [TCP-12B]. RETAIN SECTION OF Y-4 FROM 25+50-26+30 CLOSED.

PHASE III

INTERMEDIATE CONTRACT TIME SPECIAL PROVISION

COMPLETE THE WORK REQUIRED OF AREA 2-PHASE III-STEPS 1 THRU 3 WITHIN A PERIOD OF TWENTY ONE (21) CONSECUTIVE CALENDAR DAYS.

STEP 1:
CLOSE SECTION OF Y-4 BETWEEN MOOSEHAVEN RD. & WESTERN BLVD. [TCP-12C]

STEP 2:
CONSTRUCT Y-4 26+00-30+00 [TCP-12C].

UNDERCUT EXISTING PAVEMENT, CONSTRUCT DRAINAGE, PLACE FILL MATERIAL, CONSTRUCT Y-4 PAVEMENT UP TO BUT NOT INCLUDING FINAL SURFACE LAYER AND INCLUDE CONSTRUCTION OF CURB & GUTTER AND MONOLITHIC ISLAND.

CREDIT UNION TELLER TRAFFIC IS TO BE MAINTAINED AT Y-4 (SEE NOTE SHEET TCP-12C).

STEP 3:
COMPLETE ALL FINAL PAVING ON Y-4/Y-4A.

REMOVE TEMPORARY STOP/STOP AHEAD SIGNS AND BARRICADES, PLACE FINAL PAVEMENT MARKINGS ON Y-4/Y-4A AND OPEN TO THE FINAL PATTERN.

AREA 3 (Y-5) REFER TO SHEETS TCP 13-13A

PHASE I

BEGIN CONSTRUCTION OF Y-5 10+35-12+50 AWAY FROM TRAFFIC AND MAINTAIN CLOSED[TCP-13].

UNLESS OTHERWISE DIRECTED BY THE ENGINEER COMPLETE AREA 1 PHASE III WHERE L-LINE (WESTERN PARKWAY) IS OPEN TO TRAFFIC BEFORE PROCEEDING TO AREA 3-PHASE II.

PHASE II

INTERMEDIATE CONTRACT TIME SPECIAL PROVISION

COMPLETE THE WORK REQUIRED OF AREA 3-PHASE II- STEPS 1 THROUGH 4 WITHIN A PERIOD OF FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.

STEP 1:
INSTALL TRAFFIC CONTROL DEVICES AND CONSTRUCT Y-5 10+35-17+50 THROUGH THE BASE COURSE.[TCP-13]

STEP 2:
REVISE TRAFFIC CONTROL DEVICES TO CLOSE Y-5 FROM 17+50-22+41 AND REDIRECT TRAFFIC TO PREVIOUSLY CONSTRUCTED SECTION WITH ACCESS TO WESTERN PKWY.[TCP-13A].

STEP 3:
CONSTRUCT REMAINDER OF Y-5 FROM 17+50-22+41 THROUGH THE BASE COURSE.

STEP 4:
REMOVE TRAFFIC CONTROL DEVICES AND OPEN Y-5 TO TRAFFIC OPERATING ON BASE COURSE.

STEP 5:
USING NIGHTLY FLAGGER OPERATIONS ON Y-5 COMPLETE REMAINING CONSTRUCTION AND FINAL PAVEMENT MARKINGS. PERFORM THIS WORK DURING HOURS THAT THE SHOPPING CENTER IS CLOSED, UNLESS OTHERWISE ALLOWED BY THE ENGINEER.

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APPROVED: Betsy L Watson DATE: 8/30/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TRAFFIC CONTROL PLAN PHASING AREA 2 & AREA 3

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

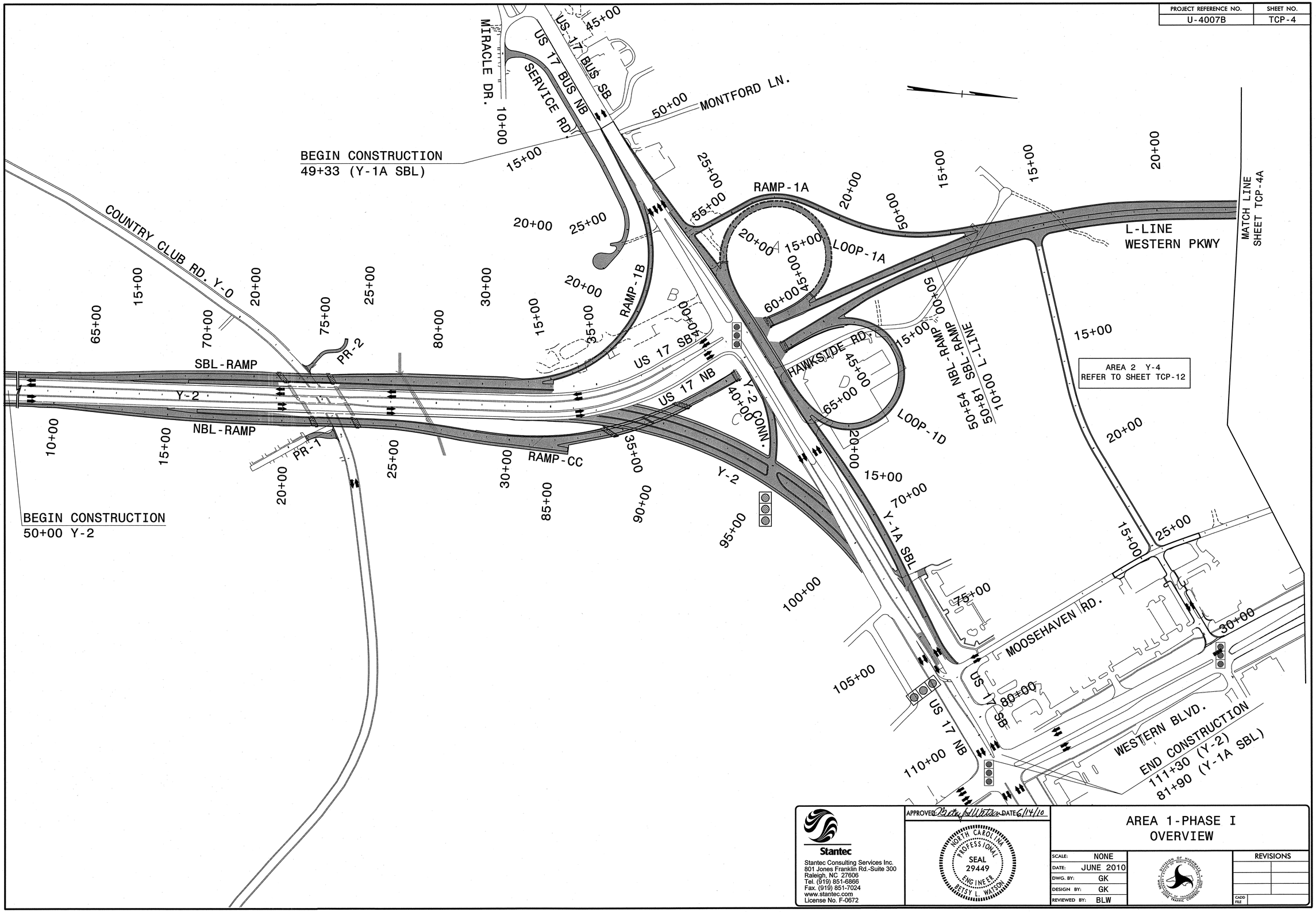
DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

8/23/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh03D.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4



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License No. F-0672

APPROVED: Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1-PHASE I OVERVIEW

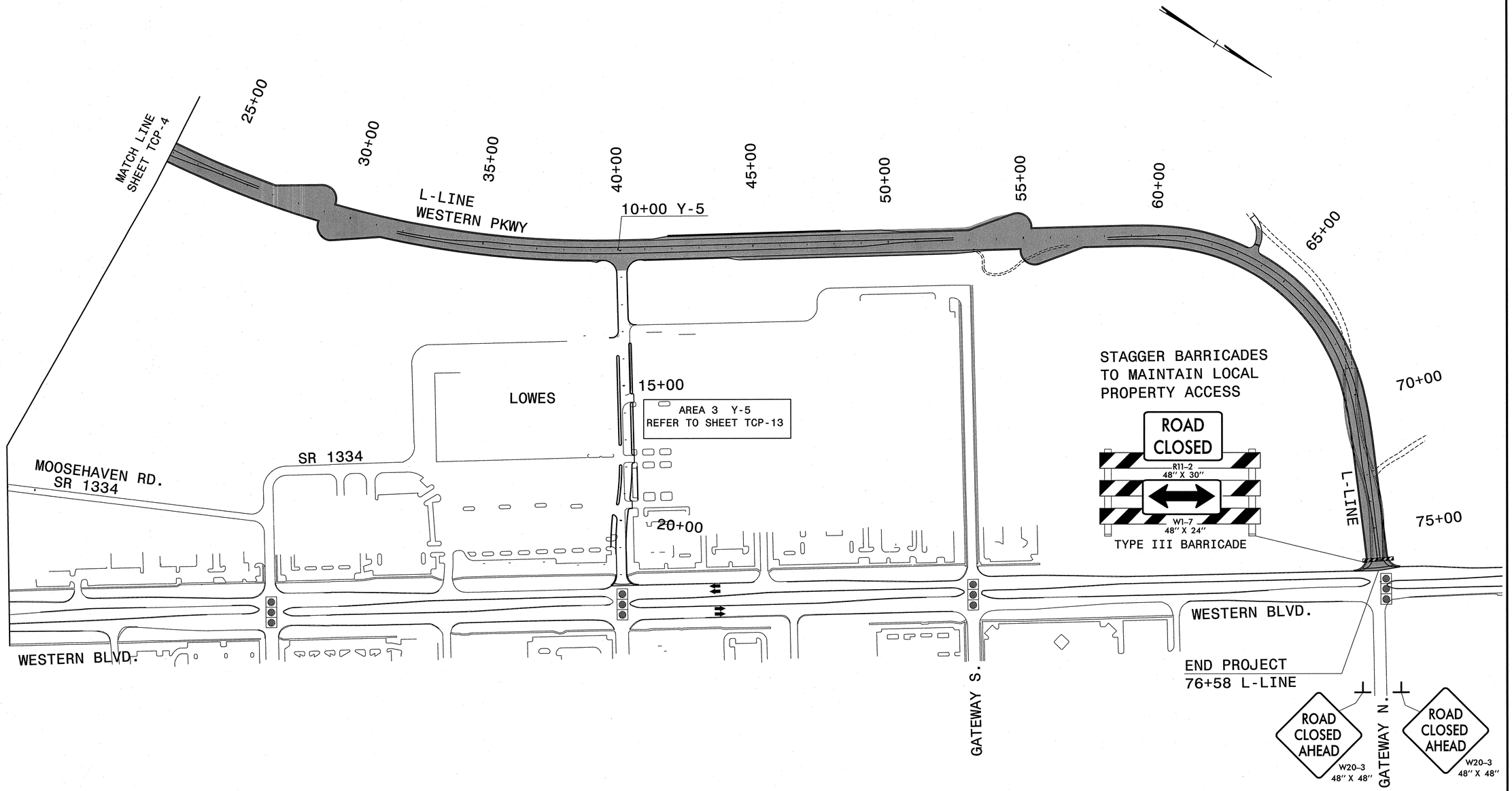
SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC ENGINEERING BRANCH

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4A



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APPROVED Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1-PHASE I OVERVIEW

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

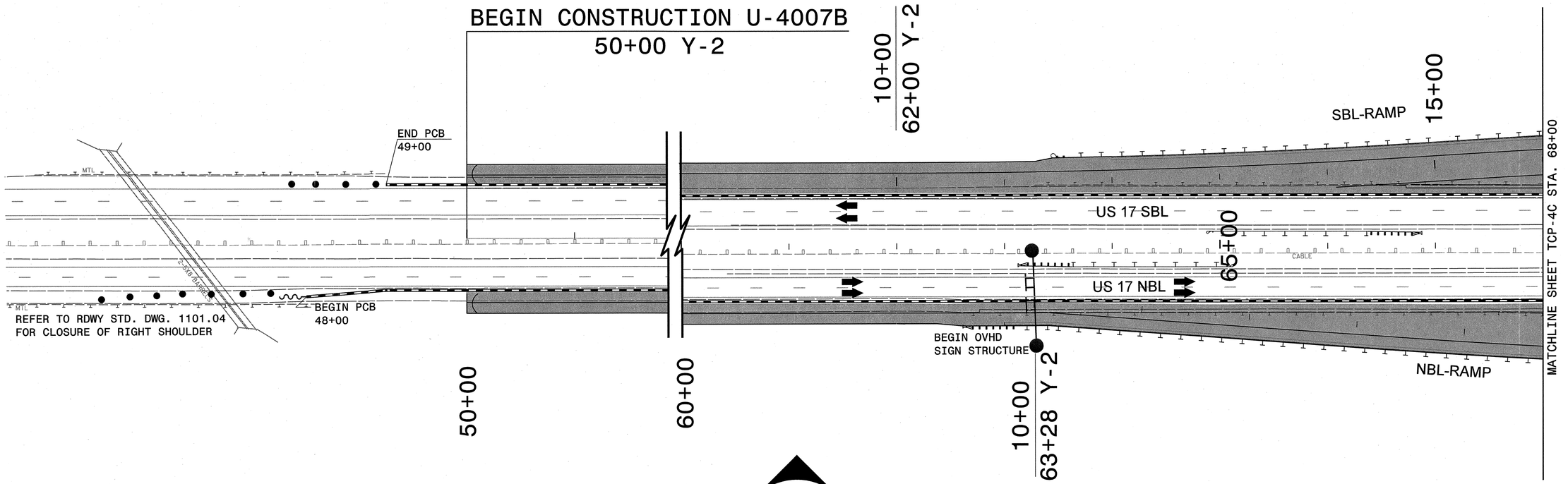
DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

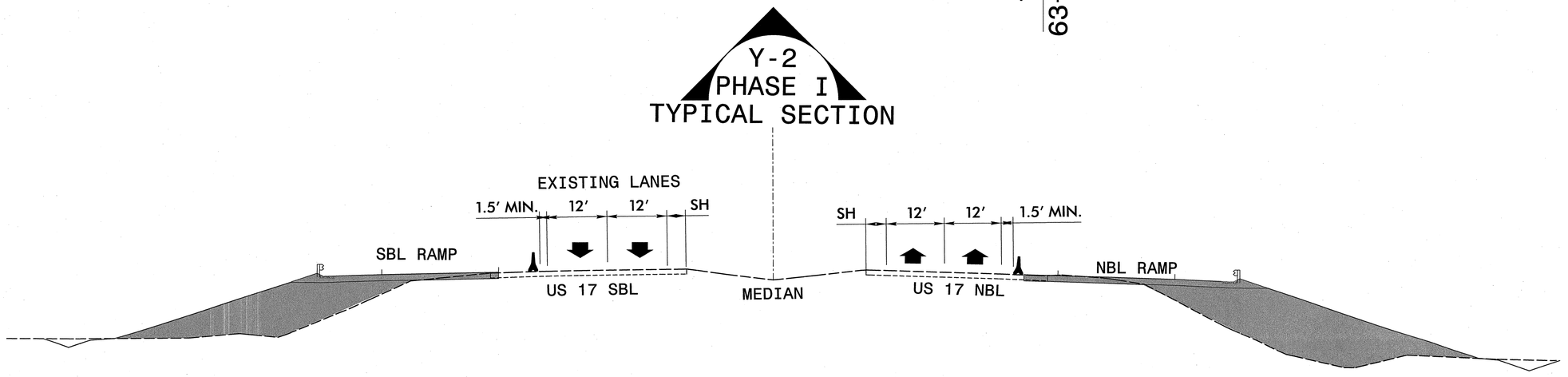
REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04A.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4B

NOTE:
COORDINATE ALL OPERATIONS WITH THE CONTRACTOR OF ADJACENT PROJECT U-4007A





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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE I

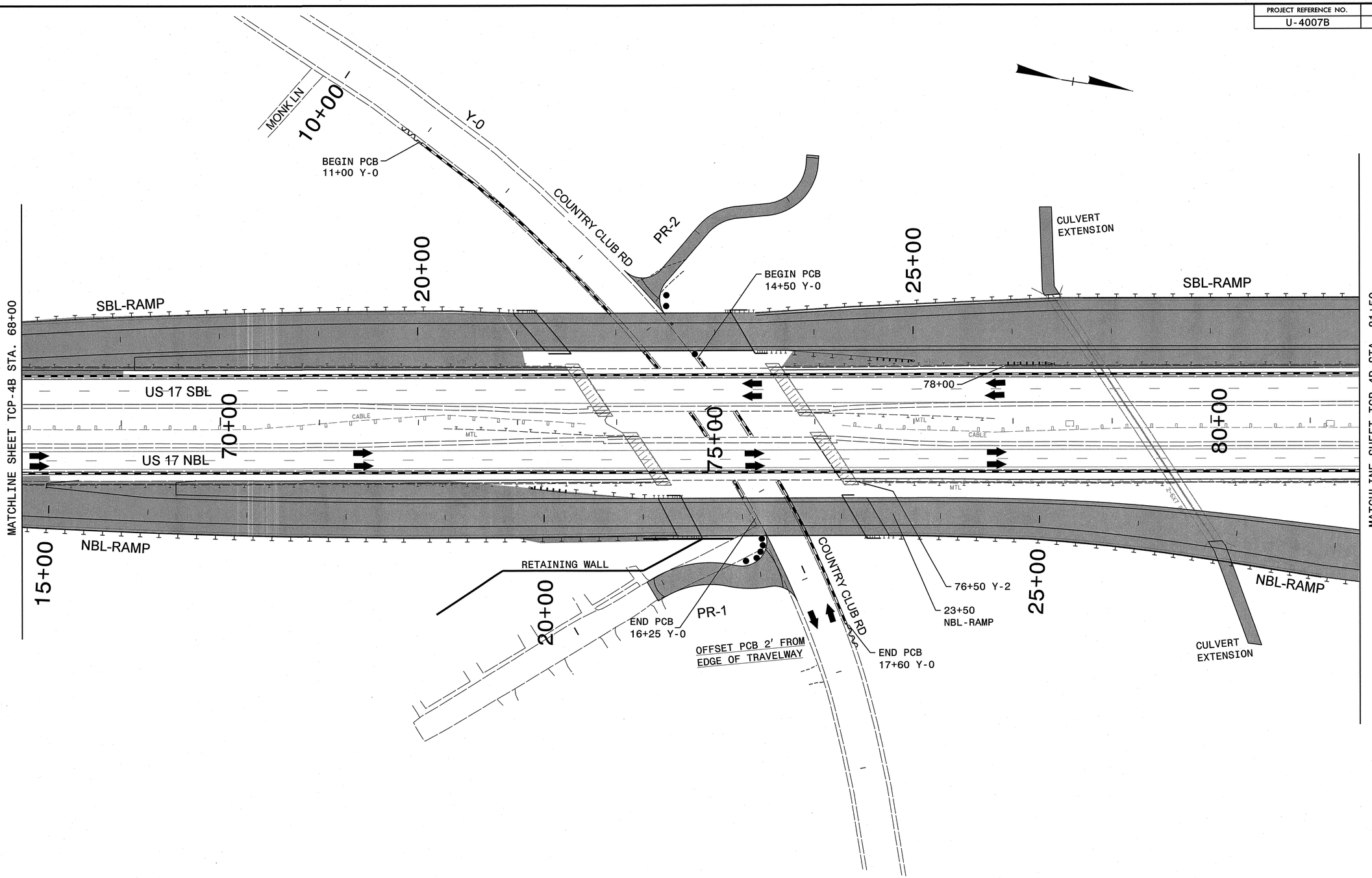
SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS · TRAFFIC ENGINEERING BRANCH · STATE TRAFFIC CONTROL UNIT

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04B.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4C



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APPROVED: Betsy L Watson DATE 6/14/16

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

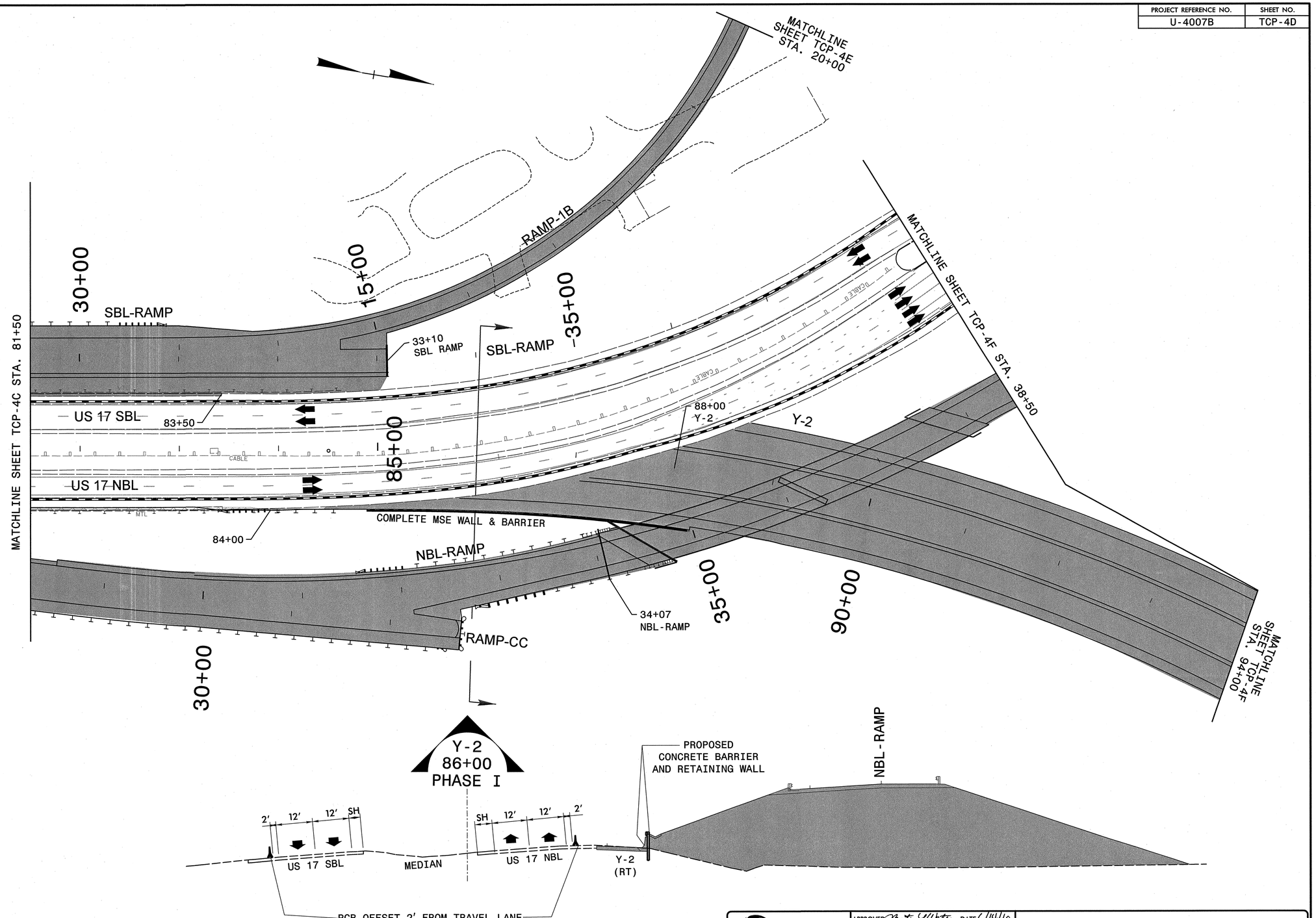
AREA 1
PHASE I

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04c.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4D



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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

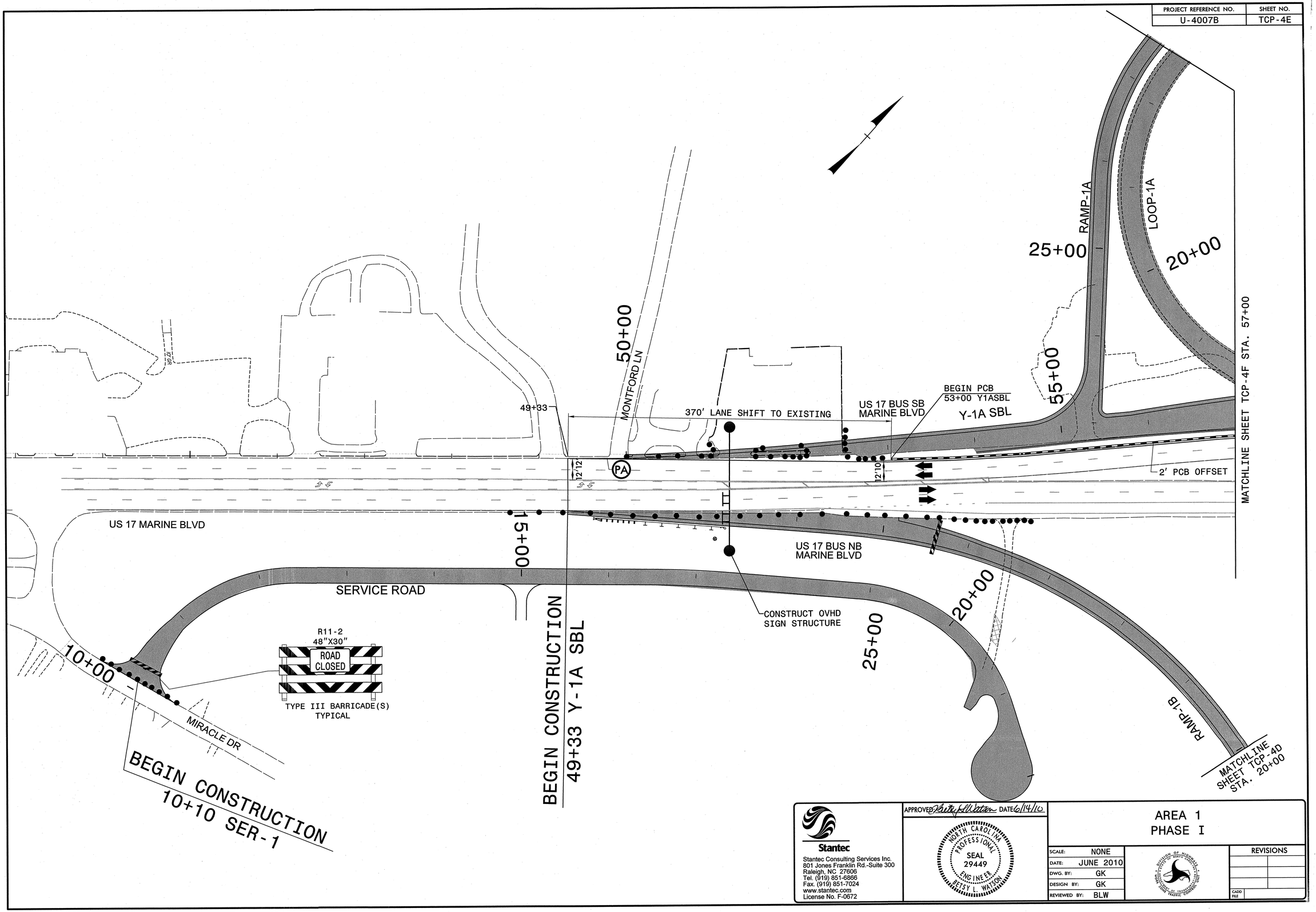
AREA 1
PHASE I

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04D.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4E



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APPROVED Betsy L Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE I

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04E.dgn
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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4F

MATCHLINE SHEET TCP-4E STA. 57+00

LOOP-1A

45+00

60+00

10+00

END BRIDGE
43+03 SBL-RAMP

END BRIDGE
42+89.50
NBL-RAMP

NBL/SBL RAMP
NORTH SIDE END BENTS
AND SLOPE PROTECTION

Y-1A SBL

45+00

LOOP-1D

10+00

HAWKSIDE RD

BEGIN OVHD
SIGN STRUCTURE

US 17 BUS SB
MARINE BLVD

65+00

MICHAEL J. PADGETT, et ux

20+00

M3-3
24" X 12"

M1-4

M5-1
21" X 15"

SOUTH

17

TEMP.

Y-1A SBL

PA

PA

PA

12'10"

TEMP.

CONC

END PCB
40+60

10+00
Y-2 CONN

US 17 BUS NB
MARINE BLVD

40+54
NBL-RAMP
SOUTH SIDE
END BENT

OVHD SIGN STRUCTURE

INSTALL TEMPORARY
GROUND MOUNTED
GUIDE SIGNS AND REMOVE
EXIST. OVHD. SIGN STRUCTURE.

Y-2

Y-2 CONN.

15+00

98+00
Y-2

MATCHLINE SHEET TCP-4G STA. 70+00

EXISTING
24" RCP

R11-2
48"X30"
ROAD
CLOSED

TYPE III BARRICADE(S)
TYPICAL

40+00

W7-3a
30"X24"
NEXT
12 MILE

W21-5aR
48" X 48"
RIGHT
SHOULDER
CLOSED

US 17 SBL

TEMP. DRAIN
TO EXIST.

TBN 17 SBL

10+00

40+00

PROPOSED
30" RCP-V

BEGIN PCB
39+00 SBL RAMP

MATCHLINE SHEET TCP-4D STA. 38+50

MATCHLINE
SHEET TCP-4D
STA. 94+00

15+34 Y-2 CONN

95+00

CONSTRUCT
SIGNAL

TYPICAL SECTION NBL-RAMP
APPROACH TO BRIDGE OVER Y-2

TEMP.
DIVERSION DITCH
DRAIN TO EXIST.

2:1 MIN.
TEMP. SLOPE

EXISTING
US 17 SBL

SBL-RAMP

EXISTING
US 17 NBL

PROPOSED PIPE
UNDER FILL

NBL-RAMP

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APPROVED: Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE I

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

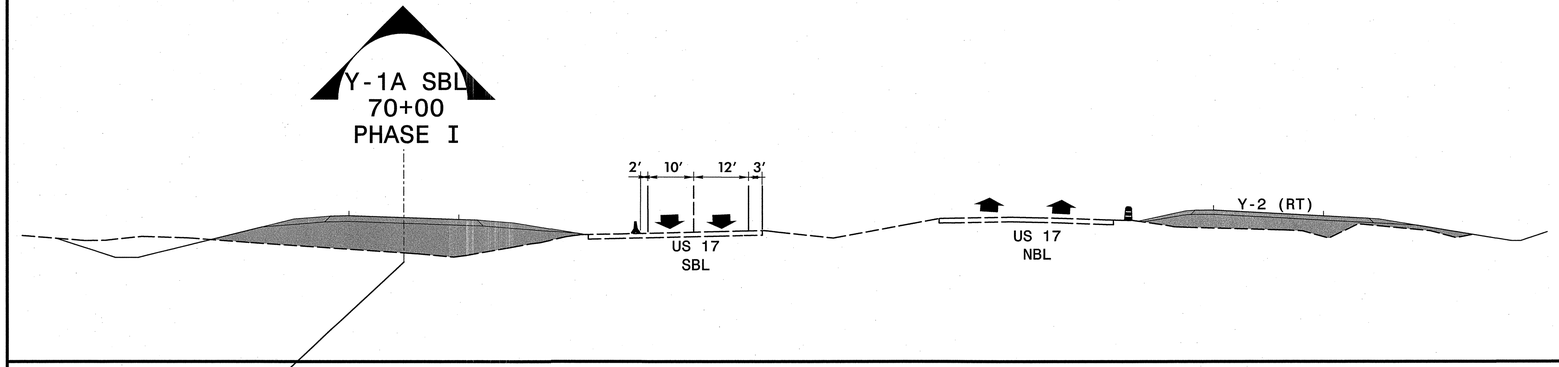
DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH

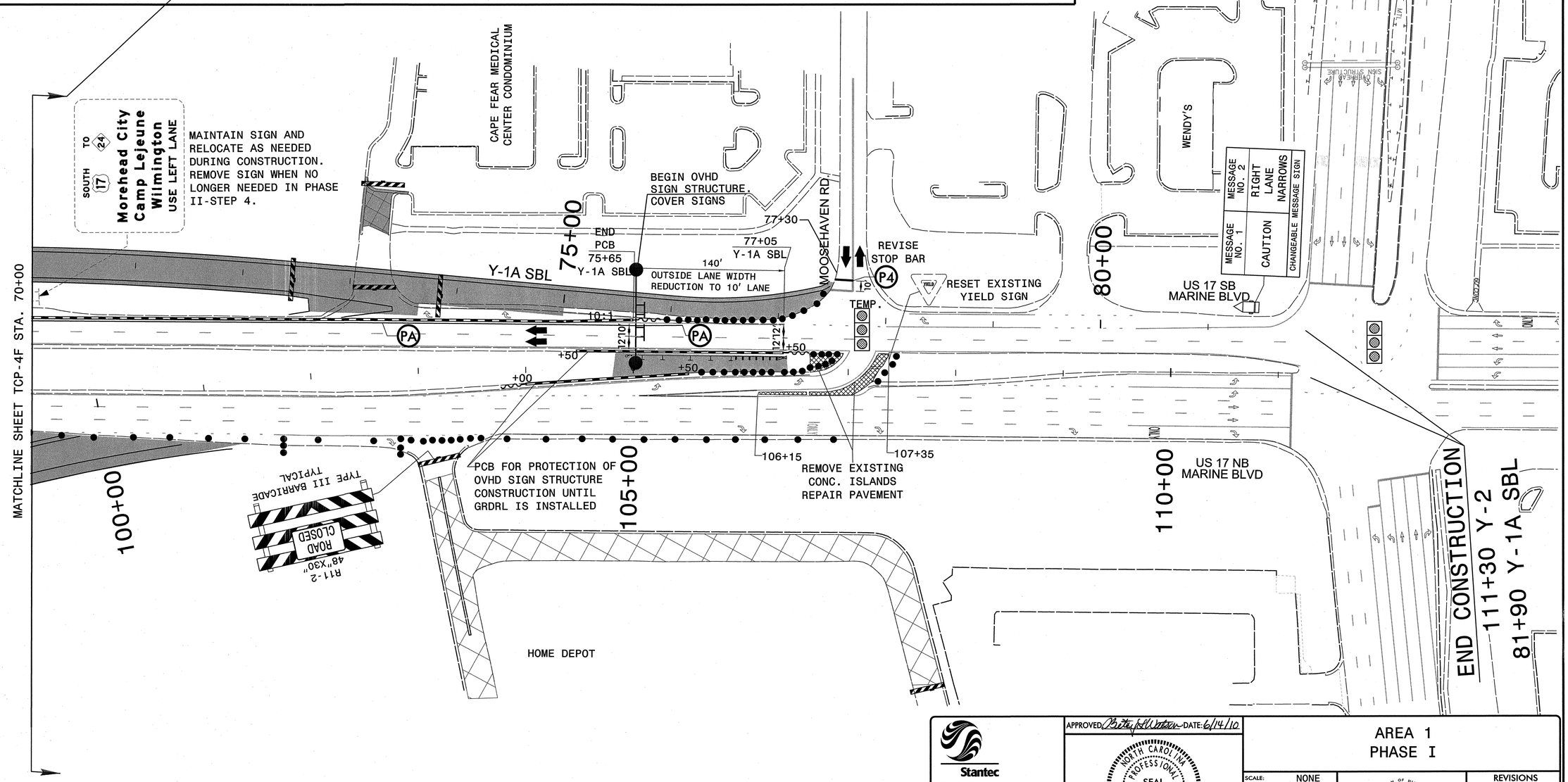
REVISIONS

CADD FILE

6/4/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04F.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-4G





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APPROVED: Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE I

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh04G.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-5

BEGIN CONSTRUCTION
49+33 (Y-1A SBL)

BEGIN CONSTRUCTION
50+00 Y-2

US 17 BUS NB
US 17 BUS SB
MONTFORD LN.
RAMP-1A
RAMP-1B
LOOP-1A
LOOP-1D
L-LINE WESTERN PKWY
SBL-RAMP
NBL-RAMP
Y-0
Y-1A SBL
Y-2
Y-2 CONN.
Y-4
Y-4A
PR-1
PR-2
RAMP-CC
US 17 SB
US 17 NB
COUNTRY CLUB RD
MOOSEHAVEN RD.
WESTERN BLVD.
STATE EMPLOYEES CREDIT UNION
50+54 NBL-RAMP
50+81 SBL-RAMP
10+00 L-LINE

AREA 2 Y-4
REFER TO SHEET TCP-12

END CONSTRUCTION
111+30 (Y-2)
81+90 (Y-1A SBL)

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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 1
OVERVIEW

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
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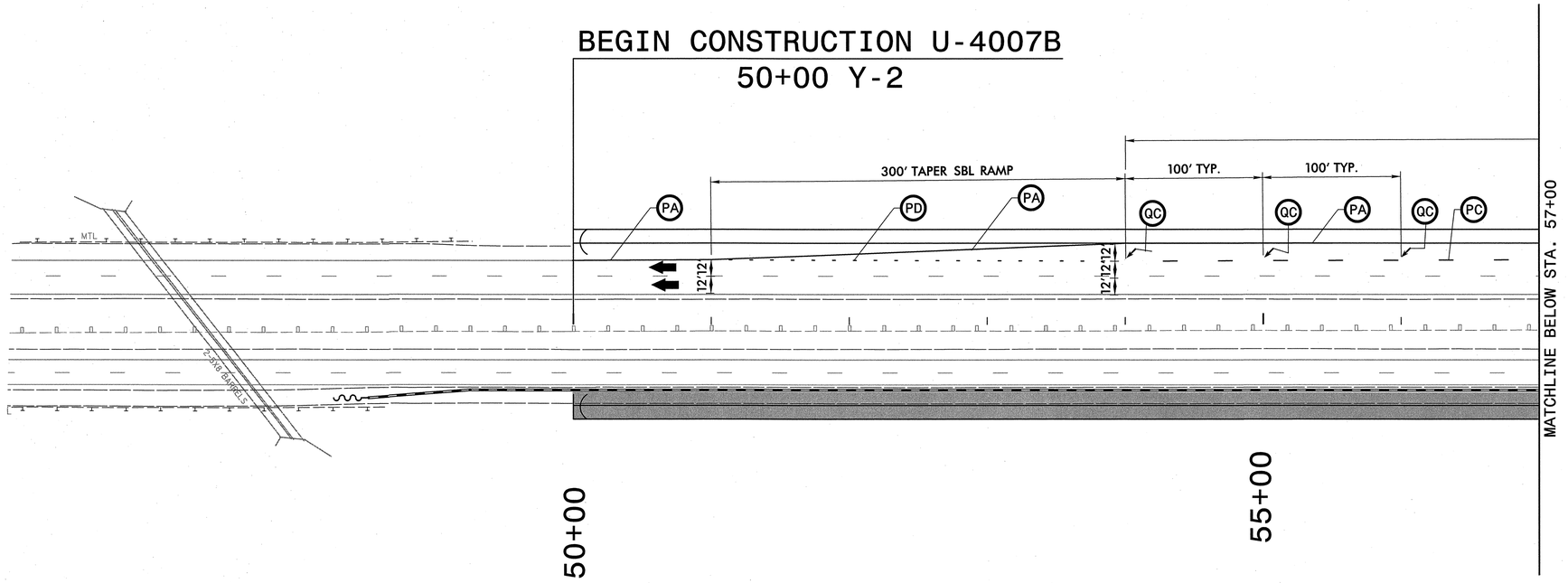
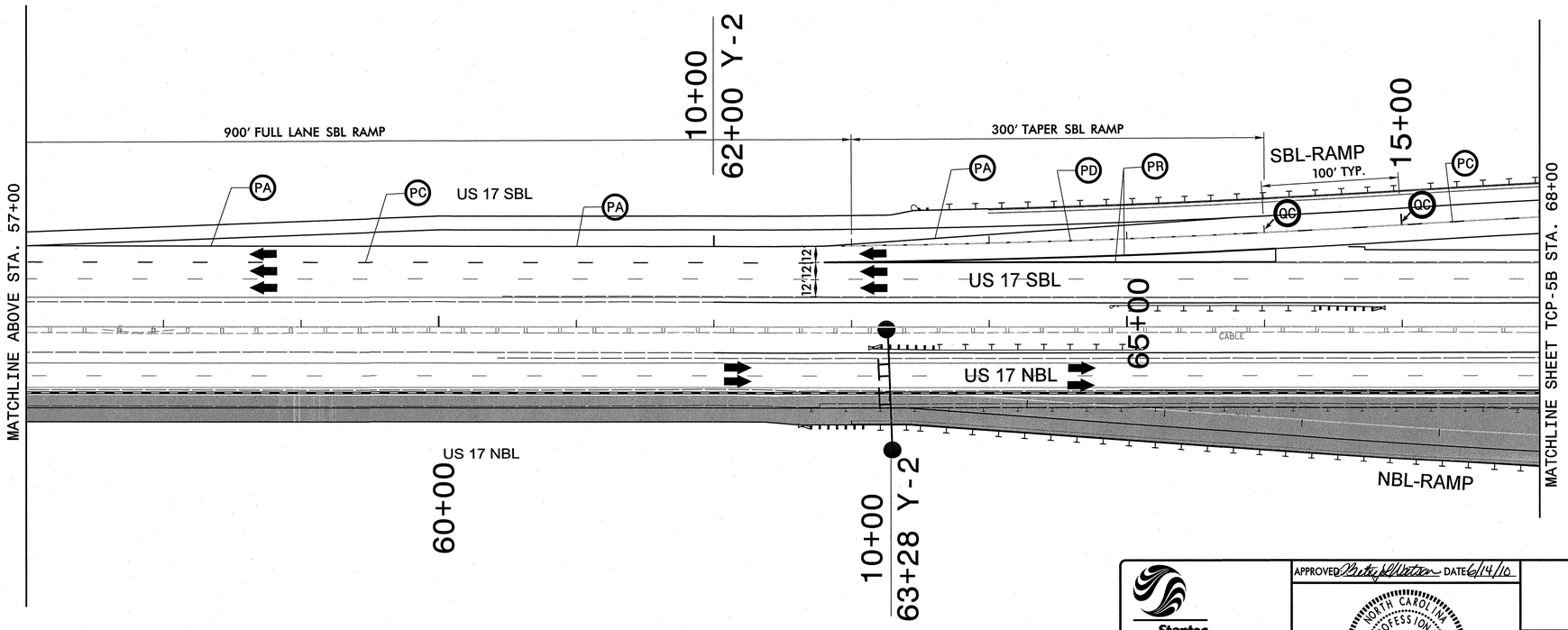
6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh05.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-5A





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APPROVED Betsy L. Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 1

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh05A.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
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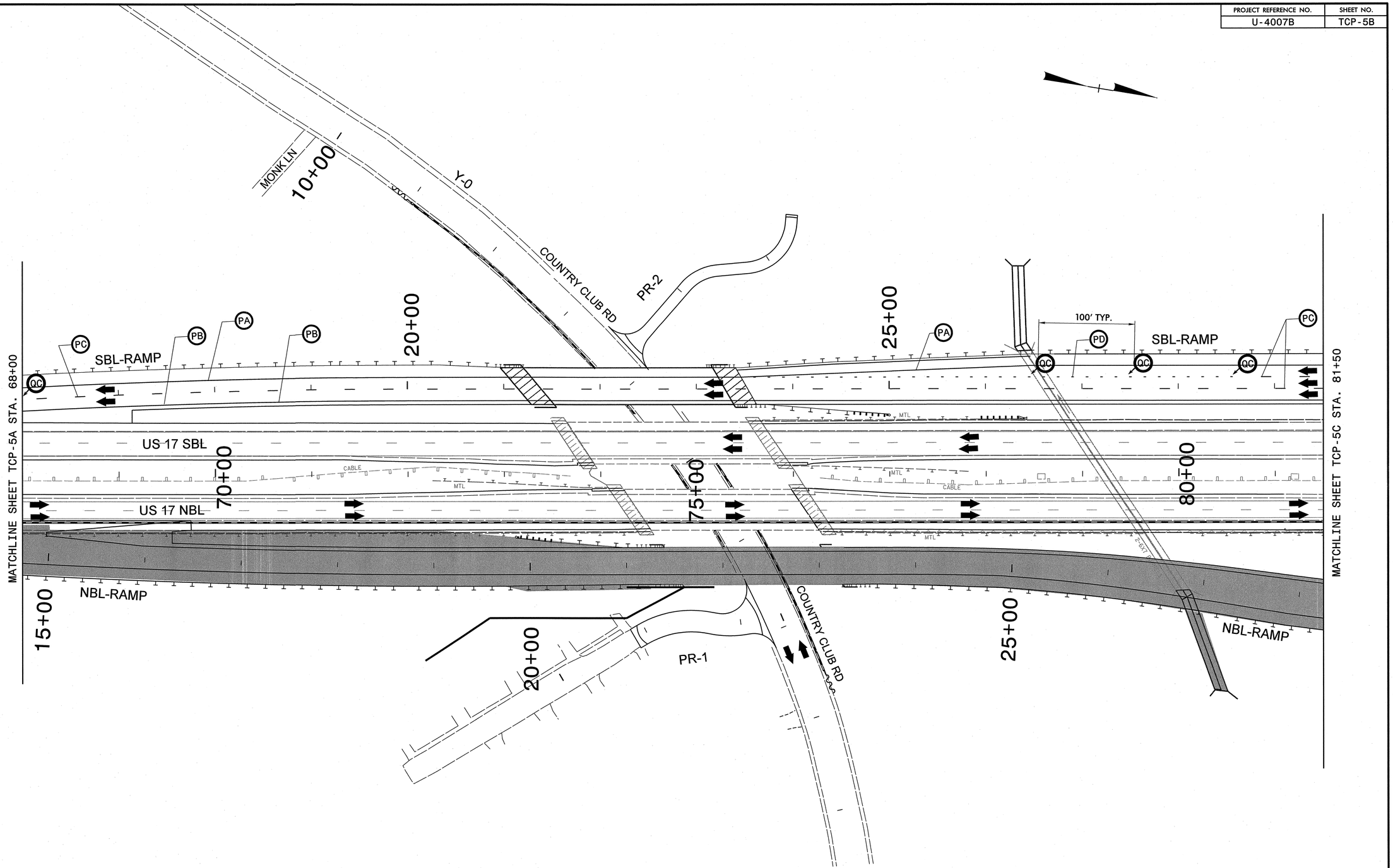

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APPROVED: Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

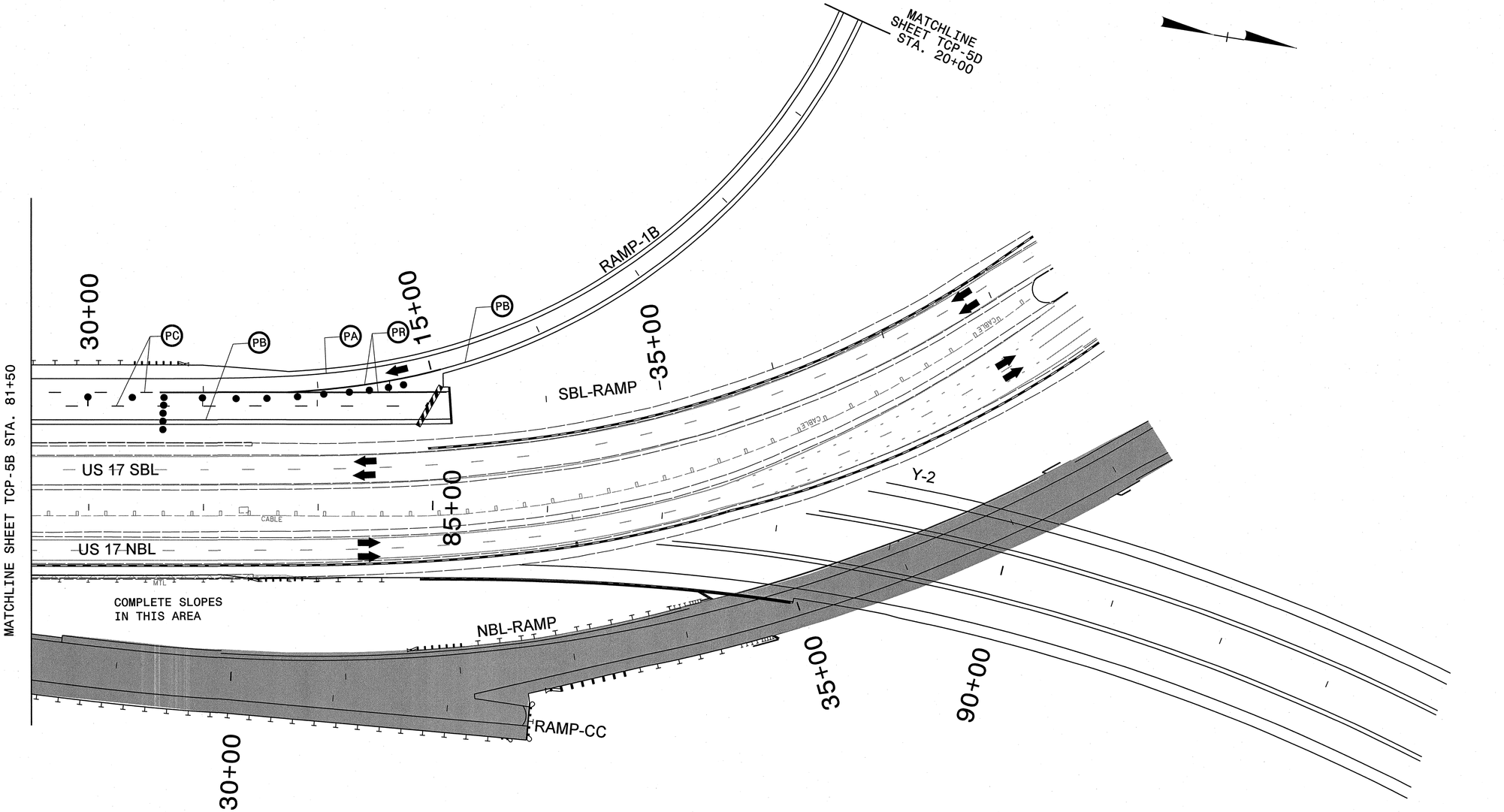
AREA 1
PHASE II-STEP 1

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
I:\ATTraffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh05B.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-5C



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APPROVED: Betsy L Watson DATE: 6/14/16

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

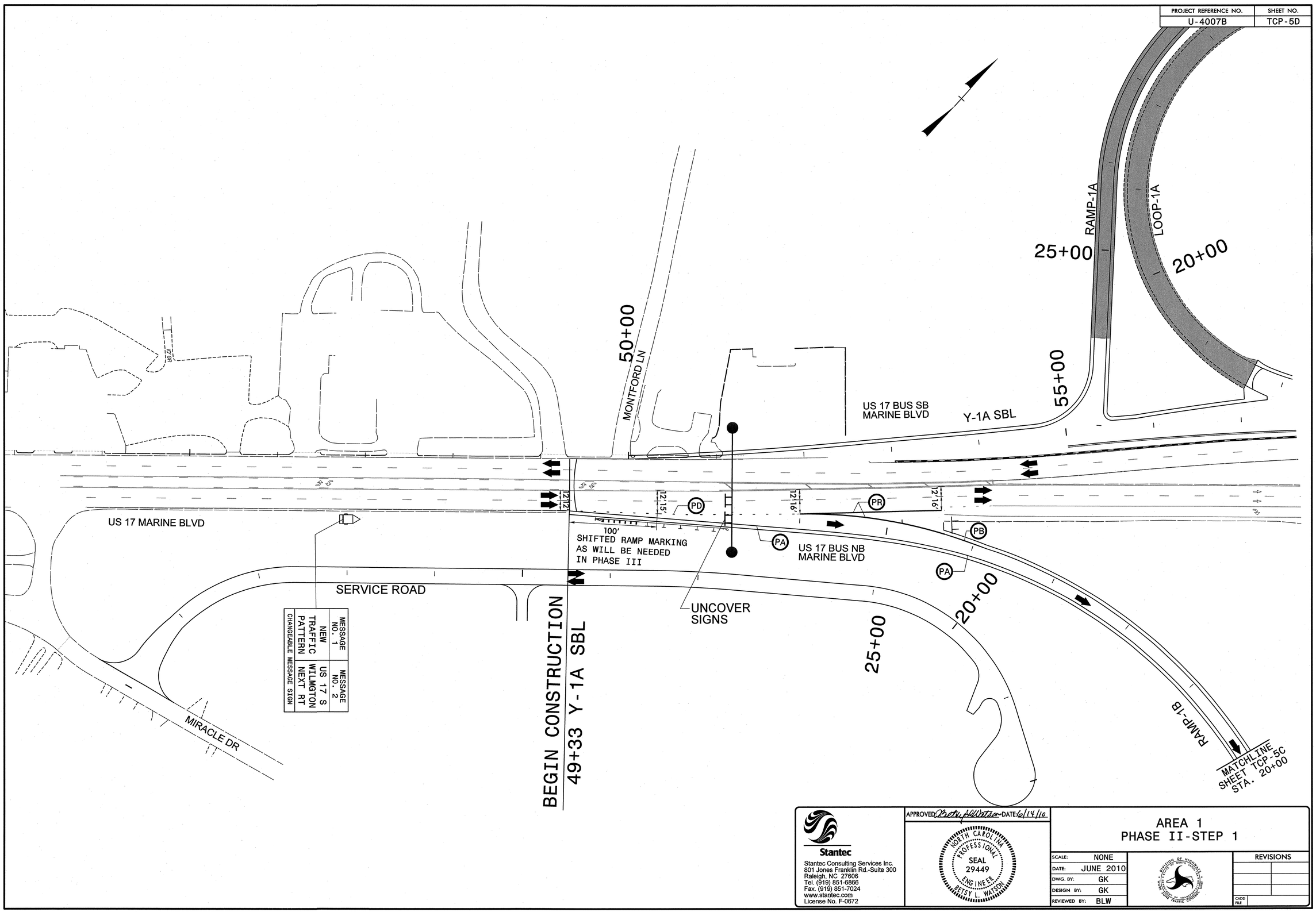
AREA 1
PHASE II-STEP 1

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh05C.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-5D



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APPROVED: Betsy Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 1

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
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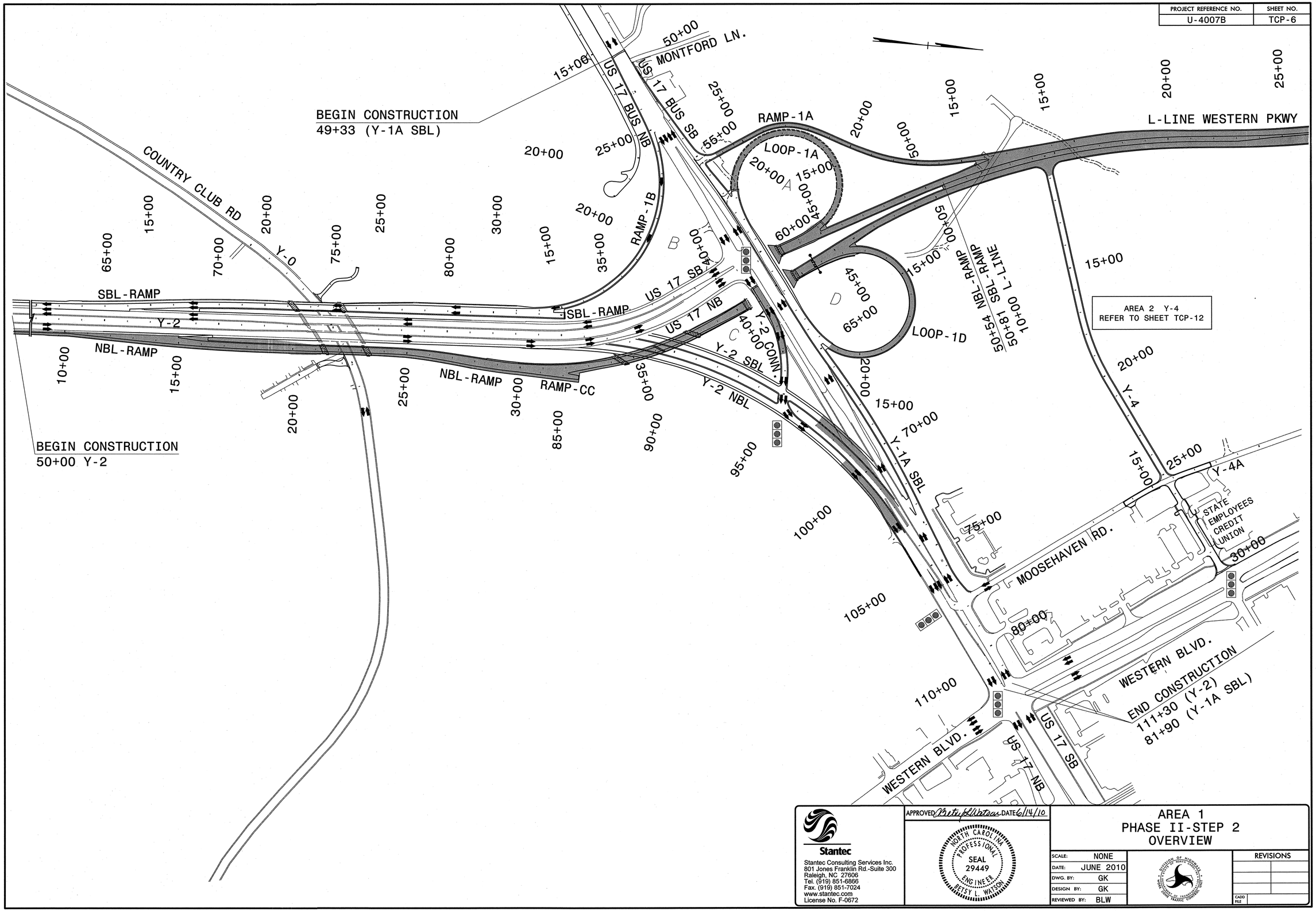
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-6



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APPROVED Betsy L. Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 2
OVERVIEW

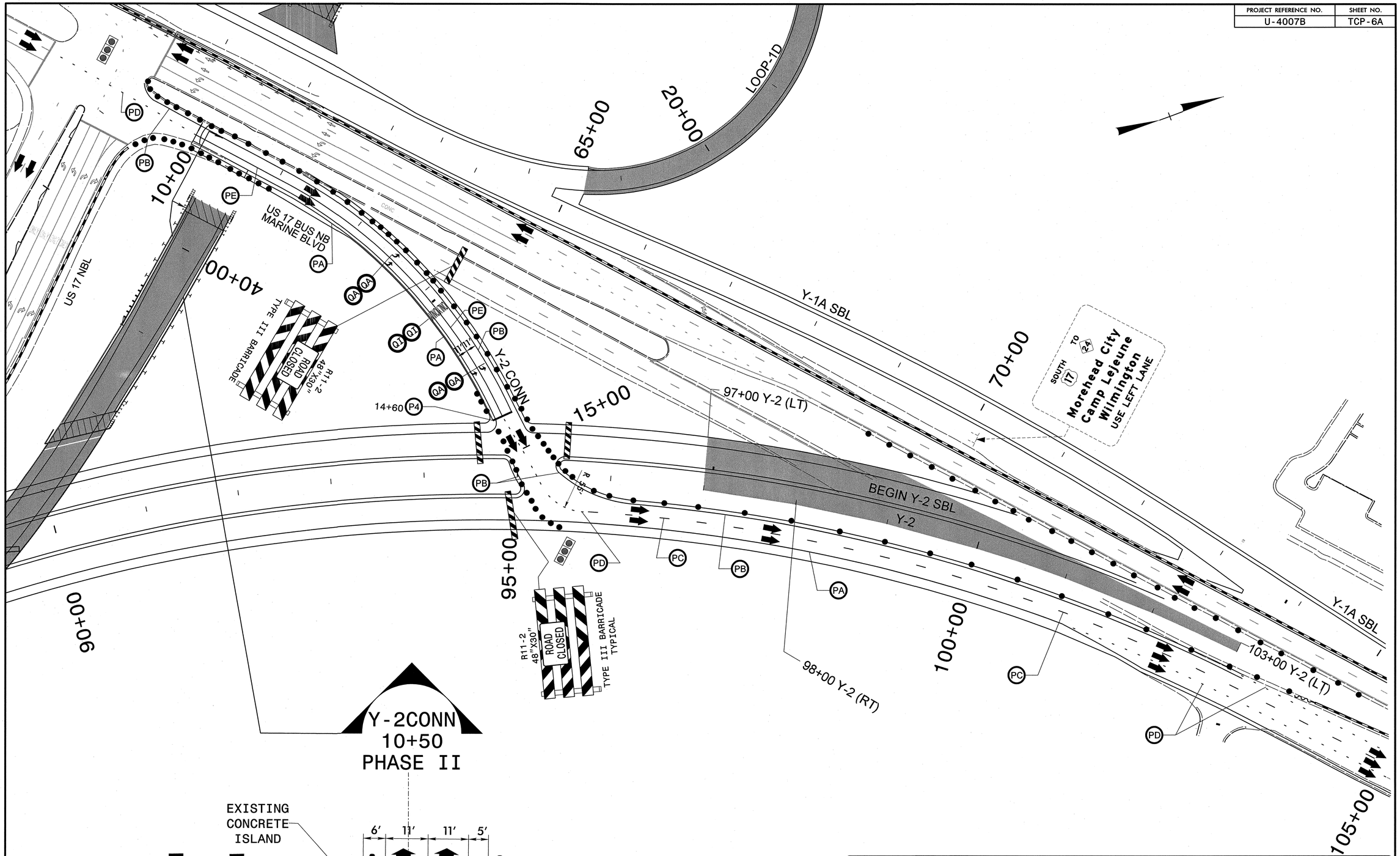
SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

CADD FILE

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh06.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-6A



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APPROVED: Betsy Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 2

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS — TRAFFIC ENGINEERING BRANCH — TRAFFIC CONTROL UNIT

REVISIONS	
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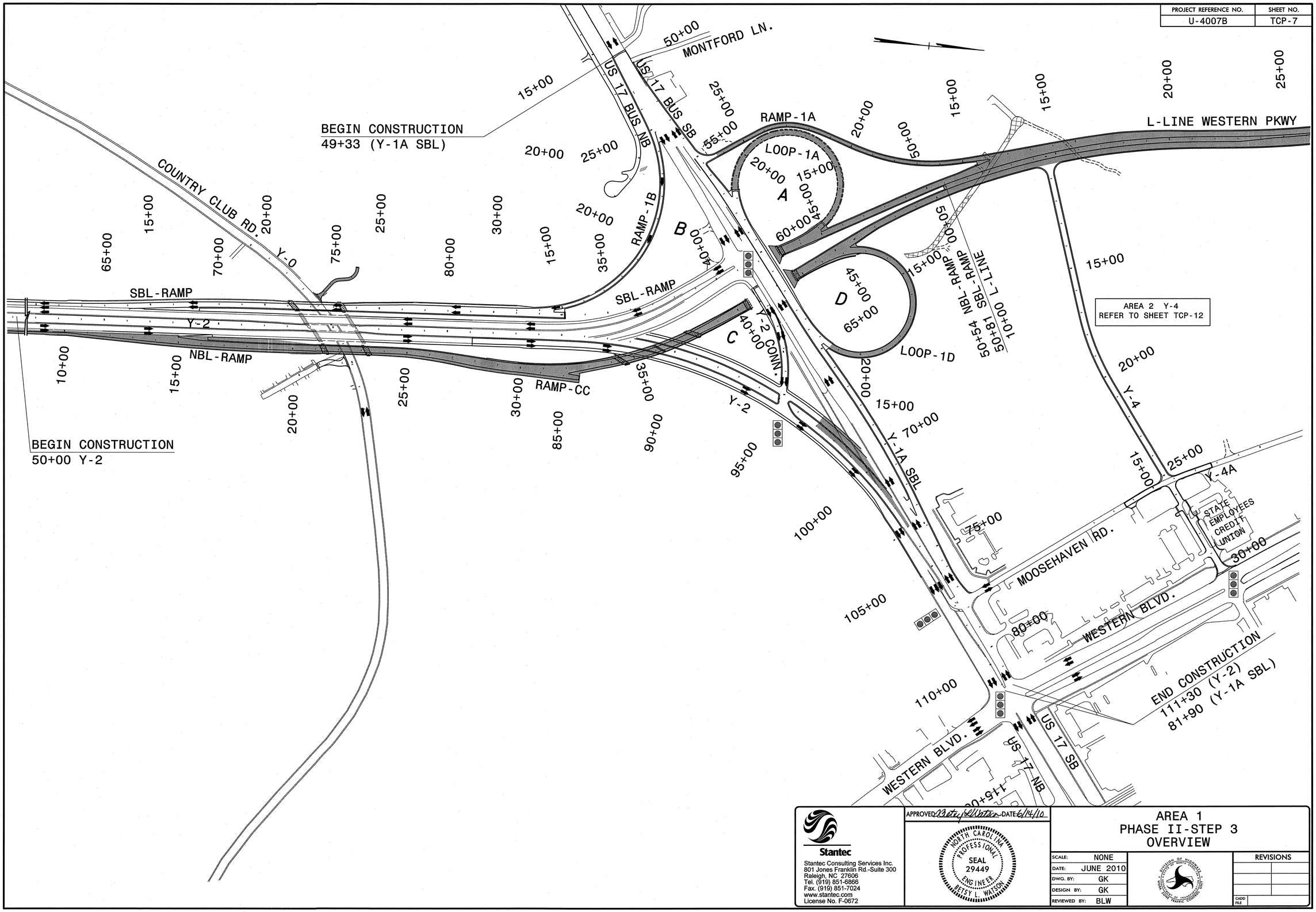
6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh06A.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-7



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APPROVED Betsy L. Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 3
OVERVIEW

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS	
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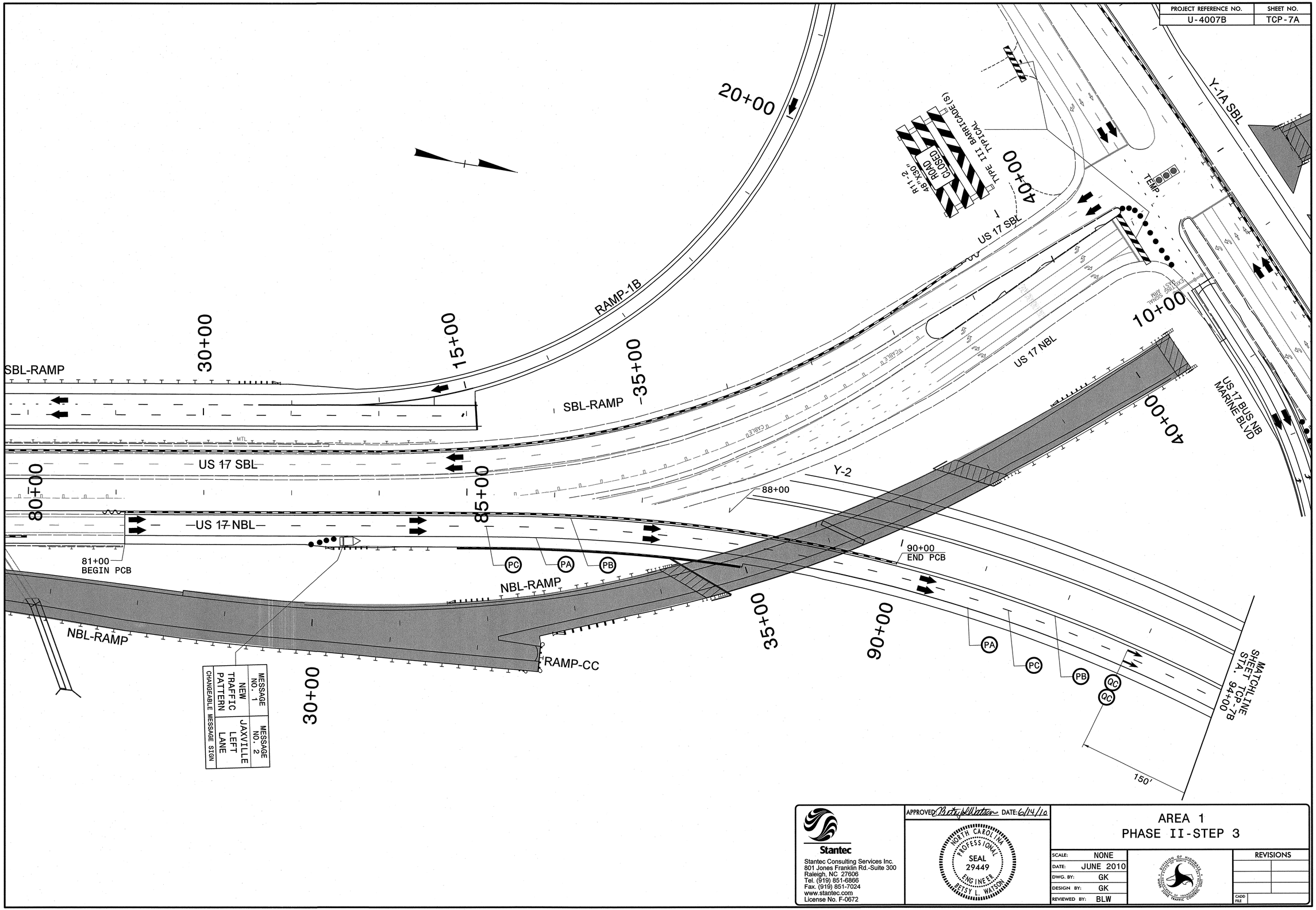
6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh07.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-7A



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APPROVED Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 3

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh07A.dgn
gkarrageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-7B

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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 3

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh07B.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-8

BEGIN CONSTRUCTION
49+33 (Y-1A SBL)

BEGIN CONSTRUCTION
50+00 Y-2

COUNTRY CLUB RD.

SBL-RAMP

NBL-RAMP

Y-2

Y-0

RAMP-1B

SBL RAMP

NBL RAMP

RAMP-CC

US 17 NB Y-2

US 17 BUS NB

US 17 BUS SB

MONTFORD LN.

RAMP-1A

L-LINE WESTERN PKWY

A

B

C

D

Y-2 CONN.

50+54 NBL-RAMP
50+81 SBL-RAMP
10+00 L-LINE

AREA 2 Y-4
REFER TO SHEET TCP-12

Y-4

Y-4A

Y-1A SBL

STATE EMPLOYEES CREDIT UNION

MOOSEHAVEN RD.

WESTERN BLVD.

END CONSTRUCTION
111+30 (Y-2)
81+90 (Y-1A SBL)

US 17 SB

US 17 NB

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APPROVED: Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 4
OVERVIEW

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

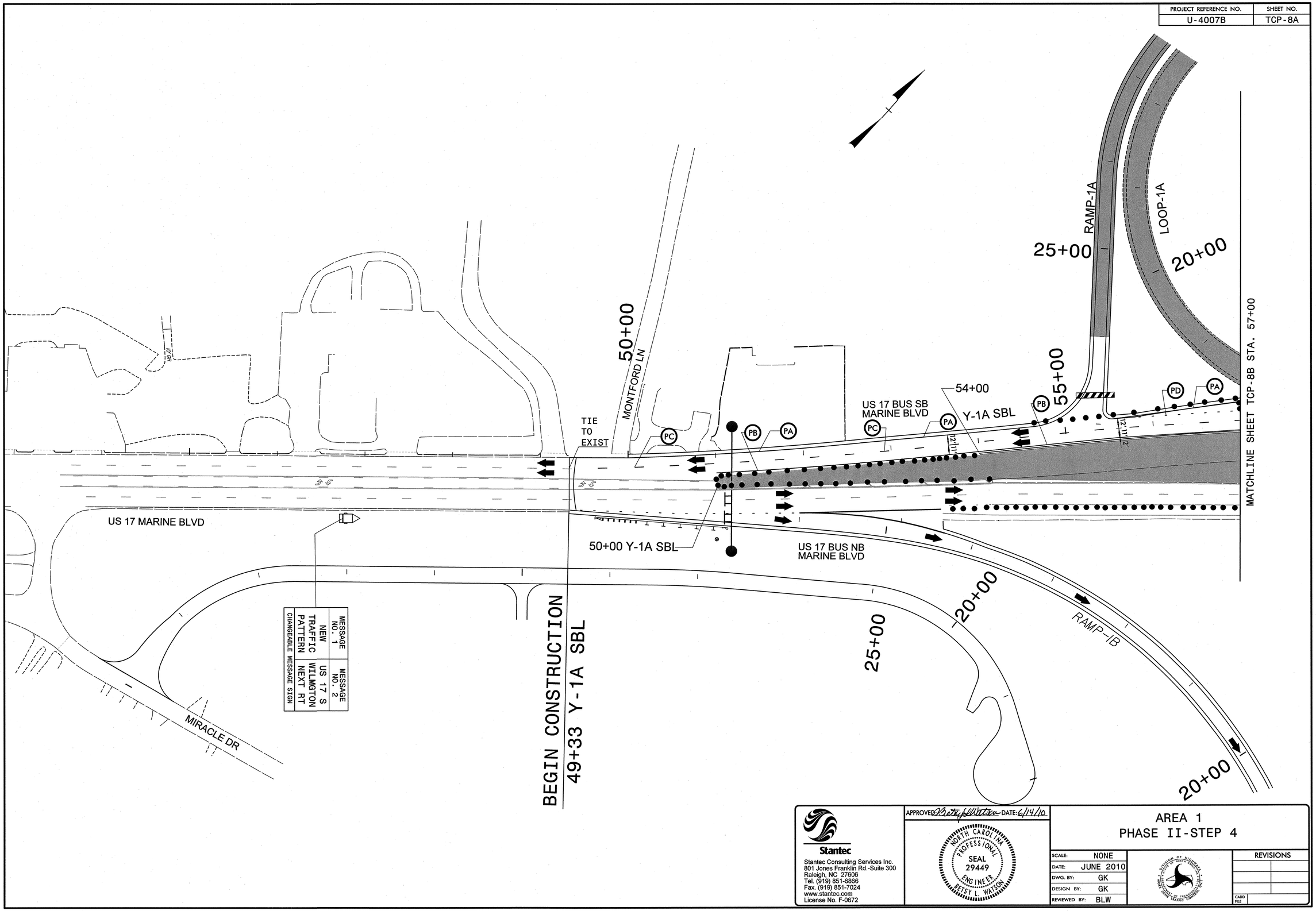
DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh08.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-8A



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APPROVED Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 4

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
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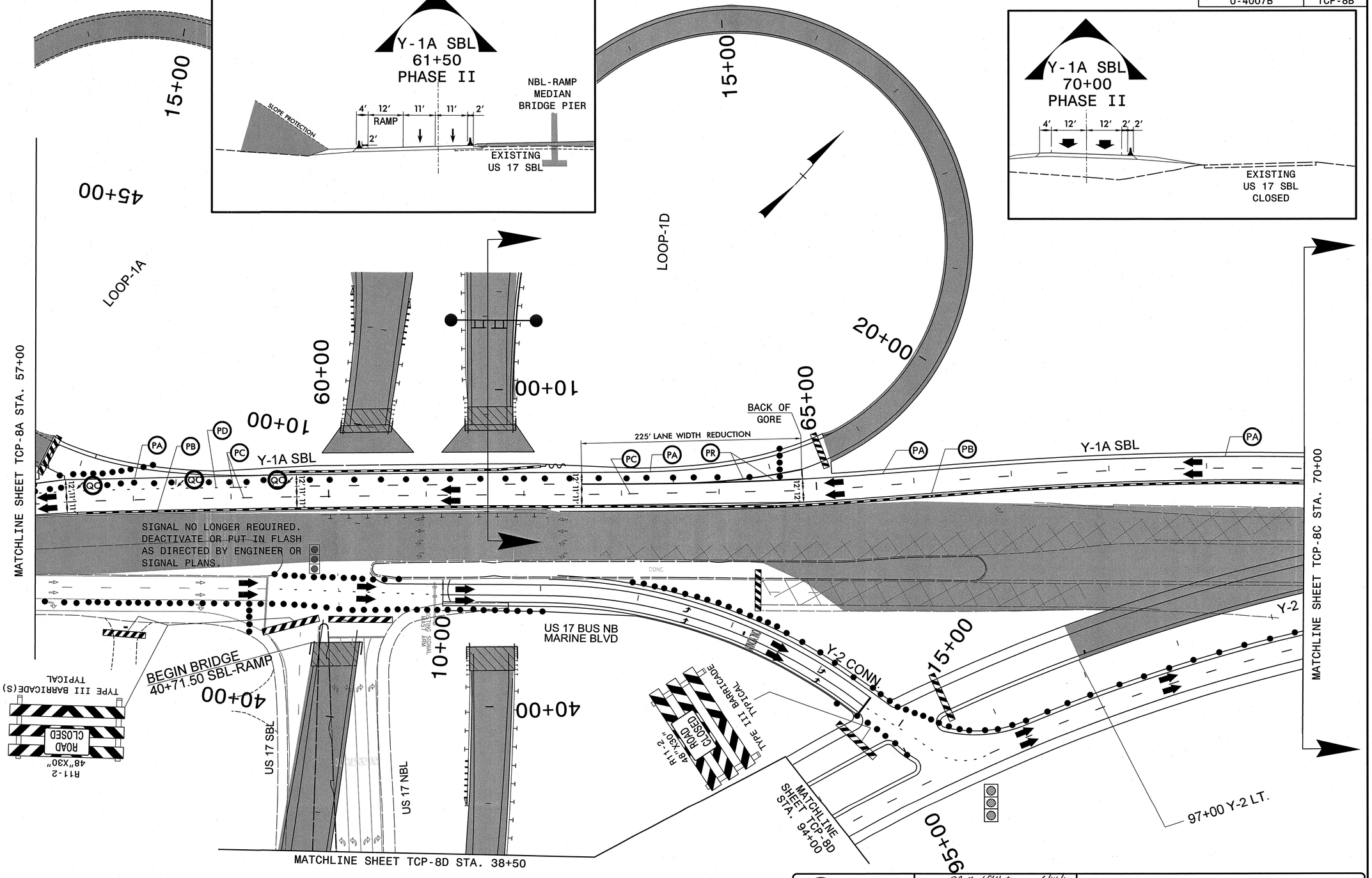
gkrogeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-8B



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NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 4

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

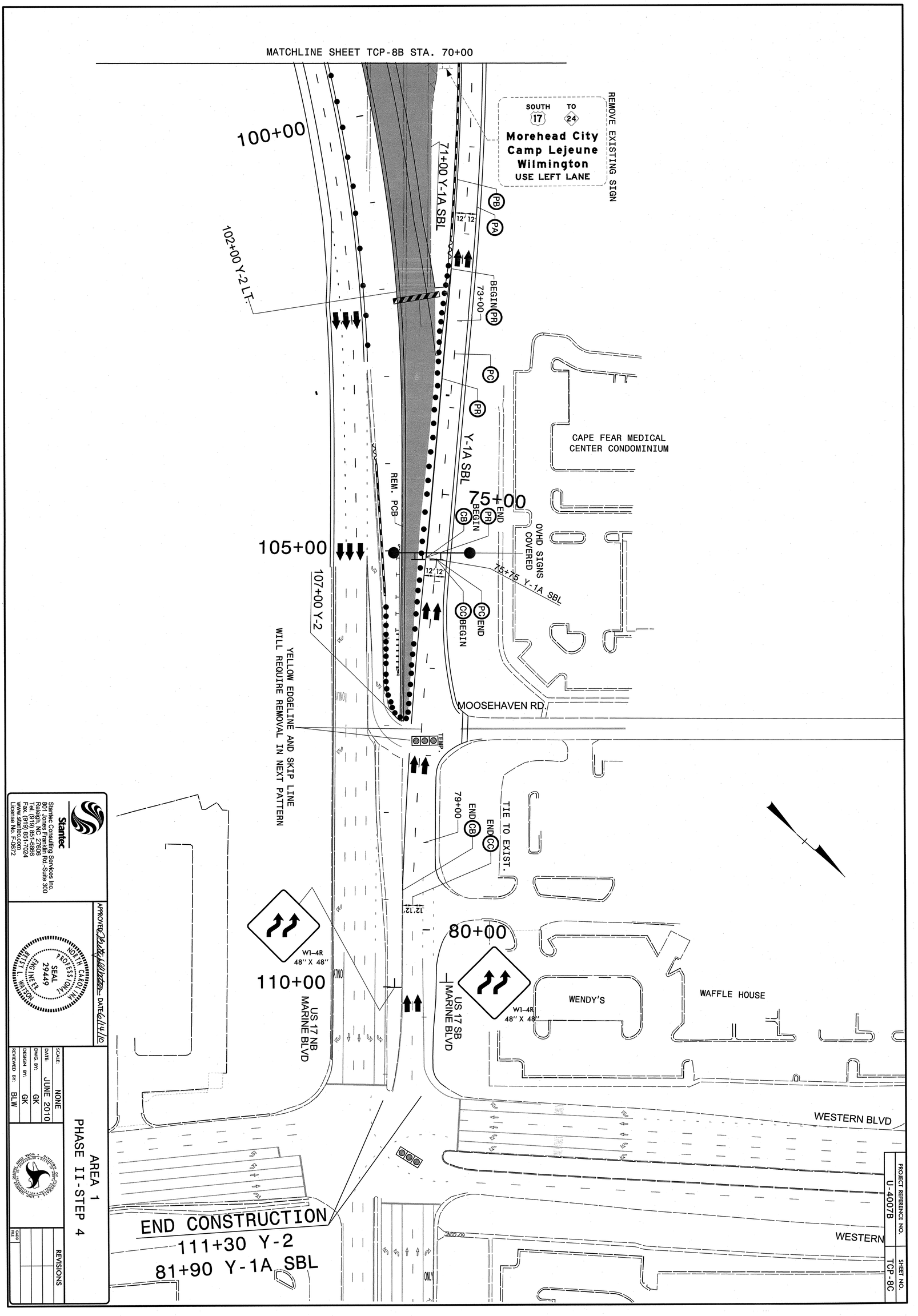
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh08B.dgn
gkargeorge

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh08C.dgn
gkarageorge



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APPROVED [signature] DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

SCALE: NONE
DATE: JUNE 2010
DWG. BY: GK
DESIGN BY: GK
REVIEWED BY: BLW

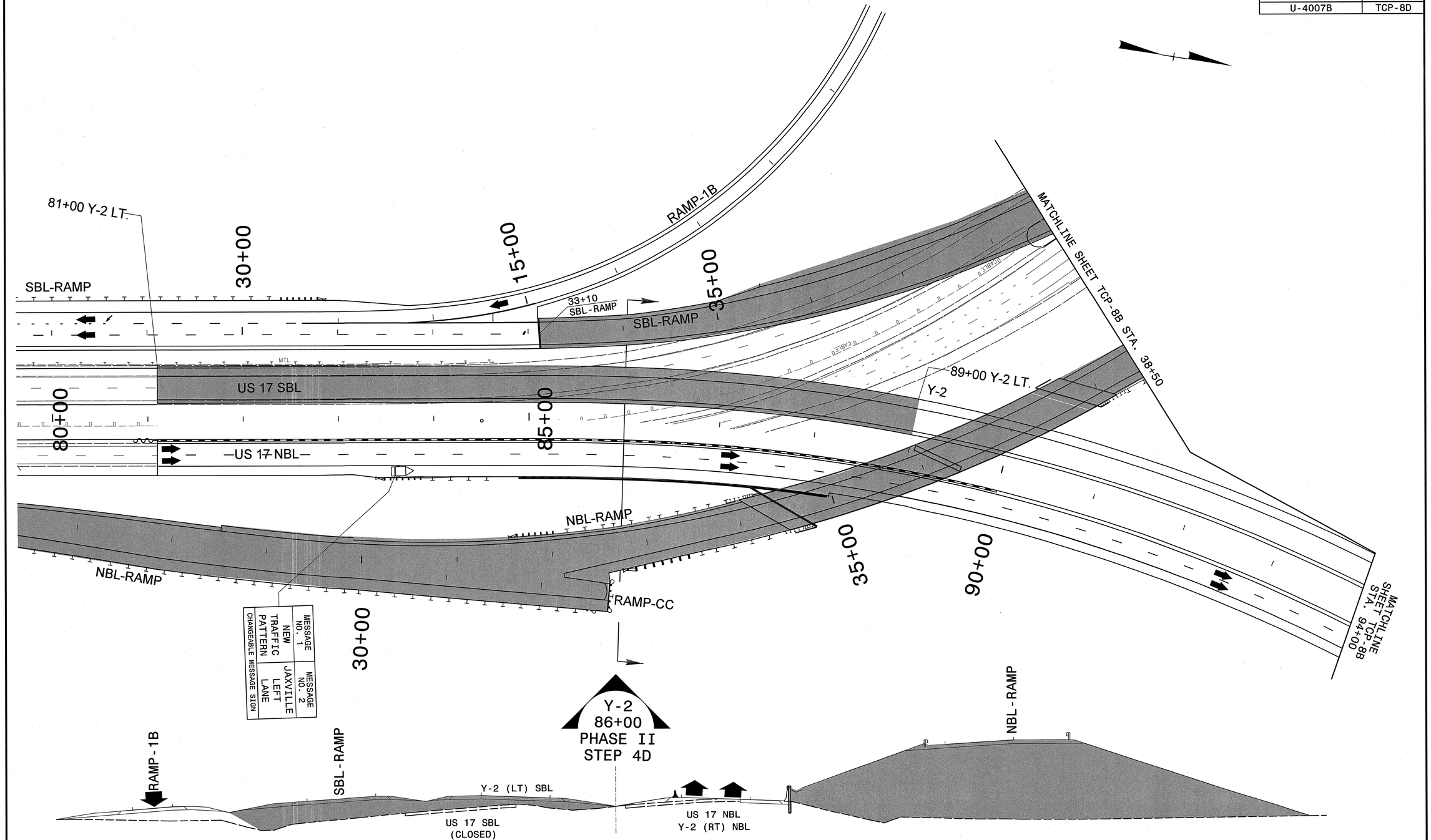
AREA 1
PHASE II-STEP 4

REVISIONS

CADD FILE

PROJECT REFERENCE NO. U-4007B
SHEET NO. TCP-8C

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-8D



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APPROVED: Betsy L Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 4

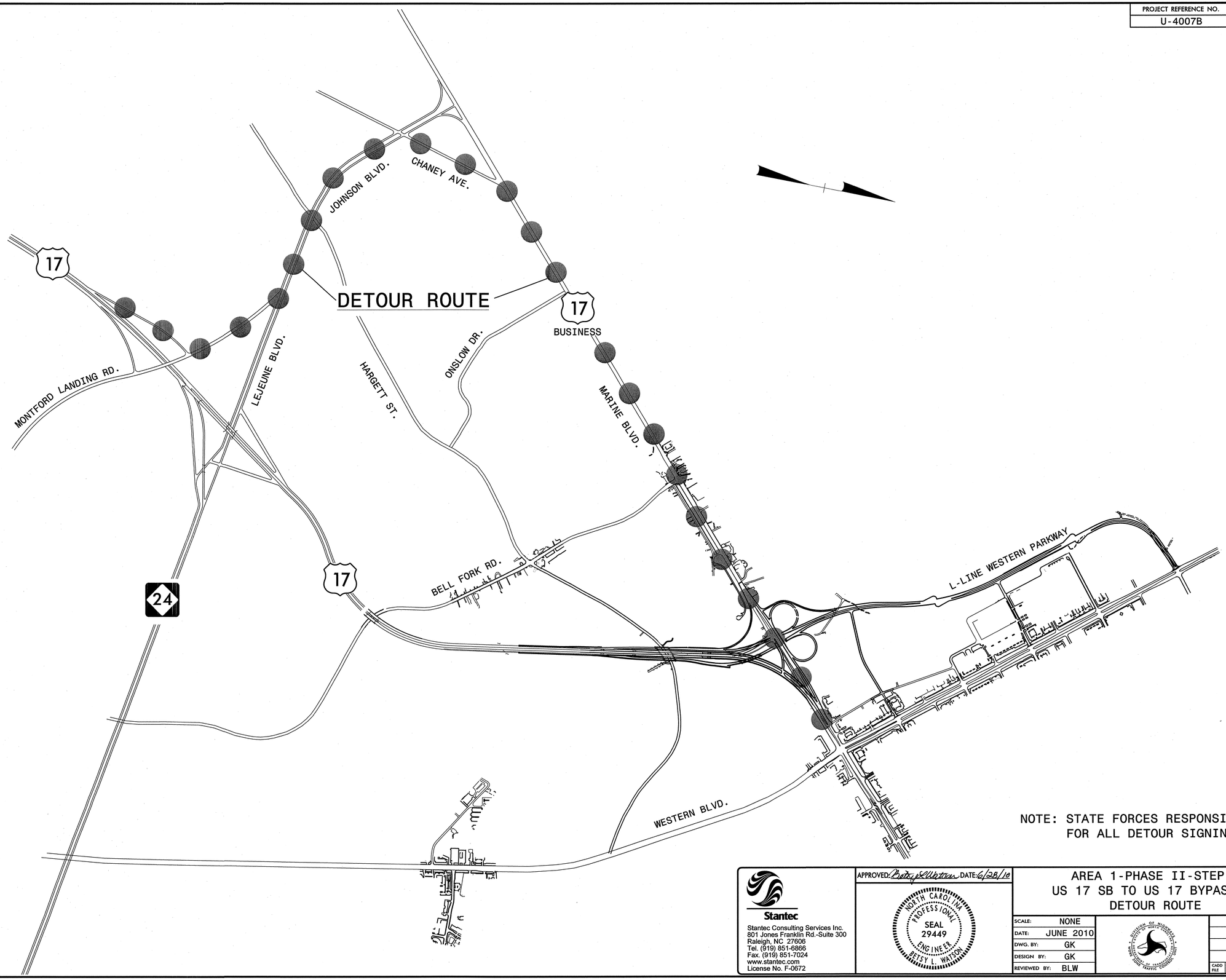
SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TRAFFIC ENGINEERING BRANCH

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\Traffic Control\TCP\PLANSHEETS\U4007B_TCP_psh08D.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-8E



NOTE: STATE FORCES RESPONSIBLE FOR ALL DETOUR SIGNING

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APPROVED: Betsy L Watson DATE: 6/28/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1-PHASE II-STEP 4
US 17 SB TO US 17 BYPASS SB
DETOUR ROUTE

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH

REVISIONS	
CADD FILE	

6/28/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh08E.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-9

BEGIN CONSTRUCTION
49+33 (Y-1A SBL)

BEGIN CONSTRUCTION
50+00 Y-2

US 17 BUS NBL

US 17 BUS SB

MONTFORD LN.

COUNTRY CLUB RD.

SBL-RAMP

NBL-RAMP

Y-2

RAMP-1B

RAMP-CC

SBL RAMP

NBL RAMP

Y-2 CONN.

US 17 SB

US 17 NB

RAMP-1A

LOOP-1A

LOOP-1D

L-LINE WESTERN PKWY

Y-1A SBL

Y-4

Y-4A

AREA 2 Y-4
REFER TO SHEET TCP-12

STATE EMPLOYEES CREDIT UNION

MOOSEHAVEN RD.

WESTERN BLVD.

WESTERN BLVD.

END CONSTRUCTION
111+30 (Y-2)
81+90 (Y-1A SBL)

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APPROVED Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 5
OVERVIEW

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

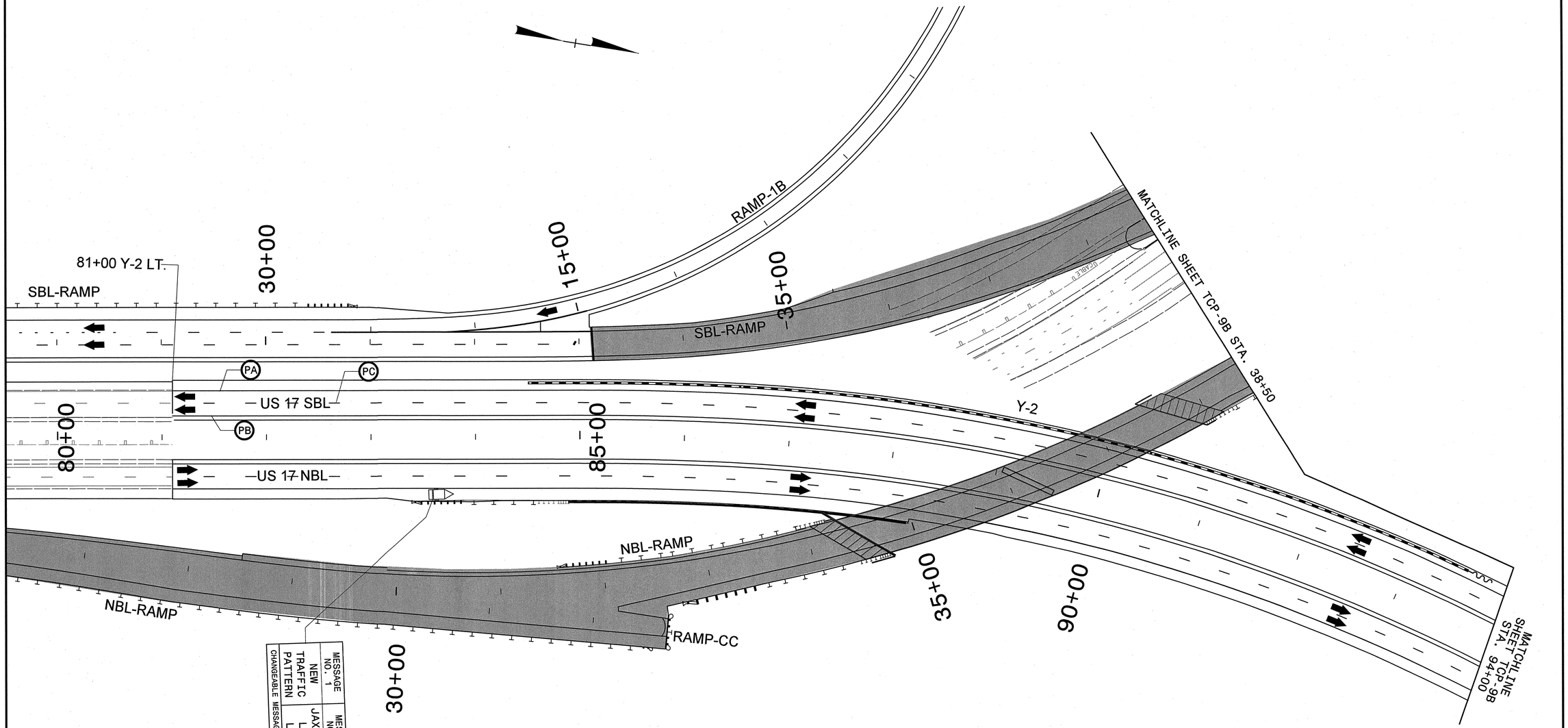
DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh09.dgn
gkargeorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-9A



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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 5

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA TRAFFIC ENGINEERING BRANCH

REVISIONS	
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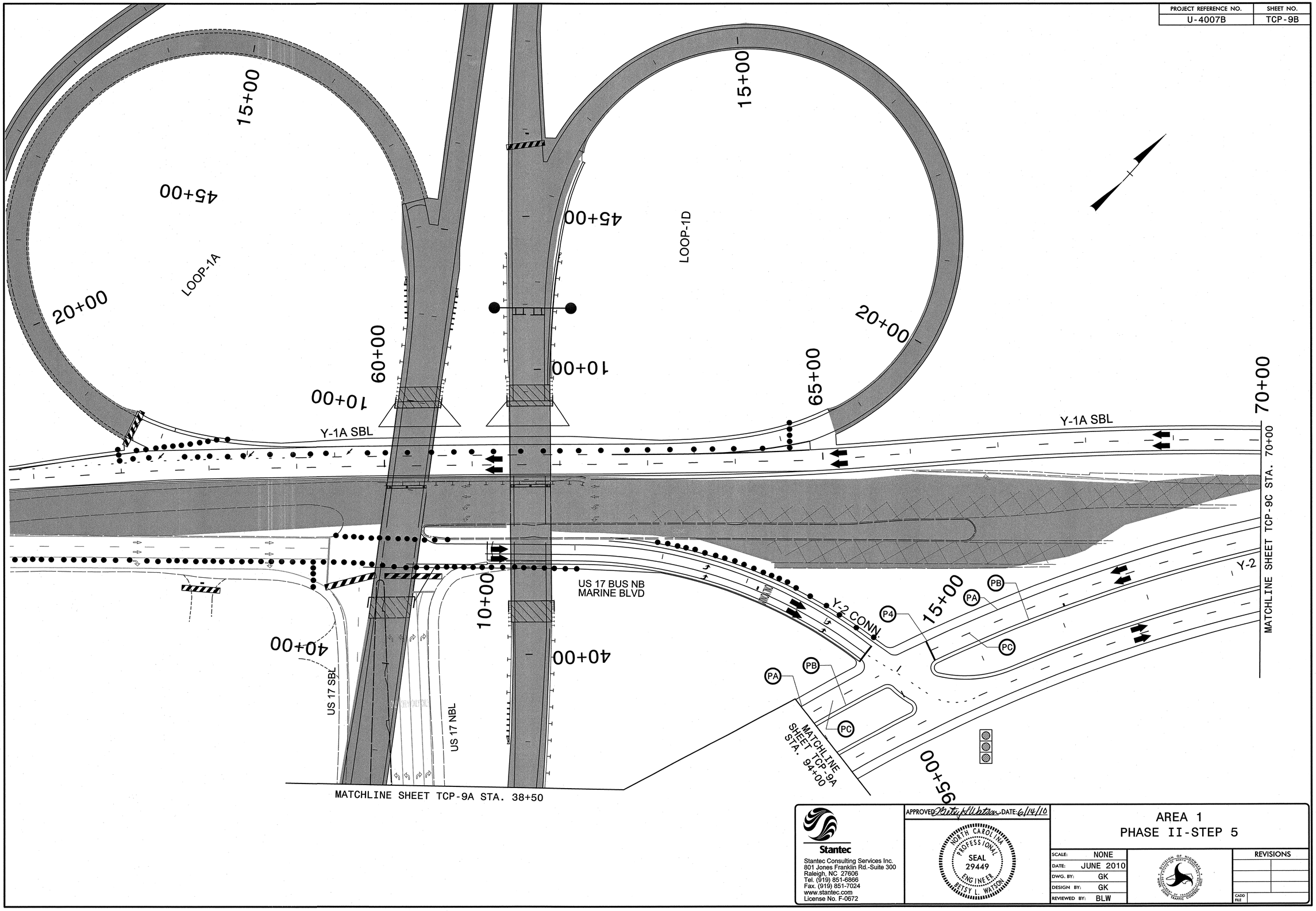
6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh09A.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-9B



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APPROVED Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

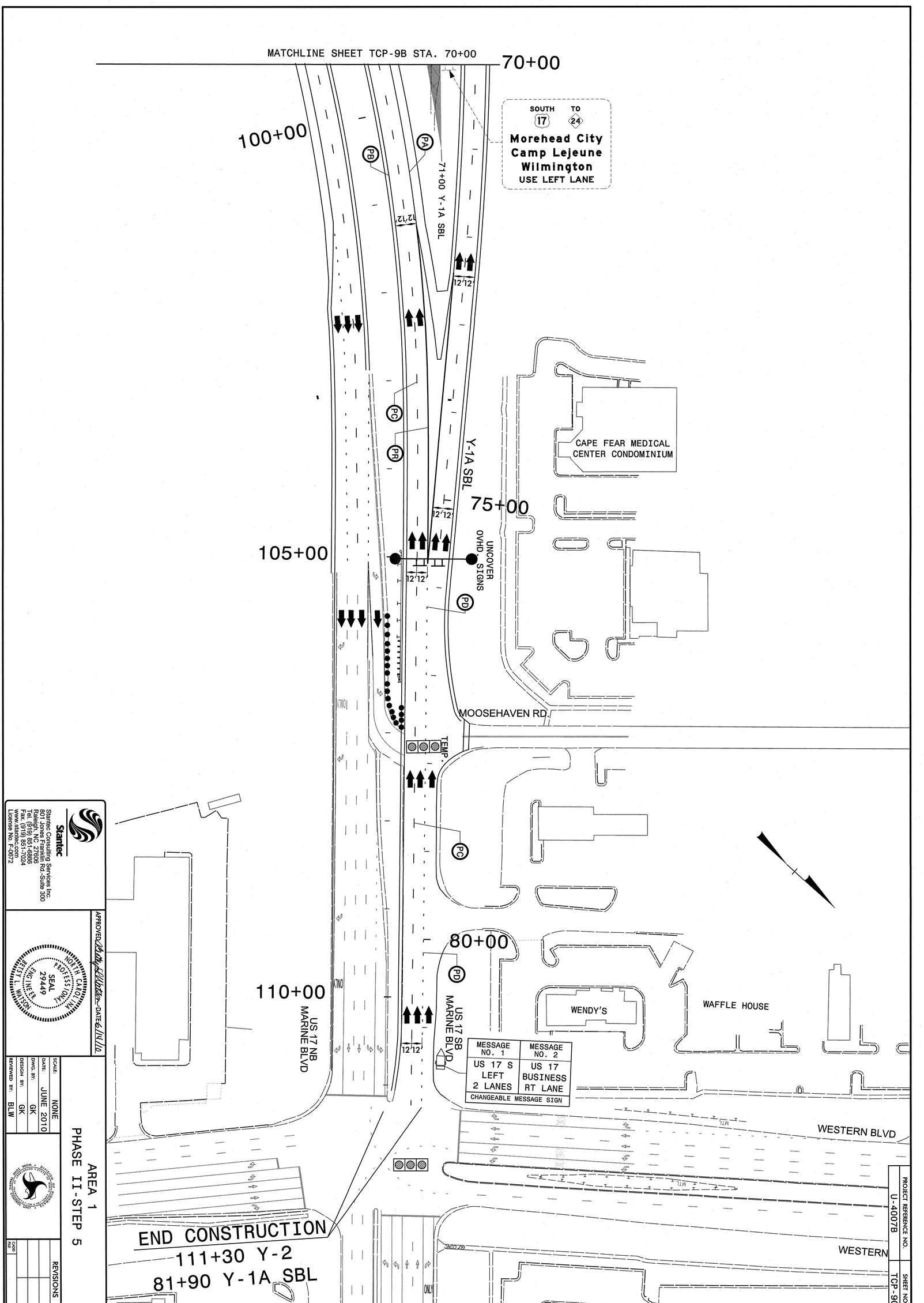
AREA 1
PHASE II-STEP 5

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
CADD FILE	

6/14/2010
U:\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh09B.dgn
gkarageorge

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh09C.dgn
gkarageorge



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APPROVED [signature] DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

SCALE: NONE
DATE: JUNE 2010
DWG. BY: GK
DESIGN BY: GK
REVIEWED BY: BLW

AREA 1
PHASE II-STEP 5

REVISIONS

PROJECT REFERENCE NO. U-4007B
SHEET NO. TCP-9C

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-10

BEGIN CONSTRUCTION
49+33 (Y-1A SBL)

BEGIN CONSTRUCTION
50+00 Y-2

US 17 BUS NB

US 17 BUS SB

MONTFORD LN.

RAMP-1A

RAMP-1B

L-LINE WESTERN PKWY

COUNTRY CLUB RD.

Y-0

SBL-RAMP

Y-2

NBL-RAMP

SBL RAMP

NBL RAMP

RAMP-CC

Y-2 CONN.

US 17 NB Y-2

A

B

C

D

NBL-RAMP 50+54
SBL-RAMP 50+81
L-LINE 10+00

AREA 2 Y-4
REFER TO SHEET TCP-12

Y-4

Y-4A

Y-1A SBL

STATE EMPLOYEES CREDIT UNION

MOOSEHAVEN RD.

WESTERN BLVD.

END CONSTRUCTION
111+30 (Y-2)
81+90 (Y-1A SBL)

US 17 SB

US 17 NB

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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 6
OVERVIEW

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TRAFFIC ENGINEERING BRANCH

REVISIONS

CADD FILE

6/14/2010
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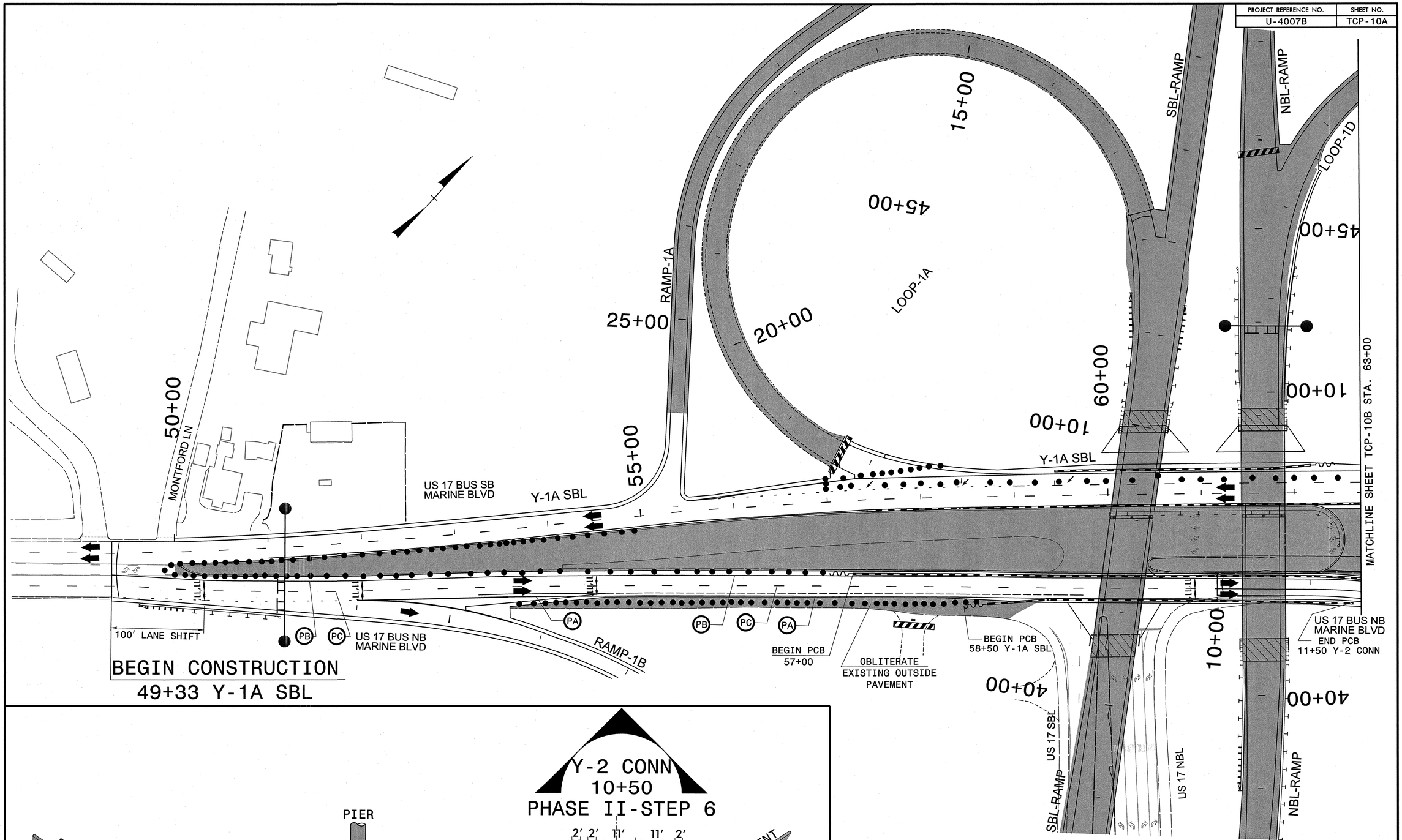
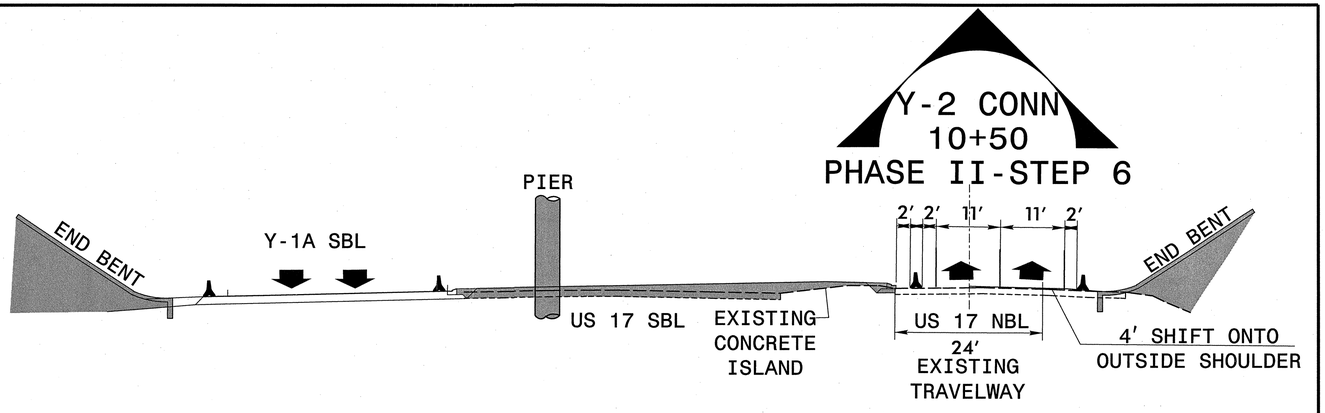
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-10A



BEGIN CONSTRUCTION
49+33 Y-1A SBL



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APPROVED: Kristy K. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 6

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS — STATE OF NORTH CAROLINA — DEPARTMENT OF TRANSPORTATION — TRAFFIC ENGINEERING BRANCH

REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_pshl0A.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-10B

MATCHLINE SHEET TCP-10A STA. 63+00

LOOP-1D

15+00

20+00

65+00

70+00

75+00

Y-1A SBL

Y-1A SBL

CAPE FEAR MEDICAL CENTER CONDOMINIUM

Y-2

END PCB
14+00 Y-2 CONN

Y-2 CONN.

15+00

100+00

105+00

95+00

M6-2 L
21" X 15"

M1-4

17

M3-3
24" X 12"

SOUTH

M4-3
24" X 12"

BUSINESS

M4-8
24" X 12"

DETOUR

M5-1
21" X 15"

M1-4

17

M3-3
24" X 12"

SOUTH

M4-3
24" X 12"

BUSINESS

M4-8
24" X 12"

DETOUR

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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1
PHASE II-STEP 6

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH

REVISIONS	
CADD FILE	

6/4/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh10B.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-11

BEGIN CONSTRUCTION
49+33 (Y-1A SBL)

BEGIN CONSTRUCTION
50+00 Y-2

COUNTRY CLUB RD
Y-0
SBL-RAMP
NBL-RAMP
Y-2
RAMP-1B
RAMP-CC
US 17 BUS NB
US 17 BUS SB
MONTFORD LN.
RAMP-1A
LOOP-1A
A
B
C
D
LOOP-1D
US 17 SB
US 17 NB
Y-2 CONN.
Y-1A SBL
L-LINE WESTERN PKWY
MATCH LINE
SHEET TCP-11A
AREA 2 Y-4
REFER TO SHEET TCP-12
Y-4
Y-4A
STATE EMPLOYEES CREDIT UNION
MOOSEHAVEN RD.
WESTERN BLVD.
WESTERN BLVD.
END CONSTRUCTION
111+30 (Y-2)
81+90 (Y-1A SBL)

10+00 15+00 20+00 25+00 30+00 35+00 40+00 45+00 50+00 55+00 60+00 65+00 70+00 75+00 80+00 85+00 90+00 95+00 100+00 105+00 110+00

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APPROVED Betsy Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 1-PHASE III OVERVIEW

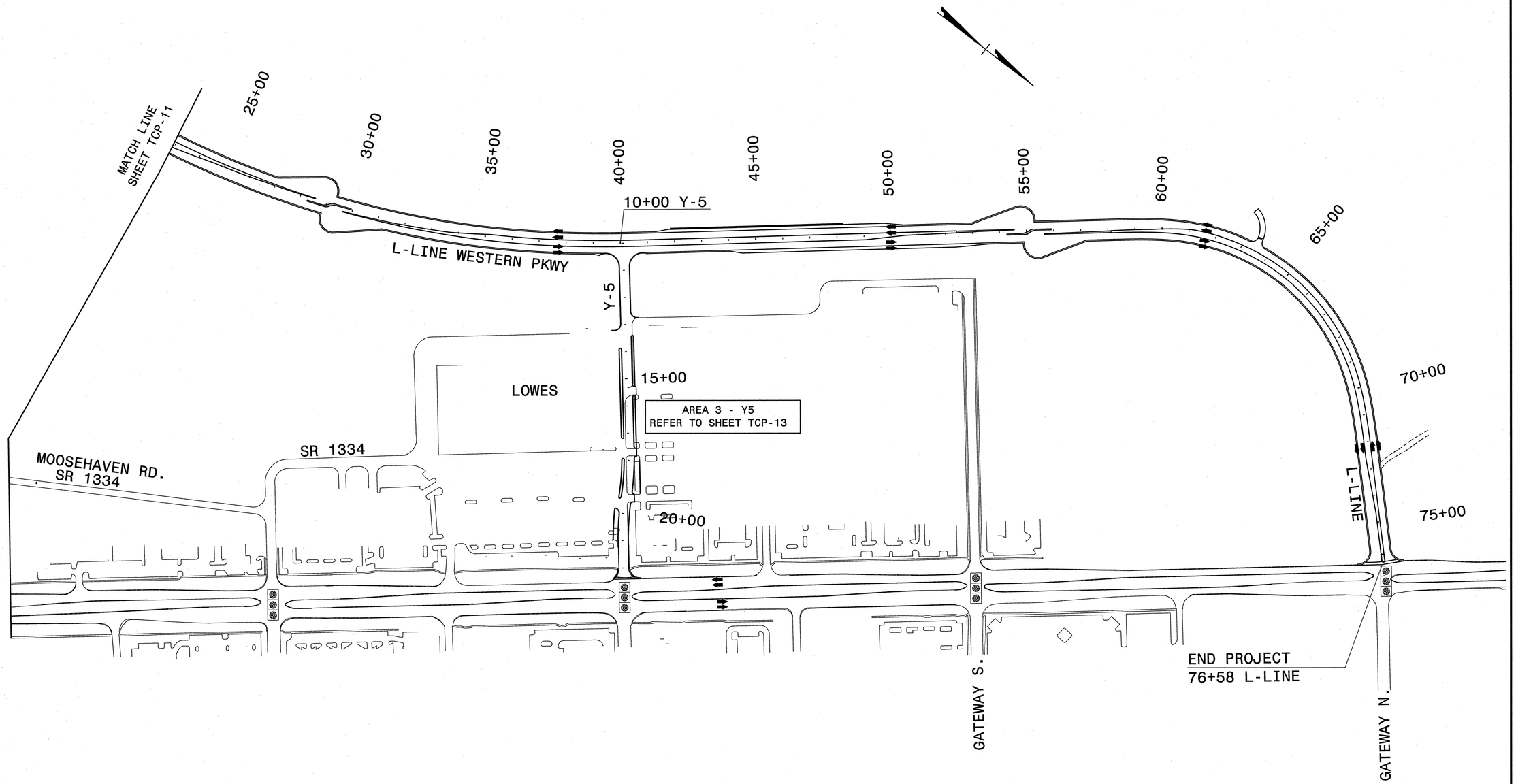
SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

CADD FILE

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_pshll.dgn
gkarageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-11A



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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

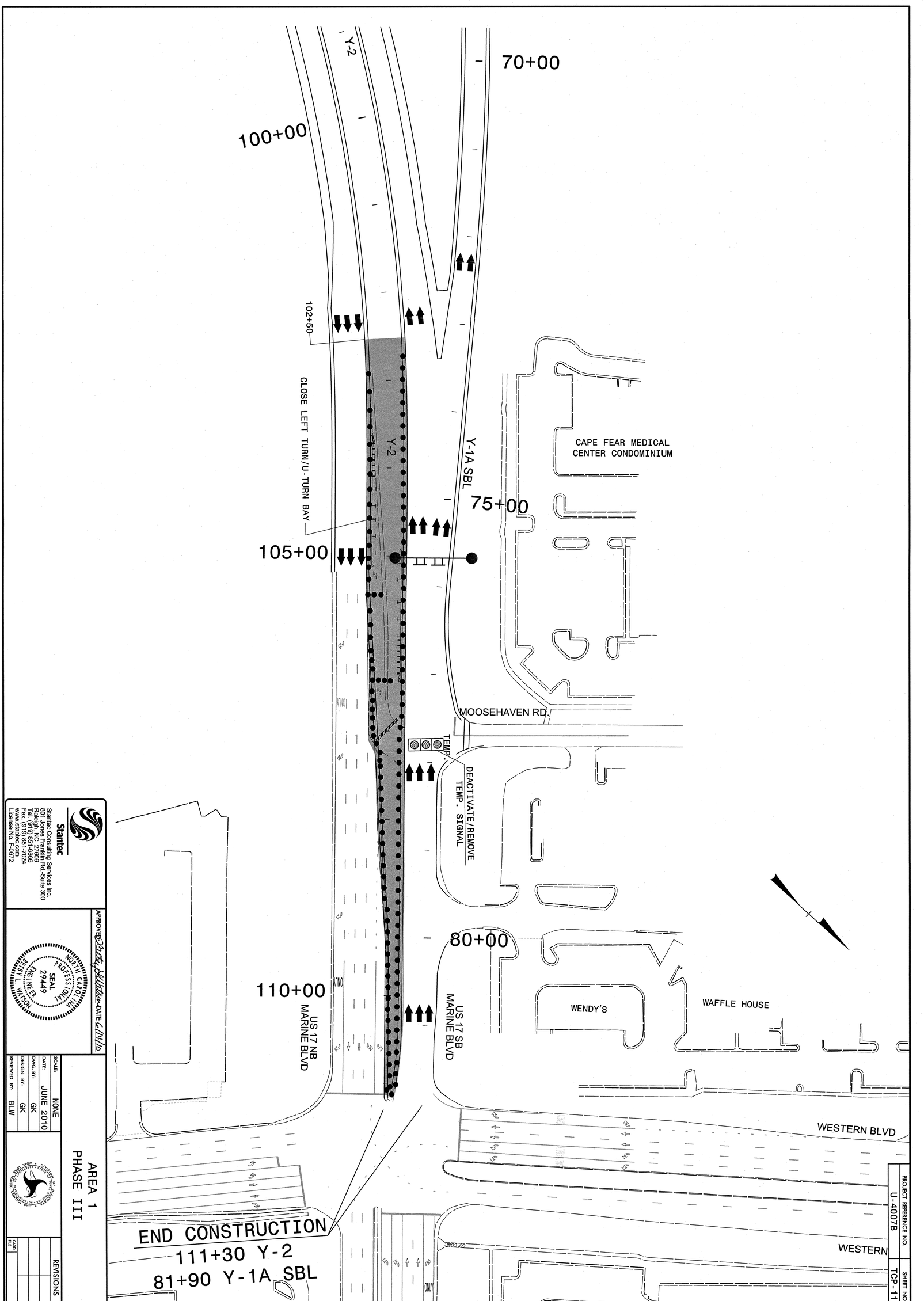
AREA 1-PHASE III OVERVIEW

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

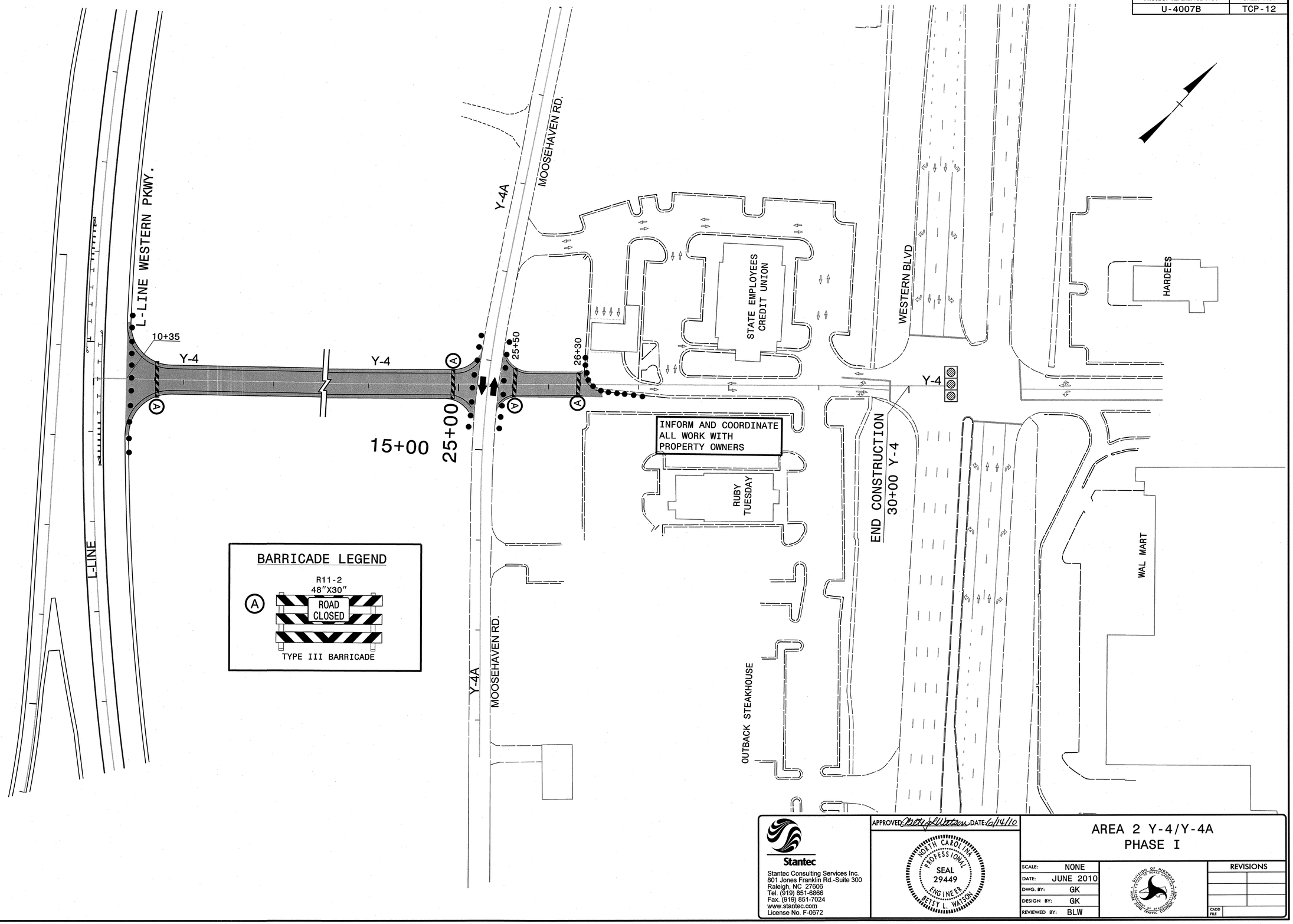
REVISIONS	
CADD FILE	

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_pshtA.dgn
gkarageorge

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_pshIIB.dgn
gkarageorge



PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-12



BARRICADE LEGEND

R11-2
48"X30"

Ⓐ ROAD CLOSED

TYPE III BARRICADE

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APPROVED: Betsy L. Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 2 Y-4/Y-4A PHASE I

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE

6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_psh2.dgn
gkarageorge

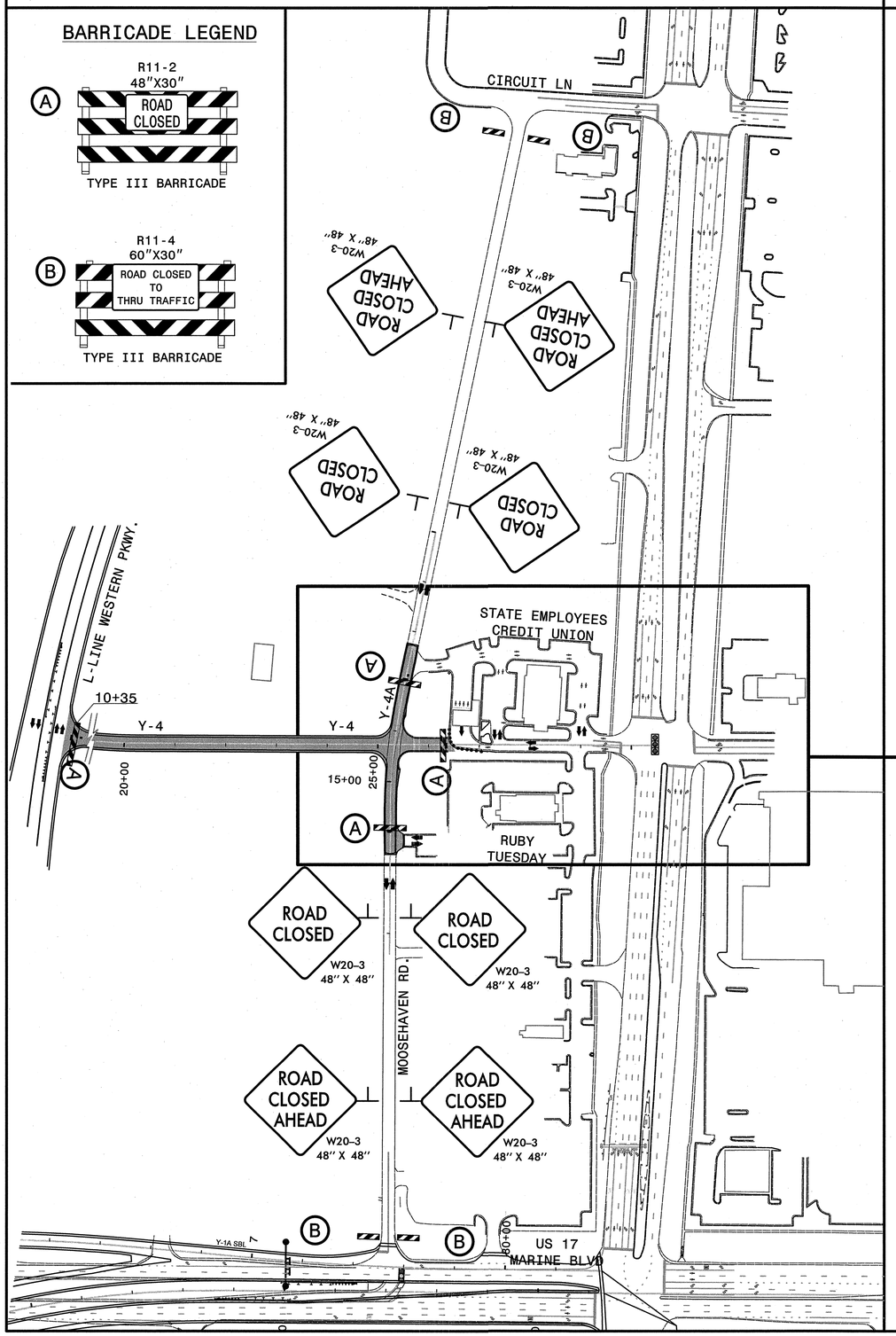
PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-12A

AREA 2-PHASE II-STEPS 1 & 2
ROAD CLOSURE OVERVIEW DETAIL

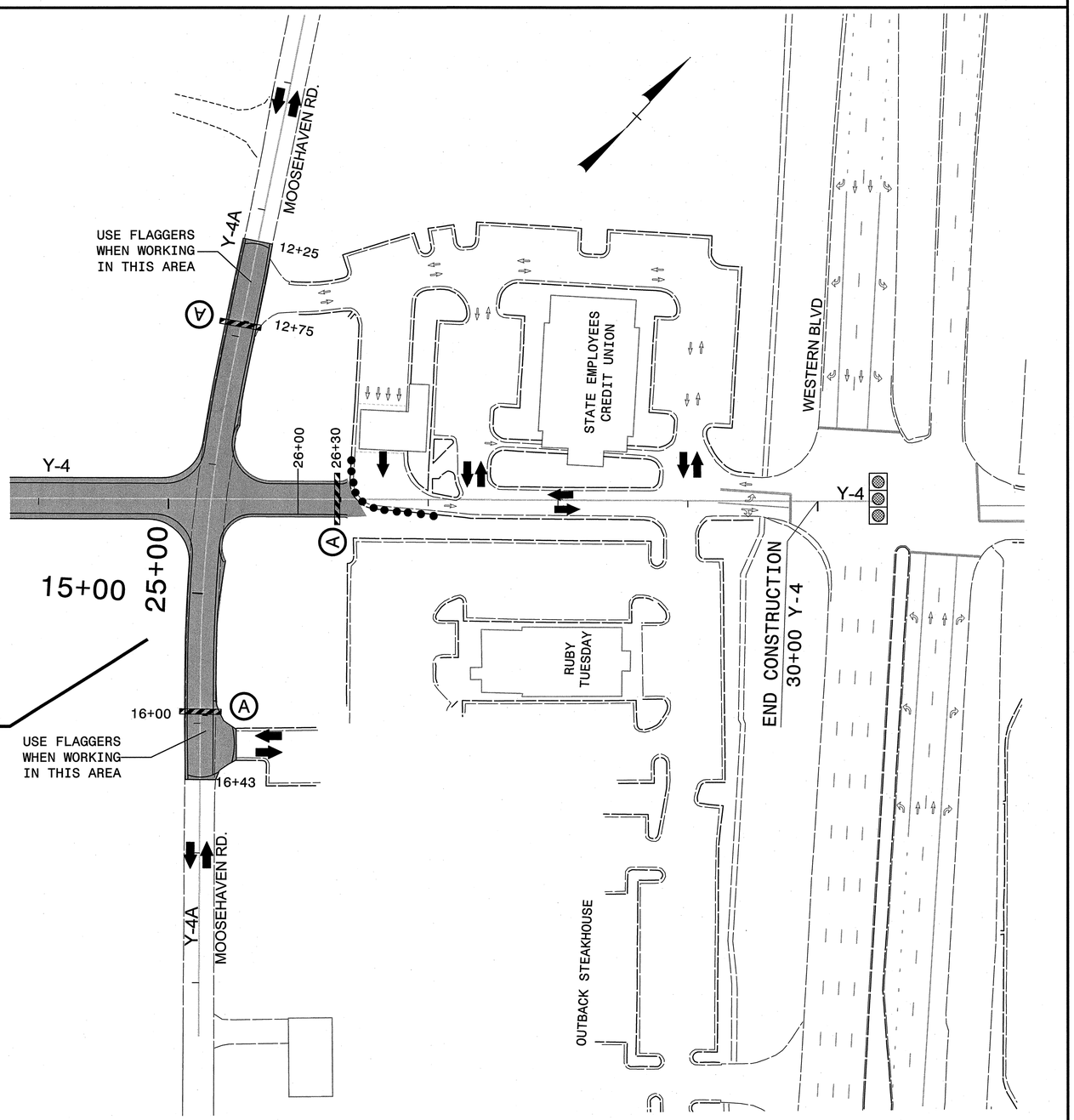
BARRICADE LEGEND

(A) R11-2 48"X30" — ROAD CLOSED — TYPE III BARRICADE

(B) R11-4 60"X30" — ROAD CLOSED TO THRU TRAFFIC — TYPE III BARRICADE



AREA 2
PHASE II-STEPS 1 & 2



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APPROVED Betsy Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 2 Y-4/Y-4A
PHASE II STEPS 1 & 2

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

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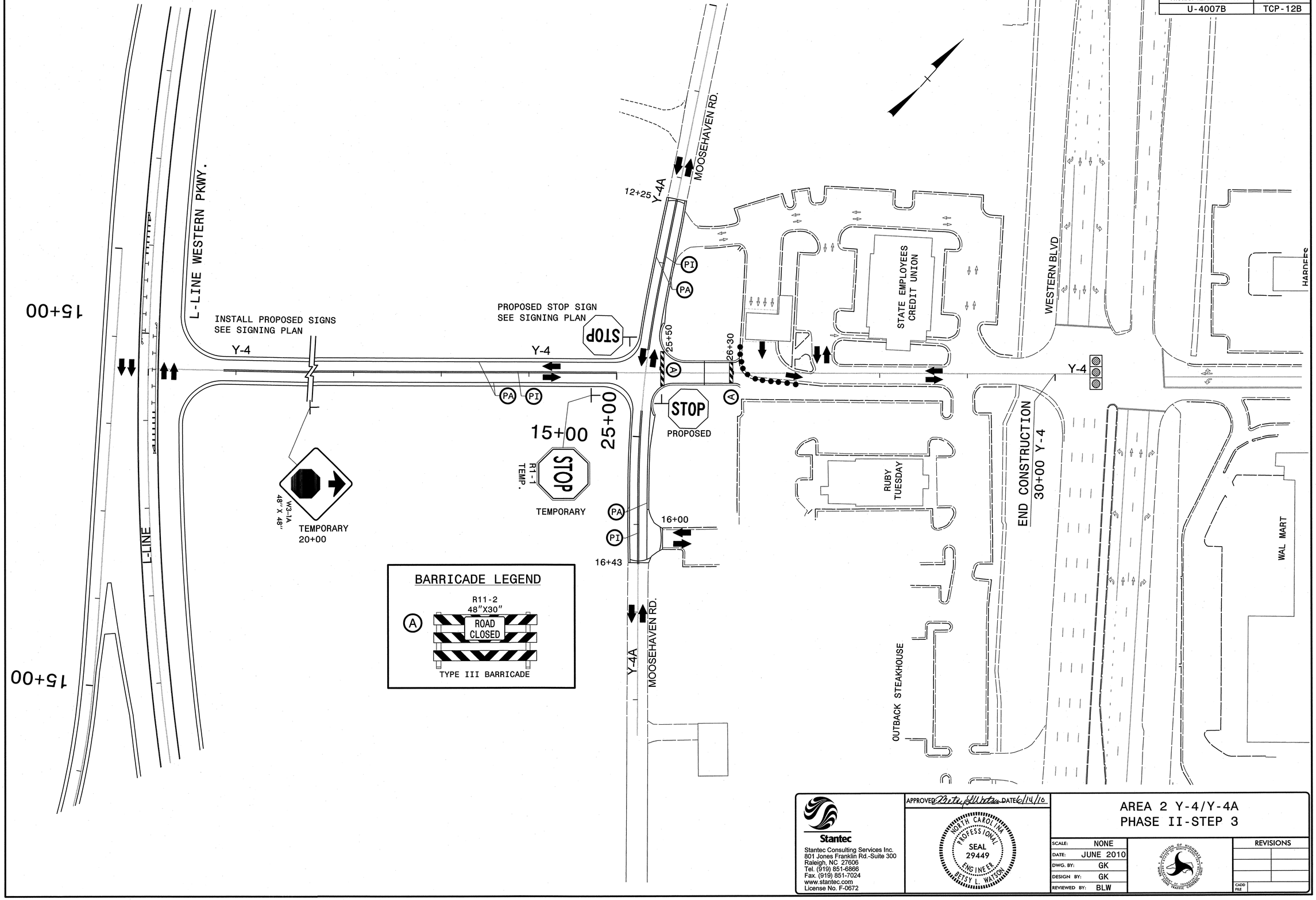
6/14/2010
U:\Traffic\TrafficControl\TCP\PLANSHEETS\U4007B_TCP_pshl2A.dgn
gkardageorge

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-12B



BARRICADE LEGEND

A — R11-2, 48"X30", ROAD CLOSED

TYPE III BARRICADE

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APPROVED Beth Wilson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 2 Y-4/Y-4A PHASE II-STEP 3

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-12C

AT TELLER DRIVEWAY
CONSTRUCT UNDERCUT & BACKFILL.
PERFORM WORK DURING NON-BUSINESS HOURS.
MAINTAIN OPEN DURING BUSINESS HOURS
USING INCIDENTAL STONE.

L-LINE WESTERN PKWY.

L-LINE

MOOSEHAVEN RD.

12+25 Y-4A

PROPOSED STOP SIGN
SEE SIGNING PLAN

STOP

STOP R1-1 TEMP.

26+00

Y-4

15+00

25+00

STOP

PROPOSED

STOP R1-1 TEMP.

W3-1A 48" X 48" TEMPORARY

16+00

16+43

Y-4A MOOSEHAVEN RD.

CLOSE RIGHT TURN LANE

WESTERN BLVD

STATE EMPLOYEES CREDIT UNION

HARDEE$

RUBY TUESDAY

OUTBACK STEAKHOUSE

END CONSTRUCTION
30+00 Y-4

WAL MART

15+00

15+00

BARRICADE LEGEND

Ⓐ R11-2 48"X30" ROAD CLOSED

TYPE III BARRICADE

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APPROVED Betsy Fell Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 2 Y-4/Y-4A
PHASE III-STEPS 1 & 2

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

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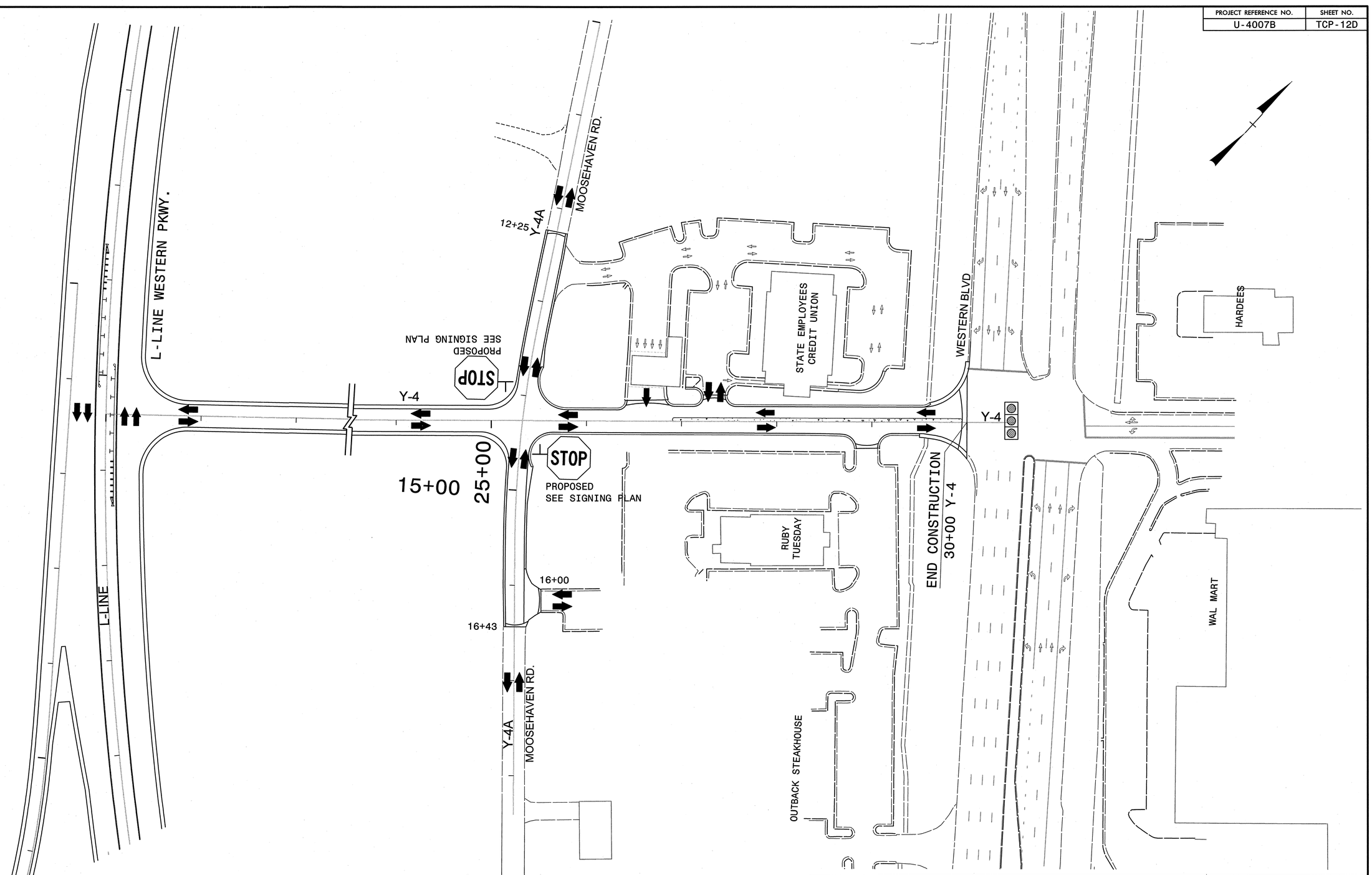
PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-12D



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APPROVED: Betsy L. Watson DATE: 8/20/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 2 Y-4/Y-4A
PHASE III-STEP 3

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS	
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8/23/2010
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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-13

AREA 3-
PHASE I & PHASE II-STEP 1

L-LINE WESTERN PKWY.

ROSS

BED BATH & BEYOND

DOCK

CHILIS

WESTERN BLVD

WESTERN BLVD

LOWES

LOWES

FRONT ENTRANCE CANOPY

W20-3
30" X 30"
ROAD CLOSED AHEAD

W20-3
30" X 30"
ROAD CLOSED AHEAD

MAINTAIN AREA WITH INCIDENTAL STONE FOR TRUCK USE DURING DOCKING

10+35

Y-5

12+50

Y-5

17+50

Y-5

END CONSTR.
22+41 Y-5

15+00

20+00

CONSTRUCT UNDERCUT, FILL AND PAVE THRU BASE COURSE. C&G SHOWN FOR REFERENCE ONLY, BUT MAY BE CONSTRUCTED AT THIS TIME.

MAINTAIN TURNING MOVEMENT EXITING FROM CANOPY

ALL BARRIER SHOWN ON THIS SHEET IS WATER-FILLED BARRIER

COORDINATE ALL WORK WITH PROPERTY OWNERS AND WITH LOWE'S PARKING LOT IMPROVEMENTS.

BARRICADE LEGEND

Ⓐ R11-2
48"X30"
ROAD CLOSED

TYPE III BARRICADE

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APPROVED Betsy L Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 3 (Y-5)
PHASE I / PHASE II-STEP 1

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH

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AREA 3 (Y-5)
PHASE II-STEPS 2 & 3

PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-13A

L-LINE

L-LINE WESTERN PKWY.

ROSS

DOCK

BED BATH & BEYOND

ARBY'S

PIER 1 IMPORTS

CHILIS

WESTERN BLVD

WESTERN BLVD

RIGHT LANE MUST TURN RIGHT
R3-7 R
30" X 30"
TEMPORARY

RIGHT LANE CLOSED
W20-5 R
48" X 48"

245' TAPER

ROAD CLOSED AHEAD
W20-3
30" X 30"

ROAD CLOSED AHEAD
W20-3
30" X 30"

ROAD CLOSED AHEAD
W20-3
30" X 30"

CLOSE RIGHT TURN LANE

10+35

Y-5

12+50

DO NOT ENTER
R5-1
30" X 30"
BARRICADE MTD.

15+00

LOWES

MAINTAIN TURNING MOVEMENTS EXITING FROM CANOPY

FRONT ENTRANCE CANOPY

17+50

Y-5

CLOSE PARKING SPACES

20+00

Y-5

END CONSTR.
22+41 Y-5

ALL BARRIER SHOWN ON THIS SHEET IS WATER-FILLED BARRIER

COORDINATE ALL WORK WITH PROPERTY OWNERS AND WITH LOWE'S PARKING LOT IMPROVEMENTS.

BARRICADE LEGEND

A — R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

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APPROVED Betsy L. Watson DATE 6/14/16

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

AREA 3 (Y-5)
PHASE II-STEPS 2 & 3

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

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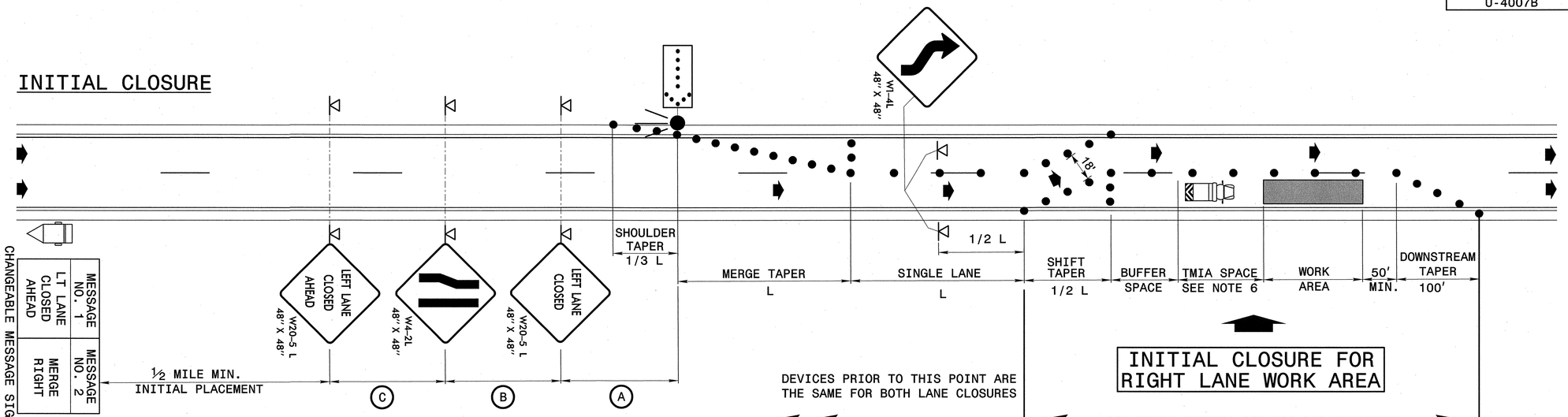
PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-14

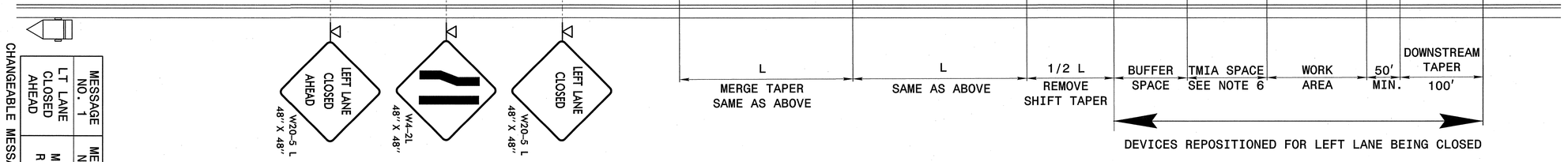
INITIAL CLOSURE



INITIAL CLOSURE FOR RIGHT LANE WORK AREA

LANE CLOSURE SWITCH FOR LEFT LANE WORK AREA

LANE CLOSURE SWITCH



NOTES

1) PLACE ARROW PANELS ON THE SHOULDER (PAVED OR UNPAVED). PLACE ARROW PANELS WITHIN THE TAPER IF SHOULDERS DO NOT EXIST. MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE ARROW PANEL LOCATION. IF NEEDED, EXTEND LANE CLOSURES, AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE TO THE ARROW PANEL IS MET. (REFER TO STD. NO. 1101.11 SHEET 2)

2) PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE BUFFER SPACE AND WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.

3) REFER TO STD. NO. 1101.11-SHEETS 1, 2 & 4, FOR "L" DISTANCE, BUFFER SPACE & SIGN SPACING.

4) INITIAL SETUP OF THE SHIFT TAPER AND SUBSEQUENT REPOSITIONING OF DEVICES DURING LANE CLOSURE SWITCHES TO BE PERFORMED BY A ROLLING ROADBLOCK OPERATION. SEE RSD 1101.02, SHEET 9.

5) PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. INITIALLY, PLACE CMS APPROXIMATELY ½ MILE IN ADVANCE OF THE W20-5 SIGNS. RELOCATE THE UNIT AS NEEDED AND AS DIRECTED BY THE ENGINEER TO ADEQUATELY INFORM MOTORISTS.

6) USE TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) TO PROTECT THE WORK AREA. POSITION TMIA TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER.

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APPROVED Betsy Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TYPICAL LANE CLOSURES

LEFT LANE CLOSURE WITH SWITCH FOR RIGHT LANE WORK AREA

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH

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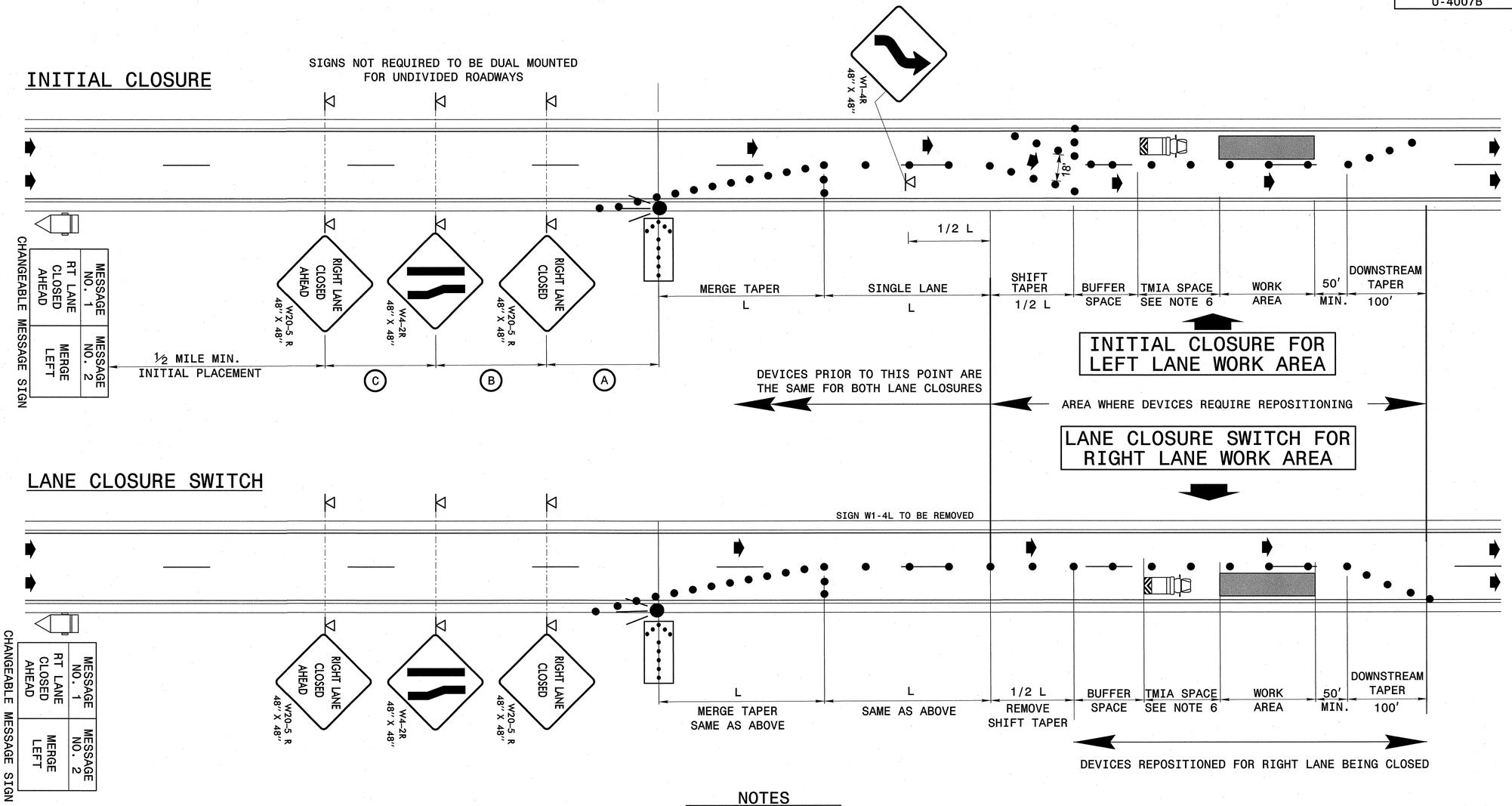
PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-14A

INITIAL CLOSURE



LANE CLOSURE SWITCH

NOTES

1) PLACE ARROW PANELS ON THE SHOULDER (PAVED OR UNPAVED). PLACE ARROW PANELS WITHIN THE TAPER IF SHOULDERS DO NOT EXIST. MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE ARROW PANEL LOCATION. IF NEEDED, EXTEND LANE CLOSURES, AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE TO THE ARROW PANEL IS MET. (REFER TO STD. NO. 1101.11 SHEET 2)

2) PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE BUFFER SPACE AND WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.

3) REFER TO STD. NO. 1101.11-SHEETS 1, 2 & 4, FOR "L" DISTANCE, BUFFER SPACE & SIGN SPACING.

4) INITIAL SETUP OF THE SHIFT TAPER AND SUBSEQUENT REPOSITIONING OF DEVICES DURING LANE CLOSURE SWITCHES TO BE PERFORMED BY A ROLLING ROADBLOCK OPERATION. SEE RSD 1101.02, SHEET 9.

5) PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. INITIALLY, PLACE CMS APPROXIMATELY ½ MILE IN ADVANCE OF THE W20-5 SIGNS. RELOCATE THE UNIT AS NEEDED AND AS DIRECTED BY THE ENGINEER TO ADEQUATELY INFORM MOTORISTS.

6) USE TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) TO PROTECT THE WORK AREA. POSITION TMIA TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER.

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APPROVED: Betsy L Watson DATE: 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

TYPICAL LANE CLOSURES

RIGHT LANE CLOSURE WITH SWITCH FOR LEFT LANE WORK AREA

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH TRAFFIC CONTROL UNIT

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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-15

FIGURE A — MULTI-LANE ROADWAY (4 LANES OR GREATER)

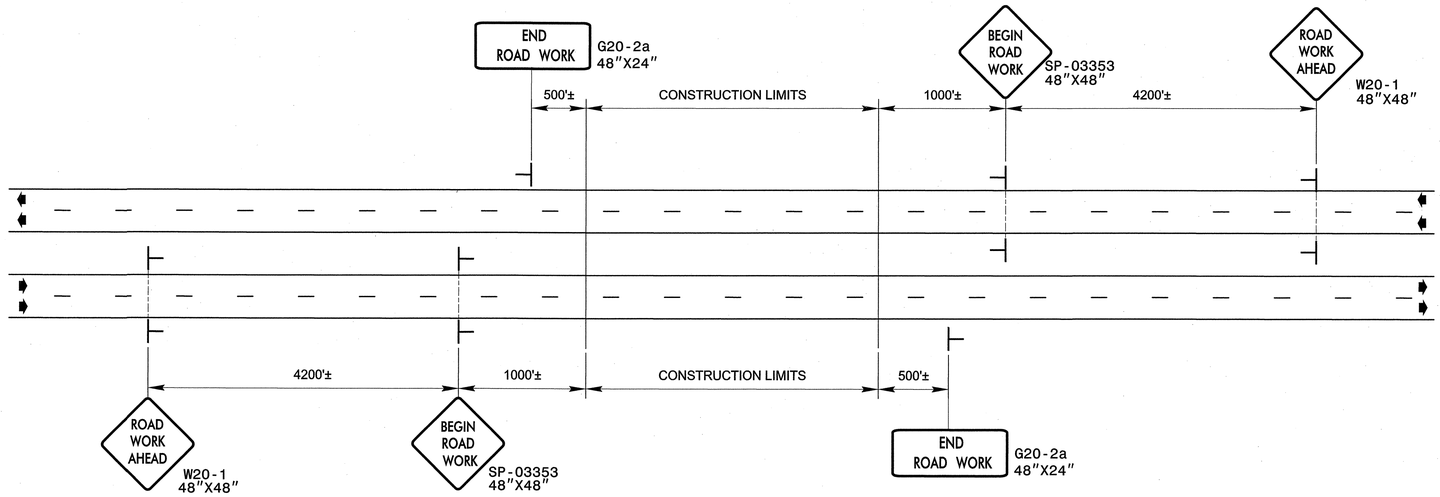
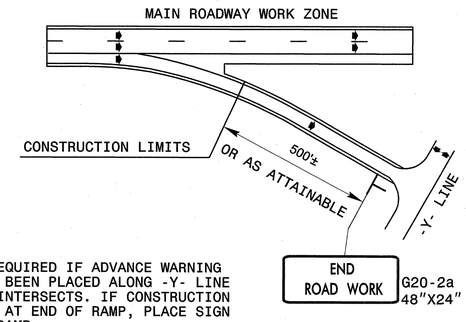


FIGURE B — EXIT RAMPS



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.

FIGURE C — ENTRANCE RAMPS

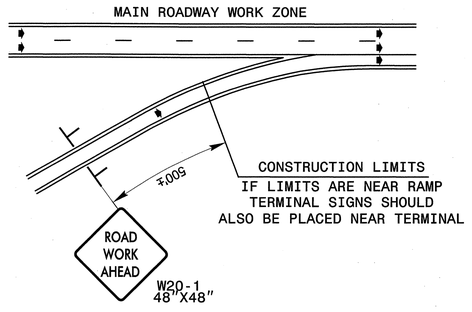
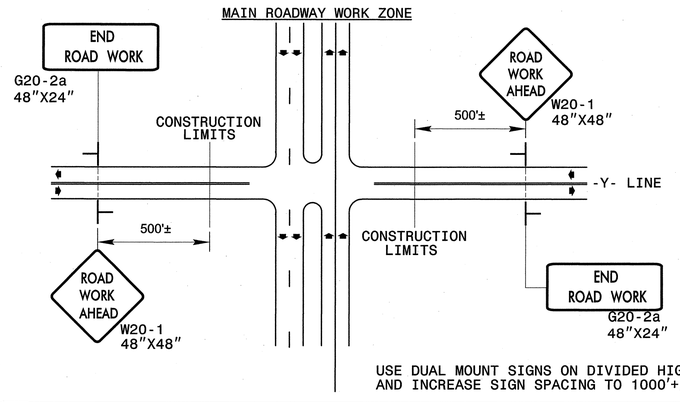


FIGURE D — -Y- LINES



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

NOTES:

- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- FOR UNDIVIDED ROADWAYS SIGNS ARE NOT REQUIRED ON THE LEFT SIDE OF EACH APPROACH.

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APPROVED: Betsy L Watson DATE 6/14/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

WORK ZONE ADVANCE WARNING SIGNS

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

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PROJECT REFERENCE NO.	SHEET NO.
U-4007B	TCP-16

SP 03353

SIGN NUMBER: SP-03353
TYPE: A
QUANTITY: 1

SIGN WIDTH: 4'-0"
HEIGHT: 4'-0"
TOTAL AREA: 16.0 Sq.Ft.

BORDER TYPE: FLUSH
RECESS: 0.59"
WIDTH: 0.75"
RADII: 1.38"

NO. Z BARS: N/A
LENGTH: N/A

BACKG COLOR: Fluorescent Orange
COPY COLOR: Black

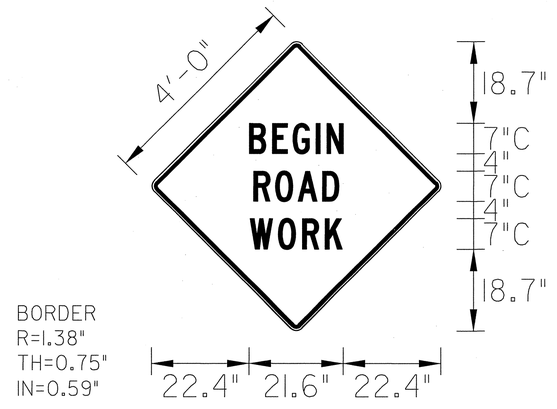
SYMBOL	X	Y	WID	HT

MAT'L:

DESIGN BY: SL DONNEY
PROJECT ID: ALL PROJECTS
CHECKED BY: CHECKED
DIV: DIV
STD #: W20-1
DATE: Aug 20,2003

USE NOTES: 2, 4

1. Legend and border shall be direct applied Type VII reflective sheeting.
2. Legend and border shall be direct applied non-reflective sheeting.
3. Shields shall be Type VII reflective sheeting on 0.032" (0.8mm) aluminum and demountable.
4. Background shall be Type VII reflective sheeting.
5. Background shall be Type I reflective sheeting.
6. Center arrow(s) vertically on sign.
7. Bottom panel shall be yellow Type III sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:



LETTER POSITIONS

Letter spacings are to start of next letter

								Series/Size Text Length
		B	E	G	I	N		C7
	22.4	5.3	4.6	5.4	2.5	3.8	22.4	21.6
		R	O	A	D			C7
	23.4	5	5.2	5.6	3.8	23.4		19.6
		W	O	R	K			C7
	22.6	6.4	5.6	5.2	4	22.6		21.2

Spacing Factor is 1 unless specified otherwise

GENERAL NOTES FOR THE "BEGIN ROAD WORK" SIGN

-SIGN SP-03353 "BEGIN ROAD WORK" ONLY APPLIES TO FULL CONTROL AND PARTIAL CONTROL OF ACCESS ROADWAYS

-WHEN USED, INSTALL SIGN SP-03353 "BEGIN ROAD WORK" ACCORDING TO DETAIL A ON SHEET TCP-15.

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APPROVED: Betsy L Watson DATE: 6/25/10

NORTH CAROLINA PROFESSIONAL SEAL 29449 ENGINEER BETSY L. WATSON

DETAIL DRAWING FOR ADVANCED WORK ZONE WARNING SIGN DESIGNS

SCALE:	NONE
DATE:	JUNE 2010
DWG. BY:	GK
DESIGN BY:	GK
REVIEWED BY:	BLW

REVISIONS

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