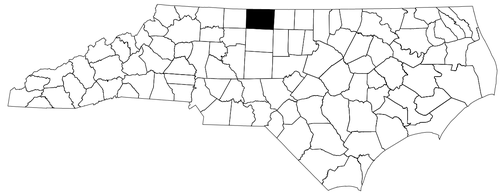
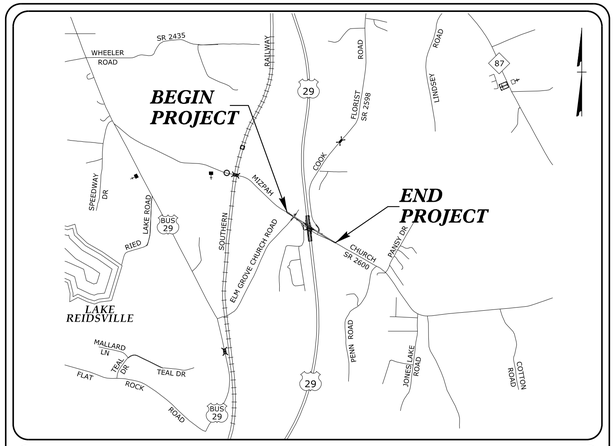
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ROCKINGHAM COUNTY





VICINITY MAP
NOT TO SCALE

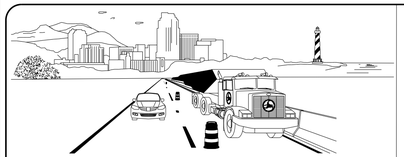
LOCATION: BRIDGE NO. 116 ON SR 2600 (MIZPAH CHURCH ROAD) OVER US-29

INDEX OF SHEETS

SHEET NO.
TMP-1

BR-0042

TIP PROJECT:



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

PLANS PREPARED BY:
JEFFREY KOONTZ, PE
PROJECT ENGINEER
KASEY McCOY
PROJECT DESIGNER

NCDOT CONTACTS:
KENNETH THORNWELL, JR. PE
PROJECT ENGINEER
JUSTIN BEAVER, PE
PROJECT DESIGN ENGINEER

AECOM
NC FIRM LICENSE No: F-0342
701 Corporate Center Drive, Suite 475
Raleigh, NC 27607
(919) 854-6200 - (919) 854-6259(FAX)

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...
DATE: 5/28/2020

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_01.dgn
User:jeffk.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-1A

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMPORARY SHORING
- PORTABLE CONCRETE BARRIER

- WORK ZONE
- PREVIOUS WORK
- REMOVAL
- WEDGING/OVERLAY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING

	PAINT
PA	WHITE EDGE LINE (4")
PB	YELLOW EDGELINE (4")
PC	10 FT. WHITE SKIP (4")
PE	WHITE LANE LINE (4")
PI	YELLOW DOUBLE CENTERLINE (4")
P2	WHITE STOP LINE (24")
	COLD APPLIED PLASTIC, TYPE I
C1	WHITE EDGE LINE (4")
C13	YELLOW DOUBLE CENTERLINE (4")

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

ROADWAY STANDARD DRAWINGS & LEGEND

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_IA.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-02

GENERAL NOTES

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

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

TIME RESTRICTIONS - REQUIRES INTERMEDIATE CONTRACT TIME PROJECT SPECIAL PROVISIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
US 29	MONDAY-FRIDAY 6:00 AM-9:00AM & 4:00 PM-6:00 PM

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

ROAD NAME

US 29

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 6:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

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

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
US 29	MON-SUN 6:00 AM-10:00 PM	30 MINS FOR GIRDER INSTALL/REMOVE

D) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FROM RAMPS WILL BE ALLOWED:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 29	MONDAY-FRIDAY 6:00 AM-9:00AM & 4:00 PM-6:00 PM

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.

K) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS

L) 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.

M) 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) 275 FEET IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

N) NOTIFY THE ENGINEER THIRTY (30) 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.

P) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

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

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

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

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

TRAFFIC BARRIER

S) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT 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 TRANSPORTATION MANAGEMENT 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 TRANSPORTATION MANAGEMENT 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.

T) 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 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: (SEE ALSO 1101.05)

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

U) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY.REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

V) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

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

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMPORARY RAISED

Y) 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.

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

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

MISCELLANEOUS

BB) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 100 AND 325 RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 1/25/2021

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-2A

PROJECT NOTES

1) NO CONSTRUCTION ACTIVITIES PERMITTED DURING SUNDAY SERVICES AT MIZPAH UNITED METHODIST CHURCH.

2) COORDINATE WITH MIZPAH UNITED METHODIST CHURCH TO PROVIDE ACCESS DURING PHASE III CONSTRUCTION.

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PROJECT NOTES

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_02A.dgn
User:jeff.koontz

TEMPORARY SHORING NOTES

TEMPORARY SHORING NO. 1 (SEE SHEET TMP-04)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. LT. TO STATION 13+60 +/- -Y-, 22 FT. LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, γ = 120 PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, γ' = 60 PCF
- FRICTION ANGLE, ϕ = 30
- COHESION, c = 0 PSF
- GROUNDWATER ELEVATION = 733 FT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. LT. TO STATION 13+60 +/- -Y-, 22 FT. LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. LT. TO STATION 13+60 +/- -Y-, 22 FT. LT MAY NOT PENETRATE BELOW ELEVATION 710 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. LT. TO STATION 13+60 +/- -Y-, 22 FT. LT. SEE GEOTECHNICAL STANDARD DETAIL 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING NO. 2 (SEE SHEET TMP-04)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. RT. TO STATION 13+60 +/- -Y-, 22 FT. RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, γ = 120 PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, γ' = 60 PCF
- FRICTION ANGLE, ϕ = 30
- COHESION, c = 0 PSF
- GROUNDWATER ELEVATION = 733 FT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. RT. TO STATION 13+60 +/- -Y-, 22 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. RT. TO STATION 13+60 +/- -Y-, 22 FT. RT MAY NOT PENETRATE BELOW ELEVATION 710 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 13+00 +/- -Y-, 22 FT. RT. TO STATION 13+60 +/- -Y-, 22 FT. RT. SEE GEOTECHNICAL STANDARD DETAIL 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING NO. 3 (SEE SHEET TMP-08)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 18+48 +/- -L-, 40 FT. RT. TO STATION 18+82 +/- -L-, 42 FT. RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, γ = 120 PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, γ' = 60 PCF
- FRICTION ANGLE, ϕ = 30
- COHESION, c = 0 PSF
- GROUNDWATER ELEVATION = 731 FT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 18+48 +/- -L-, 40 FT. RT. TO STATION 18+82 +/- -L-, 42 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 18+48 +/- -L-, 40 FT. RT. TO STATION 18+82 +/- -L-, 42 FT. RT MAY NOT PENETRATE BELOW ELEVATION 702 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 18+48 +/- -L-, 40 FT. RT. TO STATION 18+82 +/- -L-, 42 FT. RT. SEE GEOTECHNICAL STANDARD DETAIL 1801.01 FOR STANDARD TEMPORARY SHORING.

TEMPORARY SHORING NO. 4 (SEE SHEET TMP-08)

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

DESIGN TEMPORARY SHORING FROM STATION 21+08 +/- -L-, 55.0 FT. RT. TO STATION 21+50 +/- -L-, 55.0 FT. RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE, γ = 120 PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE, γ' = 60 PCF
- FRICTION ANGLE, ϕ = 30
- COHESION, c = 0 PSF
- GROUNDWATER ELEVATION = 732 FT.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION 21+08 +/- -L-, 55 FT. RT. TO STATION 21+50 +/- -L-, 55 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

DRIVEN PILES FOR TEMPORARY SHORING FROM STATION 21+08 +/- -L-, 55 FT. RT. TO STATION 21+50 +/- -L-, 55 FT. RT MAY NOT PENETRATE BELOW ELEVATION 724 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

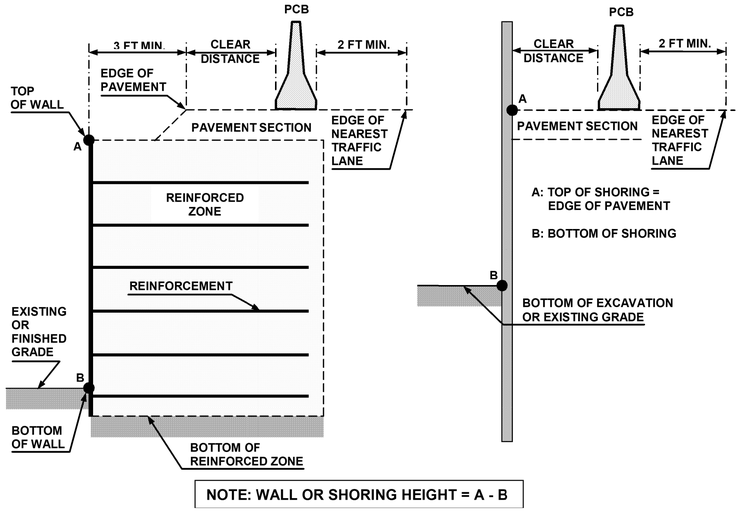
NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

TEMPORARY SHORING NOTES

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-02C



NOTE: WALL OR SHORING HEIGHT = A - B

FIGURE A

NOTES

1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.

2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).

3- PCB IS REQUIRED IF TEMPORARY SHORING IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).

4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.

5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.

6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.

7- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.

8- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS AND OR AS APPROVED BY THE ENGINEER.

9- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.

10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
		>56	32	36	42	45	47	51
	Concrete	<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
		50-56	26	26	28	32	35	38
		>56	26	27	29	32	36	38
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

* See Figure Below

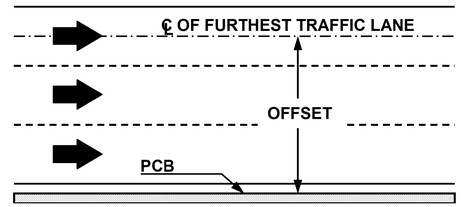


FIGURE B

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

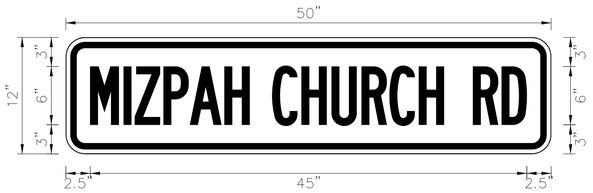
DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_02C_barrierSTD.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-02D

SIGN DETAIL
1:10



SIGN NUMBER	name
WIDTH x HGHT.	4'-2" x 1'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Orange
LEGEND/BORDER	TYPE: Reflective
	COLOR: Black/Black

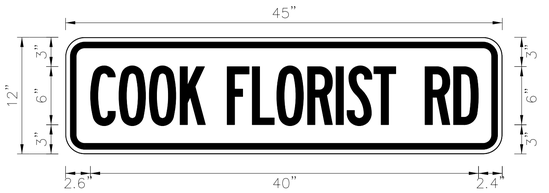
SYMBOL	ROT	X	Y	WID	HT

Panel Style=onstruction_guide.ssi
Dimensions are inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

M	I	Z	P	A	H		C	H	U	R	C	H	R	D								LENGTH	SERIES/SIZE
2.5	6	7.1	10.1	12.8	16.4	18.9	21.3	24.3	27.4	30.5	33.4	36.4	42	44.9								45	B 2000 6

SIGN DETAIL
1:10



SIGN NUMBER	name
WIDTH x HGHT.	3'-9" x 1'-0"
BORDER WIDTH	0.63"
CORNER RADIUS	1.5"
MOUNTING	Ground
BACKGROUND	TYPE: Reflective
	COLOR: Orange
LEGEND/BORDER	TYPE: Reflective
	COLOR: Black/Black

SYMBOL	ROT	X	Y	WID	HT

Panel Style=onstruction_guide.ssi
Dimensions are inches.tenths Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

C	O	O	K		F	L	O	R	I	S	T	R	D									LENGTH	SERIES/SIZE
2.6	5.5	8.6	11.8	14.4	16.6	19.2	21.8	24.9	27.9	29	31.8	37	40									40	B 2000 6

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

SIGN DESIGN

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_02D.dgn
User:jeff.koontz

PHASE I

STEP 1) PRIOR TO ANY CONSTRUCTION ACTIVITY, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON ALL ROADS INVOLVED (MIZPAH CHURCH ROAD (SR 2600), ELM GROVE CHURCH ROAD (SR 2660), COOK FLORIST ROAD (SR 2598), MAGNOLIA DRIVE (SR 2683), AND US 29 ACCORDING TO THE ROADWAY STANDARD DRAWING 1101.01.

STEP 2) USING RSD 1101.02 (SHT 4 OF 14) FOR TEMPORARY LANE CLOSURES ON US 29, INSTALL ADVANCE WARNING SIGNS, REMOVE EXISTING PAVEMENT MARKINGS, AND PLACE PAVEMENT MARKING (PAINT) AND MARKERS (TEMPORARY RAISED) IN TEMPORARY PATTERN ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-04):

SBL: 620 FT +/- NORTH OF -Y- STA. 10+00 +/- TO 600 FEET SOUTH OF –Y- STA. 18+00
NBL: 600 FT +/- NORTH OF -Y- STA. 10+00 +/- TO 620 FEET SOUTH OF –Y- STA. 18+00

AND SHIFT TRAFFIC INTO NEW PATTERN.

STEP 3) USING RSD 1101.02 (SHT 4 OF 14) FOR TEMPORARY LANE CLOSURES ON US 29, INSTALL PORTABLE CONCRETE BARRIER (PCB) ON THE INSIDE SHOULDER OF US 29 ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-04 THRU TMP-05):

SBL: 200 FT NORTH OF -Y- STA. 10+00 +/- TO 80 FT SOUTH OF –Y- STA. 18+00 +/-
NBL: 80 FT NORTH OF -Y- STA. 10+00 +/- TO 200 FT SOUTH OF –Y- STA. 18+00 +/-

STEP 4) WORKING BEHIND BARRIER, CONSTRUCT THE MEDIAN BRIDGE PIER AND US 29 MEDIAN AND TEMPORARY 3' MEDIAN WIDENING UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-04 THRU TMP-05):

-Y1- STA. 10+00 +/- TO STA. 18+00 +/-
-Y1- STA. 13+90 +/- TO STA. 17+50 +/- (MEDIAN WIDENING LT)
-Y1- STA. 10+00 +/- TO STA. 15+00 +/- (MEDIAN WIDENING RT)

PHASE II

STEP 1) USING RSD 1101.02 (SHT 4 OF 14) FOR TEMPORARY LANE CLOSURES ON US 29, RESET PCB AND PLACE WEDGING AND OVERLAY UP TO, BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-06 THRU TMP-07):

-Y- STA. 10+40 +/- TO STA. 15+00 +/- RESET PCB RT
-Y- STA. 12+70 +/- TO STA. 17+20 +/- RESET PCB LT
-Y- STA. 10+00 +/- TO STA. 18+00 +/- WEDGING & OVERLAY

AND USING RSD 1205.01 AND 1205.02 PLACE TEMPORARY PAVEMENT MARKING (PAINT) AND MARKERS (TEMPORARY RAISED) FOR NEW TEMPORARY PATTERN ON US 29 FOR PHASES II AND III ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-06):

SBL: 620 FT NORTH OF -Y- STA. 10+00 +/- TO 570 FT SOUTH OF –Y- STA. 18+00 +/-
NBL: 570 FT NORTH OF -Y- STA. 10+00 +/- TO 620 FT SOUTH OF –Y- STA. 18+00 +/-

AND SHIFT TRAFFIC INTO NEW PATTERN.

STEP 2) USING RSD 1101.02 (SHT 4 OF 14) FOR TEMPORARY LANE CLOSURES ON US 29, RESET OR PLACE PCB ALONG THE OUTSIDE SHOULDERS OF US 29 ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-08 AND TMP-10):

RESET PCB SBL: 200 FT NORTH OF -Y- STA. 10+00 +/- TO 50 FT SOUTH OF -Y- STA. 18+00 +/-
RESET PCB NBL: 50 FT NORTH OF -Y- STA. 10+00 +/- TO 5 FT NORTH OF –Y- STA. 10+00 +/-
PLACE PCB NBL: 5 FT NORTH OF -Y- STA. 10+00 +/- TO 200 FT SOUTH OF -Y- STA. 18+00 +/-

STEP 3) WORKING BEHIND BARRIER, AWAY FROM TRAFFIC, OR USING RSD 1101.02 (SHT 1 OF 14), CONSTRUCT BRIDGE AND MIZPAH CHURCH (-L-), AND US 29 (-Y-) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-08 THRU TMP-10):

-L- STA. 15+50+/- TO STA. 18+50+/- (BEGIN BRIDGE)
-L- STA. 20+50+/- (END BRIDGE) TO STA. 22+50+/-
-L- STA. 23+75+/- TO STA. 29+40+/- (UP TO EXISTING EDGE & ELEVATION OF SR 2600)
-Y- STA. 10+00+/- TO STA. 13+25+/- (SBL)
-Y- STA. 14+20+/- TO STA. 18+00+/- (SBL)
-Y- STA. 10+00+/- TO STA. 14+20+/- (NBL)
-Y- STA. 15+10+/- TO STA. 18+00+/- (NBL)

WORKING BEHIND PCB AND USING RSD 1101.03 (SHEET 9 OF 9) WITH ROLLING ROAD BLOCK FOR ROAD CLOSURE, CONSTRUCT THE MIZPAH CHURCH ROAD BRIDGE OVER US 29 (SEE TMP-08) AS FOLLOWS:

GIRDER INSTALLATION OVER NORTHBOUND US 29

WORKING ON CONSECUTIVE NIGHTS DURING ALLOWABLE CLOSURE HOURS, INSTALL GIRDERS OVER NORTHBOUND US 29 (-Y-) AS FOLLOWS:

USE RSD 1101.03 (SHEET 9 OF 9) WITH ROLLING ROADBLOCK FOR TEMPORARY ROAD CLOSURE OF NORTHBOUND US 29 AT BRIDGE.

SET ALL BRIDGE GIRDERS OVER THE NORTHBOUND LANES OF US 29 (-Y-).

AT THE END OF EACH NIGHT, OPEN BOTH NORTHBOUND LANES OF US 29 TO TRAFFIC.

GIRDER INSTALLATION OVER SOUTHBOUND US 29

WORKING ON CONSECUTIVE NIGHTS DURING ALLOWABLE CLOSURE HOURS, INSTALL GIRDERS OVER SOUTHBOUND US 29 (-Y-) AS FOLLOWS:

USE RSD 1101.03 (SHEET 9 OF 9) WITH ROLLING ROADBLOCK FOR TEMPORARY ROAD CLOSURE OF SOUTHBOUND US 29 AT BRIDGE.

SET ALL BRIDGE GIRDERS OVER THE SOUTHBOUND LANES OF US 29 (-Y-).

AT THE END OF EACH NIGHT, OPEN SOUTHBOUND LANES OF US 29 TO TRAFFIC.

PHASE III

STEP 1) PLACE PORTABLE CHANGEABLE MESSAGE BOARDS OUT TWO WEEKS IN ADVANCE OF ROAD CLOSURES. INSTALL AND COVER DETOUR SIGNS SHOWN ON TMP-13.

INTERMEDIATE CONTRACT TIME

COMPLETE THE FOLLOWING WORK OF PHASE IIII, STEPS 2 THROUGH 4 ON MIZPAH CHURCH ROAD (–L-), ELM GROVE CHURCH ROAD (-Y1- & -Y2-), MAGNOLIA DRVE (-Y3-), AND COOK FLORIST ROAD (-Y4-) IN ACCORDANCE WITH THE INTERMEDIATE CONTRACT TIME OF 30 CONSECUTIVE DAYS (SEE SPECIAL PROVISIONS).

STEP 2) UNCOVER DETOUR SIGNS AND CONSTRUCT –L-, -Y1-, -Y2-, AND –Y3- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-11 THRU TMP-12):

-L- STA. 11+54 +/- TO STA. 16+53 +/-
-L- STA. 22+50 +/- TO STA. 23+75 +/-
-Y1- STA. 11+70 +/- TO STA. 12+75 +/-
-Y2- STA. 10+18 +/- TO STA. 11+45 +/-
-Y3- STA. 10+25 +/- TO STA. 12+55 +/-
-Y4- STA. 11+50 +/- TO STA. 14+00 +/-

USE RSD 1101.02 (SHT 1 OF 14) AND FLAGGERS FOR ALTERNATING LANE CLOSURE ON MAGNOLIA DRIVE TO MAINTAIN TRAFFIC ACCESS TO MIZPAH CHURCH ROAD.

STEP 3) USING RSD 1101.02 (SHT 1 OF 14) AND FLAGGERS FOR ALTERNATING LANE CLOSURES, PLACE WEDGING AND OVERLAY ON MIZPAH CHURCH ROAD ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-12):

-L- STA. 26+70 +/- TO STA. 29+40 +/-

STEP 4) USING RSD 1101.02 (SHEETS 1 OF 14) WITH FLAGGERS FOR TEMPORARY LANE CLOSURES AND RSD 1205.01, 1205.02, 1205.04, AND 1205.12, PLACE PAVEMENT MARKING (TEMPORARY PAINT ON ROADWAY AND FINAL COLD APPLIED PLASTIC ON CONCRETE BRIDGE) IN THE FINAL PATTERN ACCORDING TO THE FOLLOWING STATIONS (SEE PAVEMENT MAKING PLANS):

-L- STA. 11+54 +/- TO STA. 29+40 +/-
-Y1- STA. 11+70 +/- TO STA. 12+75 +/-
-Y2- STA. 10+25 +/- TO STA. 11+45 +/-
-Y3- STA. 10+20 +/- TO STA. 12+55 +/-
-Y4- STA. 11+50 +/- TO STA. 14+00 +/-

REMOVE BARRICADES AND SHIFT MIZPAH CHURCH ROAD AND MAGNOLIA DRIVE TRAFFIC TO NEW ALIGNMENTS AND OPEN ALL OTHER ROADS TO TRAFFIC (SEE TMP-14 THRU TMP-15).

PHASE IV

STEP 1) PLACE DRUMS ALONG MIZPAH CHURCH ROAD AND WORKING AWAY FROM TRAFFIC OR USING RSD 1101.02 (SHT 1 OF 14) AND FLAGGERS FOR TEMPORARY LANE CLOSURE, REMOVE OLD PAVEMENT FROM MIZPAH CHURCH ROAD, MAGNOLIA DRIVE, AND COOK FLORIST ROAD (SEE TMP-14 THRU TMP-15 AND ROADWAY PLANS).

STEP 2) WORKING BEHIND PCB OR AWAY FROM TRAFFIC REMOVE MIZPAH CHURCH ROAD BRIDGE AND ABUTMENTS.

GIRDER REMOVAL OVER NORTHBOUND US 29

WORKING ON CONSECUTIVE NIGHTS DURING ALLOWABLE CLOSURE HOURS, REMOVE GIRDERS OF MIZPAH CHURCH ROAD BRIDGE OVER NORTHBOUND US 29 (-Y-) AS FOLLOWS:

USE RSD 1101.03 (SHEET 9 OF 9) WITH ROLLING ROADBLOCK FOR TEMPORARY ROAD CLOSURE OF NORTHBOUND US 29 AT BRIDGE.

REMOVE ALL BRIDGE GIRDERS OVER THE NORTHBOUND LANES OF US 29 (-Y-).

AT THE END OF EACH NIGHT, OPEN BOTH NORTHBOUND LANES OF US 29 TO TRAFFIC.

GIRDER REMOVAL OVER SOUTHBOUND US 29

WORKING ON CONSECUTIVE NIGHTS DURING ALLOWABLE CLOSURE HOURS, INSTALL GIRDERS OVER SOUTHBOUND US 29 (-Y-) AS FOLLOWS:

USE RSD 1101.03 (SHEET 9 OF 9) WITH ROLLING ROADBLOCK FOR TEMPORARY ROAD CLOSURE OF SOUTHBOUND US 29 AT BRIDGE.

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...
DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT PHASING

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_03.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-03A

REMOVE ALL BRIDGE GIRDERS OVER THE SOUTHBOUND LANES OF US 29 (-Y-).

AT THE END OF EACH NIGHT, OPEN SOUTHBOUND LANES OF US 29 TO TRAFFIC.

STEP 3) WORKING BEHIND PCB, CONSTRUCT THE OUTSIDE SHOULDERS OF US 29 (-Y-) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-14):

-Y- STA. 13+25 +/- TO STA. 14+20 +/- (SBL)
-Y- STA. 14+20 +/- TO STA. 15+10 +/- (NBL)

PHASE V

STEP 1) USING RSD 1101.02 (SHT 4 OF 14) FOR TEMPORARY OUTSIDE LANE CLOSURES ON US 29, REMOVE PCB PLACED IN PHASE III.

USING RSD 1101.02 (SHT 4 OF 14) FOR TEMPORARY INSIDE LANE CLOSURES ON US 29, REMOVE THE EXISTING BRIDGE PIER AND CONSTRUCT THE PROPOSED MEDIAN OF US 29 (-Y-) ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-16):

-Y- STA. 13+67 +/- TO –Y- STA. 14+52

PHASE VI

STEP 1) USING RSD 1101.02 (SHT 4 OF 14) FOR TEMPORARY INSIDE LANE CLOSURES ON US 29, REMOVE PCB PLACED IN MEDIAN AND REMOVE TEMPORARY 3' MEDIAN WIDENING OF US 29 (-Y-) ACCORDING TO THE FOLLOWING STATIONS (SEE TMP-17):

-Y- STA. 10+00 +/- TO –Y- STA. 12+69 +/- MEDIAN RT
-Y- STA. 13+90 +/- TO –Y- STA. 15+00 +/- MEDIAN RT
-Y- STA. 13+90 +/- TO –Y- STA. 17+50 +/- MEDIAN LT

PHASE VII

STEP 1) USING RSD 1101.02 (SHEETS 1 AND 4 OF 14) AND FLAGGERS AS NEEDED FOR TEMPORARY LANE CLOSURES, PLACE THE FINAL LAYER OF SURFACE COURSE AND USING RSD 1205.01, 1205.02, 1205.04, 1205.05, 1205.12, 1250.01, AND 1251.01, PLACE PERMANENT PAVEMENT MARKING (THERMOPLASTIC) AND MARKERS (SNOWPLOWABLE OR RAISED PERMANENT ON CONCRETE BRIDGE) IN FINAL PATTERN ACCORDING TO THE PAVEMENT MARKING PLAN FOR –L- LINES, AND -Y-LINES ACCORDING TO THE FOLLOWING STATIONS:

-L- STA. 11+54 +/- TO STA. 29+40 +/-
-Y- STA. 10+00 +/- TO STA. 18+00 +/-
-Y1- STA. 11+70 +/- TO STA.12+86 +/-
-Y2- STA. 10+18 +/- TO STA. 11+45 +/-
-Y3- STA. 10+24 +/- TO STA. 12+55 +/-
-Y4- STA. 11+50 +/- TO STA. 14+15 +/-

REMOVE ALL REMAINING TRAFFIC CONTROL SIGNS AND DEVICES AND OPEN PROJECT FULLY TO TRAFFIC.

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...
DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

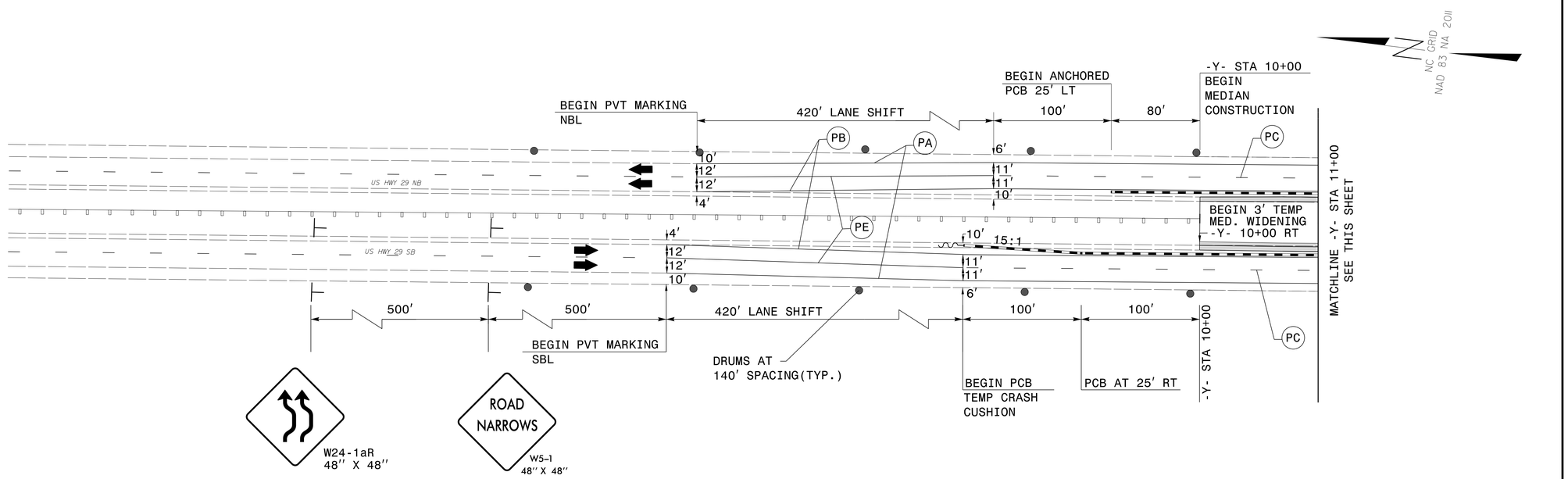
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

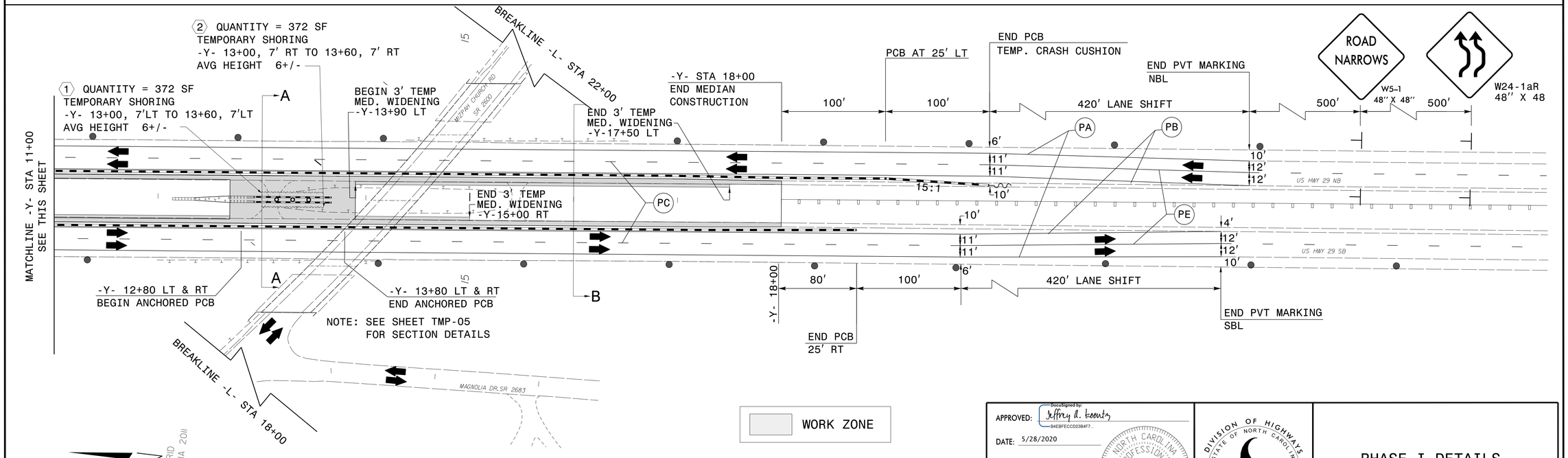
PROJECT PHASING

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_3A.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-04



NOTE: ALSO LOCATE SIGNS ON US 29 NBL



NOTE: SEE SHEET TMP-05
FOR SECTION DETAILS

WORK ZONE

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

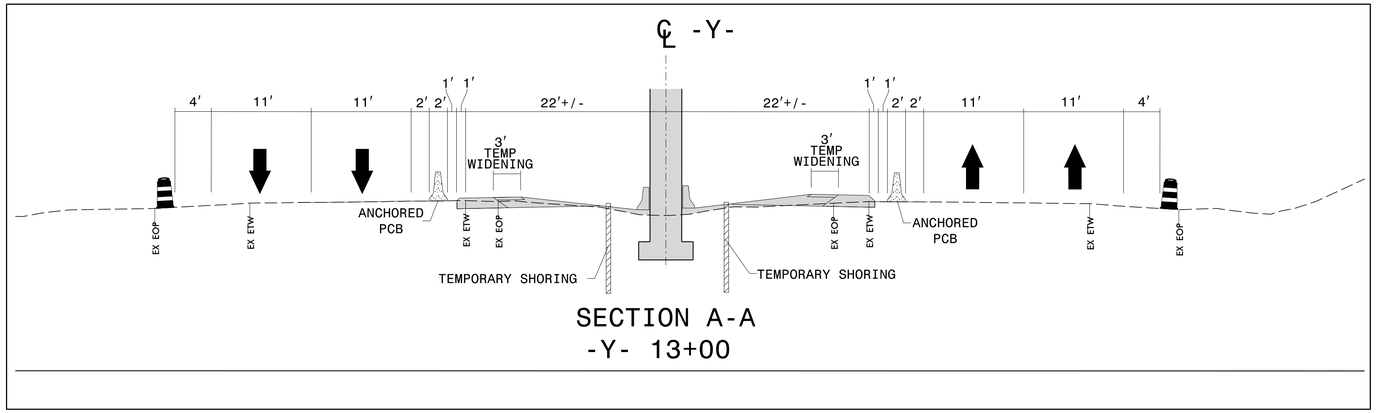
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

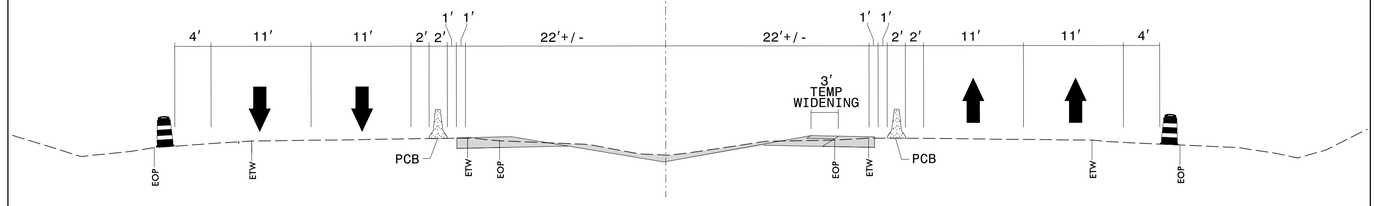
PHASE I DETAILS
US 29

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_04_Phase I.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-05



SECTION A-A
-Y- 13+00



SECTION B-B
-Y- 16+00

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A KOONTZ

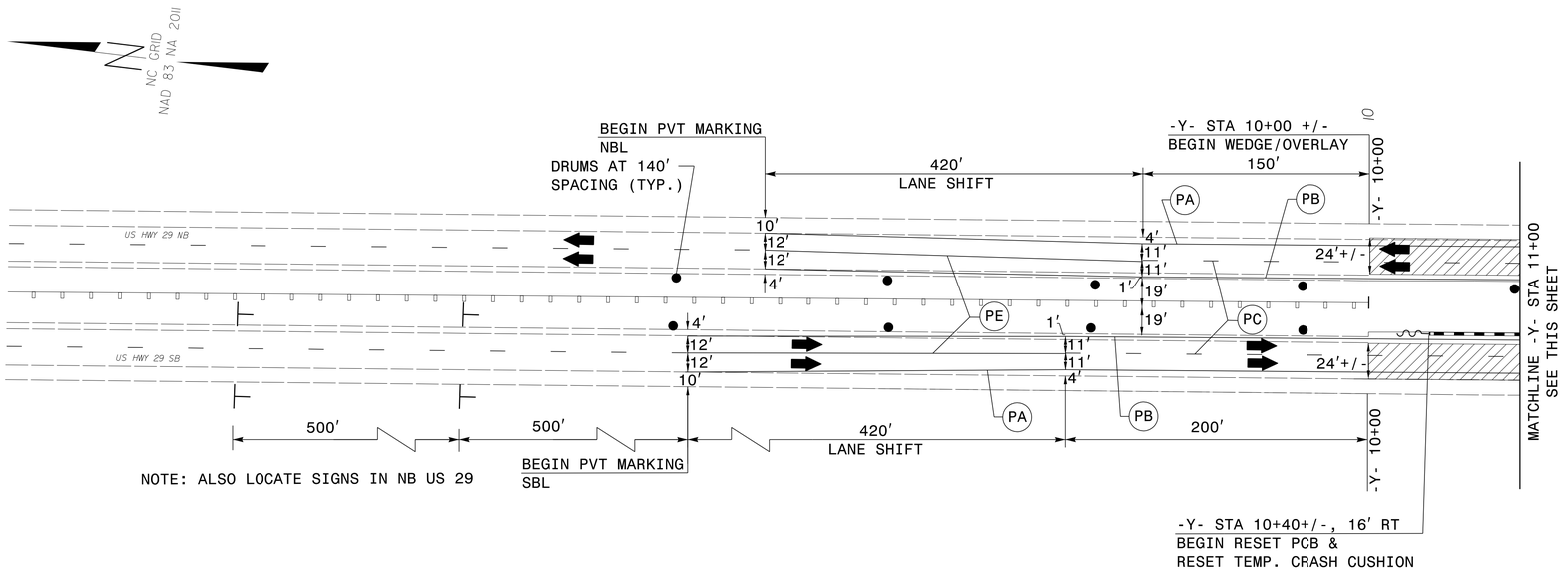
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

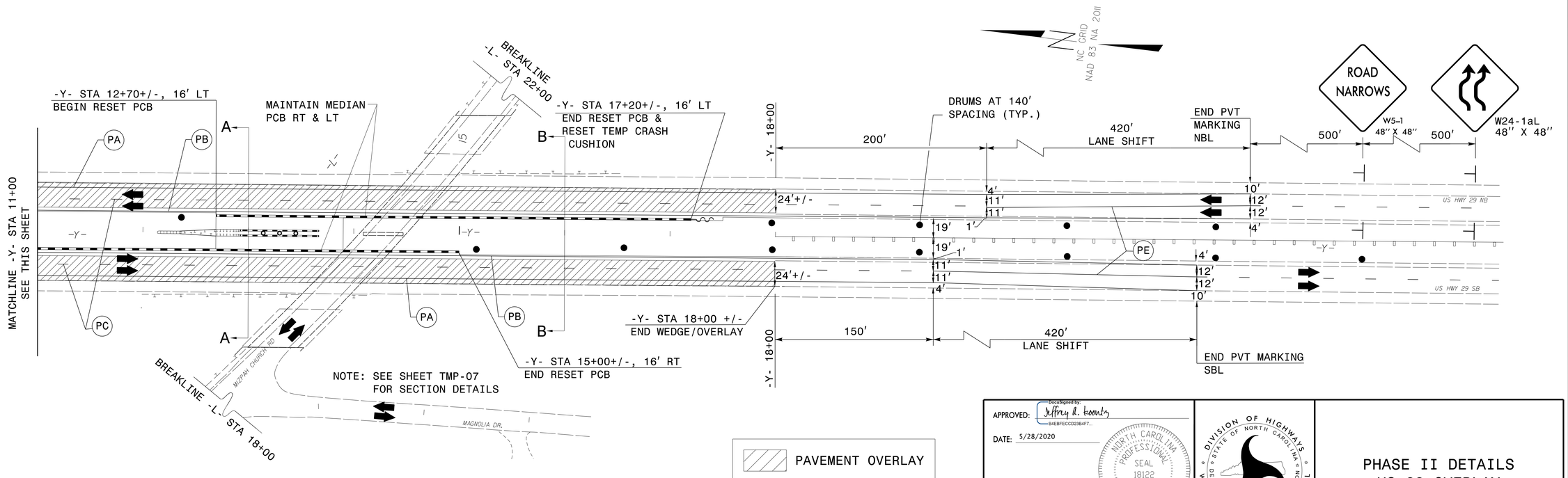
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASE I DETAILS
US 29 MEDIAN

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_05_Phase I_Section Details.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-06





APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

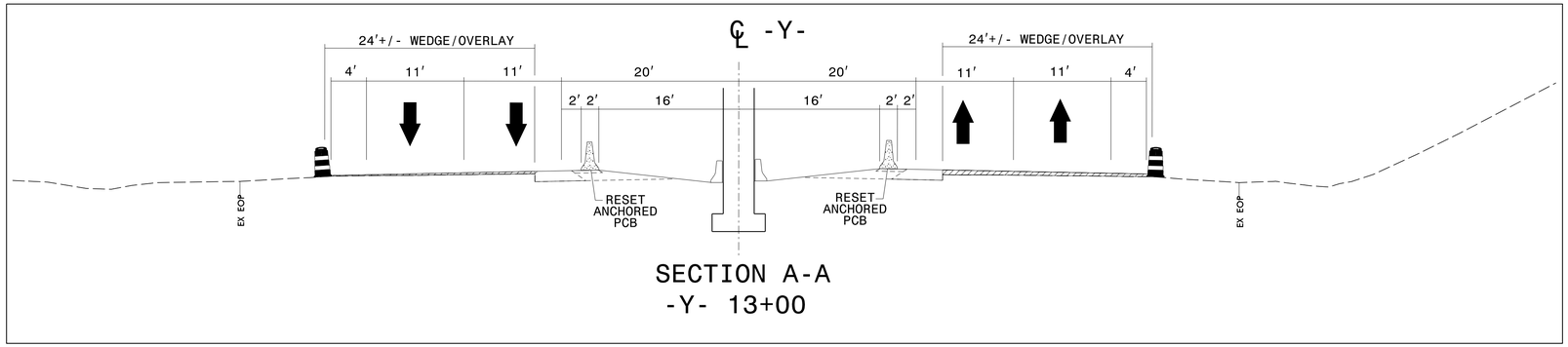
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

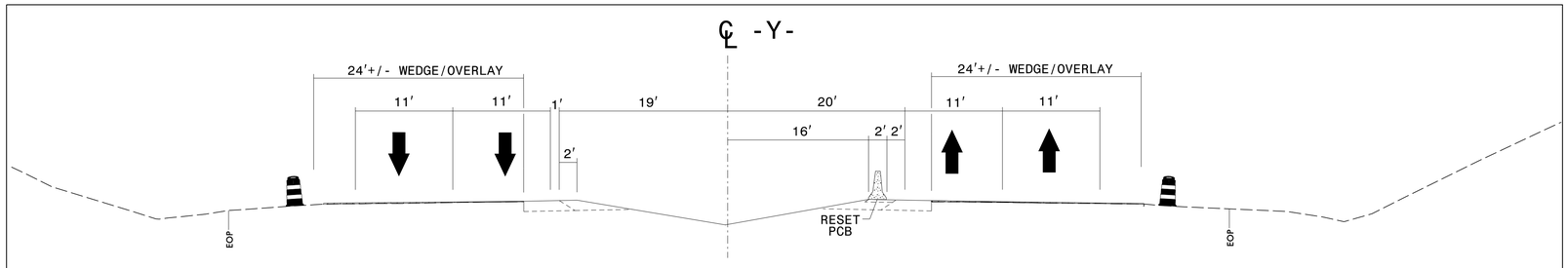
PHASE II DETAILS
US 29 OVERLAY

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_06_Phase II.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-07



SECTION A-A
-Y- 13+00



SECTION B-B
-Y- 16+00

PAVEMENT OVERLAY

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A KOONTZ

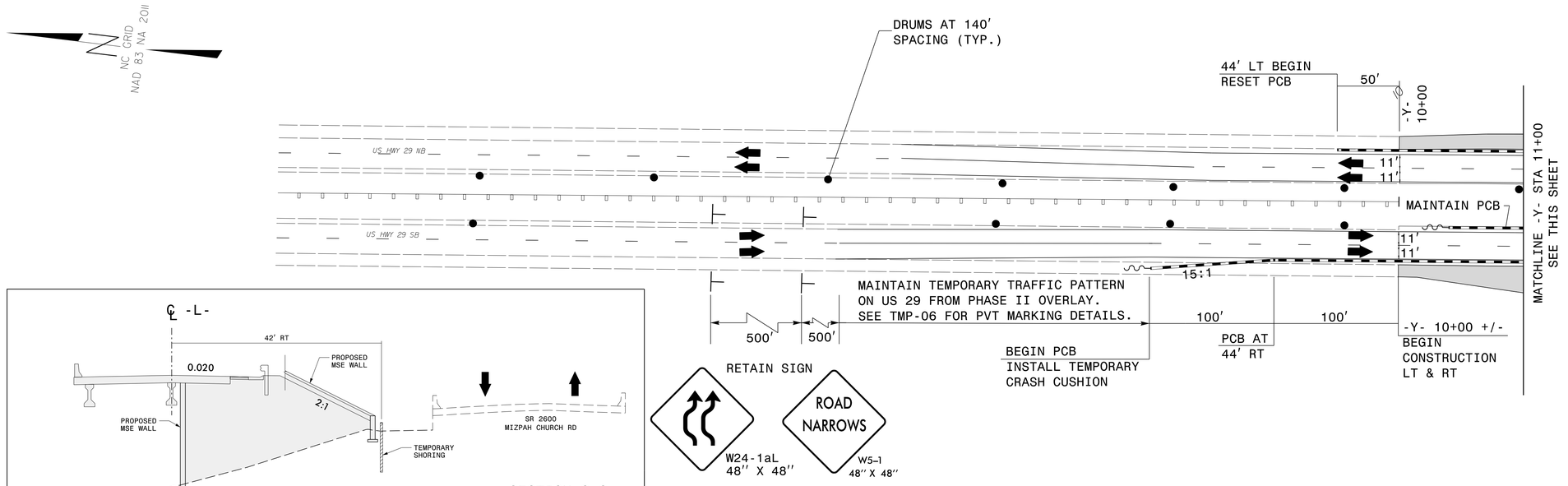
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

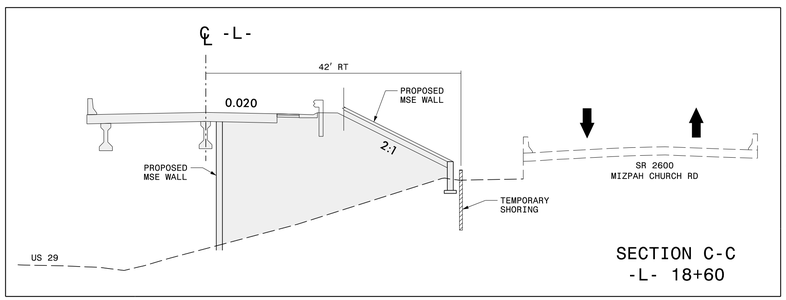
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASE II DETAILS
US 29

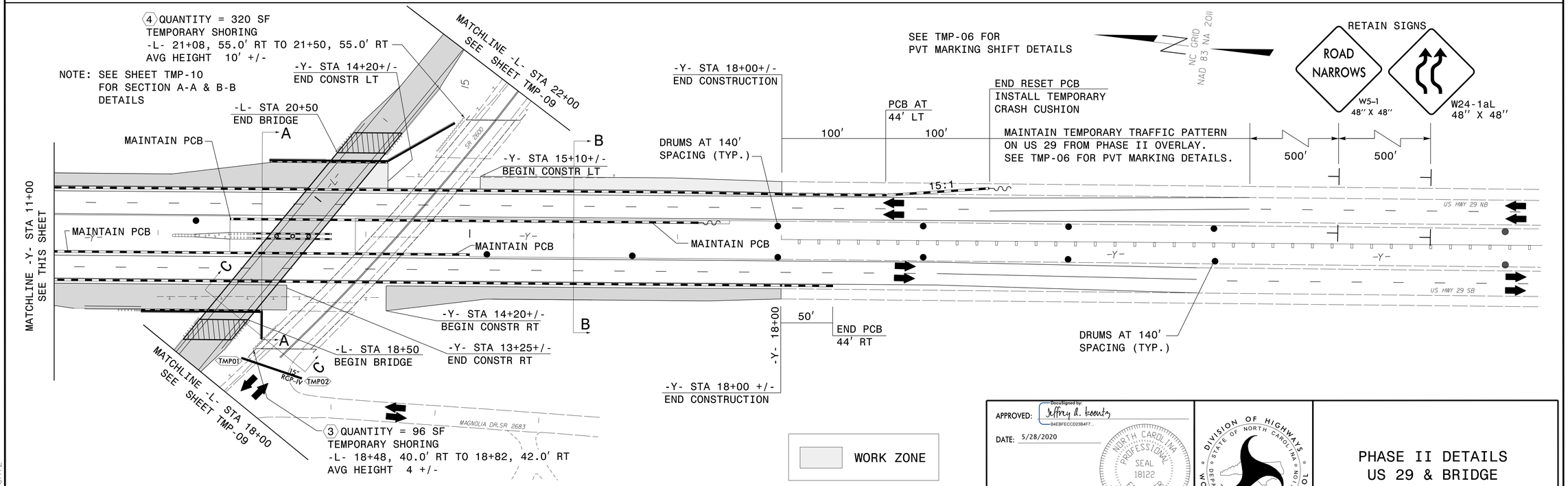
5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_07_Phase II_Section Details.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-08





SECTION C-C
-L- 18+60



APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A KOONTZ

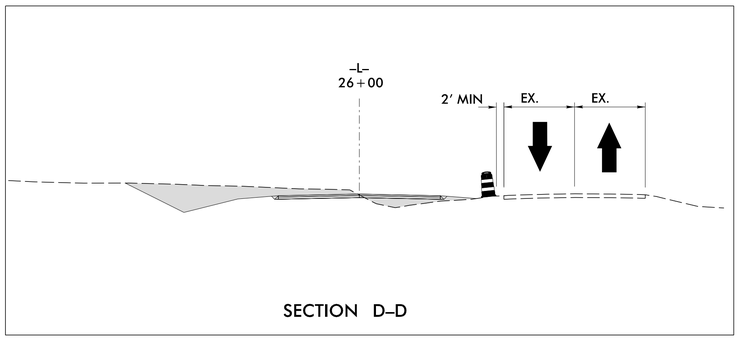
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

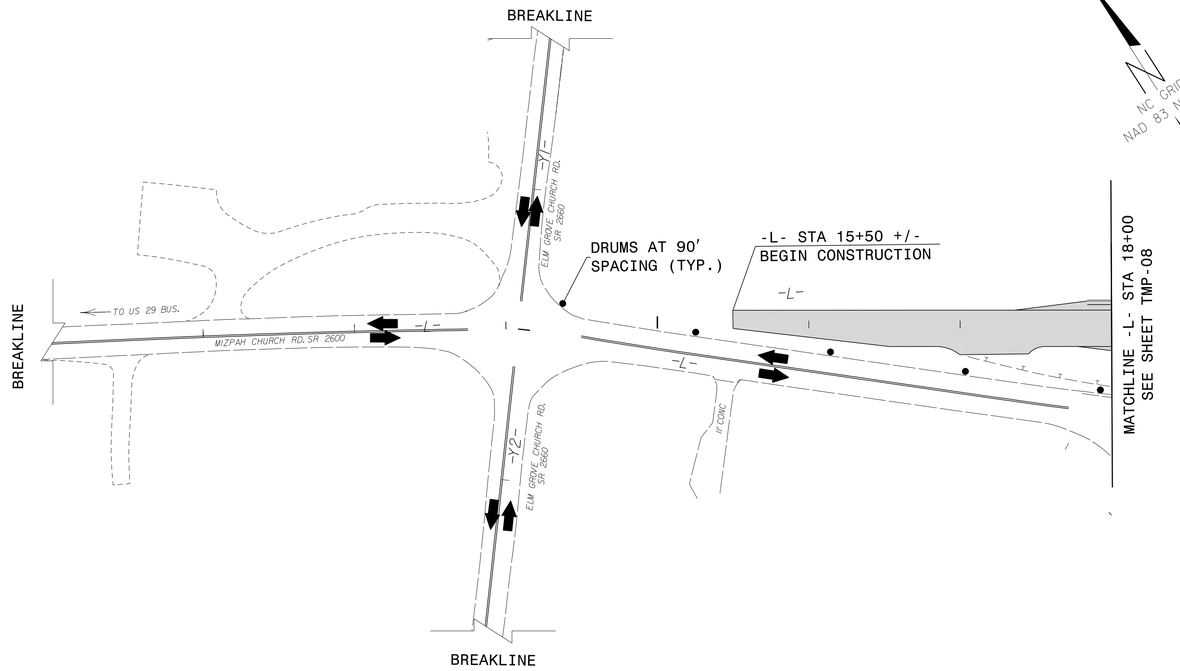
PHASE II DETAILS US 29 & BRIDGE

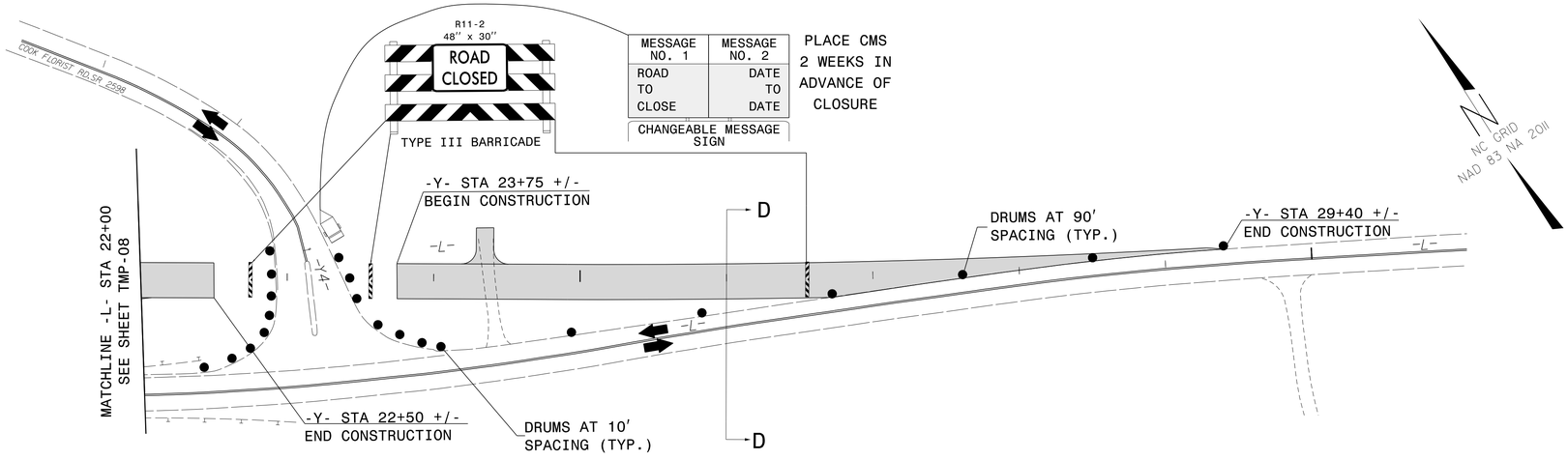
5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_08_Phase II.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-09



SECTION D–D





APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

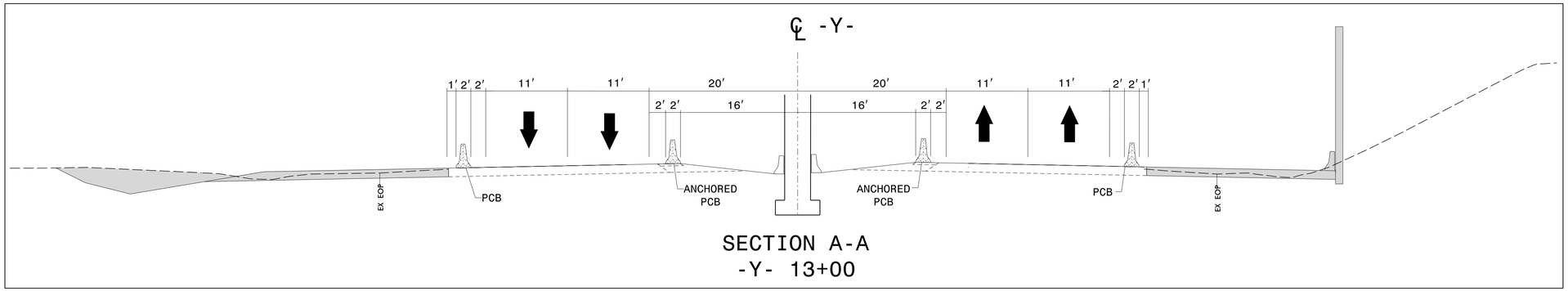
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

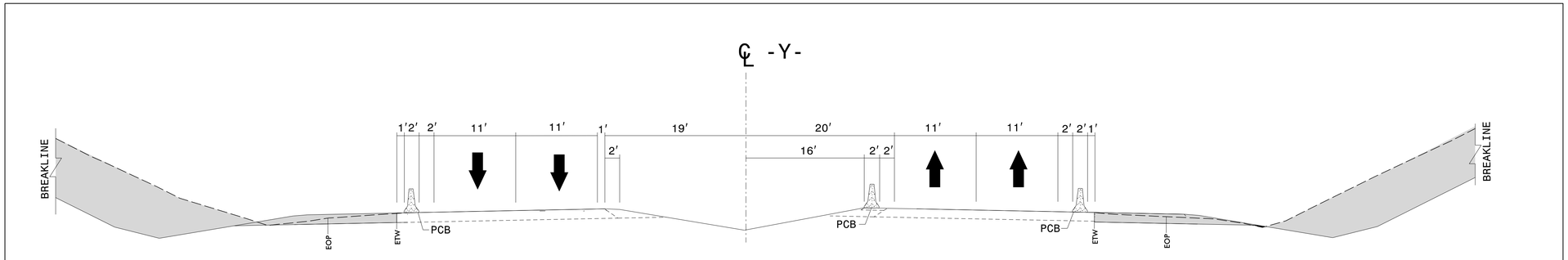
PHASE II DETAILS
MIZPAH CHURCH RD

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_09_Phase II.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-10



SECTION A-A
-Y- 13+00



SECTION B-B
-Y- 16+00

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASE II DETAILS
US 29

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_IO_Phase II_Section Details.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-11

NC GRID
NAD 83 NA 2011

SEE TMP-13 FOR OFF-SITE DETOUR FOR MIZPAH CHURCH RD AND COOK FLORIST RD.

ELM GROVE CHURCH RD. SR 2660

R11-2 48" x 30" ROAD CLOSED
TYPE III BARRICADE(S)

-Y1- STA 11+70 +/-
BEGIN CONSTRUCTION

-Y1- STA 12+75 +/-
BEGIN CONSTRUCTION

-L- STA 16+53+/-
END CONSTRUCTION

-L- STA 11+54 +/-
END CONSTRUCTION

-Y2- STA 10+18 +/-
BEGIN CONSTRUCTION

-Y2- STA 11+45 +/-
END CONSTRUCTION

R11-2 48" x 30" ROAD CLOSED
TYPE III BARRICADE(S)

LOCATE BARRICADE IN COORDINATION WITH CHURCH TO MAINTAIN ACCESS

MAINTAIN PCB
RT, LT, & MEDIAN

US HWY 29 NB

US HWY 29 SB

-Y3- STA 10+25 +/-
BEGIN CONSTRUCTION

R11-2 48" x 30" ROAD CLOSED
TYPE III BARRICADE(S)

PLACE DRUMS
ACROSS ROADWAY

-Y3- STA 12+55+/-
END CONSTRUCTION

R11-2 48" x 30" ROAD CLOSED
TYPE III BARRICADE(S)

COOK FLORIST RD.SR 2598

-Y4- STA 11+50 +/-
BEGIN CONSTRUCTION

-L- STA 23+75 +/-
END CONSTRUCTION

-Y4- STA 14+00 +/-
END CONSTRUCTION

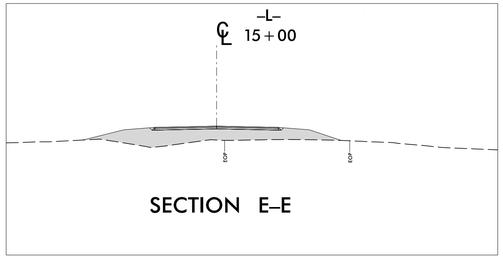
-L- STA 22+50 +/-
BEGIN CONSTRUCTION

MATCHLINE -L- STA 24+00
SEE SHEET TMP-12

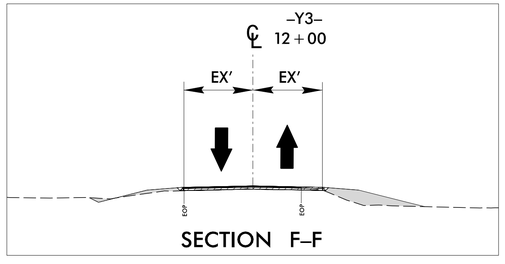
MAGNOLIA DR.SR 2683

WORK ZONE

PAVEMENT OVERLAY



SECTION E–E



SECTION F–F

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

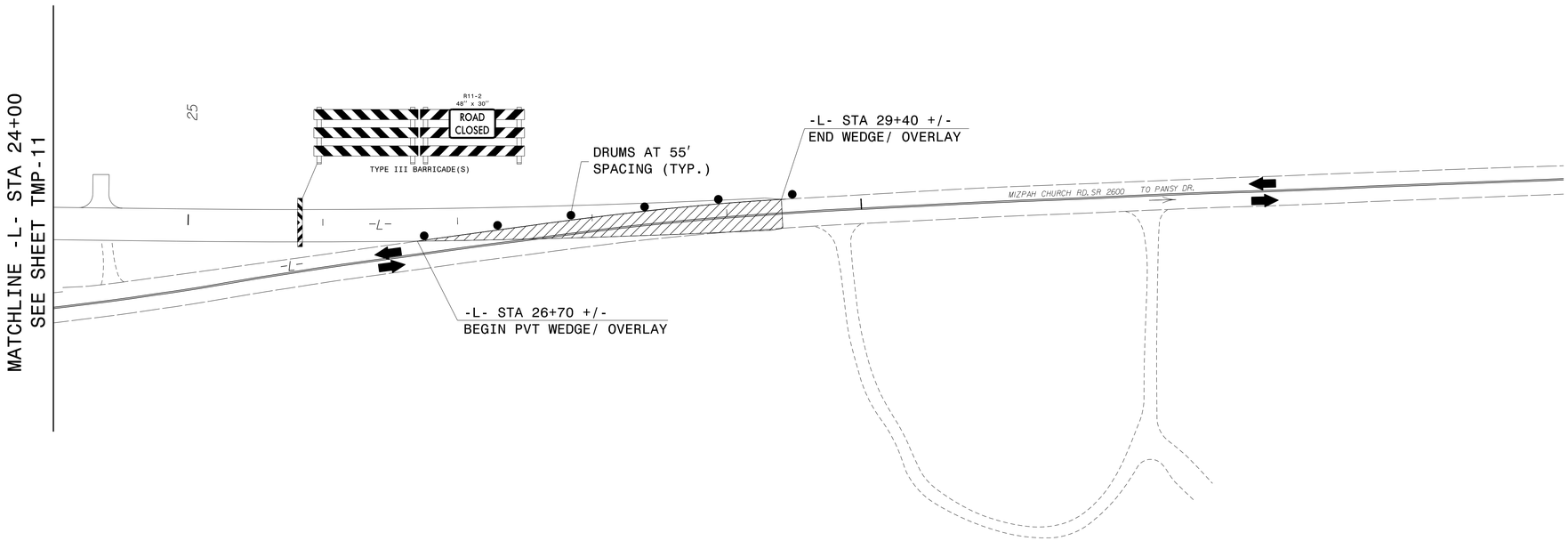
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASE III DETAILS

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_II_Phase III.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-12

NC GRID
NAD 83 NA 2011



APPROVED: DocuSigned by: Jeffrey A. Koontz
-54EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A KOONTZ

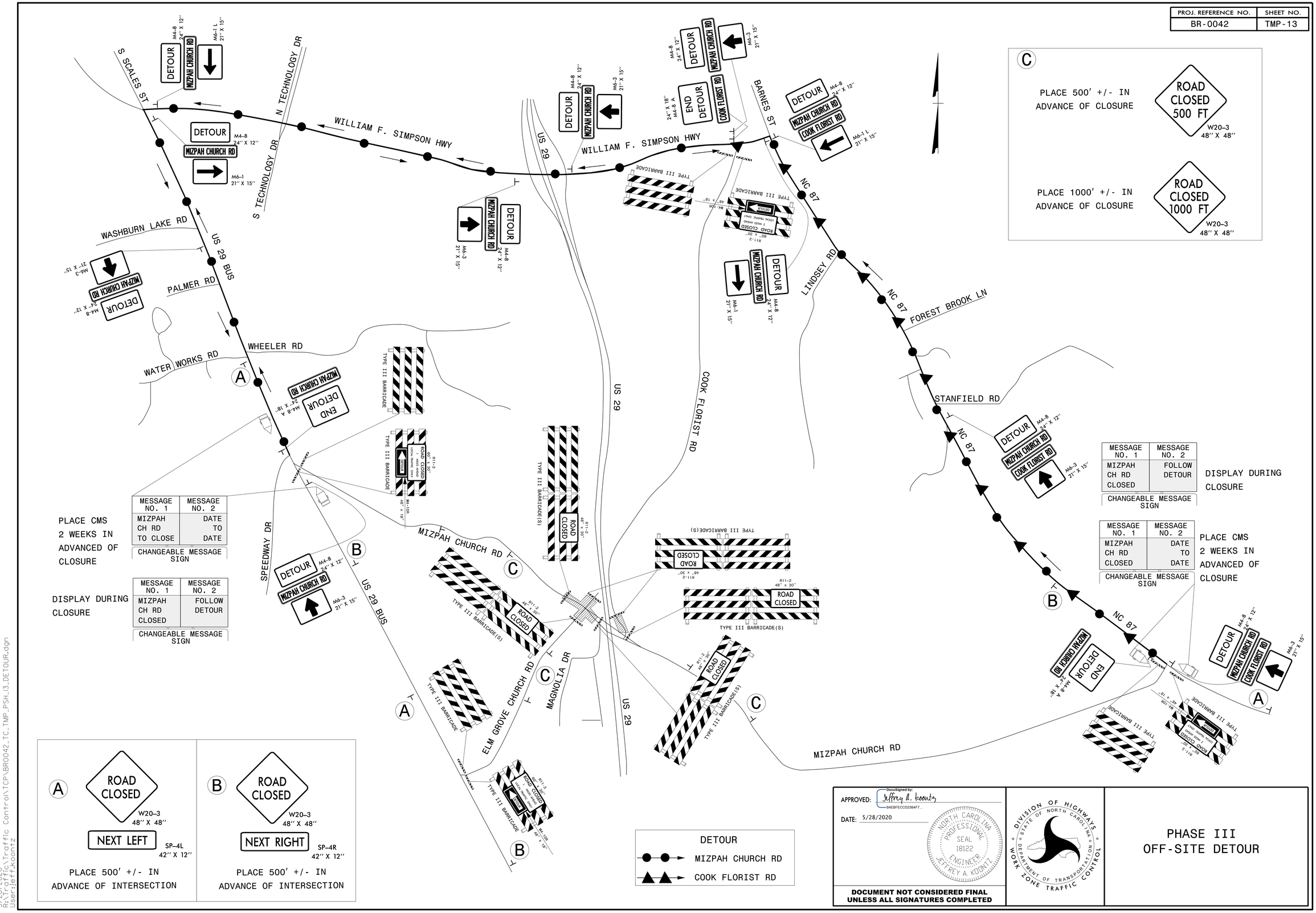
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

PHASE III DETAILS

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_12_Phase III.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-13



C

PLACE 500′ +/- IN ADVANCE OF CLOSURE

ROAD CLOSED 500 FT
W20–3
48″ X 48″

PLACE 1000′ +/- IN ADVANCE OF CLOSURE

ROAD CLOSED 1000 FT
W20–3
48″ X 48″

MESSAGE NO. 1	MESSAGE NO. 2
MIZPAH CH RD CLOSED	FOLLOW DETOUR

CHANGEABLE MESSAGE SIGN

DISPLAY DURING CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
MIZPAH CH RD TO CLOSE	DATE TO DATE

CHANGEABLE MESSAGE SIGN

PLACE CMS 2 WEEKS IN ADVANCED OF CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
MIZPAH CH RD CLOSED	DATE TO DATE

CHANGEABLE MESSAGE SIGN

PLACE CMS 2 WEEKS IN ADVANCED OF CLOSURE

A

ROAD CLOSED
W20–3
48″ X 48″

NEXT LEFT
SP–4L
42″ X 12″

PLACE 500′ +/- IN ADVANCE OF INTERSECTION

B

ROAD CLOSED
W20–3
48″ X 48″

NEXT RIGHT
SP–4R
42″ X 12″

PLACE 500′ +/- IN ADVANCE OF INTERSECTION

DETOUR
MIZPAH CHURCH RD
COOK FLORIST RD

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

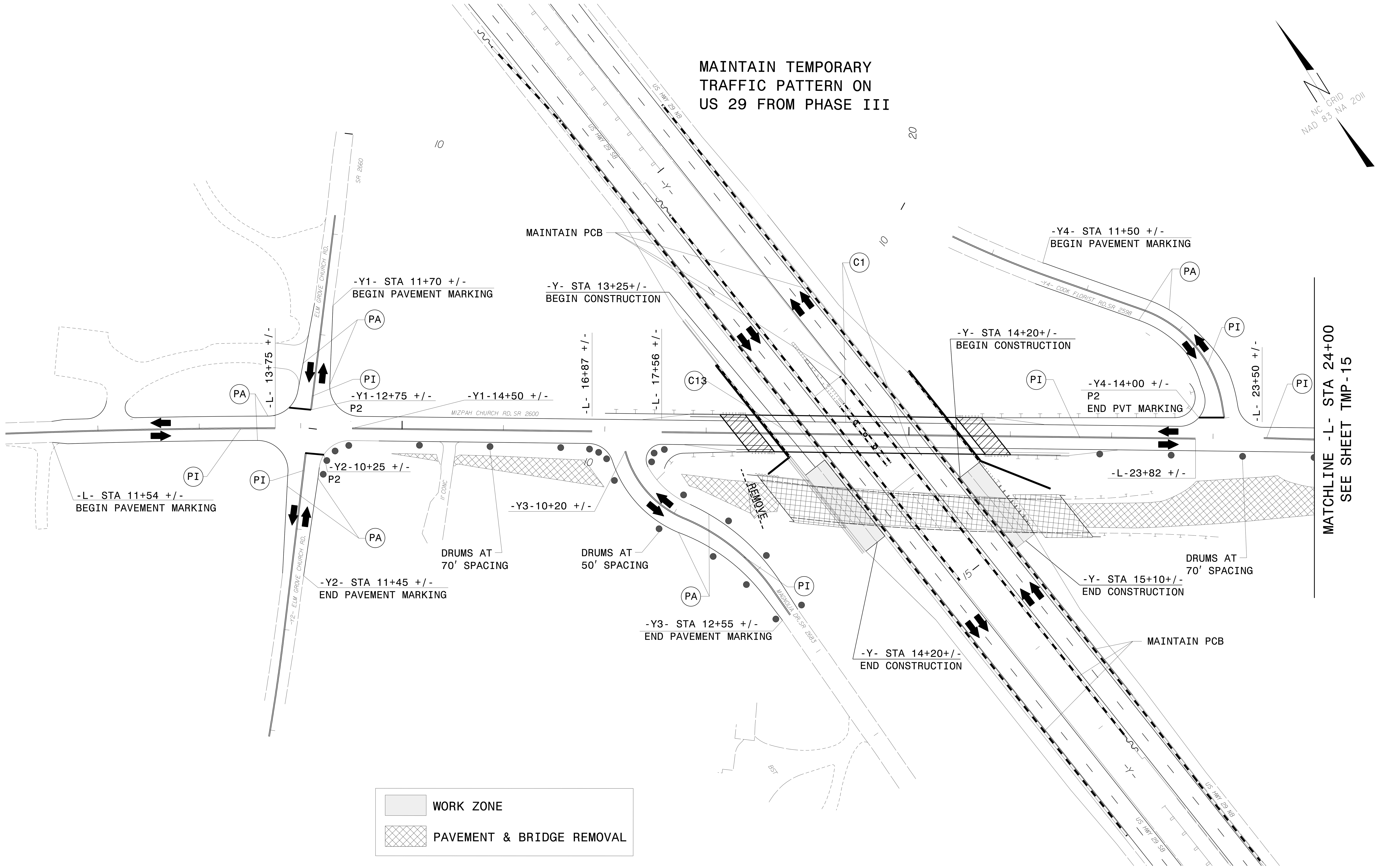
NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A KOONTZ

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PHASE III OFF-SITE DETOUR

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-14



MAINTAIN TEMPORARY
TRAFFIC PATTERN ON
US 29 FROM PHASE III
NC GRID
NAD 83 NA 2011
MAINTAIN PCB
-Y- STA 13+25+/-
BEGIN CONSTRUCTION
-Y1- STA 11+70 +/-
BEGIN PAVEMENT MARKING
PA
PI
-Y1-12+75 +/-
P2
-Y1-14+50 +/-
-L- 13+75 +/-
-L- 16+87 +/-
-L- 17+56 +/-
C13
C1
-Y4- STA 11+50 +/-
BEGIN PAVEMENT MARKING
-Y- STA 14+20+/-
BEGIN CONSTRUCTION
-Y4-14+00 +/-
P2
END PVT MARKING
-L- 23+50 +/-
MATCHLINE -L- STA 24+00
SEE SHEET TMP-15
-L-23+82 +/-
-Y2-10+25 +/-
P2
-L- STA 11+54 +/-
BEGIN PAVEMENT MARKING
-Y3-10+20 +/-
REMOVE
DRUMS AT
70' SPACING
DRUMS AT
50' SPACING
DRUMS AT
70' SPACING
-Y2- STA 11+45 +/-
END PAVEMENT MARKING
-Y3- STA 12+55 +/-
END PAVEMENT MARKING
-Y- STA 15+10+/-
END CONSTRUCTION
-Y- STA 14+20+/-
END CONSTRUCTION
MAINTAIN PCB
MIZPAH CHURCH RD. SR 2600
ELM GROVE CHURCH RD.
US HWY 29 NB
US HWY 29 SB
WORK ZONE
PAVEMENT & BRIDGE REMOVAL

APPROVED: Jeffrey A. Koontz

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL

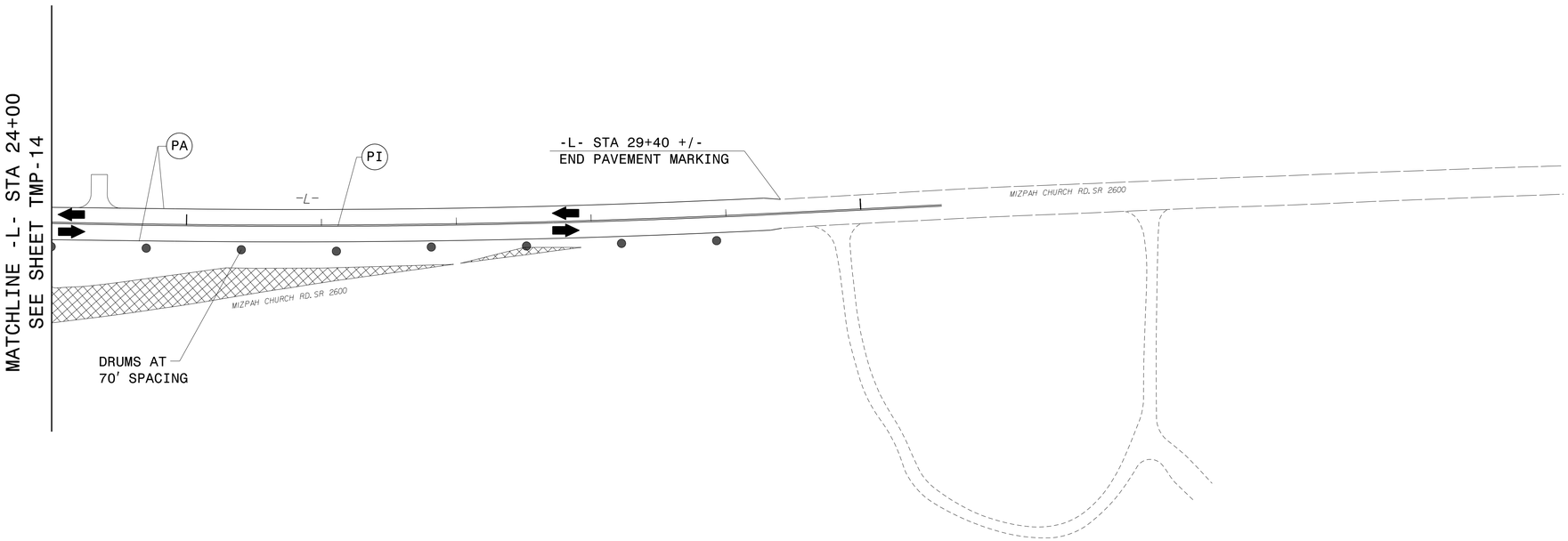
PHASE IV DETAILS

5/28/2020
R:\Traffic Control\TCP\BR0042_TC_TMP_PSH_14_Phase IV.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-15

NC GRID
NAD 83 NA 2011

25



PAVEMENT REMOVAL

PAVEMENT OVERLAY

APPROVED: DocuSigned by: Jeffrey A. Koontz 54EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A KOONTZ

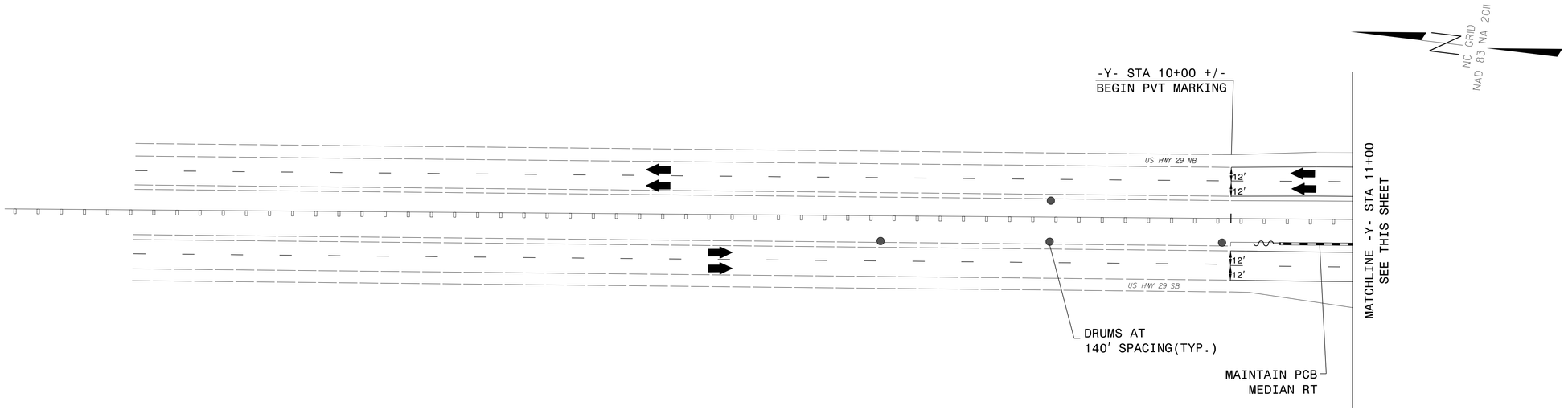
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

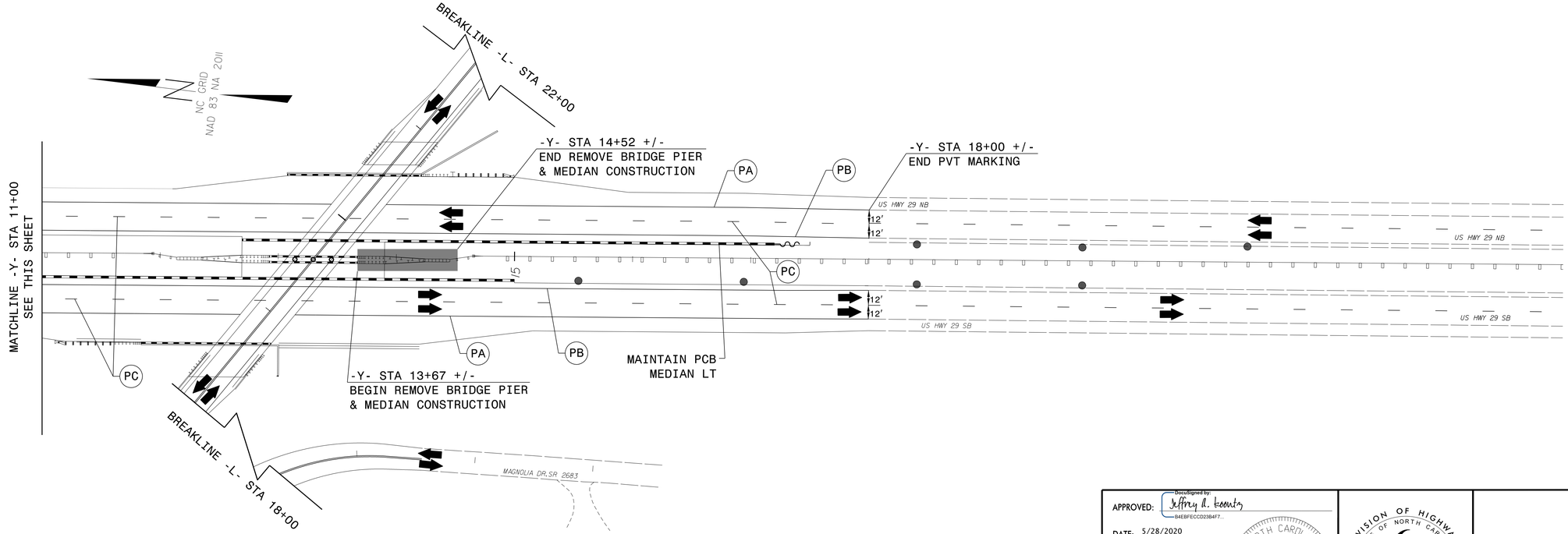
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASE IV DETAILS

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_I5_Phase IV.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-16





WORK ZONE

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A. KOONTZ

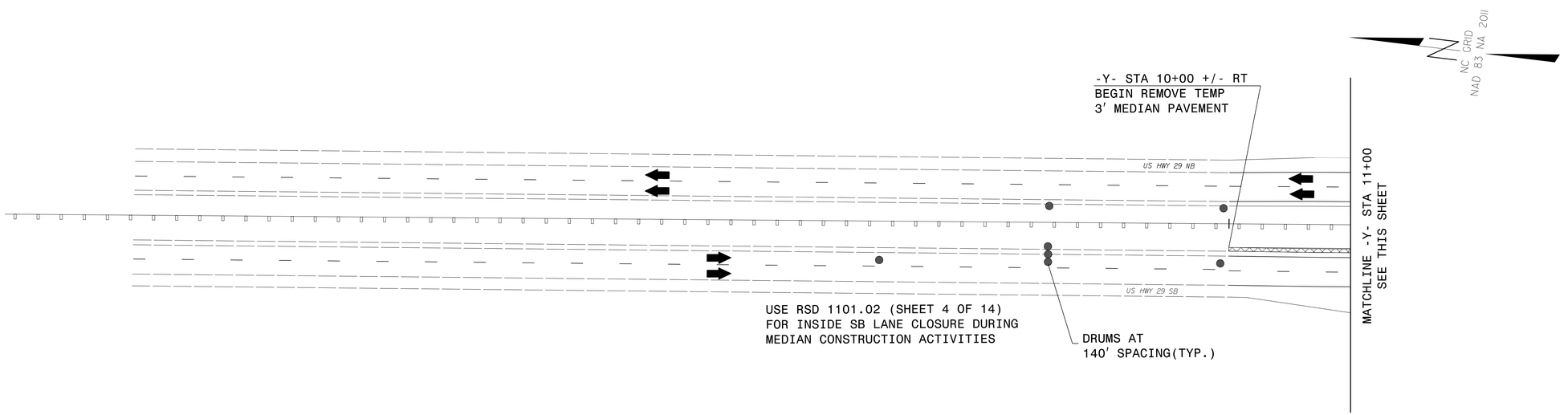
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

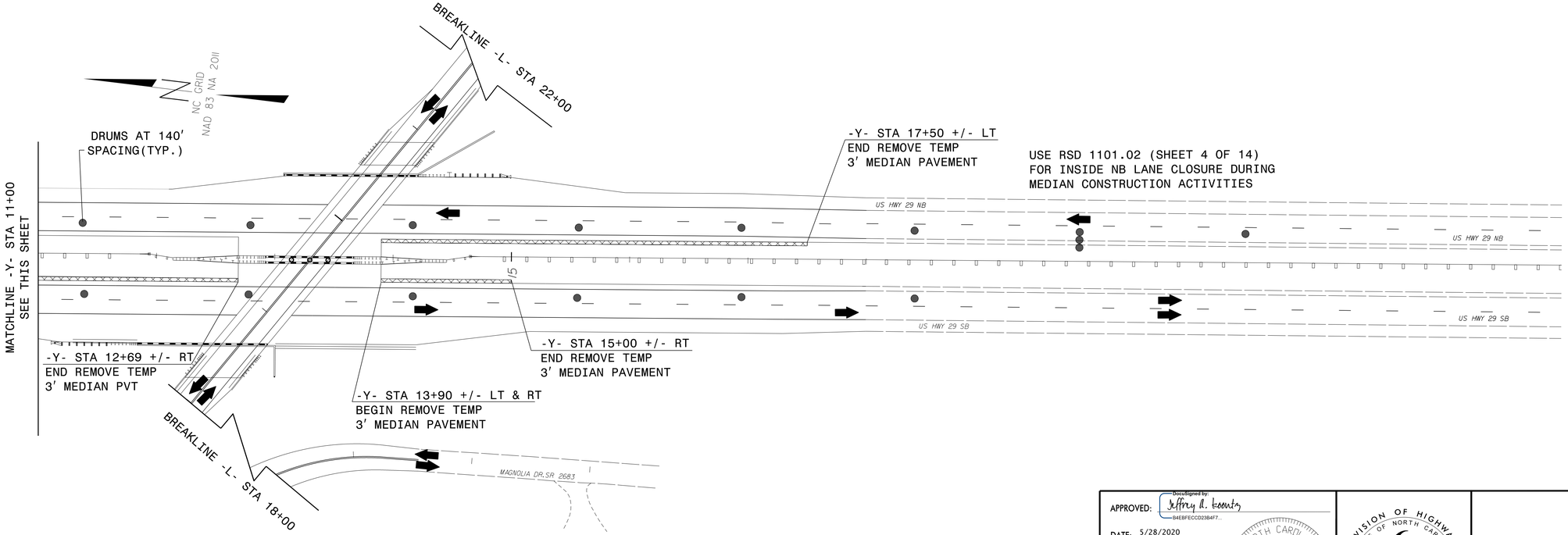
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASE V DETAILS
US 29 MEDIAN

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_16_Phase IV.dgn
User:jeff.koontz

PROJ. REFERENCE NO.	SHEET NO.
BR-0042	TMP-17





PAVEMENT REMOVAL

APPROVED: DocuSigned by: Jeffrey A. Koontz B4EBFECCD23B4F7...

DATE: 5/28/2020

NORTH CAROLINA PROFESSIONAL SEAL 18122 ENGINEER JEFFREY A KOONTZ

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

PHASE VI DETAILS
US 29 MEDIAN
TEMP. PVT REMOVAL

5/28/2020
R:\Traffic\Traffic Control\TCP\BR0042_TC_TMP_PSH_17_Phase VI.dgn
User:jeff.koontz