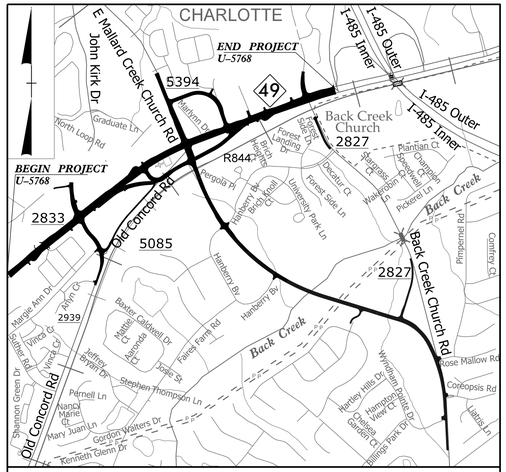
TIP PROJECT: U-5768

See Sheet 1B For Conventional Symbols



VICINITY MAP

NTS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

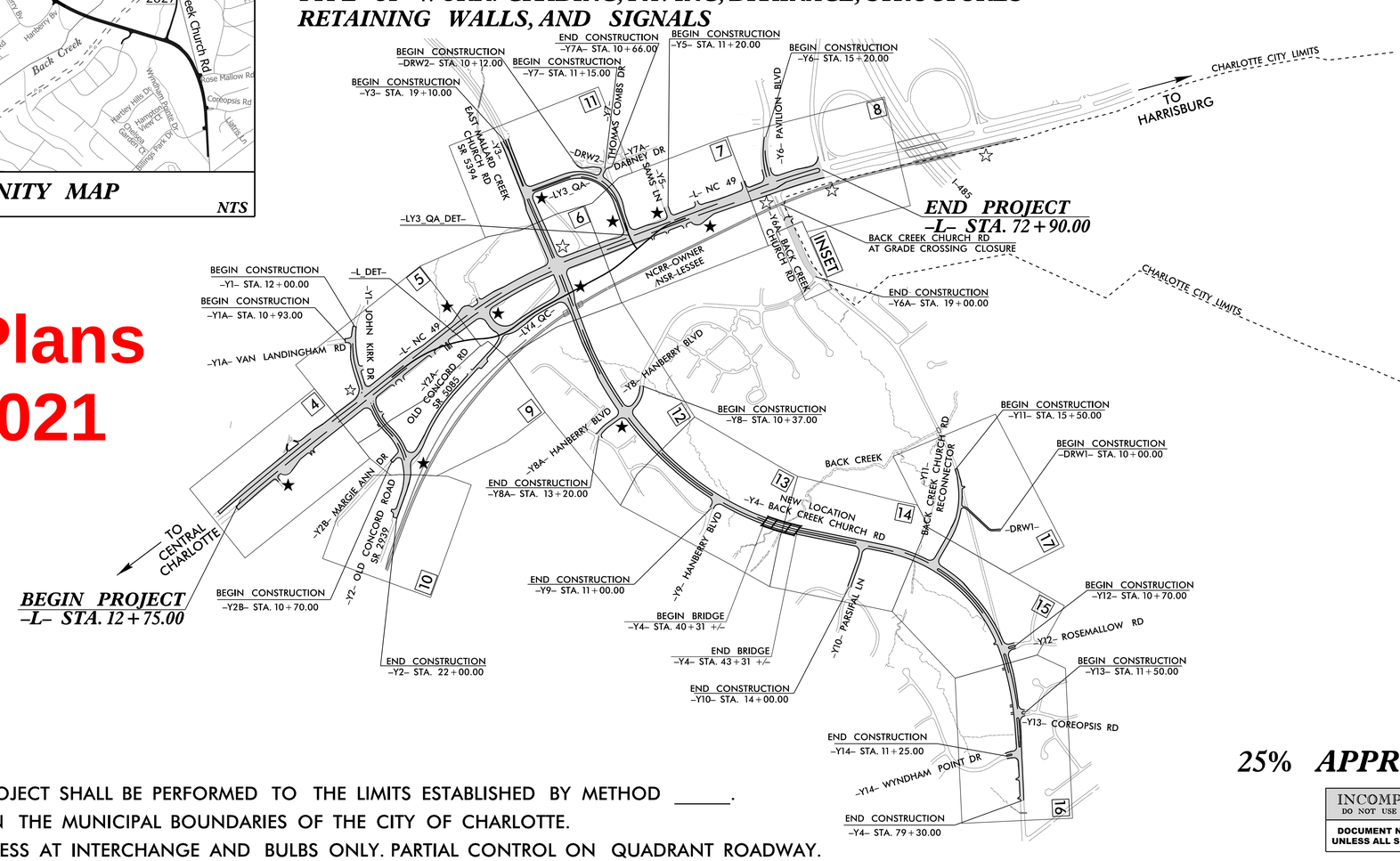
MECKLENBURG COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5768	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
50181.1.R1		P.E.

☆ EXISTING SIGNAL
★ PROPOSED SIGNAL

LOCATION: NC 49 FROM JOHN KIRK DRIVE TO I-485
BACK CREEK CHURCH RD FROM WYNDHAM POINTE DR TO NC 49
TYPE OF WORK: GRADING, PAVING, DRAINAGE, STRUCTURES
RETAINING WALLS, AND SIGNALS



NAD 83/NA 2011

CP4B Plans
9/15/2021

NOTES:

1. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD _____.
2. THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF CHARLOTTE.
3. FULL CONTROL OF ACCESS AT INTERCHANGE AND BULBS ONLY. PARTIAL CONTROL ON QUADRANT ROADWAY.

25% APPROVED PLANS

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT:

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

DESIGN DATA

ADT 2025 = 54,100
ADT 2045 = 70,900
K = 7 %
D = 70 %
T = 4 % *
V = 40 MPH
* TTST=1% DUAL=3%
FUNC CLASS =
PRINCIPAL ARTERIAL
REGIONAL TIER

PROJECT LENGTH

LENGTH OF ROADWAY T.I.P. PROJECT U-5768 = 1.139 MILES
TOTAL LENGTH OF T.I.P. PROJECT U-5768 = 1.139 MILES

ALL LENGTHS BASED ON -L- CENTERLINE

PREPARED IN THE OFFICE OF:

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

FOR THE DIVISION OF HIGHWAYS

RIGHT OF WAY DATE:
DECEMBER 17, 2021

LETTING DATE:
JULY 16, 2024

JEFF HESS, P.E.
PROJECT ENGINEER

BRIAN BLACKWELL, P.E.
PROJECT DESIGN ENGINEER

KRISTINA SOLBERG, PE
NCDOT CONTACT

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

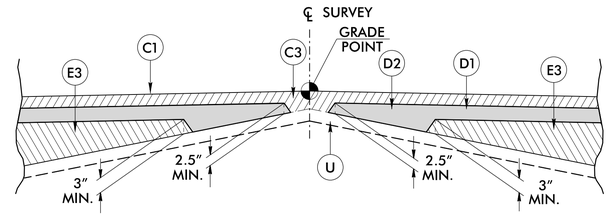
30-AUG-2021 19:56
N:\Roadway\Proj\U5768_RDY_TSH.dgn
HNTB

5/14/99

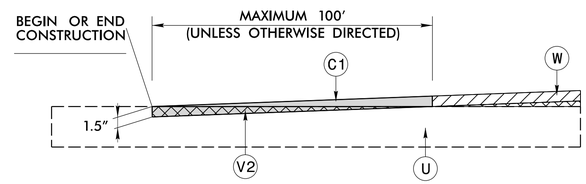
AWAITING FINAL PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 3″ ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. PLACED IN TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1″ DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 1.5″ IN DEPTH OR GREATER THAN 2″ IN DEPTH.
D1	PROP. APPROX. 4″ ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1″ DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½″ IN DEPTH OR GREATER THAN 4″ IN DEPTH.
E1	PROP. APPROX. 4″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROP. APPROX. 7″ ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 399 LBS. PER SQ. YD. PLACED IN TWO LAYERS.
E3	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1″ DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 3″ IN DEPTH OR GREATER THAN 5½″ IN DEPTH.
J1	7″ AGGREGATE BASE COURSE.
R1	2′-6″ CONCRETE CURB AND GUTTER.
R2	1′-6″ CONCRETE CURB AND GUTTER.
R3	2′-9″ CONCRETE CURB AND GUTTER.
R4	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4″ CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5″.
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

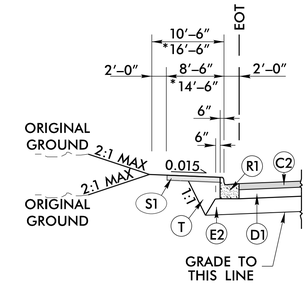


DETAIL SHOWING METHOD OF WEDGING NO.1



INCIDENTAL MILLING DETAIL

TO BE USED AT ALL TIE-IN LOCATIONS
MIRROR FOR OPPOSITE DIRECTION

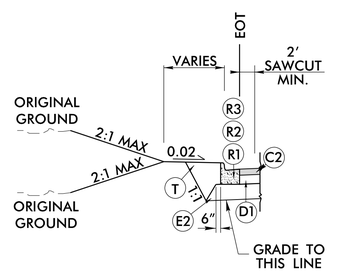


SIDEWALK AT BACK OF CURB DETAIL

MIRROR FOR OPPOSITE DIRECTION

USE SIDEWALK AT BACK OF CURB DETAIL IN CONJUNCTION WITH TYPICAL SECTIONS NO. 7 & 13

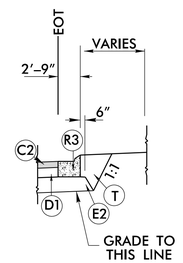
–Y2– STA. 10+52.28 TO STA. 12+56.98 RT
*–Y4– STA. 12+60.00 TO STA. 14+80.00 LT & RT



CONCRETE CURB SAWCUT DETAIL

ALL CURBING LOCATIONS
MIRROR FOR OPPOSITE DIRECTION

SEE PLANS FOR LOCATIONS

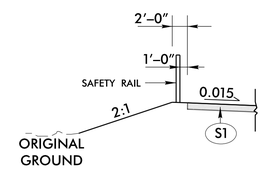


MEDIAN CURB DETAIL

ALL 2′-9″ CURBING LOCATIONS
MIRROR FOR OPPOSITE DIRECTION

USE CONCRETE CURB DETAIL IN CONJUNCTION WITH TYPICAL SECTIONS 3, 9, 14, & 17

SEE PLANS FOR LOCATIONS

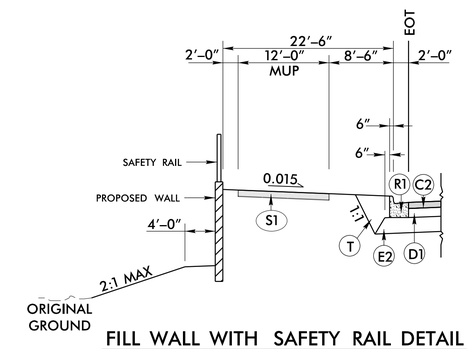


SAFETY RAIL DETAIL

MIRROR FOR OPPOSITE DIRECTION

USE SAFETY RAIL DETAIL IN CONJUNCTION WITH TYPICAL SECTIONS 1, 2, 13, 14, 17, & 27

SEE PLANS FOR LOCATIONS

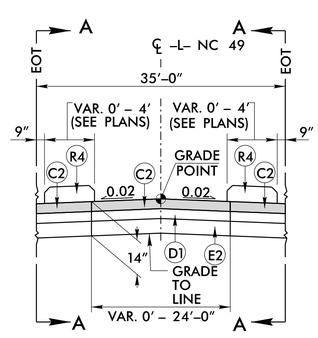


FILL WALL WITH SAFETY RAIL DETAIL

ALL WALL LOCATIONS
MIRROR FOR OPPOSITE DIRECTION

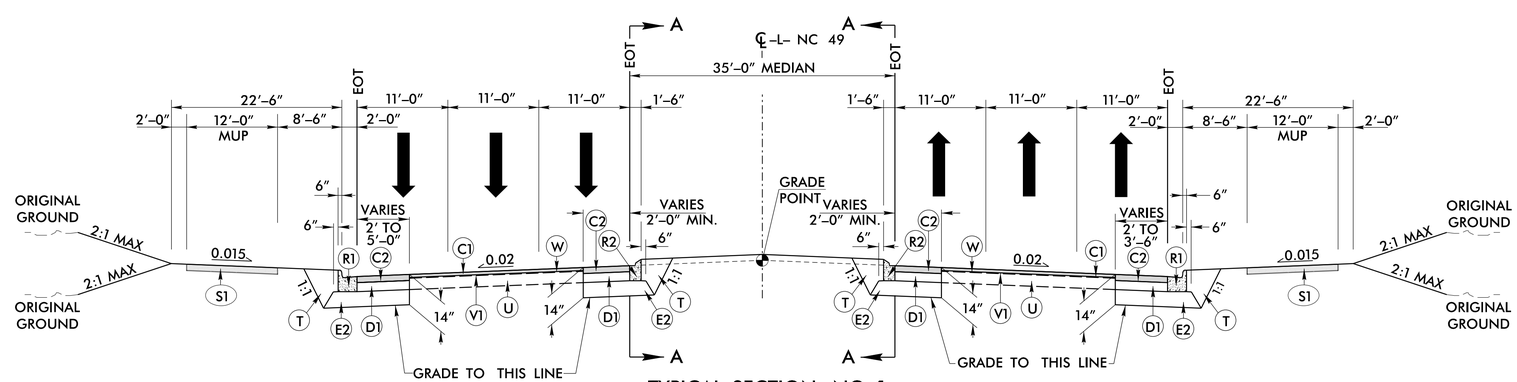
USE FILL WALL WITH SAFETY RAIL DETAIL IN CONJUNCTION WITH TYPICAL SECTIONS NO. 2 & 13

–L– STA. 34+50.00 TO STA. 37+70.31 LT
–Y3– STA. 20+00.00 TO STA. 21+10.00 RT



DETAIL 1A

MONOLITHIC ISLAND LOCATIONS
USE IN CONJUNCTION WITH TYPICAL SECTION 1 & 2



TYPICAL SECTION NO. 1

–L– NC 49

USE TYPICAL SECTION NO. 1

–L– STA. 12+75.00 TO STA. 36+25.00
–L– STA. 54+45.00 TO STA. 60+00.00

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

30-AUG-2021 9:56
S:\Company Proj\U5768_RDY_TYP.dgn
jmtB

5/14/99

AWAITING FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5″ ACSC, TYPE S9.5C
C2	PROP. APPROX. 3″ ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4″ ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4″ ACBC, TYPE B25.0C
E2	PROP. APPROX. 7″ ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7″ AGGREGATE BASE COURSE.
R1	2′-6″ CONCRETE CURB AND GUTTER.
R2	1′-6″ CONCRETE CURB AND GUTTER.
R3	2′-9″ CONCRETE CURB AND GUTTER.
R4	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4″ CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5″.
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

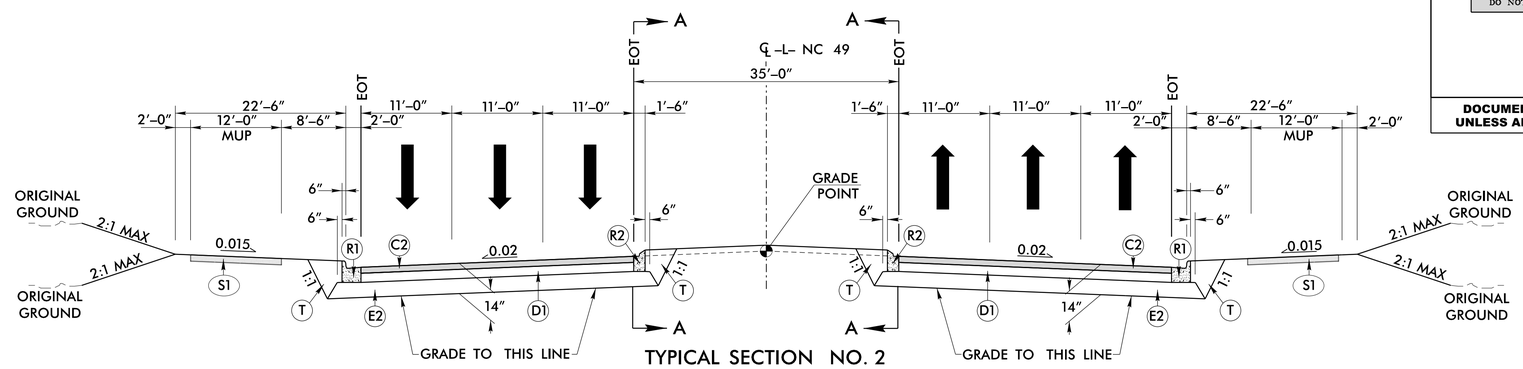
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

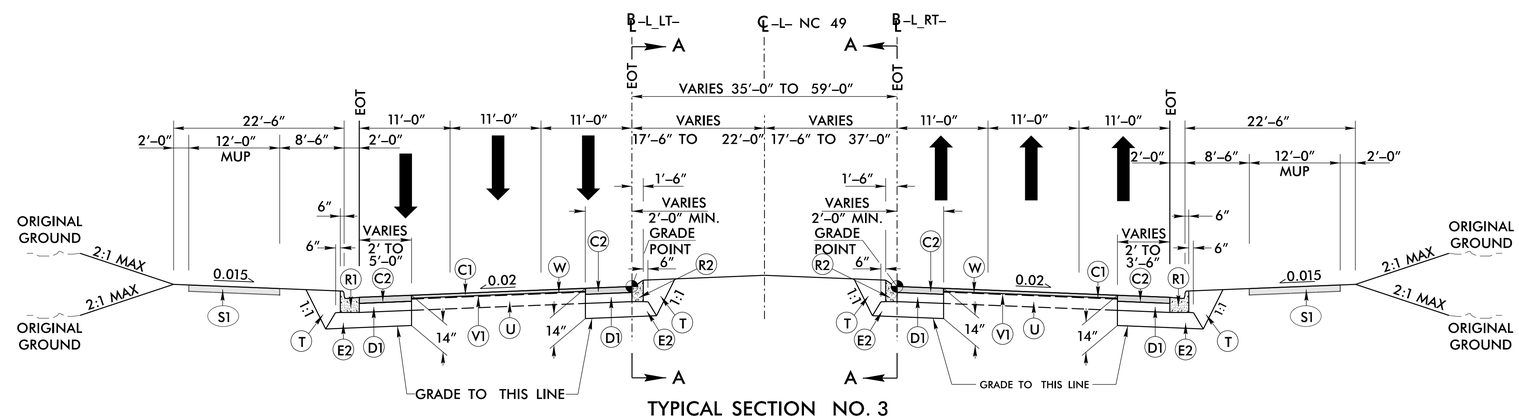


TYPICAL SECTION NO. 2

-L- NC 49

USE TYPICAL SECTION NO. 2

-L- STA. 36+25.00 TO STA. 54+45.00

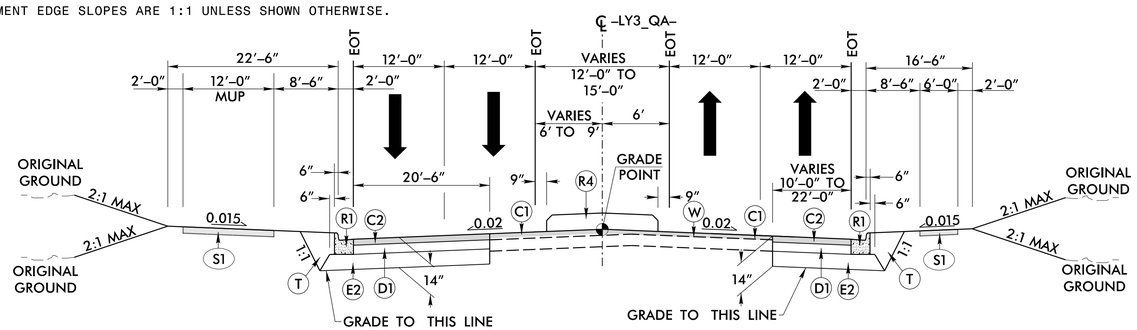


TYPICAL SECTION NO. 3

-L- NC 49

USE TYPICAL SECTION NO. 3

-L- STA. 60+00.00 TO STA. 72+90.00



TYPICAL SECTION NO. 4

-LY3_QA- QUADRANT A RD

USE TYPICAL SECTION NO. 4

-LY3_QA- STA. 10+50.52 TO STA. 13+75.00

30-AUG-2021 9:56
S:\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-3
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

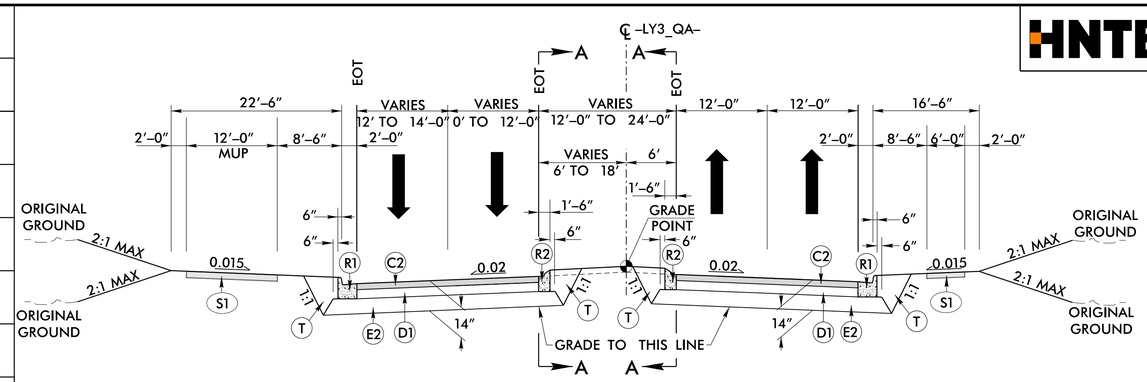
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

AWAITING FINAL PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ACSC, TYPE S9.5C
C2	PROP. APPROX. 3" ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4" ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4" ACBC, TYPE B25.0C
E2	PROP. APPROX. 7" ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7" AGGREGATE BASE COURSE.
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	1'-6" CONCRETE CURB AND GUTTER.
R3	2'-9" CONCRETE CURB AND GUTTER.
R4	5" MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4" CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5".
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

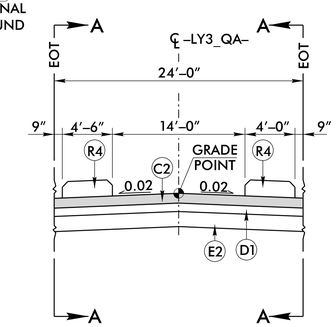


TYPICAL SECTION NO. 5

-LY3_QA- QUADRANT A RD

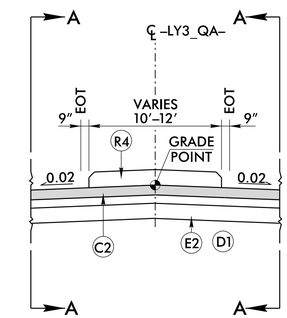
USE TYPICAL SECTION NO. 5

-LY3_QA- STA. 13+75.00 TO STA. 15+70.00



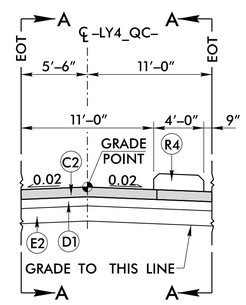
DETAIL 5A

MONOLITHIC ISLAND LOCATIONS USE IN CONJUNCTION WITH TYPICAL SECTION 5



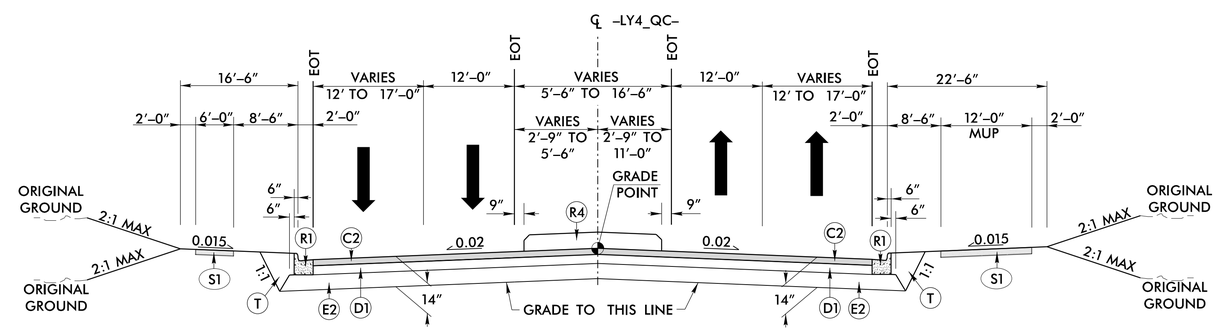
DETAIL 5B

MONOLITHIC ISLAND LOCATIONS USE IN CONJUNCTION WITH TYPICAL SECTION 5



DETAIL 6A

MONOLITHIC ISLAND LOCATIONS USE IN CONJUNCTION WITH TYPICAL SECTION 6

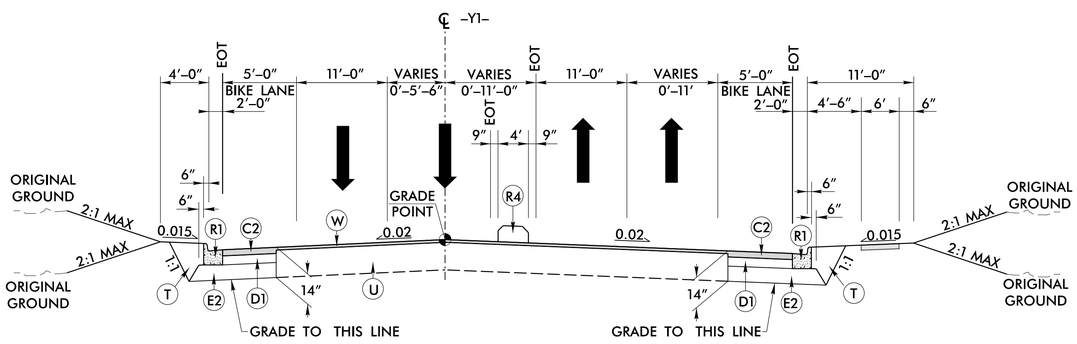


TYPICAL SECTION NO. 6

-LY4_QC- QUADRANT C RD

USE TYPICAL SECTION NO. 6

-LY4_QC- STA. 10+50.50 TO STA. 19+18.51

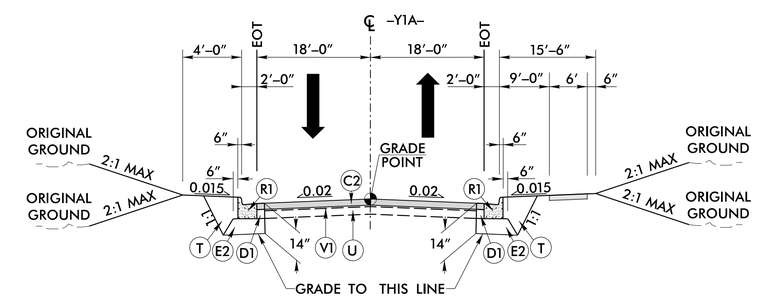


TYPICAL SECTION NO. 7

-Y1- JOHN KIRK DR

USE TYPICAL SECTION NO. 7

-Y1- STA. 12+00.00 TO STA. 17+94.35



TYPICAL SECTION NO. 8

-Y1A- VAN LANDINGHAM RD

USE TYPICAL SECTION NO. 8

-Y1A- STA. 10+93.00 TO STA. 11+46.85

5/14/99
30-AUG-2021 19:56
R:\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

5/14/99

AWAITING FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ACSC, TYPE S9.5C
C2	PROP. APPROX. 3" ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4" ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4" ACBC, TYPE B25.0C
E2	PROP. APPROX. 7" ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7" AGGREGATE BASE COURSE.
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	1'-6" CONCRETE CURB AND GUTTER.
R3	2'-9" CONCRETE CURB AND GUTTER.
R4	5" MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4" CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5".
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

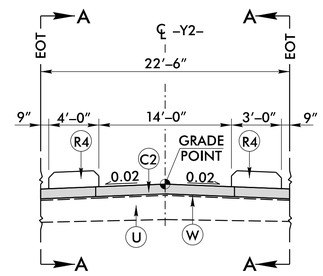
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

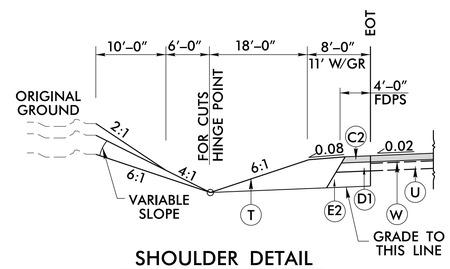
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



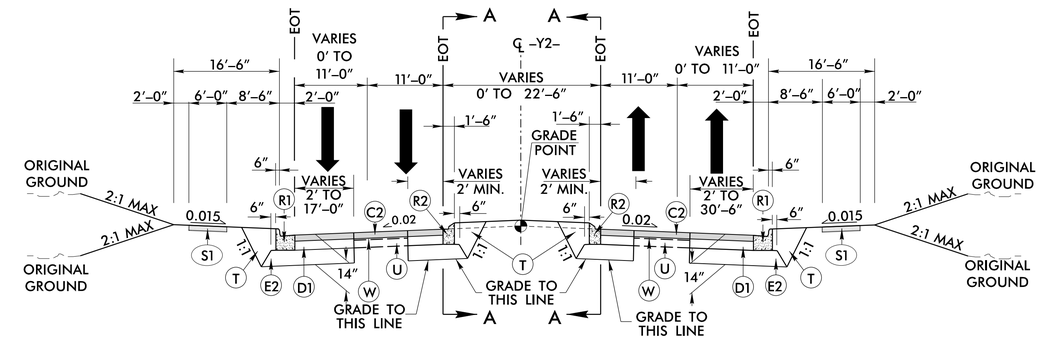
DETAIL 9A

MONOLITHIC ISLAND LOCATIONS
USE IN CONJUNCTION WITH TYPICAL SECTION 9



SHOULDER DETAIL

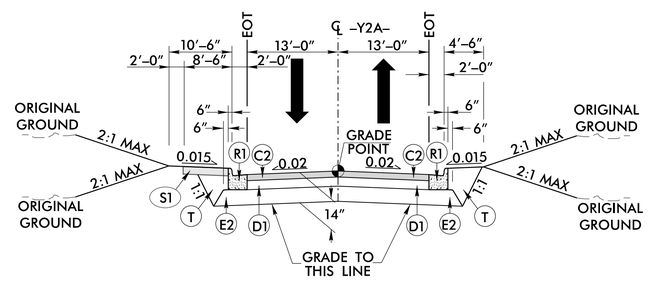
USE SHOULDER DETAIL IN CONJUNCTION WITH TYPICAL SECTION NO. 9
-Y2- STA. 17+28.49 TO STA. 22+00.00 LT



TYPICAL SECTION NO. 9

-Y2- OLD CONCORD ROAD (MAIN ROAD)

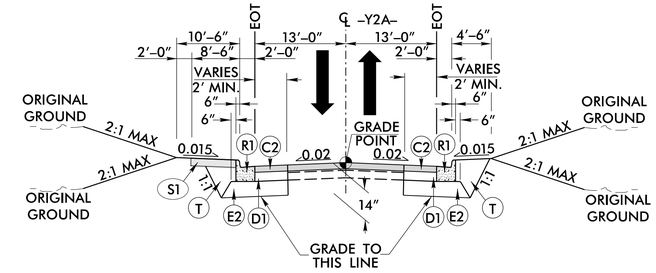
USE TYPICAL SECTION NO. 9
-Y2- STA. 10+52.28 TO STA. 22+00.00



TYPICAL SECTION NO. 10

-Y2A- OLD CONCORD RD (SIDE STREET)

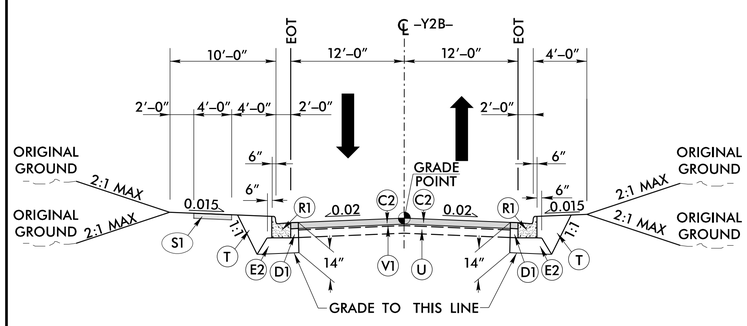
USE TYPICAL SECTION NO. 10
-Y2A- STA. 10+31.95 TO STA. 10+80.18
-Y2A- STA. 19+95.19 TO STA. 24+31.33



TYPICAL SECTION NO. 11

-Y2A- OLD CONCORD RD (SIDE STREET)

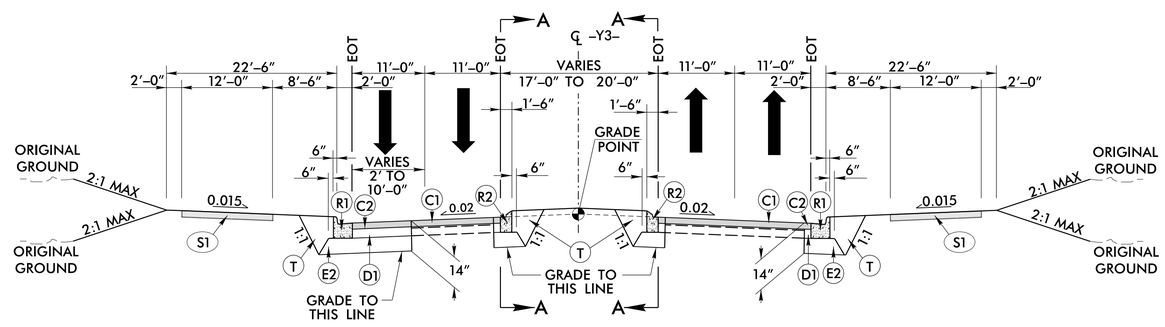
USE TYPICAL SECTION NO. 11
-Y2A- STA. 10+80.18 TO STA. 19+95.19



TYPICAL SECTION NO. 12

-Y2B- MARGIE ANN DR

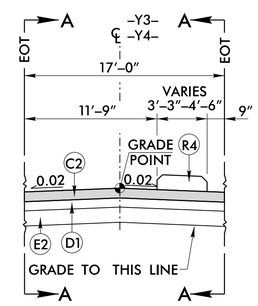
USE TYPICAL SECTION NO. 12
-Y2B- STA. 10+70.00 TO STA 11+72.25



TYPICAL SECTION NO. 13

-Y3- EAST MALLARD CREEK CHURCH RD

USE TYPICAL SECTION NO. 13
-Y3- STA. 19+10.00 TO STA. 25+09.23



DETAIL 13A

MONOLITHIC ISLAND LOCATIONS
USE IN CONJUNCTION WITH TYPICAL SECTION 13 & 14
MIRROR FOR OPPOSITE DIRECTION

30-AUG-2021 19:56
R:\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

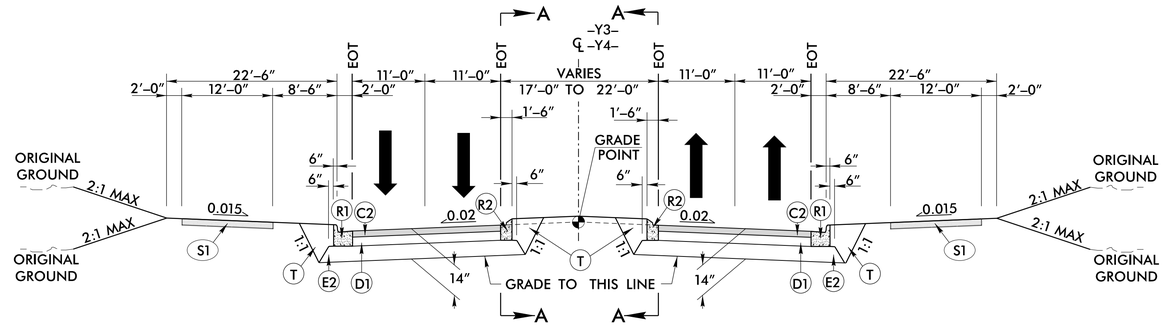
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

AWAITING FINAL PAVEMENT SCHEDULE

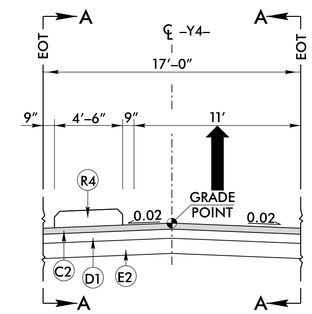
C1	PROP. APPROX. 1.5" ACSC, TYPE S9.5C
C2	PROP. APPROX. 3" ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4" ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4" ACBC, TYPE B25.0C
E2	PROP. APPROX. 7" ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7" AGGREGATE BASE COURSE.
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	1'-6" CONCRETE CURB AND GUTTER.
R3	2'-9" CONCRETE CURB AND GUTTER.
R4	5" MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4" CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5".
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

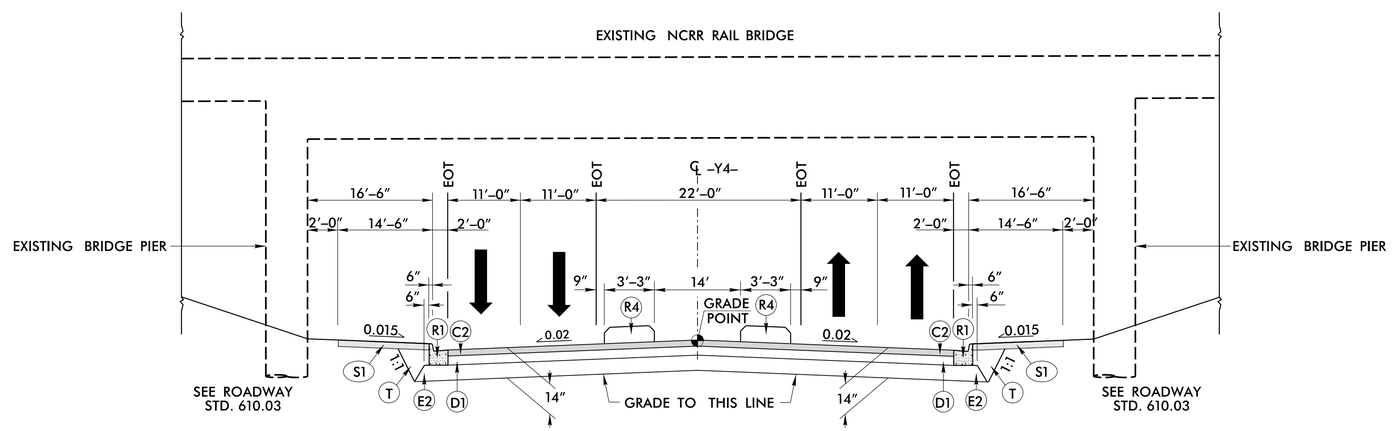


TYPICAL SECTION NO. 14
-Y3- EAST MALLARD CREEK CHURCH RD
-Y4- BACK CREEK CHURCH RD (NEW LOCATION)

USE TYPICAL SECTION NO. 14
-Y3- STA. 25+09.23 TO STA. 30+80.09
-Y4- STA. 10+50.51 TO STA. 13+76.38
-Y4- STA. 14+20.67 TO STA. 40+31 +/- (BEGIN BRIDGE)
-Y4- STA. 43+32 +/- (END BRIDGE) TO STA. 63+63.51



DETAIL 14A
MONOLITHIC ISLAND LOCATIONS
USE IN CONJUNCTION WITH TYPICAL SECTION 14
(SEE PLANS FOR LOCATIONS)



TYPICAL SECTION NO. 15
-Y4- BACK CREEK CHURCH RD (NEW LOCATION) BRIDGE UNDERPASS
USE TYPICAL SECTION NO. 15
-Y4- STA. 13+76.38 TO STA. 14+20.67

5/14/99
30-AUG-2021 19:56
\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

5/14/99

AWAITING FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5″ ACSC, TYPE S9.5C
C2	PROP. APPROX. 3″ ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4″ ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4″ ACBC, TYPE B25.0C
E2	PROP. APPROX. 7″ ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7″ AGGREGATE BASE COURSE.
R1	2′-6″ CONCRETE CURB AND GUTTER.
R2	1′-6″ CONCRETE CURB AND GUTTER.
R3	2′-9″ CONCRETE CURB AND GUTTER.
R4	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4″ CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5″.
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

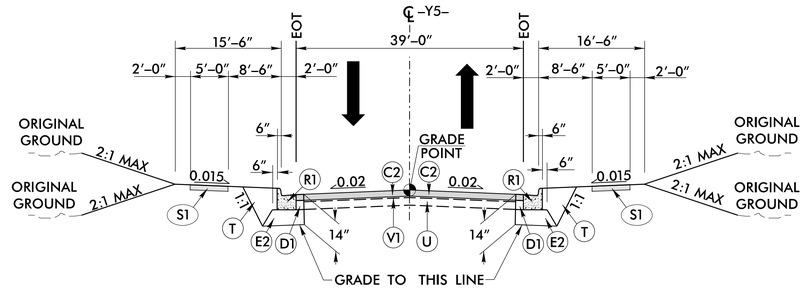
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

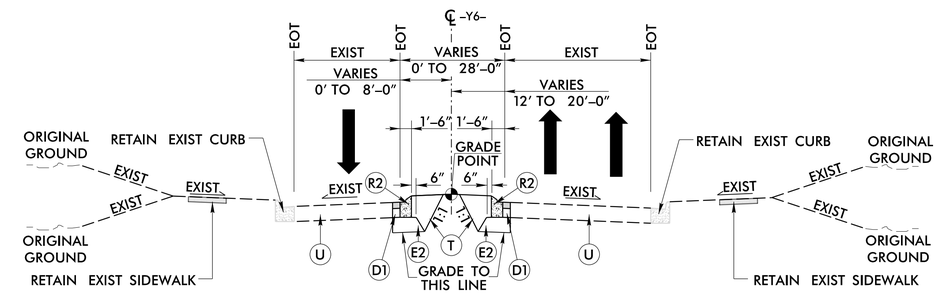
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 19

-Y5- SAMS LN

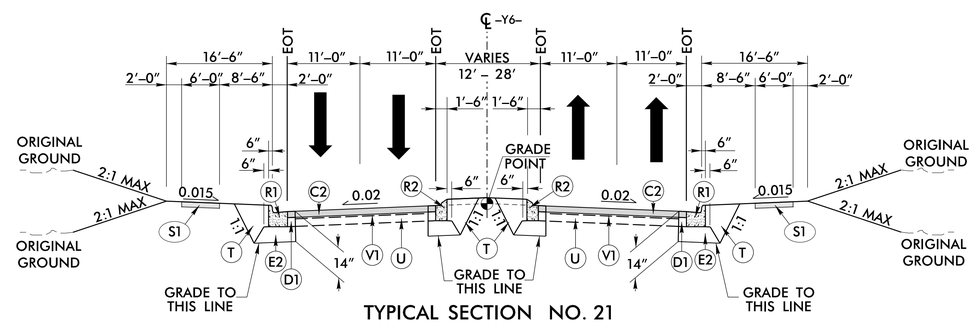
USE TYPICAL SECTION NO. 19
-Y5- STA. 11+20.00 TO STA. 12+24.20



TYPICAL SECTION NO. 20

-Y6- PAVILION BLVD

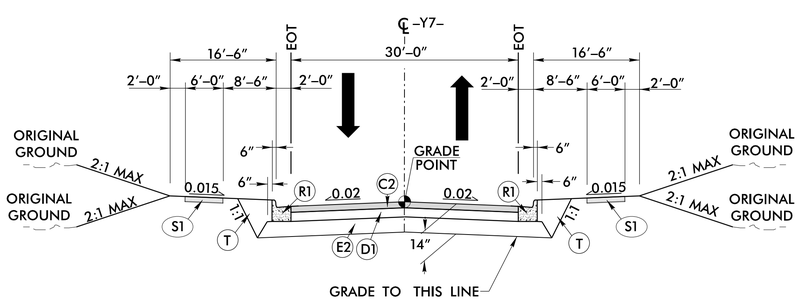
USE TYPICAL SECTION NO. 20
-Y6- STA. 15+20.00 TO STA. 18+00.00



TYPICAL SECTION NO. 21

-Y6- PAVILION BLVD

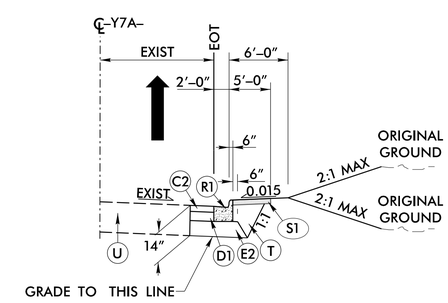
USE TYPICAL SECTION NO. 21
-Y6- STA. 18+00.00 TO STA. 19+03.93



TYPICAL SECTION NO. 22

-Y7- THOMAS COMBS DR

USE TYPICAL SECTION NO. 22
-Y7- STA. 11+15.00 TO STA. 11+98.93



TYPICAL SECTION NO. 23

-Y7A- DABNEY DR

USE TYPICAL SECTION NO. 23
-Y7A- STA. 10+18.88 TO STA. 10+66.00

30-AUG-2021 19:56
R:\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

5/14/99

AWAITING FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5″ ACSC, TYPE S9.5C
C2	PROP. APPROX. 3″ ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4″ ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4″ ACBC, TYPE B25.0C
E2	PROP. APPROX. 7″ ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7″ AGGREGATE BASE COURSE.
R1	2′-6″ CONCRETE CURB AND GUTTER.
R2	1′-6″ CONCRETE CURB AND GUTTER.
R3	2′-9″ CONCRETE CURB AND GUTTER.
R4	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4″ CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5″.
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

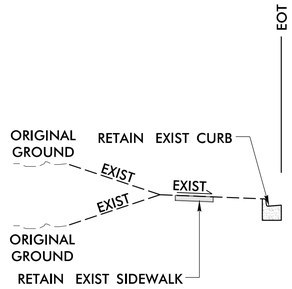
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

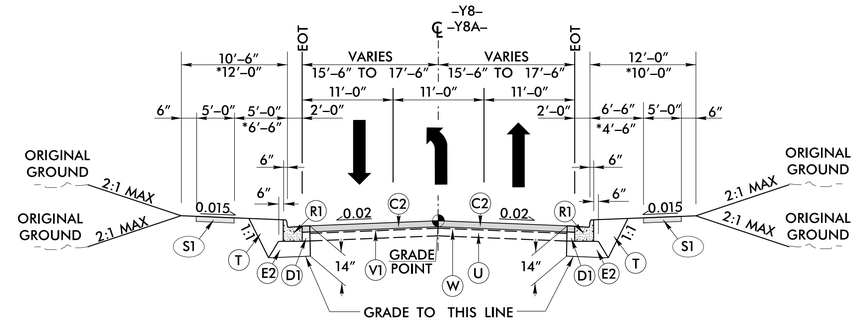
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



DETAIL 24A

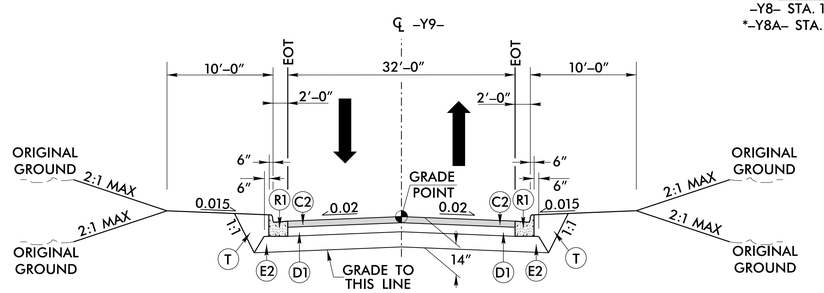
RETAIN EXISTING CURB LOCATIONS
USE IN CONJUNCTION WITH TYPICAL SECTION 24
(SEE PLANS FOR LOCATIONS)



TYPICAL SECTION NO. 24

-Y8- HANBERRY BLVD
-Y8A- HANBERRY BLVD

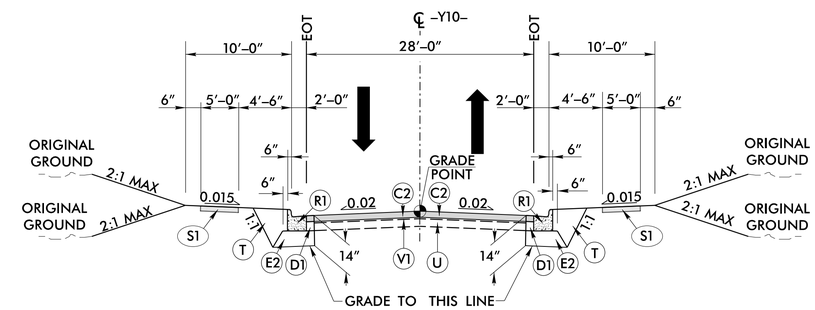
USE TYPICAL SECTION NO. 24
-Y8- STA. 10+37.00 TO STA. 12+95.39
*-Y8A- STA. 10+30.50 TO STA. 13+20.00



TYPICAL SECTION NO. 25

-Y9- HANBERRY BLVD

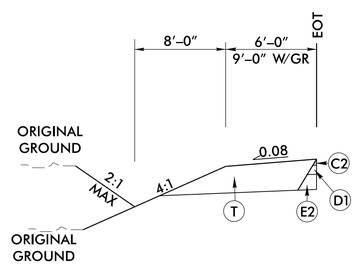
USE TYPICAL SECTION NO. 25
-Y9- STA. 10+30.50 TO STA. 11+00.00



TYPICAL SECTION NO. 26

-Y10- PARSIFAL LN

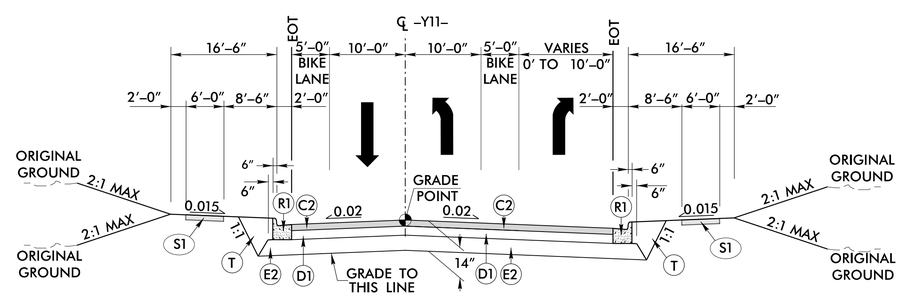
USE TYPICAL SECTION NO. 26
-Y10- STA. 10+30.50 TO STA 14+00.00



DETAIL 27A

SHOULDER LOCATIONS
USE IN CONJUNCTION WITH TYPICAL SECTION 27
(SEE PLANS FOR LOCATIONS)

NOTE: MIRROR FOR RT SIDE



TYPICAL SECTION NO. 27

-Y11- BACK CREEK CHURCH RD (REALIGNMENT)

USE TYPICAL SECTION NO. 27
-Y11- STA. 15+50.00 TO STA 24+48.39

30-AUG-2021 9:56
S:\Roadway\Proj\U5768_RDY_TYP.dgn
jnTB

5/14/99

AWAITING FINAL PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5″ ACSC, TYPE S9.5C
C2	PROP. APPROX. 3″ ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4″ ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4″ ACBC, TYPE B25.0C
E2	PROP. APPROX. 7″ ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7″ AGGREGATE BASE COURSE.
R1	2′-6″ CONCRETE CURB AND GUTTER.
R2	1′-6″ CONCRETE CURB AND GUTTER.
R3	2′-9″ CONCRETE CURB AND GUTTER.
R4	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4″ CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5″.
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

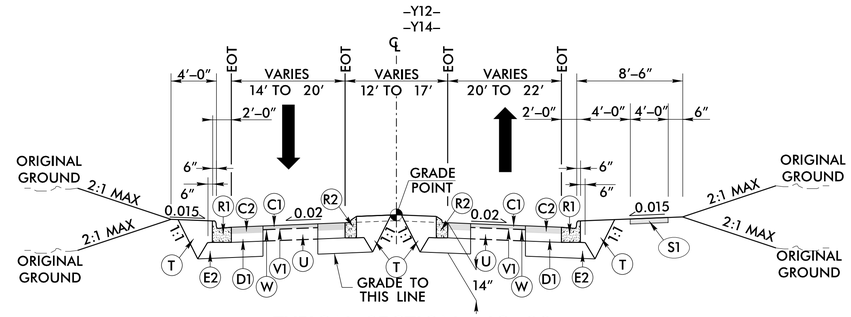
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

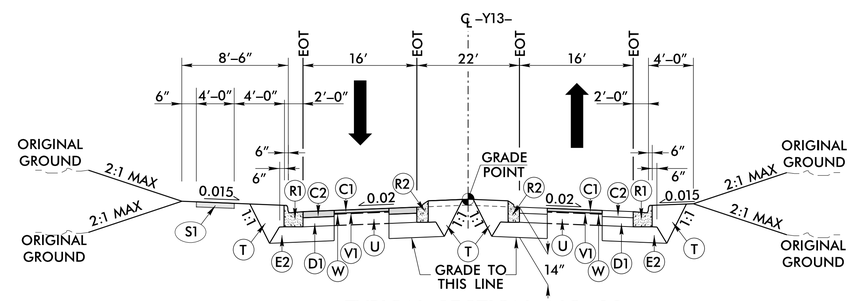
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 28

-Y12- ROSEMALLOW RD
-Y14- WYNDHAM POINT DR

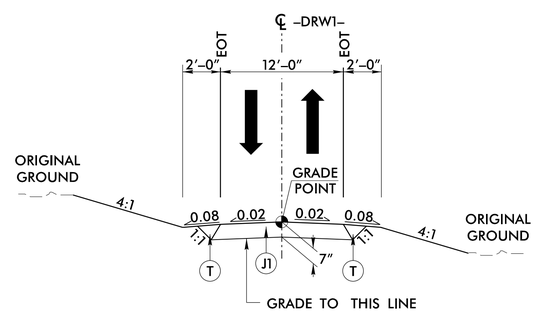
USE TYPICAL SECTION NO. 28
-Y12- STA. 10+70.00 TO STA. 11+55.16
-Y14- STA. 10+16.50 TO STA 11+25.00



TYPICAL SECTION NO. 29

-Y13- COREOPSIS RD

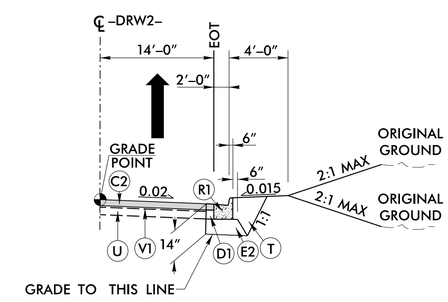
USE TYPICAL SECTION NO. 29
-Y13- STA. 11+50.00 TO STA. 11+99.66



TYPICAL SECTION NO. 30

-DRW1-

USE TYPICAL SECTION NO. 30
-DRW1- STA. 10+00.00 TO STA. 14+26.02



TYPICAL SECTION NO. 31

-DRW2-

USE TYPICAL SECTION NO. 31
-DRW2- STA. 10+12.00 TO STA. 12+41.85

30-AUG-2021 19:56
R:\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

5/14/99

AWAITING FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5" ACSC, TYPE S9.5C
C2	PROP. APPROX. 3" ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4" ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4" ACBC, TYPE B25.0C
E2	PROP. APPROX. 7" ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7" AGGREGATE BASE COURSE.
R1	2'-6" CONCRETE CURB AND GUTTER.
R2	1'-6" CONCRETE CURB AND GUTTER.
R3	2'-9" CONCRETE CURB AND GUTTER.
R4	5" MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4" CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5".
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

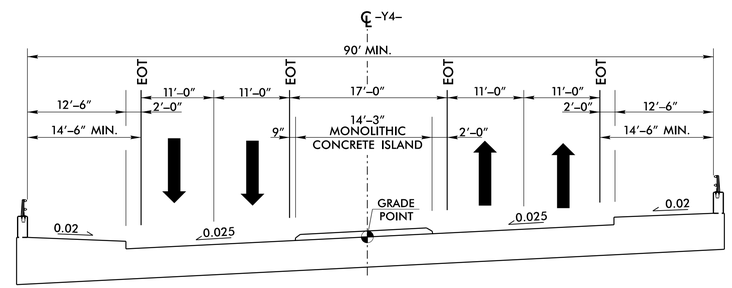
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

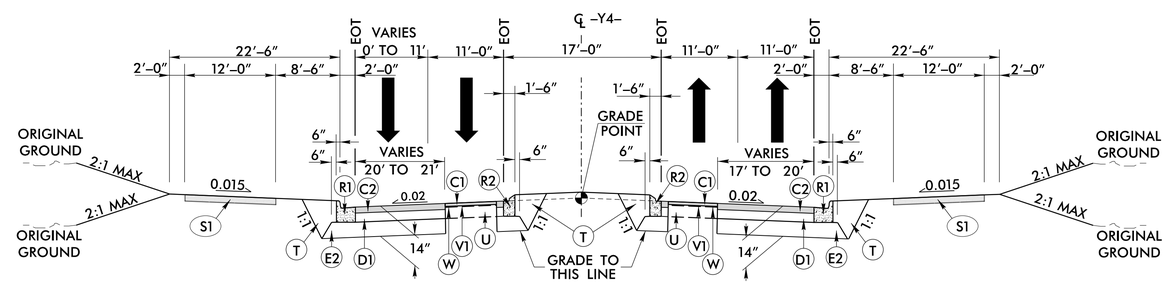
PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

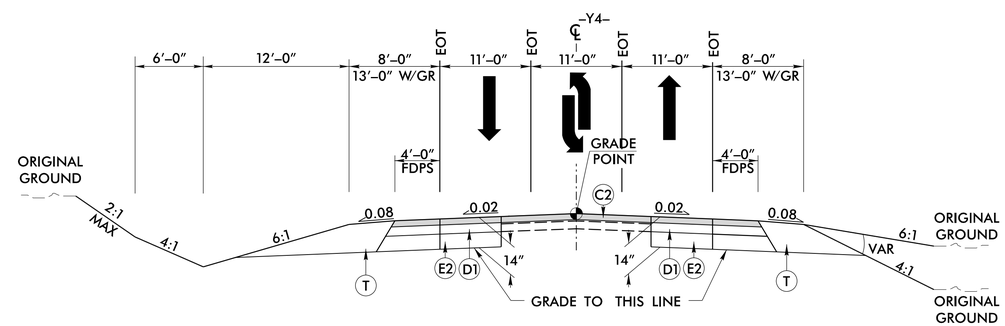
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



TYPICAL SECTION NO. 16
-Y4- BACK CREEK CHURCH RD BRIDGE (NEW LOCATION)
USE TYPICAL SECTION NO. 16
-Y4- STA. 40+31 +/- (BEGIN BRIDGE) TO STA. 43+31 +/- (END BRIDGE)



TYPICAL SECTION NO. 17
-Y4- BACK CREEK CHURCH RD (NEW LOCATION)
USE TYPICAL SECTION NO. 17
-Y4- STA. 63+63.51 TO STA. 74+48.00



TYPICAL SECTION NO. 18
-Y4- BACK CREEK CHURCH RD (NEW LOCATION)
USE TYPICAL SECTION NO. 18
-Y4- STA. 74+48.00 TO STA. 79+30.00

30-AUG-2021 9:56
\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

5/14/99

AWAITING FINAL PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.5″ ACSC, TYPE S9.5C
C2	PROP. APPROX. 3″ ACSC, TYPE S9.5C
C3	PROP. VAR. DEPTH ACSC, TYPE S9.5C
D1	PROP. APPROX. 4″ ACIC, TYPE I19.0C
D2	PROP. VAR. DEPTH ACIC, TYPE I19.0C
E1	PROP. APPROX. 4″ ACBC, TYPE B25.0C
E2	PROP. APPROX. 7″ ACBC, TYPE B25.0C
E3	PROP. VAR. DEPTH ACBC, TYPE B25.0C
J1	7″ AGGREGATE BASE COURSE.
R1	2′-6″ CONCRETE CURB AND GUTTER.
R2	1′-6″ CONCRETE CURB AND GUTTER.
R3	2′-9″ CONCRETE CURB AND GUTTER.
R4	5″ MONOLITHIC CONCRETE ISLAND (KEYED IN).
S1	4″ CONCRETE SIDEWALK.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
V1	MILLING BITUMINOUS PAVEMENT 1.5″.
V2	INCIDENTAL MILLING .
W	VARIABLE DEPTH ASPHALT PAVEMENT. (SEE DETAIL No. 1 SHOWING METHOD OF WEDGING)

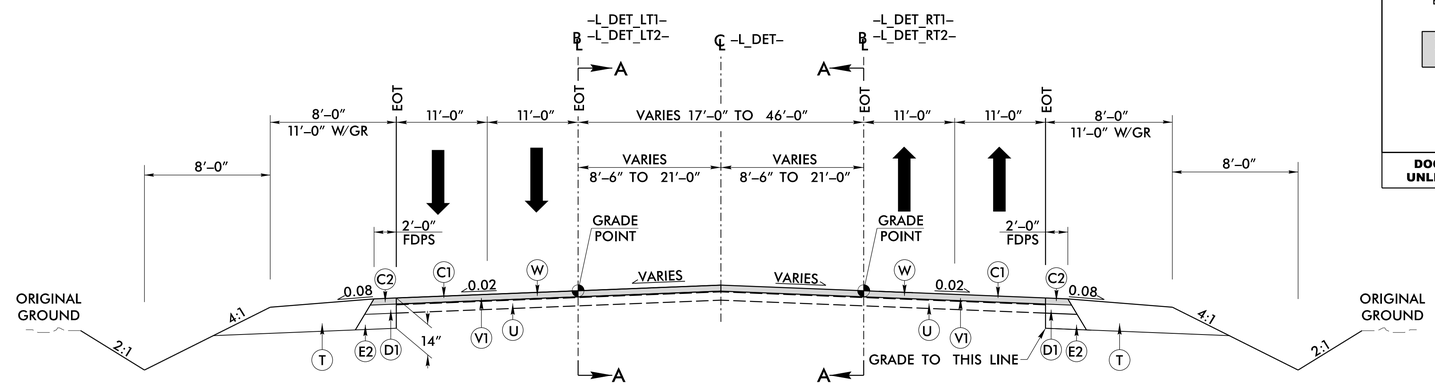
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	2A-10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	PAVEMENT DESIGN ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

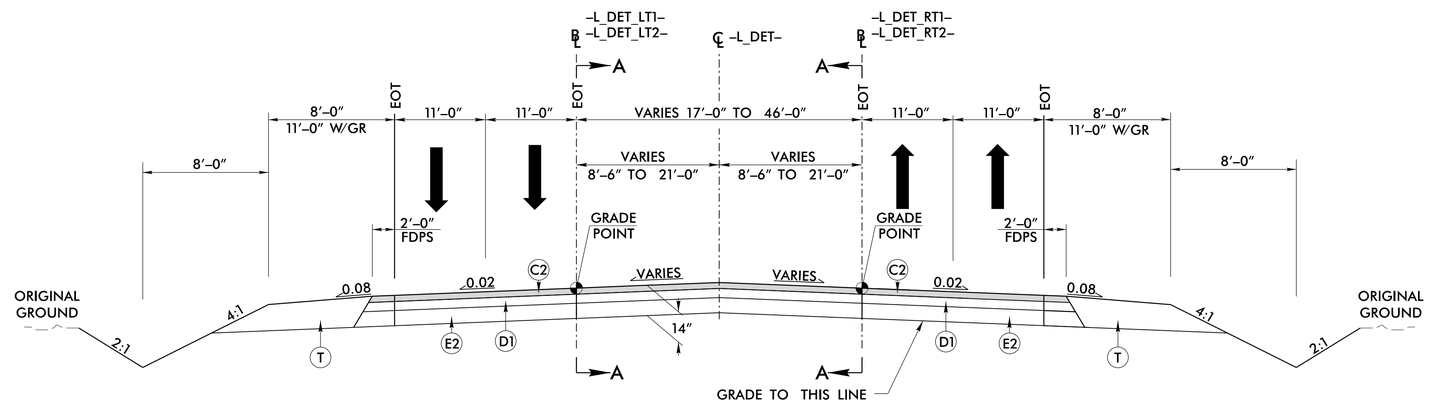


TYPICAL SECTION NO. 32

-L_DET-, -L_DET_LT1-, -L_DET_LT2-, -L_DET_RT1- & -L_DET_RT2- DETOUR

USE TYPICAL SECTION NO. 32

-L_DET- STA. 10+00.00 TO STA. 14+00.00 +/-
-L_DET- STA. 38+00.00 TO STA. 40+00.00

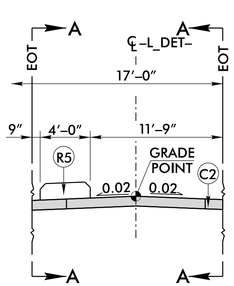


TYPICAL SECTION NO. 33

-L_DET-, -L_DET_LT1-, -L_DET_LT2-, -L_DET_RT1- & -L_DET_RT2- DETOUR

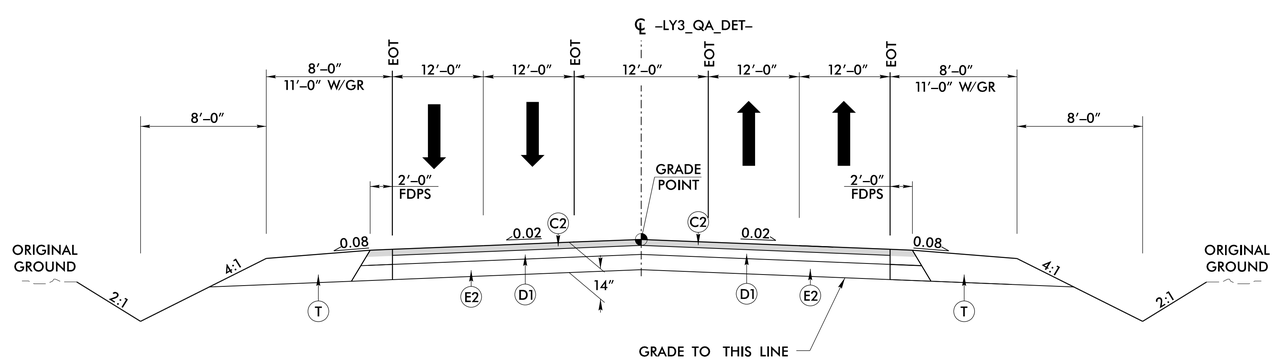
USE TYPICAL SECTION NO. 33

-L_DET- STA. 14+00.00 +/- TO STA. 38+00.00 +/-



DETAIL 32A

MONOLITHIC ISLAND LOCATIONS
USE IN CONJUNCTION WITH TYPICAL SECTION 32



TYPICAL SECTION NO. 34

-LY3_QA_DET- QUADRANT A DETOUR

USE TYPICAL SECTION NO. 34

-LY3_QC_DET- STA. 10+00.00 TO STA. 12+27.73

30-AUG-2021 9:56
R:\Roadway\Proj\U5768_RDY_TYP.dgn
HNTB

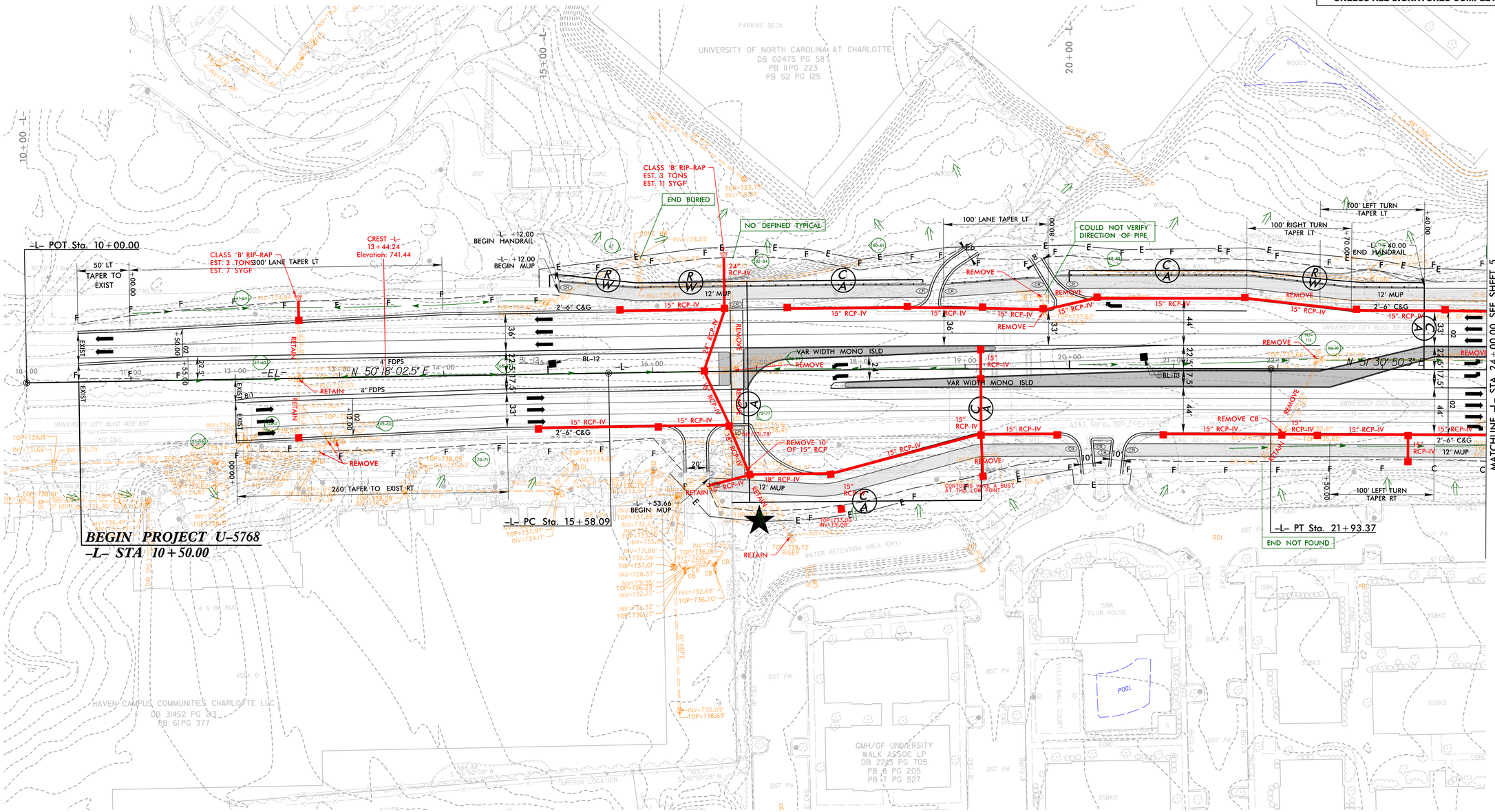
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NO JURISDICTIONAL RESOURCES IMPACTED ON THIS PAGE.



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -L- INTERSECTION DETAILS, SEE SHEET 2B-1
3. FOR -L- PROFILE, SEE SHEET 18

5/14/99

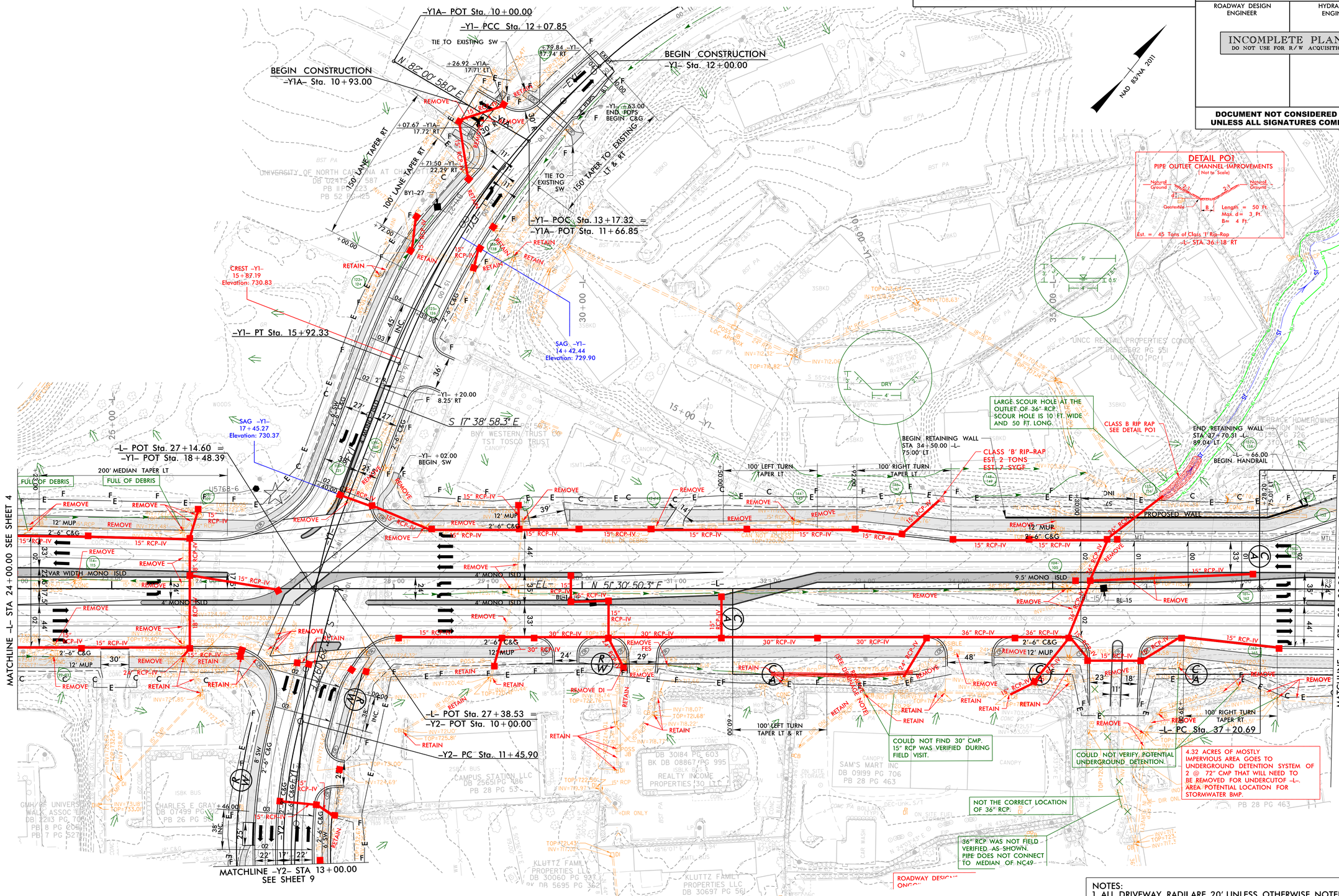
30-AUG-2021 9:56
CADD\PSH\U-5768_HYD_PSH4.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -L-, -Y1- & -Y2- INTERSECTION DETAILS, SEE SHEET 2B-2
3. FOR -L- PROFILE, SEE SHEET 18
4. FOR -Y1- PROFILE, SEE SHEET 22
5. FOR -Y1A- PROFILE, SEE SHEET 22
6. FOR -Y2- PROFILE, SEE SHEET 22

5/14/99

30-AUG-2021 9:57
C:\pwworking\hnt\d0795\u5768_HYD_PSH5.dgn
HNTB

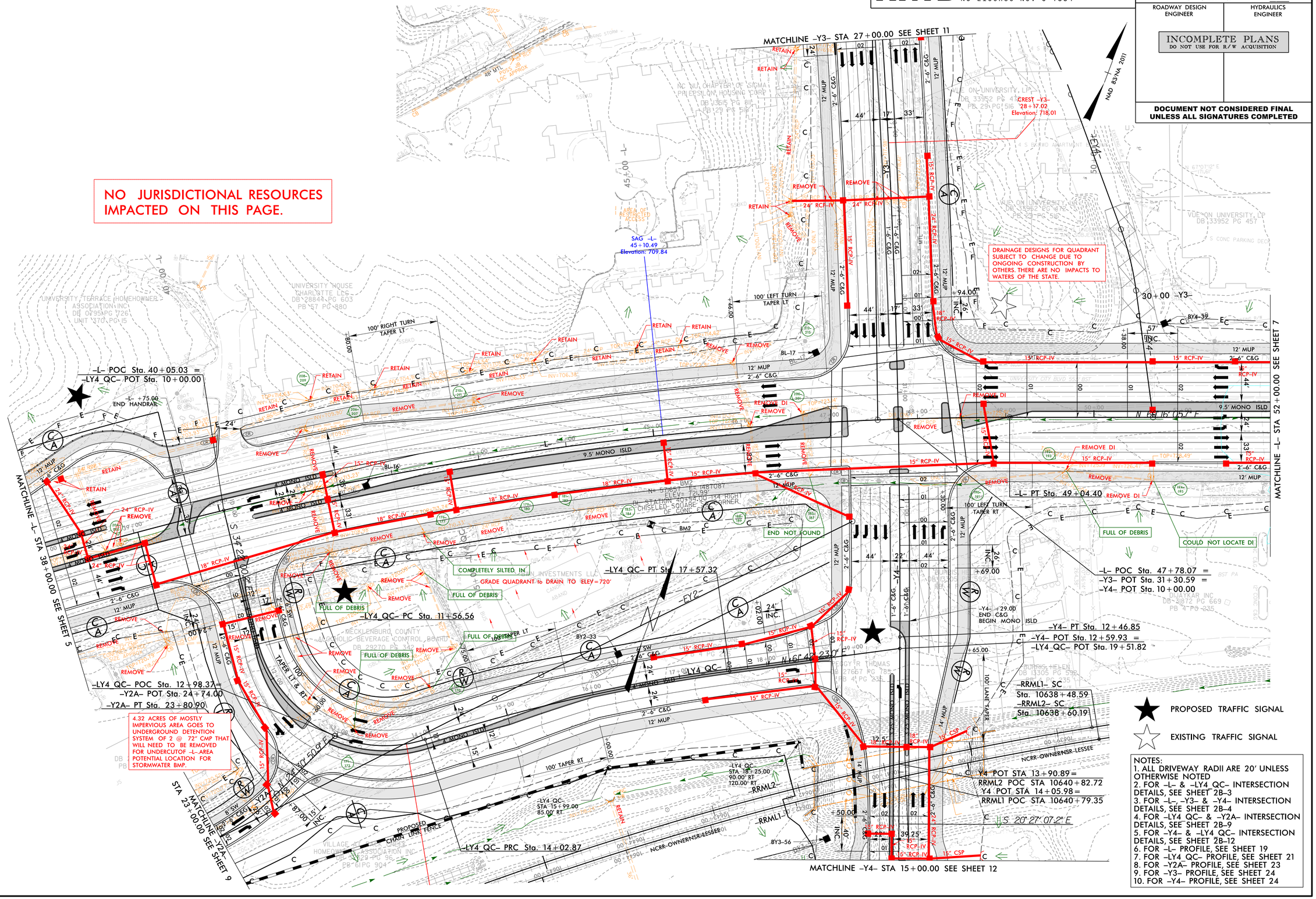
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NO JURISDICTIONAL RESOURCES IMPACTED ON THIS PAGE.



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -L- & -LY4_QC- INTERSECTION DETAILS, SEE SHEET 2B-3
3. FOR -L-, -Y3- & -Y4- INTERSECTION DETAILS, SEE SHEET 2B-4
4. FOR -LY4_QC- & -Y2A- INTERSECTION DETAILS, SEE SHEET 2B-9
5. FOR -Y4- & -LY4_QC- INTERSECTION DETAILS, SEE SHEET 2B-12
6. FOR -L- PROFILE, SEE SHEET 19
7. FOR -LY4_QC- PROFILE, SEE SHEET 21
8. FOR -Y2A- PROFILE, SEE SHEET 23
9. FOR -Y3- PROFILE, SEE SHEET 24
10. FOR -Y4- PROFILE, SEE SHEET 24

5/14/99

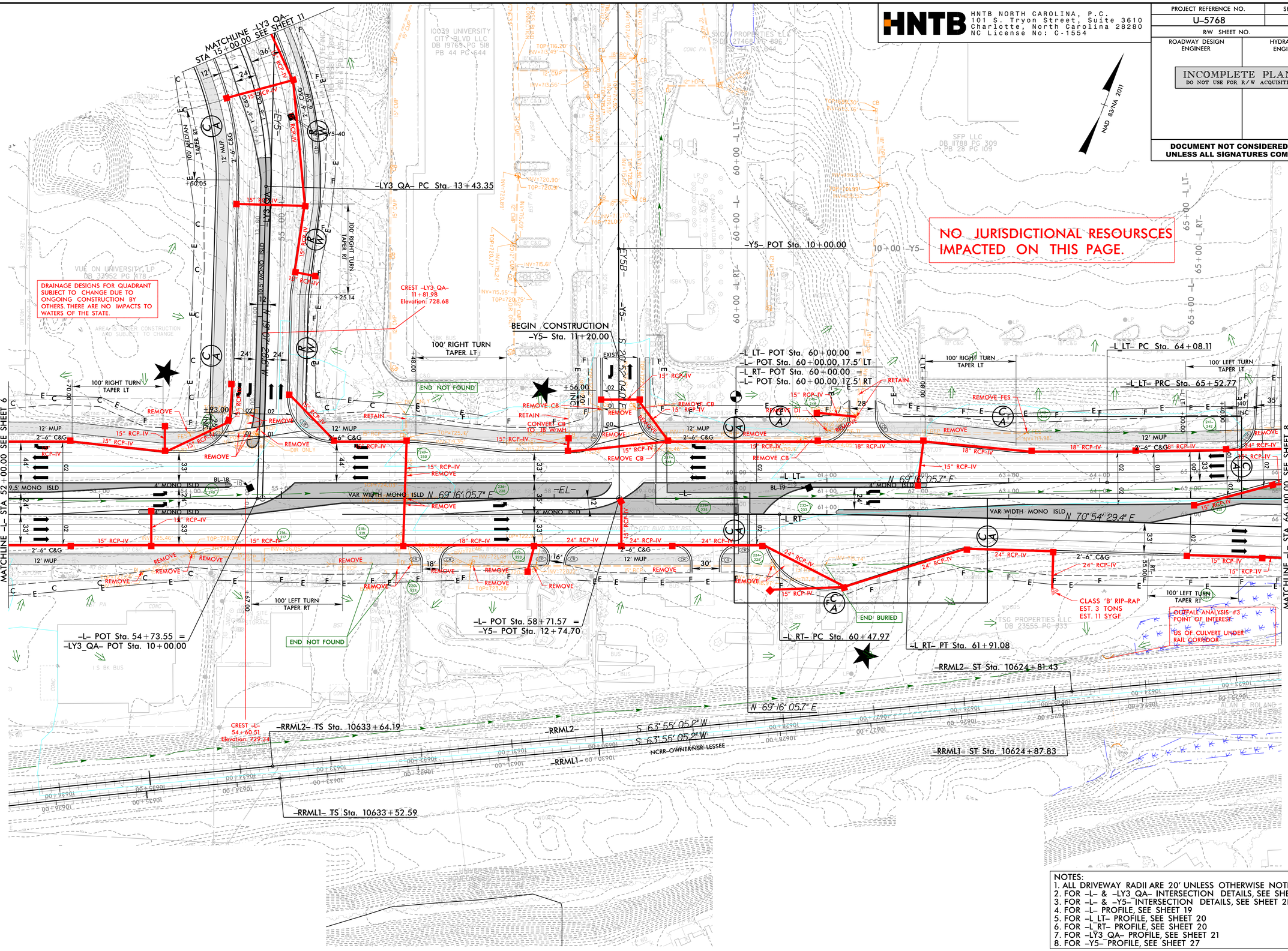
30-AUG-2021 9:57
R:\Roadway\Proj\U-5768_HYD_PSH6.dgn

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -L- & -LY3_QA- INTERSECTION DETAILS, SEE SHEET 2B-5
3. FOR -L- & -Y5- INTERSECTION DETAILS, SEE SHEET 2B-6
4. FOR -L- PROFILE, SEE SHEET 19
5. FOR -L_LT- PROFILE, SEE SHEET 20
6. FOR -L_RT- PROFILE, SEE SHEET 20
7. FOR -LY3_QA- PROFILE, SEE SHEET 21
8. FOR -Y5- PROFILE, SEE SHEET 27

5/14/99

30-AUG-2021 19:57
C:\pwworking\hnt\d0393611\U-5768_HYD_PSH7.dgn
HNTB

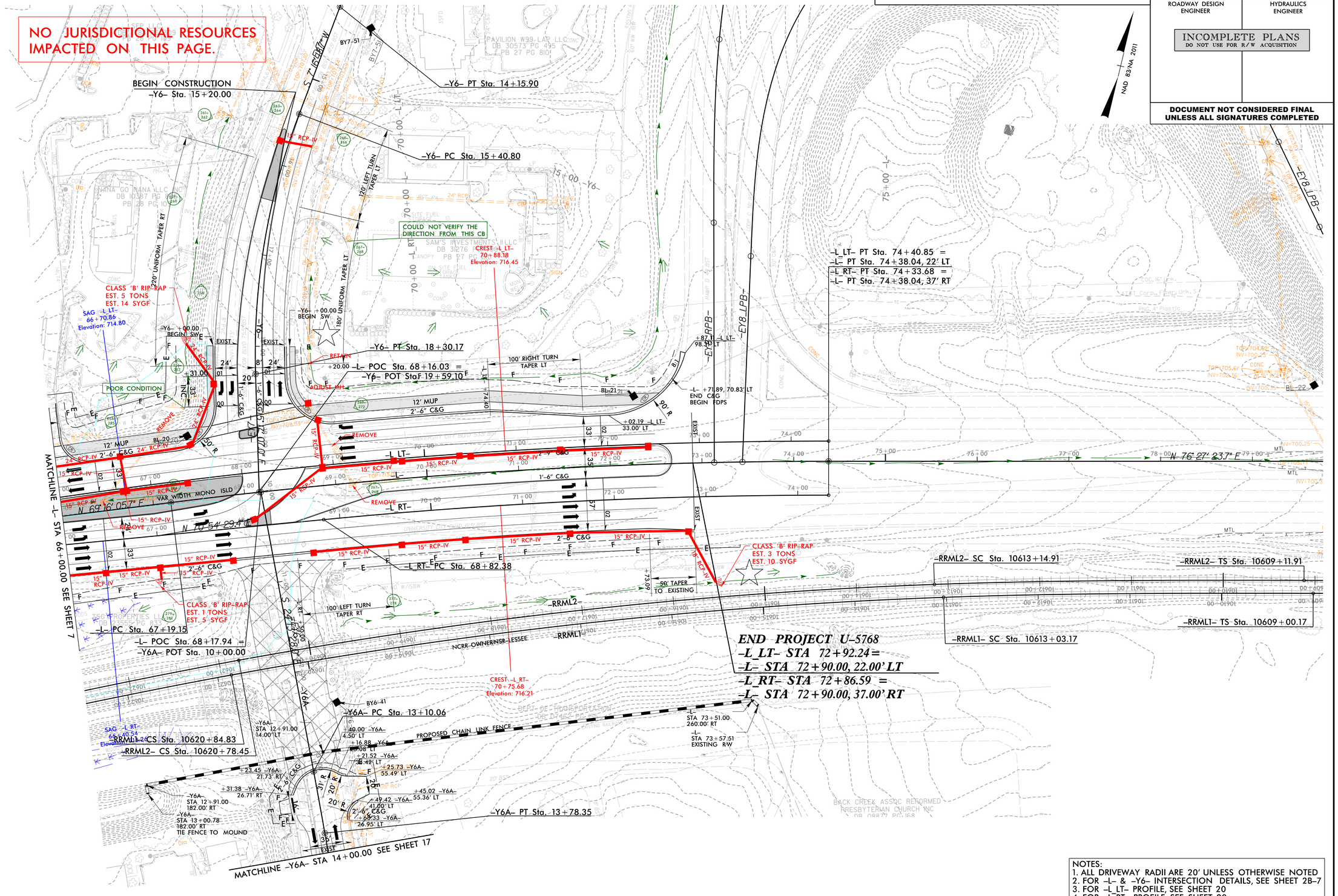
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NO JURISDICTIONAL RESOURCES IMPACTED ON THIS PAGE.



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -L- & -Y6- INTERSECTION DETAILS, SEE SHEET 2B-7
3. FOR -L_LT- PROFILE, SEE SHEET 20
4. FOR -L_RT- PROFILE, SEE SHEET 20
5. FOR -Y6- PROFILE, SEE SHEET 27
6. FOR -Y6A- PROFILE, SEE SHEET 27

5/14/99

30-AUG-2021 19:57
CADD\PSH\U-5768_HYD_PSH8.dgn
HNTB

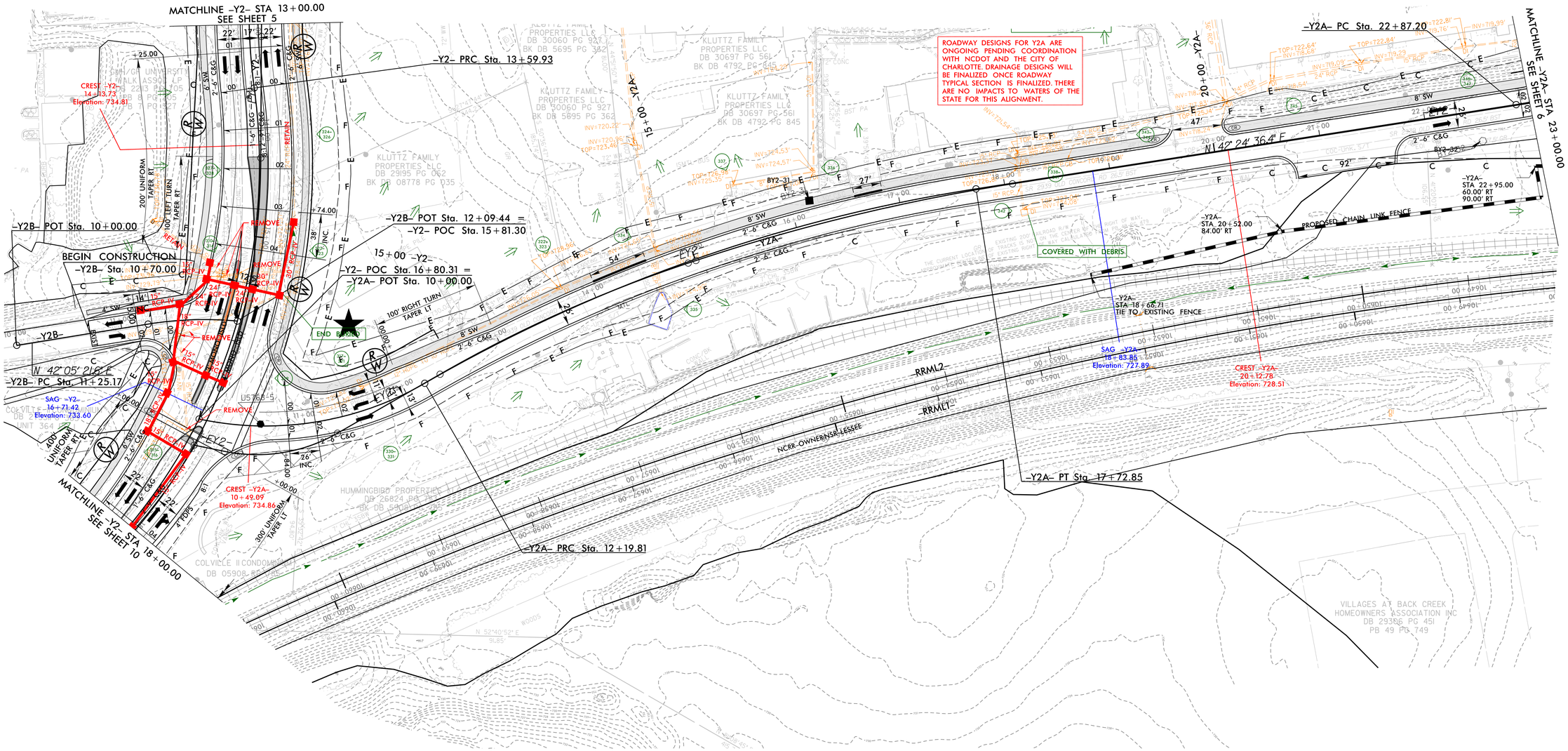
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NO JURISDICTIONAL RESOURCES IMPACTED ON THIS PAGE.



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y2- & -Y2A- INTERSECTION DETAILS, SEE SHEET 2B-8
3. FOR -Y2- PROFILE, SEE SHEET 22
4. FOR -Y2A- PROFILE, SEE SHEET 23
5. FOR -Y2B- PROFILE, SEE SHEET 23

5/14/99

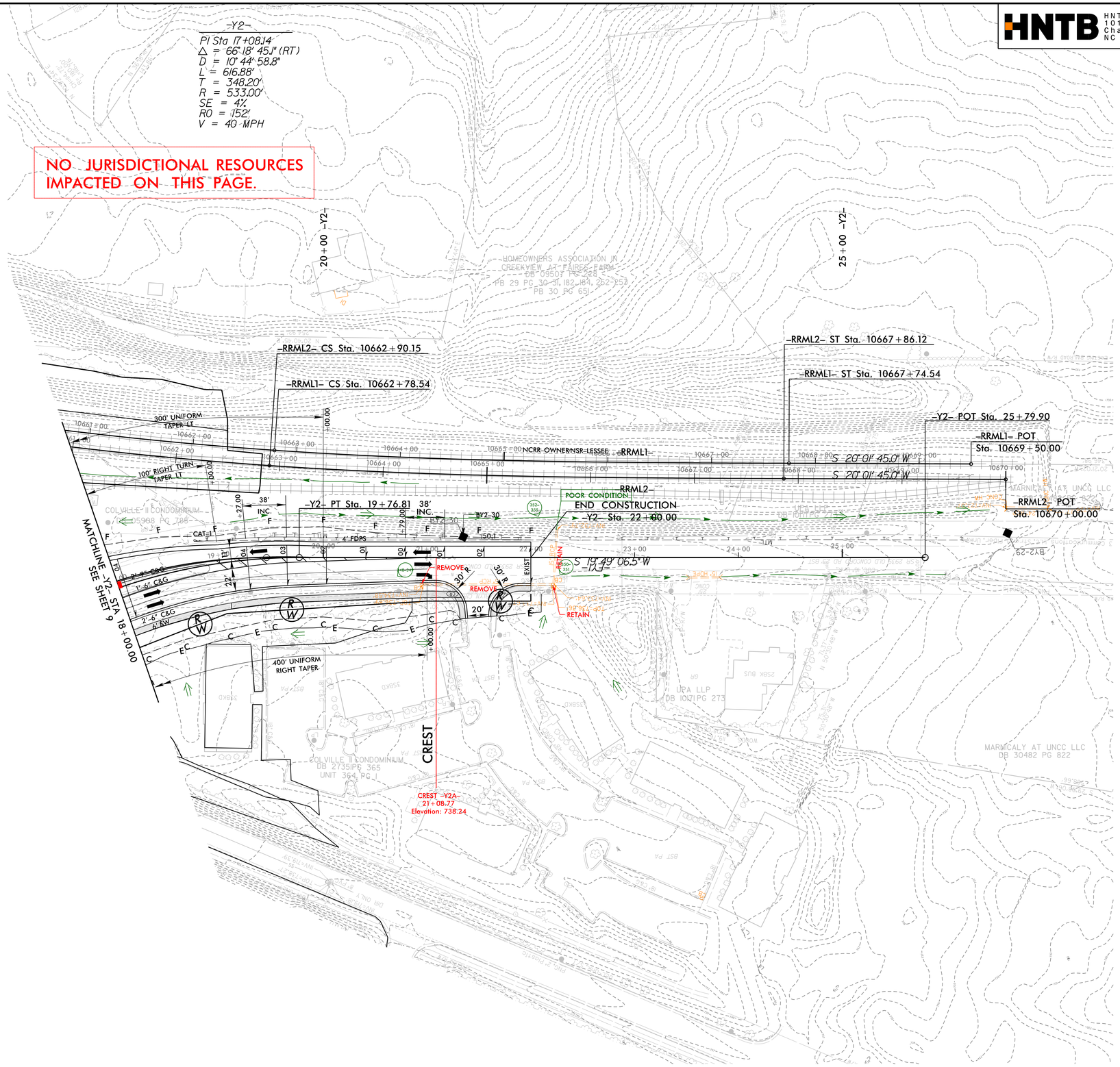
30-AUG-2021 19:57
CADD PSH U-5768_HYD_PSH9.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y2- PROFILE, SEE SHEET 22

5/14/99

30-AUG-2021 19:57
\CADD\PSH\U-5768_HYD_PSH10.dgn
HNTB

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

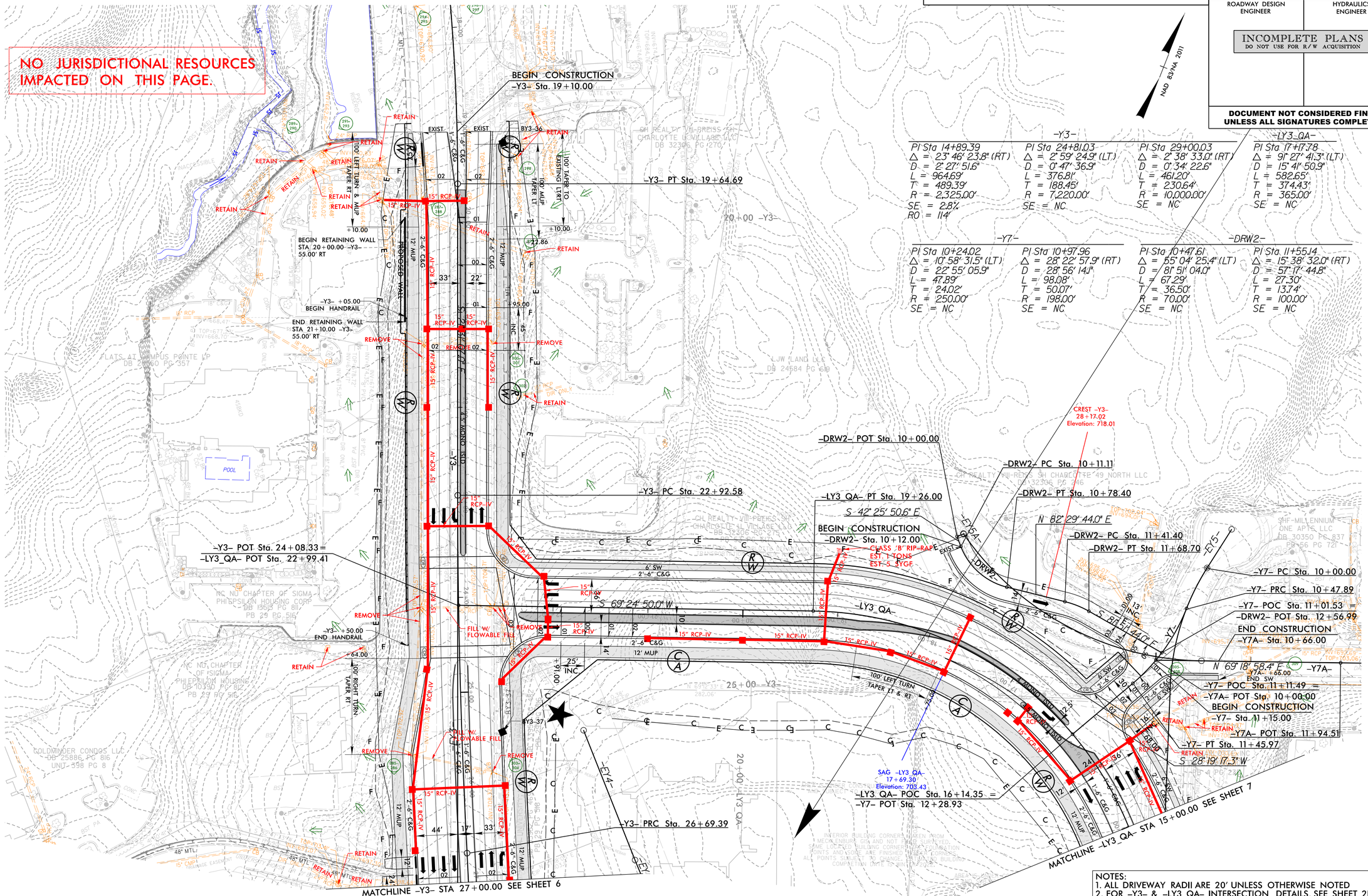
PROJECT REFERENCE NO.	SHEET NO.
U-5768	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011

NO JURISDICTIONAL RESOURCES IMPACTED ON THIS PAGE.



-Y3-

PI Sta 14+89.39	PI Sta 24+81.03	PI Sta 29+00.03	PI Sta 17+17.78
Δ = 23° 46' 23.8" (RT)	Δ = 2° 59' 24.9" (LT)	Δ = 2° 38' 33.0" (RT)	Δ = 91° 27' 41.3" (LT)
D = 2° 27' 51.6"	D = 0° 47' 36.9"	D = 0° 34' 22.6"	D = 15° 41' 50.9"
L = 964.69'	L = 376.81'	L = 461.20'	L = 582.65'
T = 489.39'	T = 188.45'	T = 230.64'	T = 374.43'
R = 2,325.00'	R = 7,220.00'	R = 10,000.00'	R = 365.00'
SE = 2.8%	SE = NC	SE = NC	SE = NC
RO = 114'			

-Y7-

PI Sta 10+24.02	PI Sta 10+97.96	PI Sta 10+47.61	PI Sta 11+55.14
Δ = 10° 58' 31.5" (LT)	Δ = 28° 22' 57.9" (RT)	Δ = 55° 04' 25.4" (LT)	Δ = 15° 38' 32.0" (RT)
D = 22° 55' 05.9"	D = 28° 56' 14.1"	D = 81° 51' 04.0"	D = 57° 17' 44.8"
L = 47.89'	L = 98.08'	L = 67.29'	L = 27.30'
T = 24.02'	T = 50.07'	T = 36.50'	T = 13.74'
R = 250.00'	R = 198.00'	R = 70.00'	R = 100.00'
SE = NC	SE = NC	SE = NC	SE = NC

-DRW2-

NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y3- & -LY3_QA- INTERSECTION DETAILS, SEE SHEET 2B-10
3. FOR -LY3_QA- & -Y7- INTERSECTION DETAILS, SEE SHEET 2B-11
4. FOR -LY3_QA- PROFILE, SEE SHEET 21
5. FOR -Y3- PROFILE, SEE SHEET 24
6. FOR -Y7- PROFILE, SEE SHEET 27
7. FOR -Y7A- PROFILE, SEE SHEET 27
8. FOR -DRW2- PROFILE, SEE SHEET 30

5/14/99

30-AUG-2021 9:57
U:\Projects\PSH\U-5768_HYD_PSH11.dgn

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-Y4-
PI Sta 24+68.88
Δ = 31° 54' 17.5" (LT)
D = 1° 52' 42.8"
L = 1,698.38'
T = 871.83'
R = 3,050.00'
SE = 2.5%
RO = 100'

-Y8-
PI Sta 11+83.29
Δ = 46° 21' 22.2" (RT)
D = 22° 55' 05.9"
L = 202.27'
T = 107.04'
R = 250.00'
SE = NC

-Y8A-
PI Sta 12+87.72
Δ = 30° 14' 46.2" (LT)
D = 15° 04' 40.2"
L = 200.60'
T = 102.70'
R = 380.00'
SE = NC

NAD 83/NA 2011

-Y4- PC Sta. 15+97.05

BEGIN CONSTRUCTION
-Y8- STA 10+37.00

-Y8- POT Sta. 10+00.00

-Y8- PC Sta. 10+76.25

-Y8- PT Sta. 12+78.52

-Y4- POC Sta. 24+35.57 =
-Y8- POT Sta. 13+25.89 =
-Y8A- POT Sta. 10+00.00

-Y8A- PC Sta. 11+85.03

-Y8A- PT Sta. 13+85.63

END CONSTRUCTION
-Y8A- STA 13+20.00

MATCHLINE -Y4- STA 15+00.00 SEE SHEET 6

MATCHLINE -Y4- STA 29+00.00 SEE SHEET 13

S 20° 27' 07.2" E

S 7° 48' 10.3" W

S 54° 09' 32.4" W

SAG -Y4-
18+11.00
Elevation: 694.35

CREST -Y4-
25+04.74
Elevation: 713.03

CLASS 'B' RIP-RAP
EST. 8 TONS
EST. 21 SYGF

SPECIAL LATERAL BASE DITCH
SEE DETAIL SLBX

STANDARD 4' BASE DITCH
SEE DETAIL SBX

-Y4- +88.00
BEGIN HANDRAIL

-Y4- +93.00
END HANDRAIL

-Y4- +65.51
END C&G
BEGIN MONO ISLD

-Y8- +52.00
BEGIN 2'-6" C&G
BEGIN 5' SW

-Y4- +39.19
END MONO ISLD
BEGIN C&G

-Y4- +17.00
END HANDRAIL

-Y4- +88.06
END MONO ISLD
BEGIN C&G

-Y4- +01.00
END HANDRAIL

-Y4- +60.00
BEGIN HANDRAIL

-Y4- +97.00
BEGIN HANDRAIL

-Y8A- +96.00
BEGIN 2'-6" C&G
BEGIN 5' SW

REMOVE AND RESET GUARDRAIL

100' SHIFT LT/RT

30' LANE TAPER LT/RT

100' LANE TAPER

12' MUP

2'-6" C&G

1'-6" C&G

2'-9" C&G

4.5' MONO ISLD

30" RCP-IV

15" RCP-IV

24" RCP-IV

BY3-57

BY3-58

BY3-59

RETAIN

REMOVE

PROPOSED TRAFFIC SIGNAL

BACK CREEK CHURCH ROAD (-Y4-)
AT HANBERRY BLVD (-Y8-)

2019 ADT / 2045 ADT	N/A / 34,900	
N/A / 3,300	-Y4-	N/A / 2,800
N/A / 5,200	-Y8-	N/A / 4,500
N/A / 1,100	-Y4-	N/A / 900
N/A / 30,800		

NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y4-, -Y8-, & -Y8A- INTERSECTION DETAILS, SEE SHEET 2B-13
3. FOR -Y4- PROFILE, SEE SHEETS 24 & 25
4. FOR -Y8- PROFILE, SEE SHEET 28
5. FOR -Y8A- PROFILE, SEE SHEET 28

5/14/99

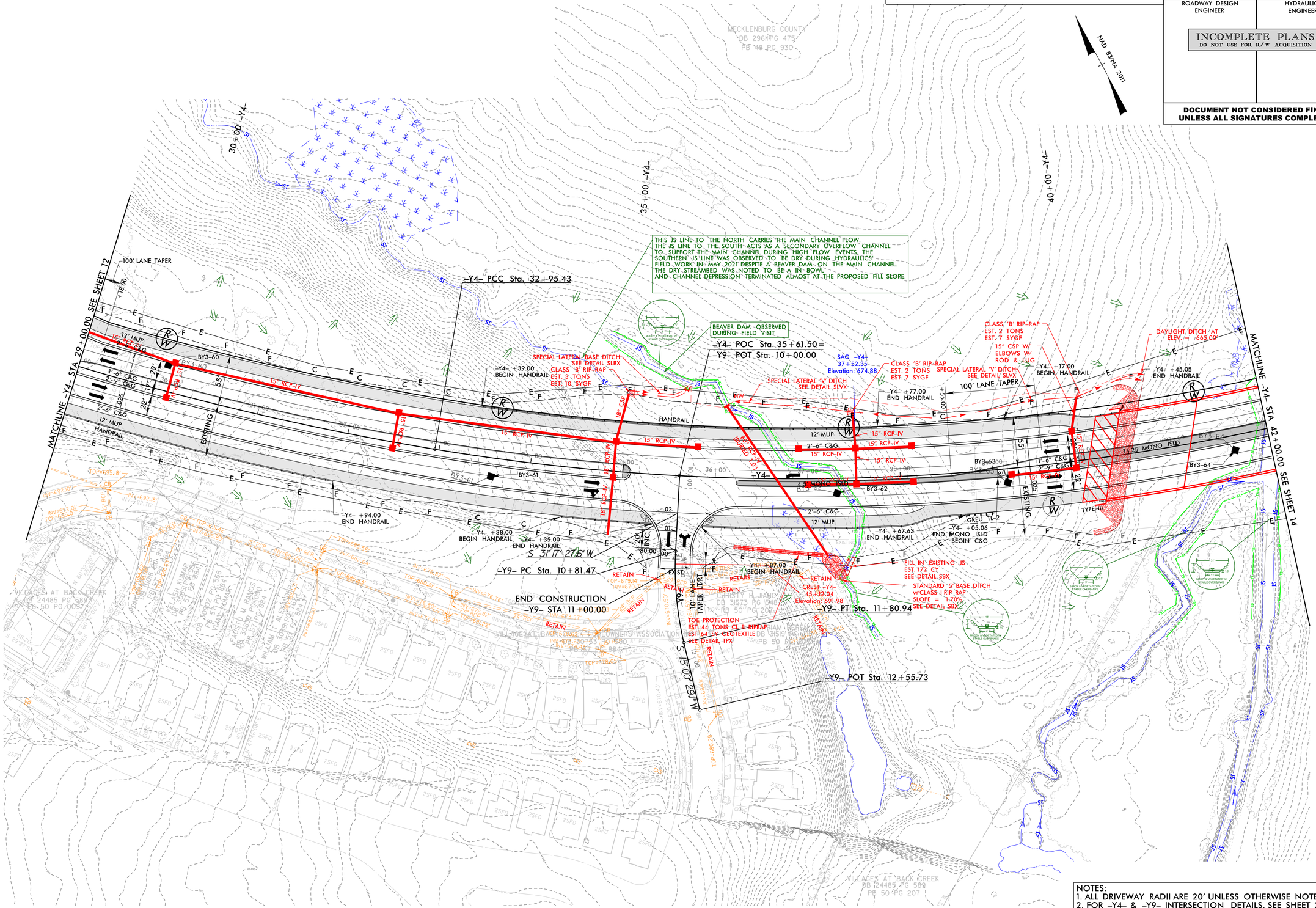
SCALE: 20' = 1" 1:167
CADD: FSK
U-5768_HYD_PSH12.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y4- & -Y9- INTERSECTION DETAILS, SEE SHEET 2B-14
3. FOR -Y4- PROFILE, SEE SHEET 25
4. FOR -Y9- PROFILE, SEE SHEET 28

5/14/99

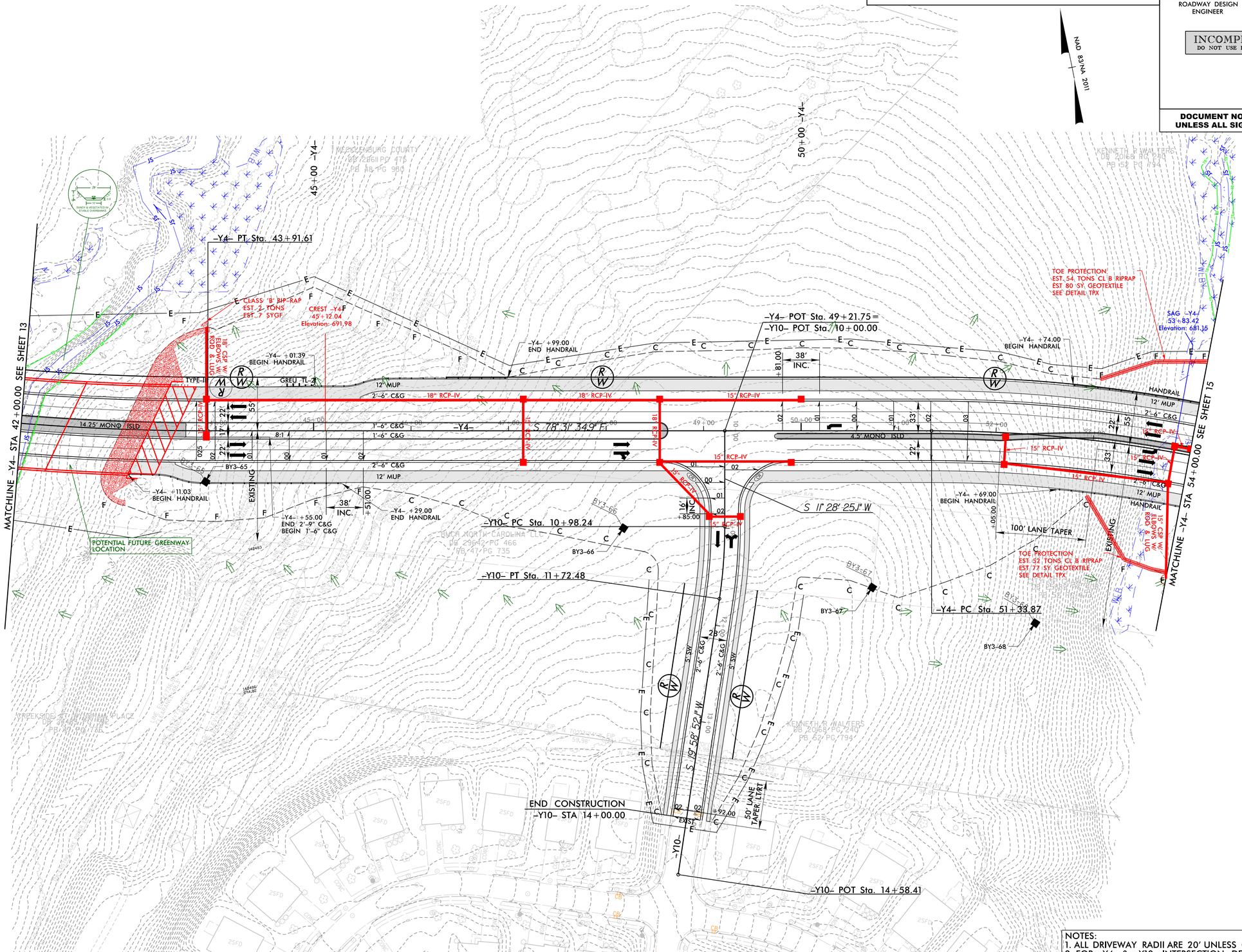
30-AUG-2021 19:57
CADD\PSH\U-5768_HYD_PSH13.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y4- & -Y10- INTERSECTION DETAILS, SEE SHEET 2B-14
3. FOR -Y4- PROFILE, SEE SHEETS 25 & 26
4. FOR -Y10- PROFILE, SEE SHEET 28

5/14/99

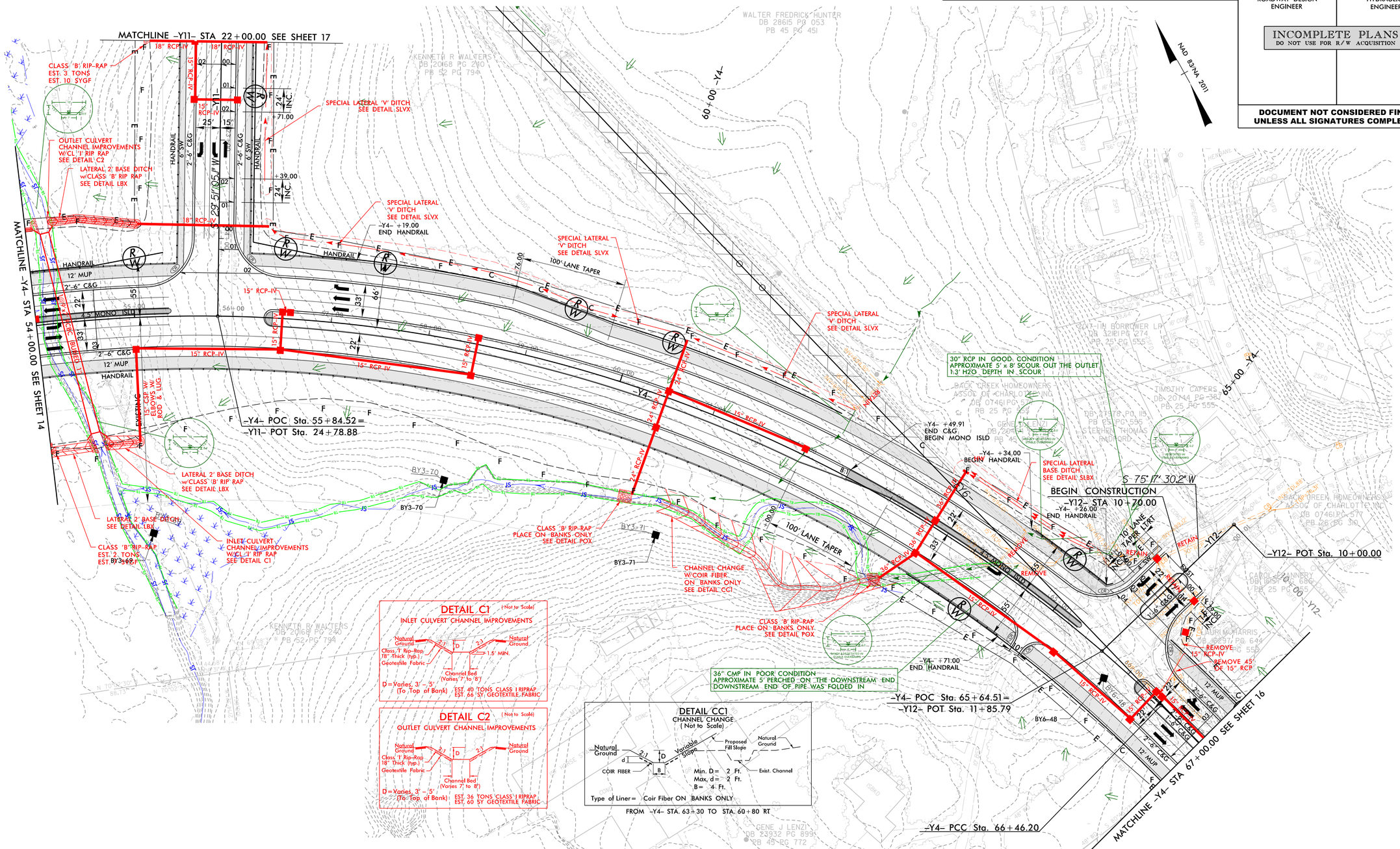
30-AUG-2021 19:57
\CADD\PSH\U-5768_HYD_PSH14.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y4- & -Y11- INTERSECTION DETAILS, SEE SHEET 2B-15
3. FOR -Y4- & -Y12- INTERSECTION DETAILS, SEE SHEET 2B-16
4. FOR -Y4- PROFILE, SEE SHEET 26
5. FOR -Y11- PROFILE, SEE SHEET 29
6. FOR -Y12- PROFILE, SEE SHEET 29

5/14/99

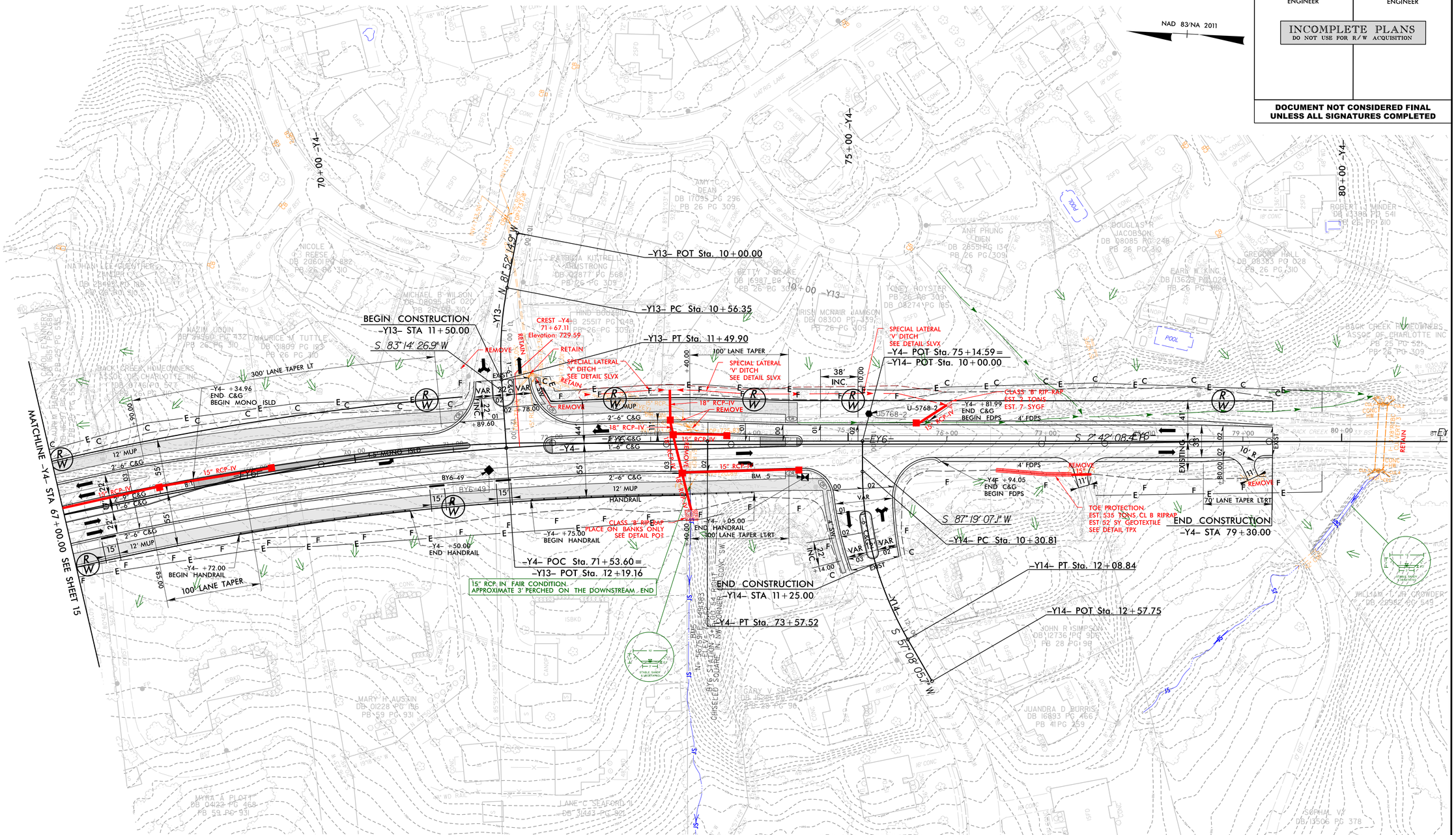
30-AUG-2021 19:57
R:\Roadway\Proj\U-5768_HYD_PSH15.dgn

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y4- & -Y13- INTERSECTION DETAILS, SEE SHEET 2B-16
3. FOR -Y4- & -Y14- INTERSECTION DETAILS, SEE SHEET 2B-17
4. FOR -Y4- PROFILE, SEE SHEETS 26 & 27
5. FOR -Y13- PROFILE, SEE SHEET 30
6. FOR -Y14- PROFILE, SEE SHEET 30

5/14/99

30-AUG-2021 19:58
CADD\PSH\U-5768_HYD_PSH16.dgn
HNTB

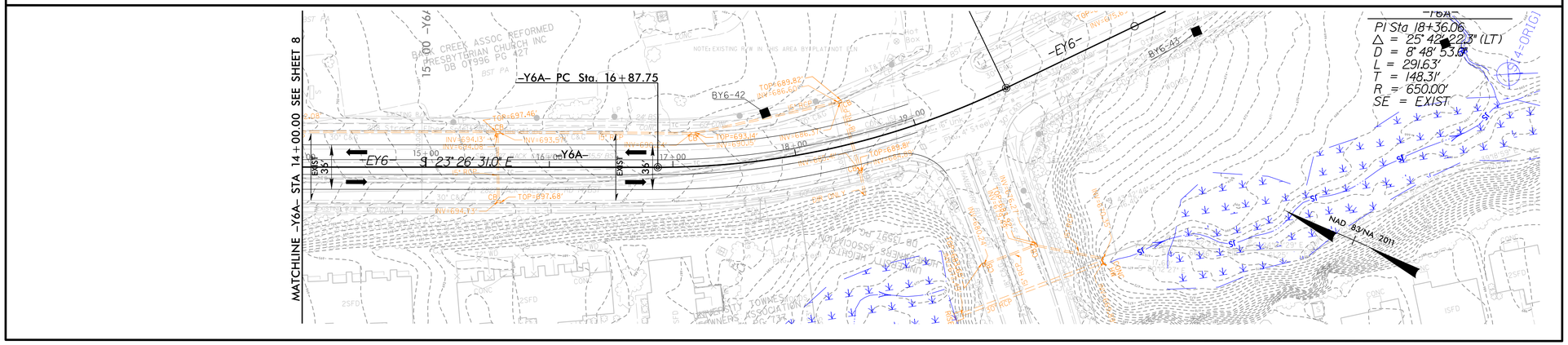
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

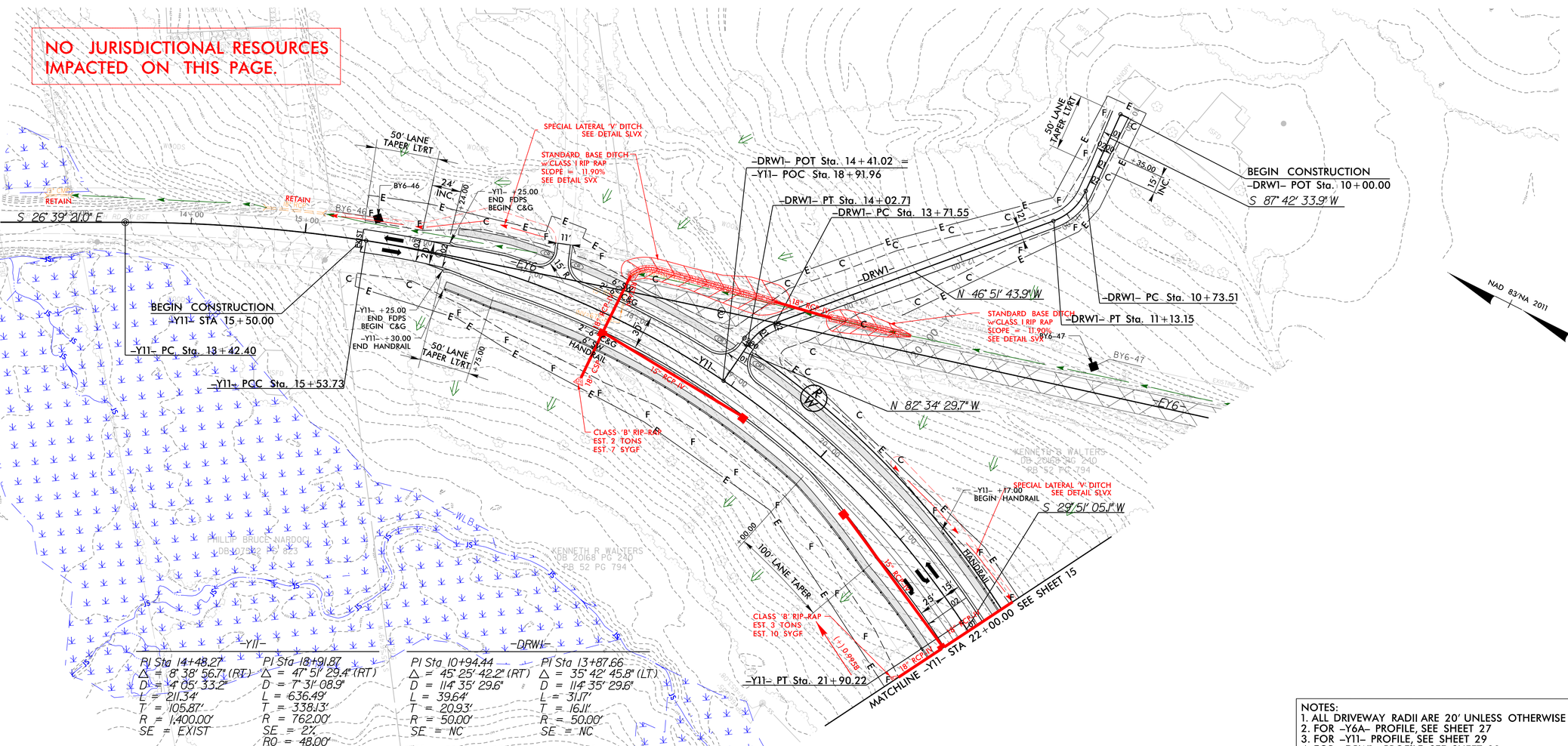
PROJECT REFERENCE NO.	SHEET NO.
U-5768	17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

INSET




NO JURISDICTIONAL RESOURCES IMPACTED ON THIS PAGE.

-Y11-		-DRW1-	
PI Sta 14+48.27	PI Sta 18+91.87	PI Sta 10+94.44	PI Sta 13+87.66
Δ = 8° 38' 56.7" (RT)	Δ = 47° 51' 29.4" (RT)	Δ = 45° 25' 42.2" (RT)	Δ = 35° 42' 45.8" (LT)
D = 4° 05' 33.2"	D = 7° 31' 08.9"	D = 114° 35' 29.6"	D = 114° 35' 29.6"
L = 211.34'	L = 636.49'	L = 39.64'	L = 31.17'
T = 105.87'	T = 338.13'	T = 20.93'	T = 16.11'
R = 1,400.00'	R = 762.00'	R = 50.00'	R = 50.00'
SE = EXIST	SE = 2%	SE = NC	SE = NC
	RO = 48.00'		

NOTES:
1. ALL DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
2. FOR -Y6A- PROFILE, SEE SHEET 27
3. FOR -Y11- PROFILE, SEE SHEET 29
4. FOR -DRW1- PROFILE, SEE SHEET 30

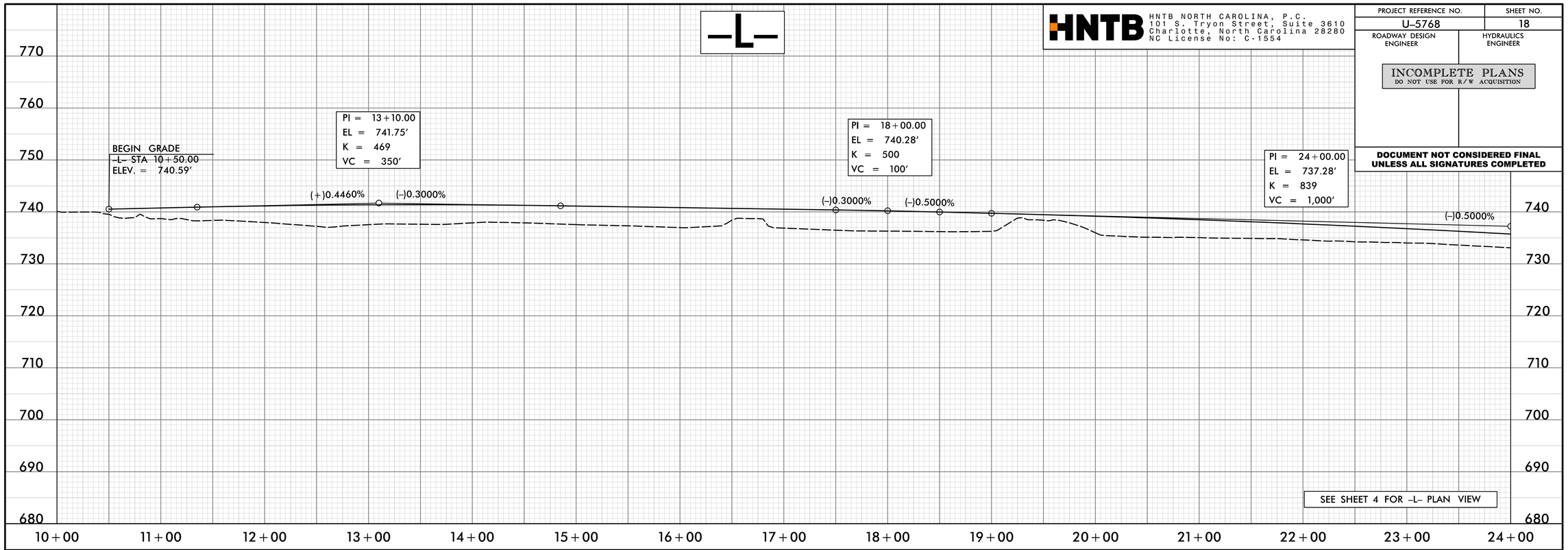
5/14/99
30-AUG-2021 19:58
CADD PSH U-5768_HYD_PSH17.dgn
HNTB

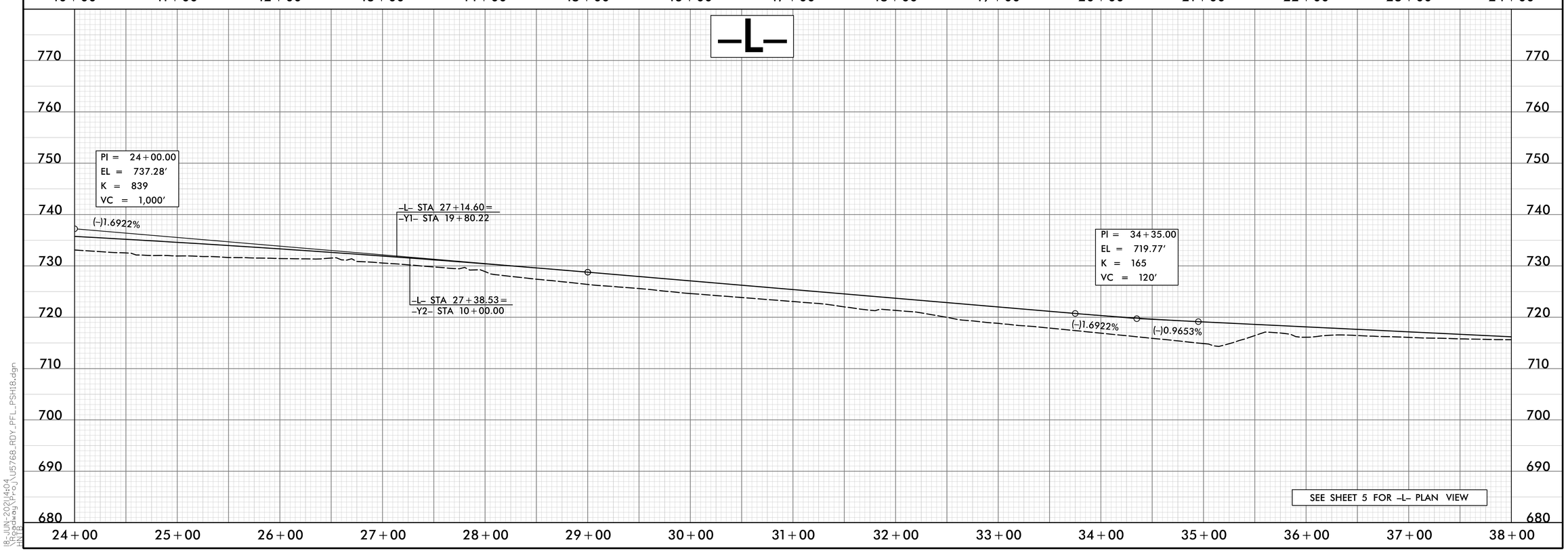
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





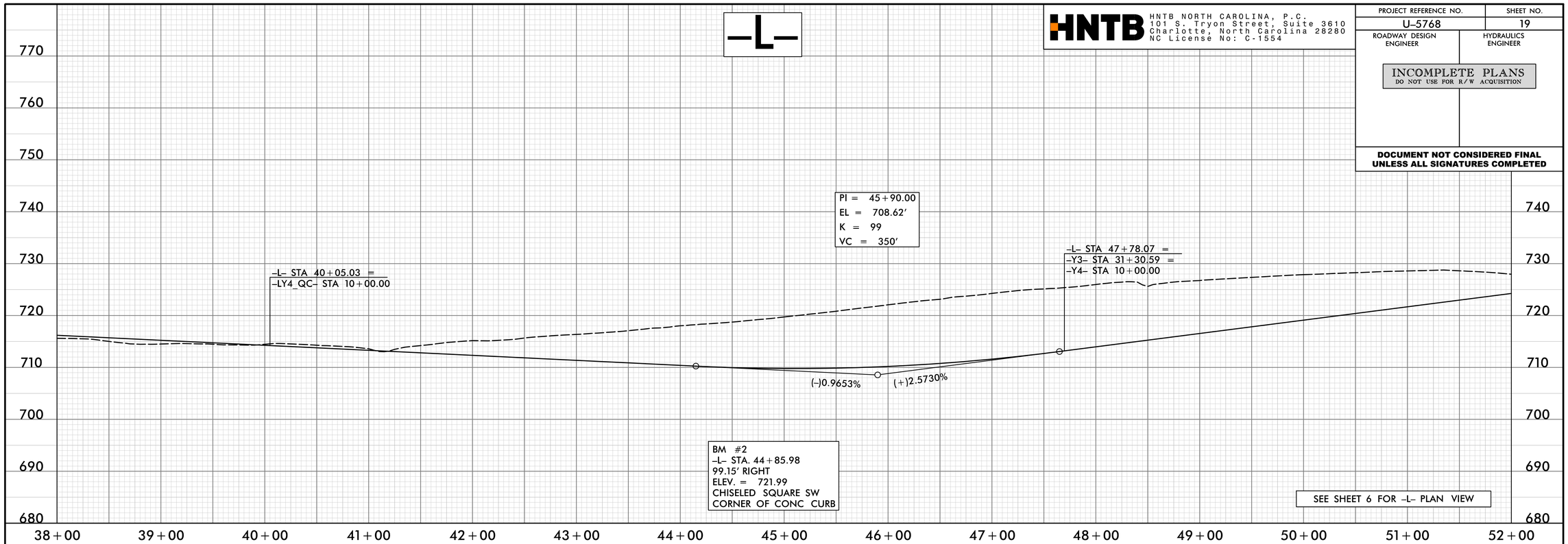
18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH18.dgn
HNTB

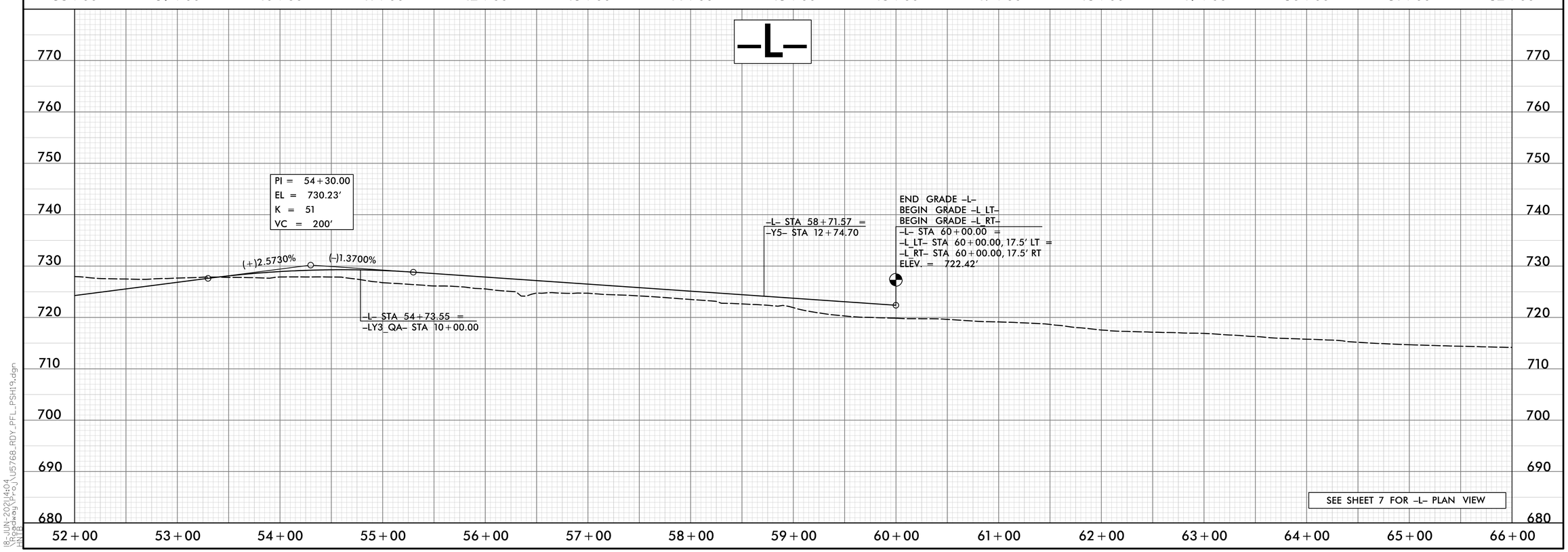
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





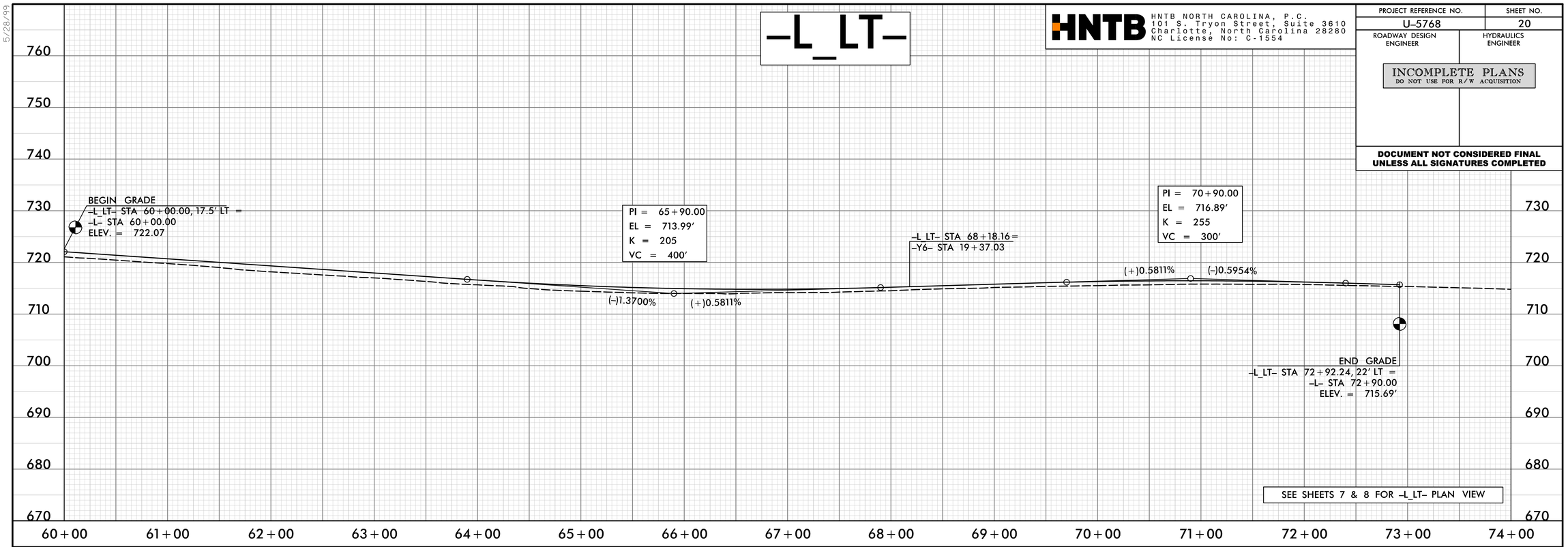
18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH19.dgn
HNTB

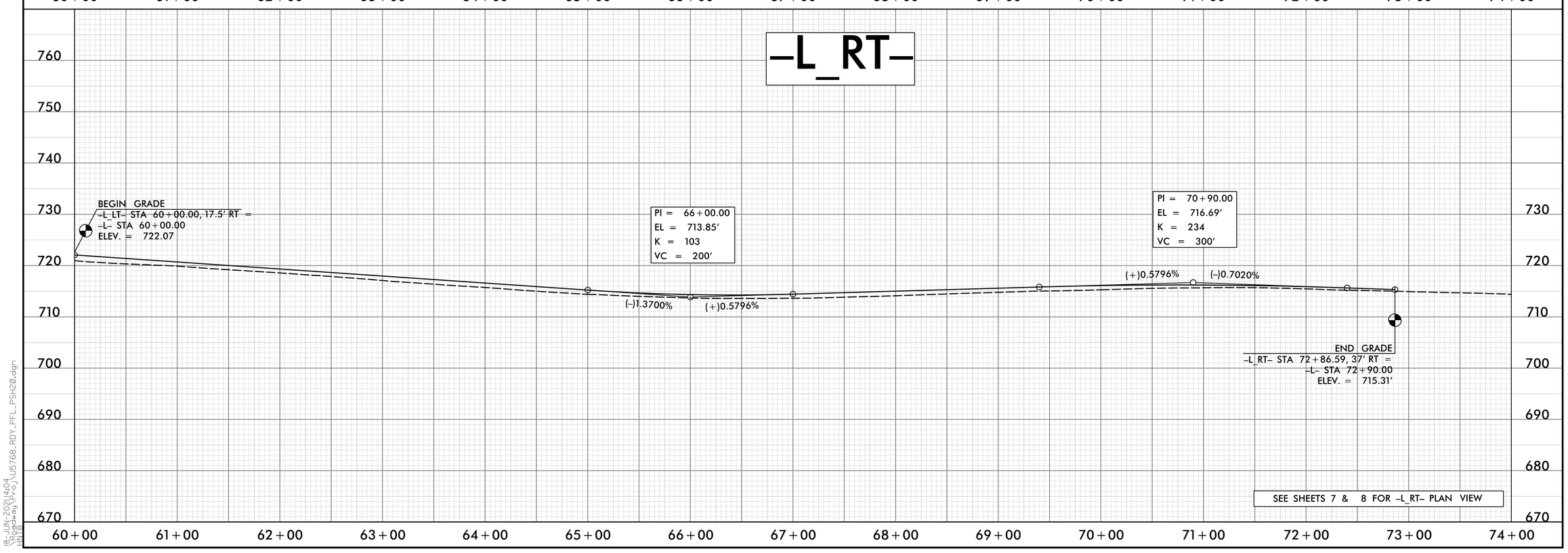
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	20
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





5/28/99

18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH20.dgn
HNTB

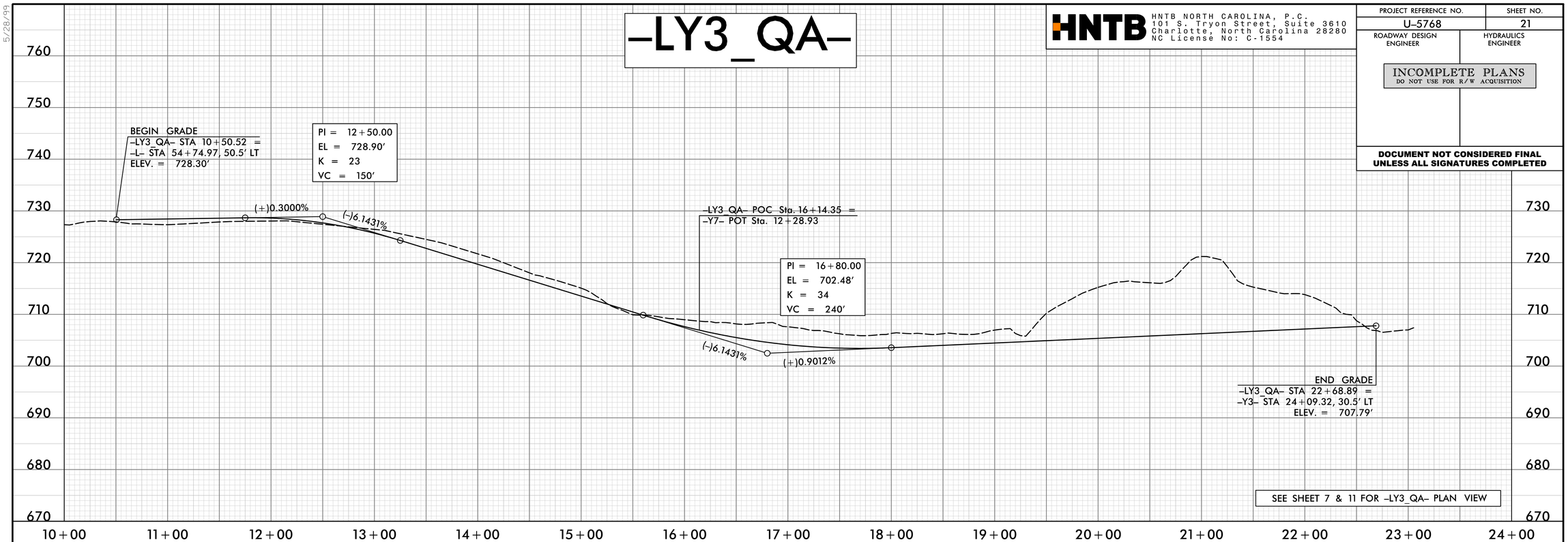
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	21
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

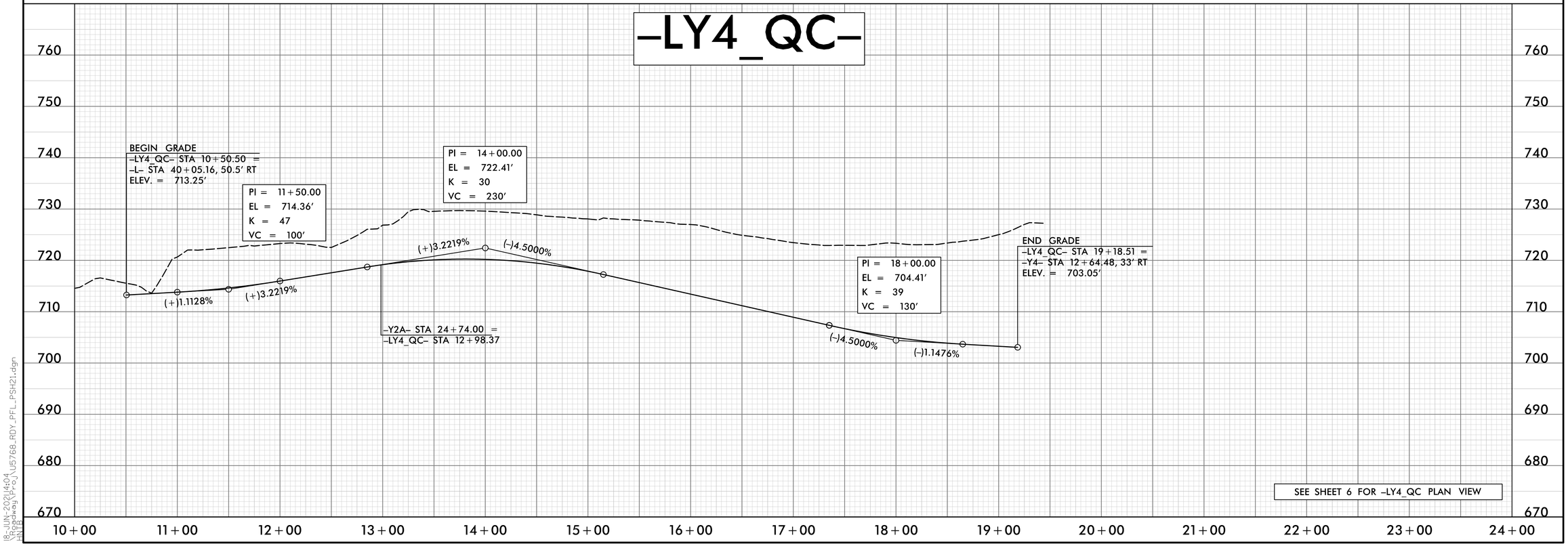
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-LY3_QA-



-LY4_QC-



5/28/99

18-JUN-2021 14:04
R:\Roadway\Proj\U5768_RDY_PFL_PSH21.dgn
HNTB

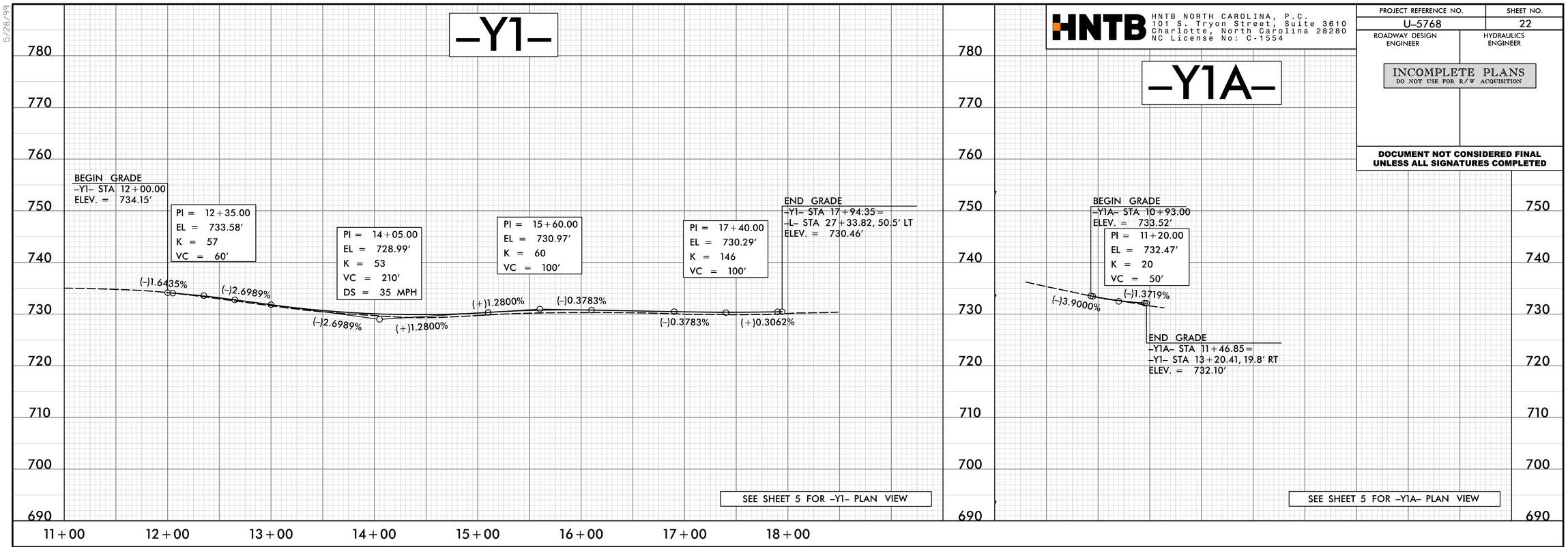
5/28/99

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



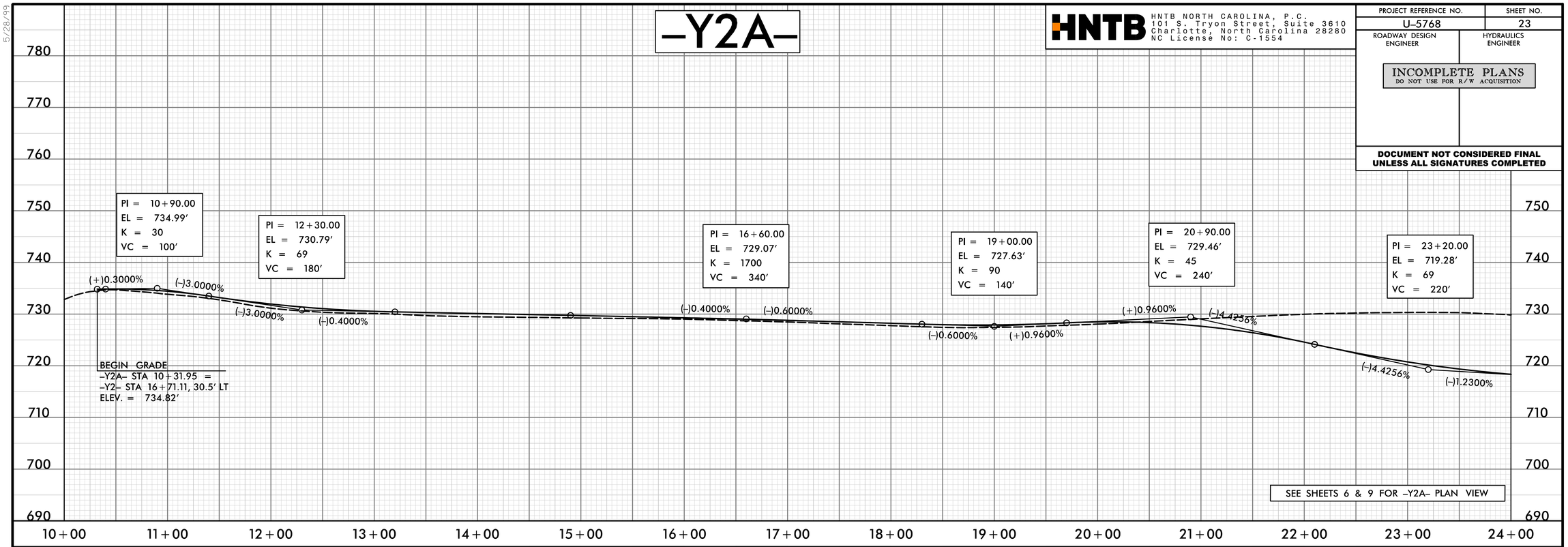
18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH22.dgn
HNTB

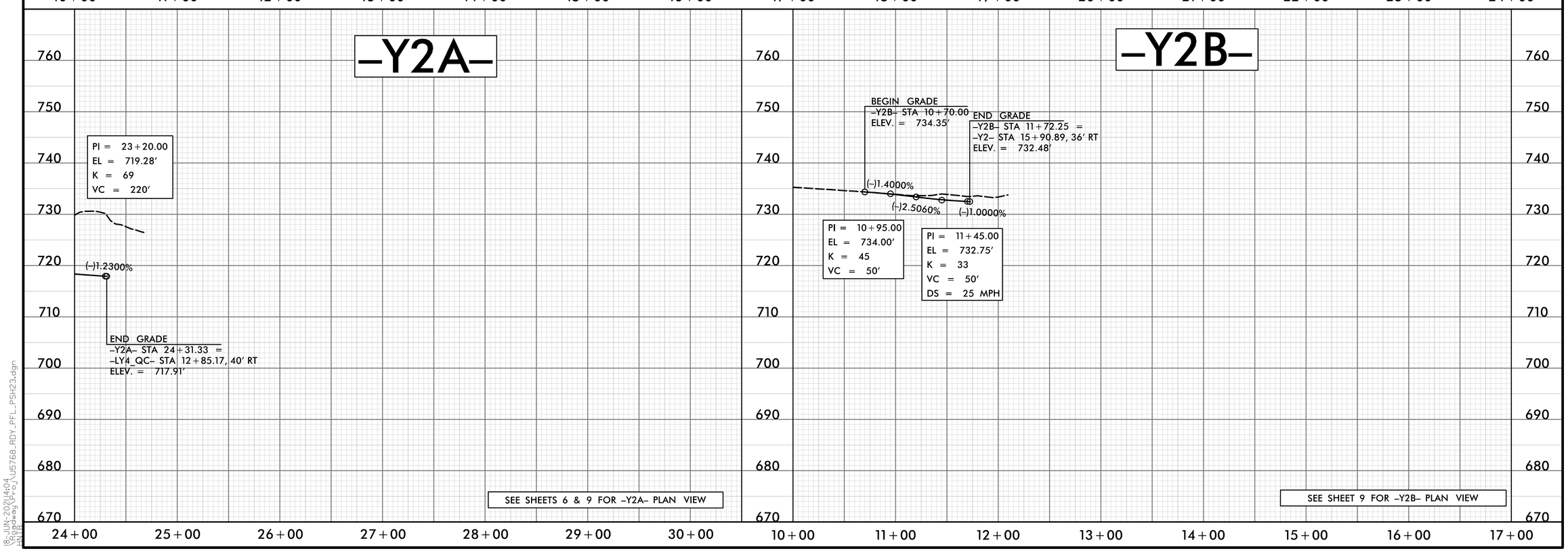
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





5/28/99

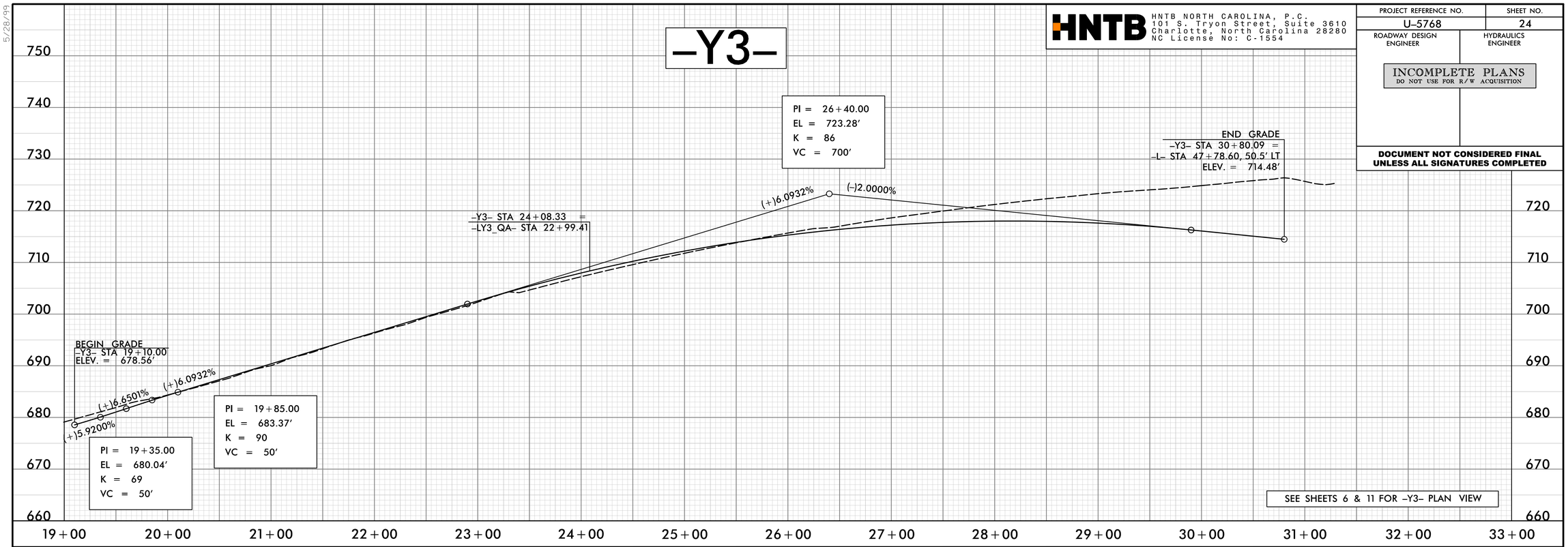
18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH23.dgn
HNTB

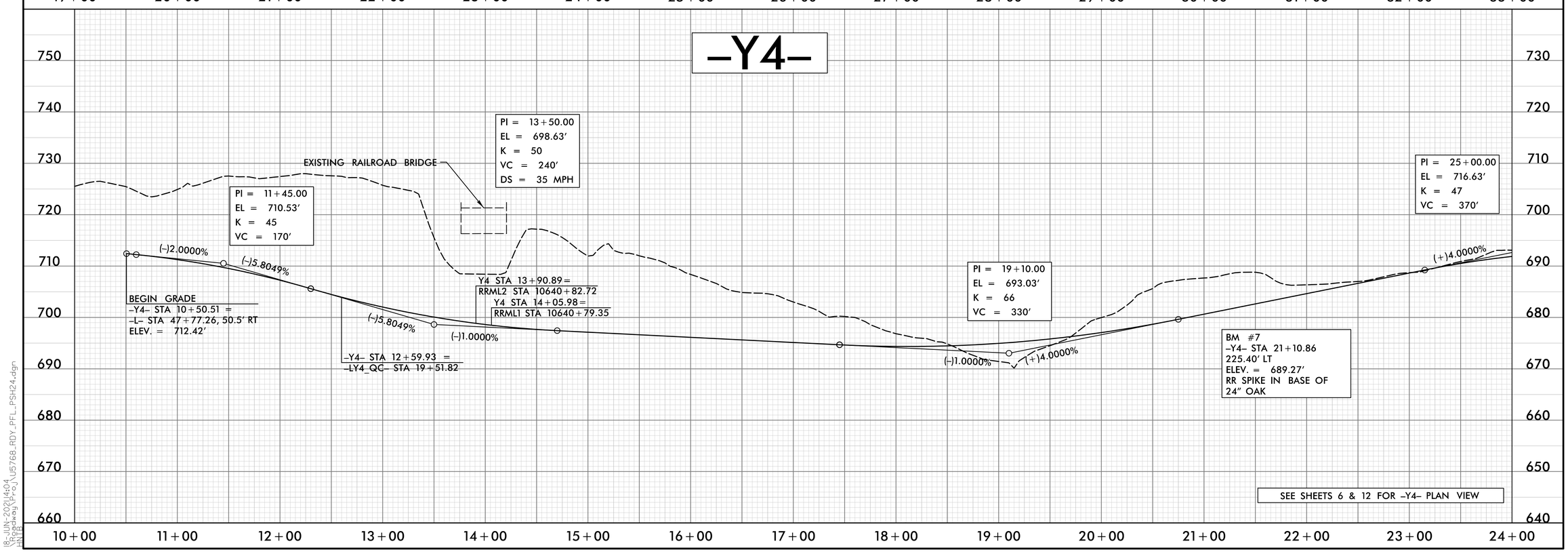
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	24
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





5/28/99

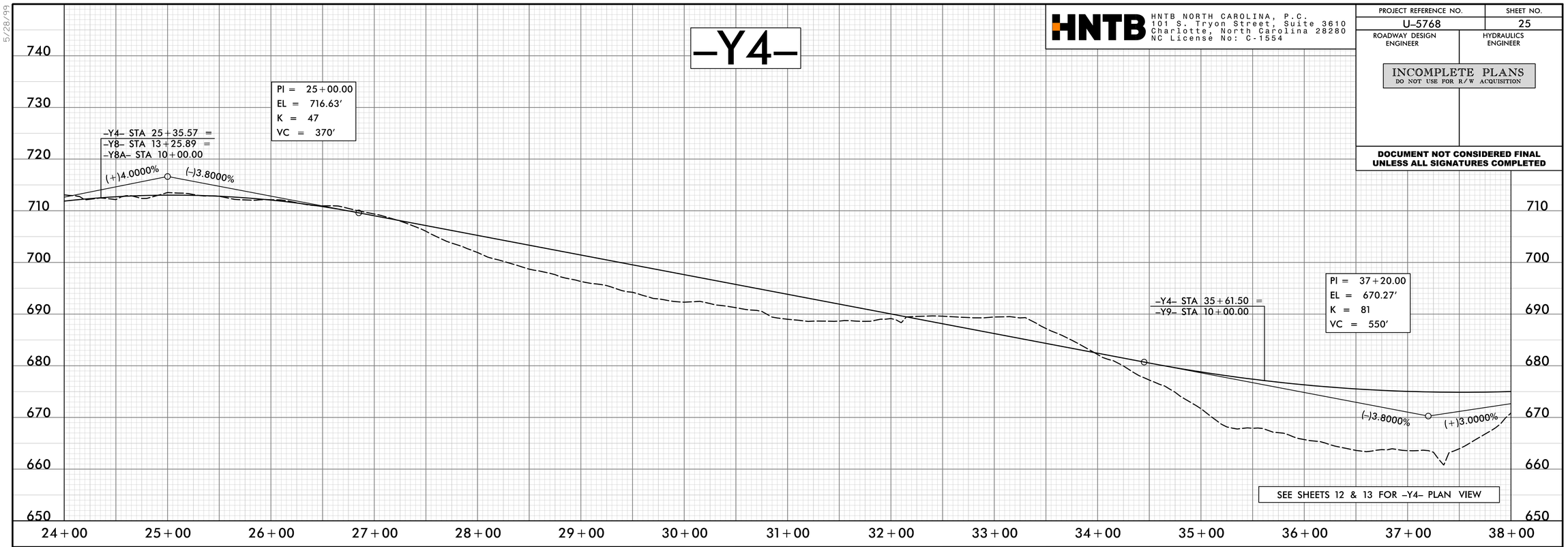
18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH24.dgn
HNTB

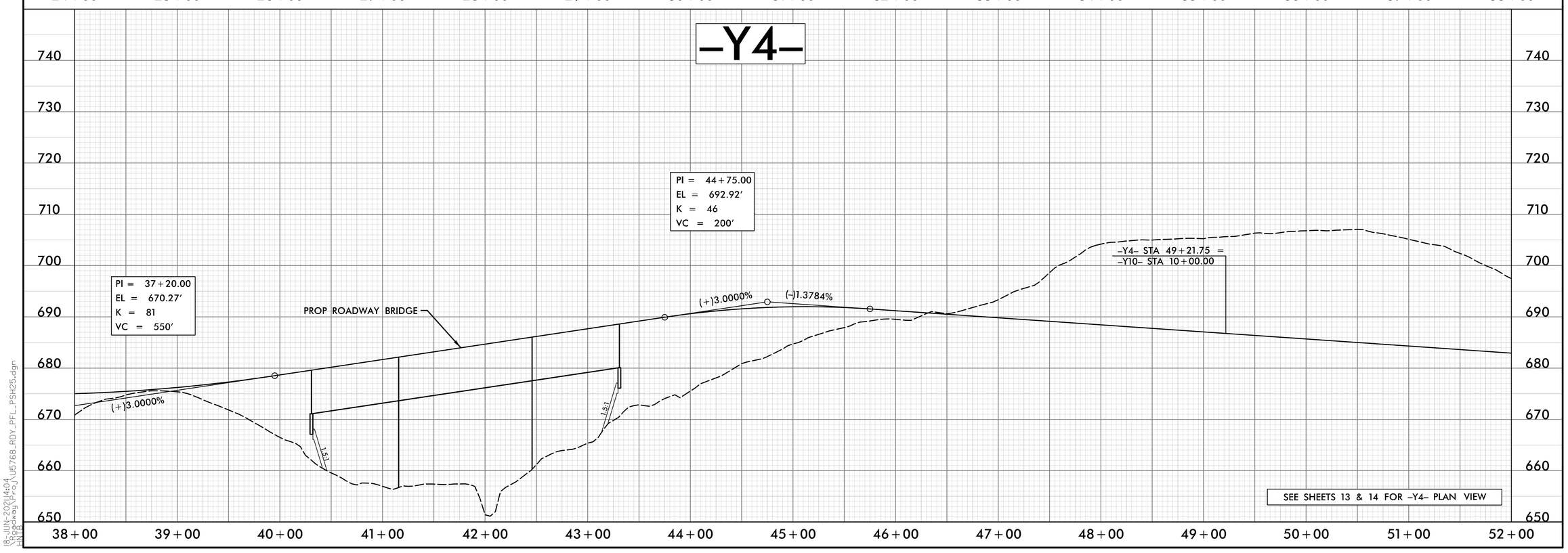
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	25
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





5/28/99

18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH25.dgn
HNTB

5/28/99

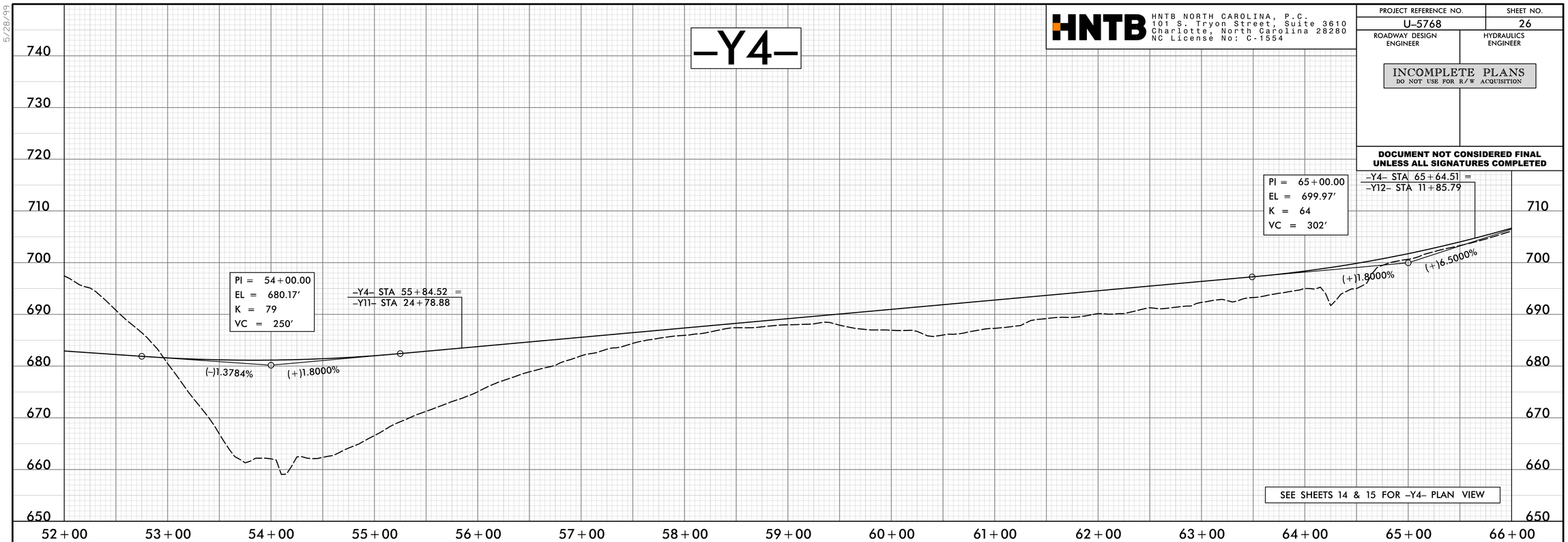
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

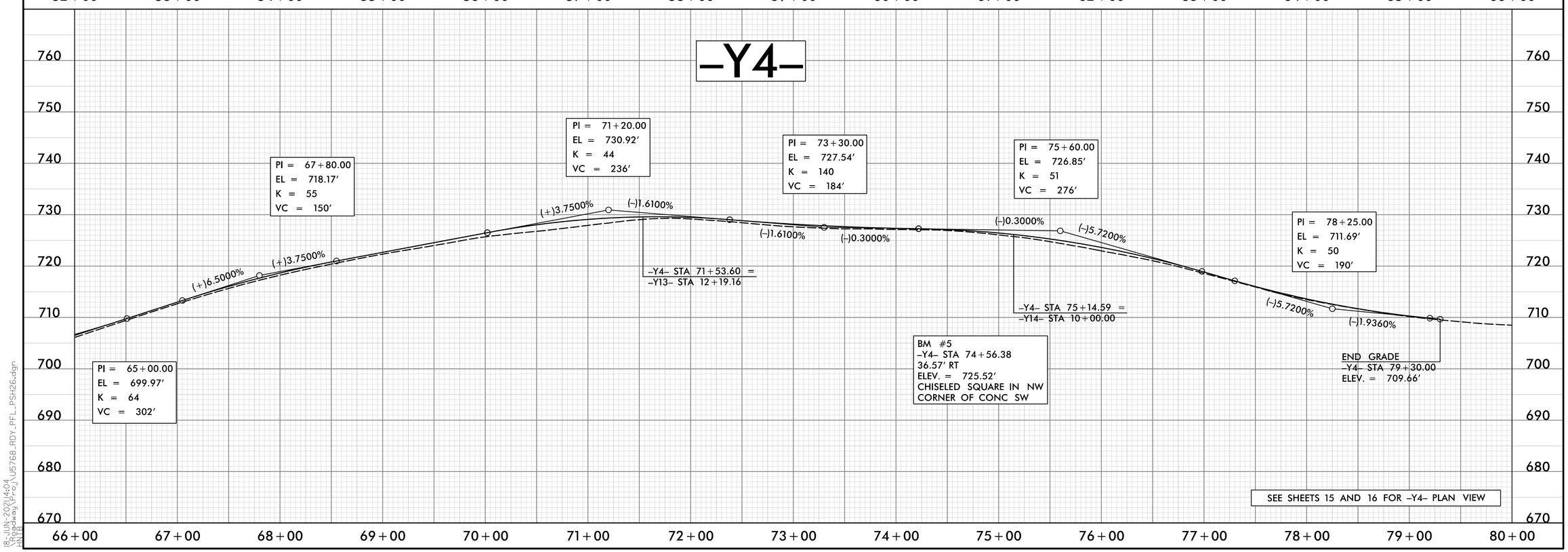
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y4–



–Y4–



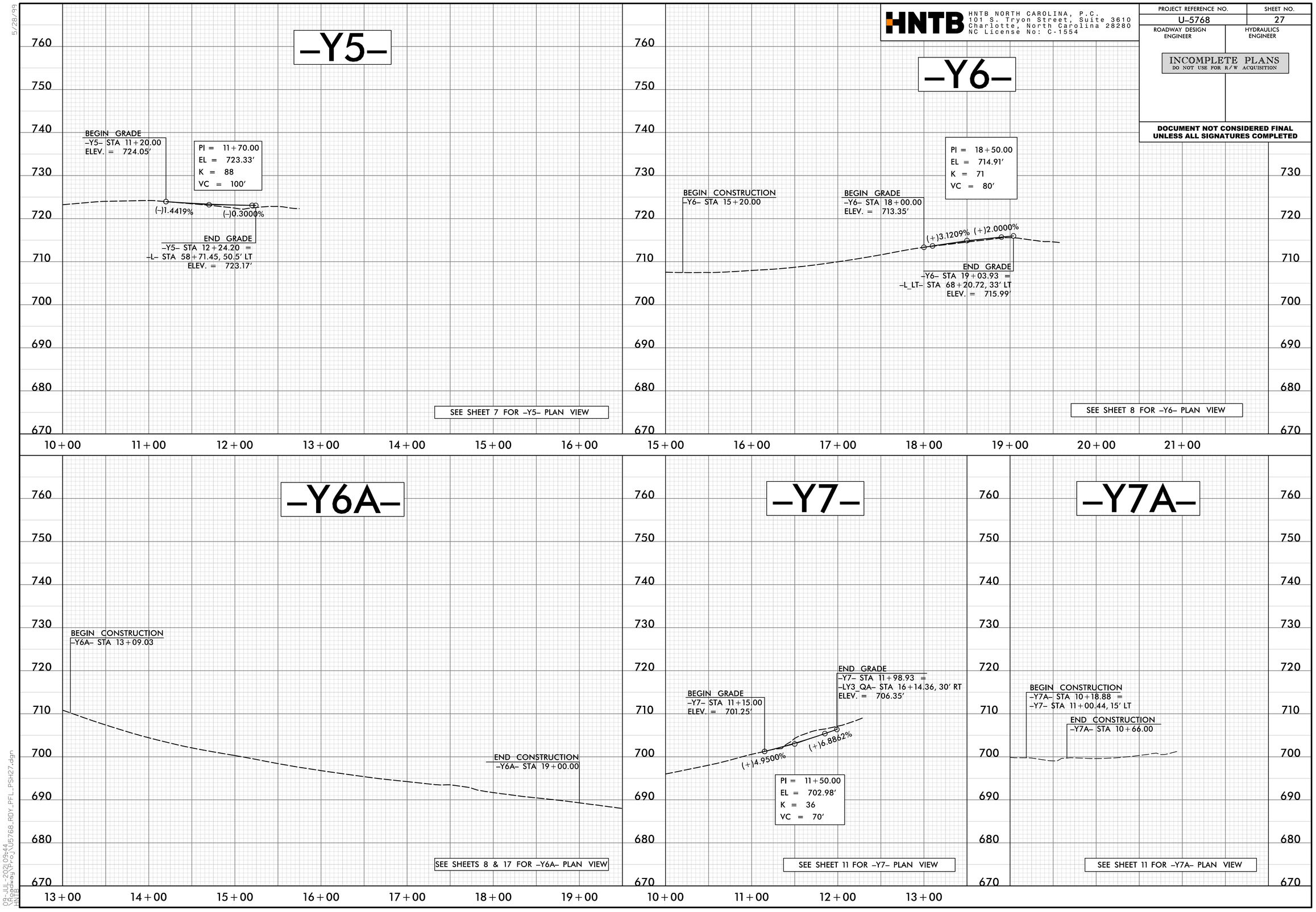
18-JUN-2021 14:04
\\Roadway\Proj\U5768_RDY_PFL_PSH26.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	27
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



5/28/99

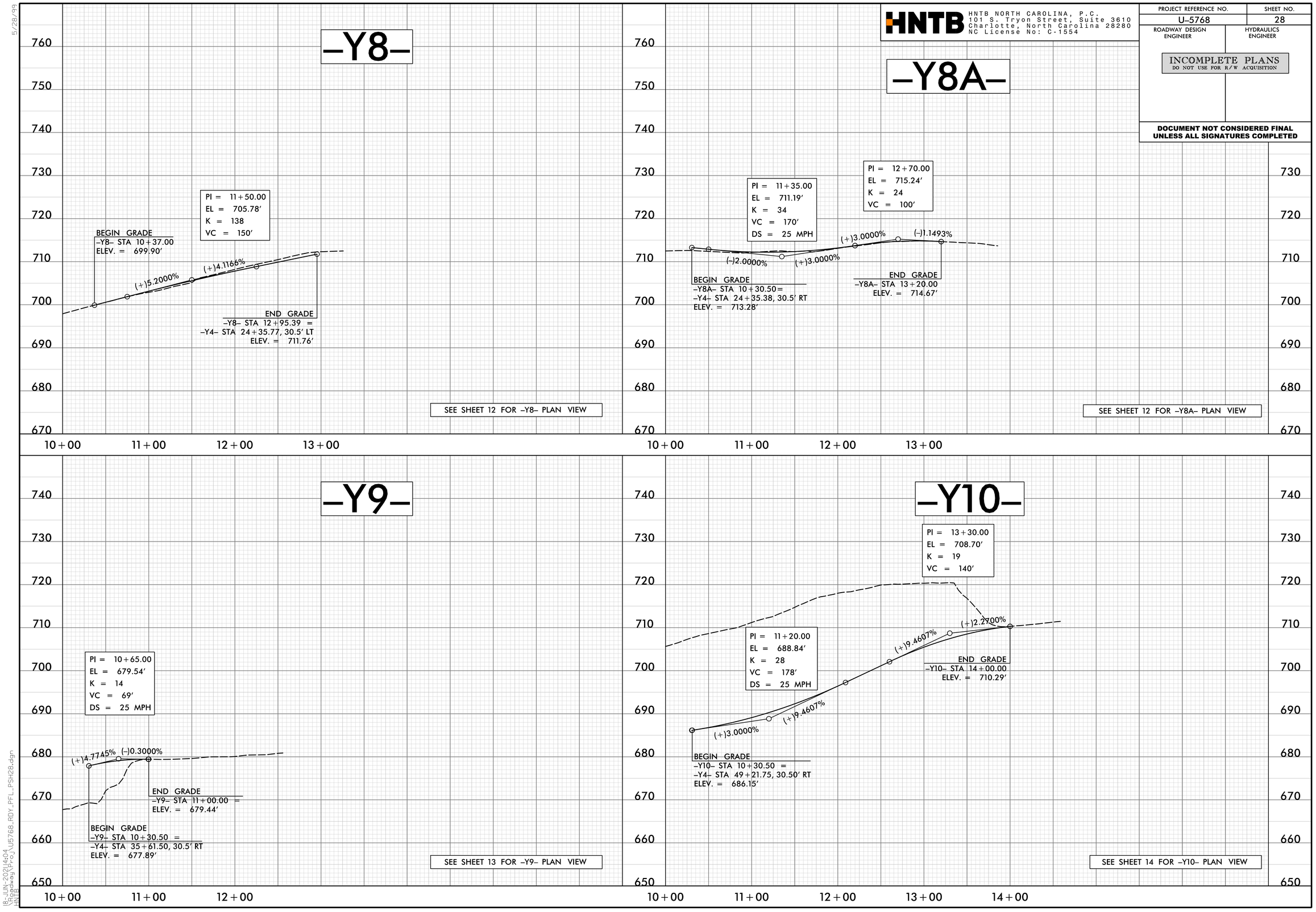
09-JUL-2021 09:44
\\Roadway\Proj\U5768_RDY_PFL_PSH27.dgn
HNTB

HNTB
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	28
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



5/28/99

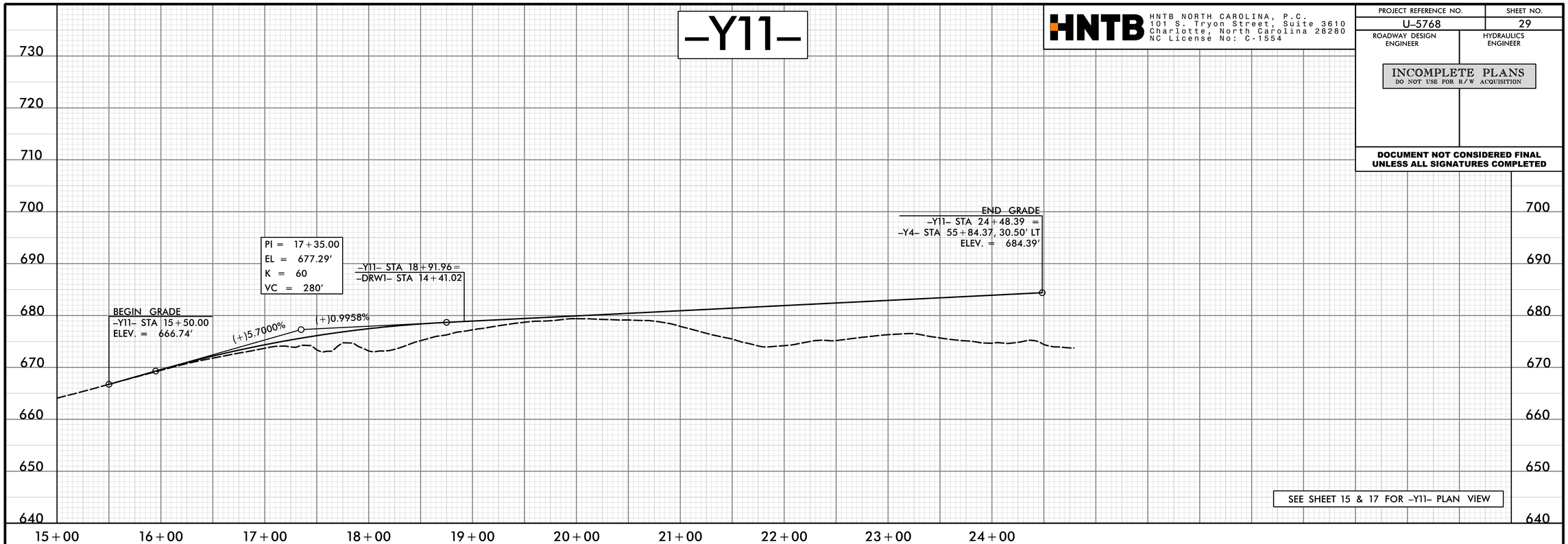
18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH28.dgn
HNTB

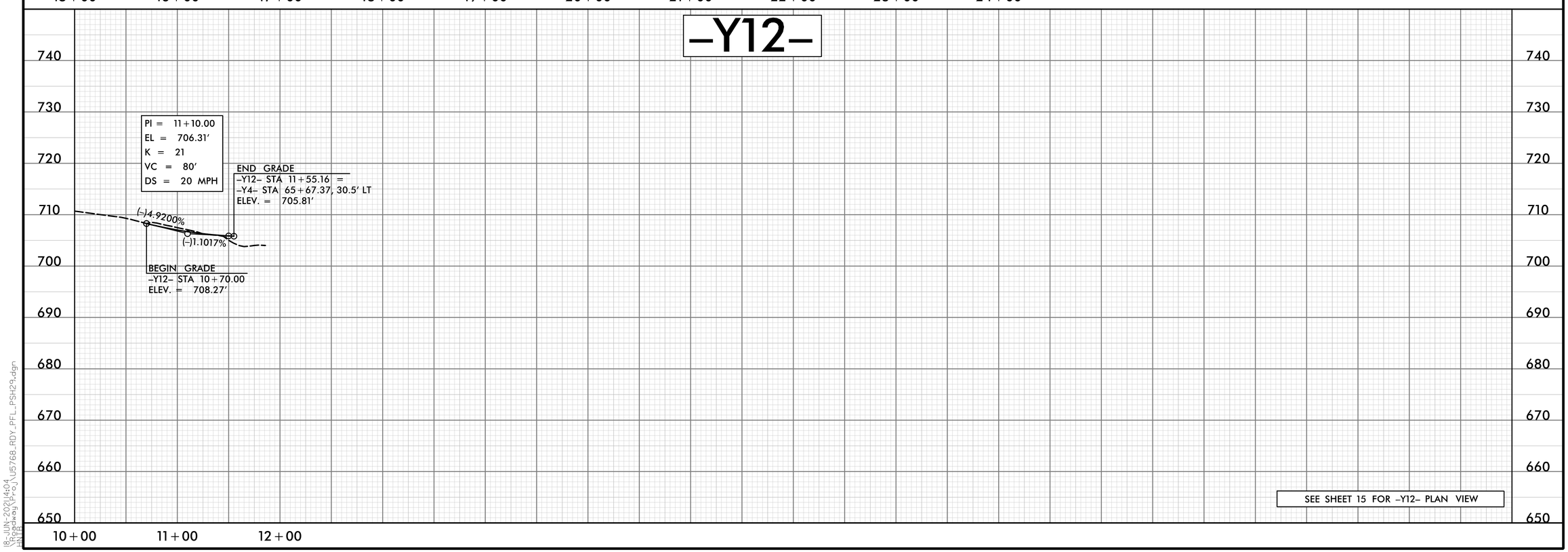
HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	29
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED





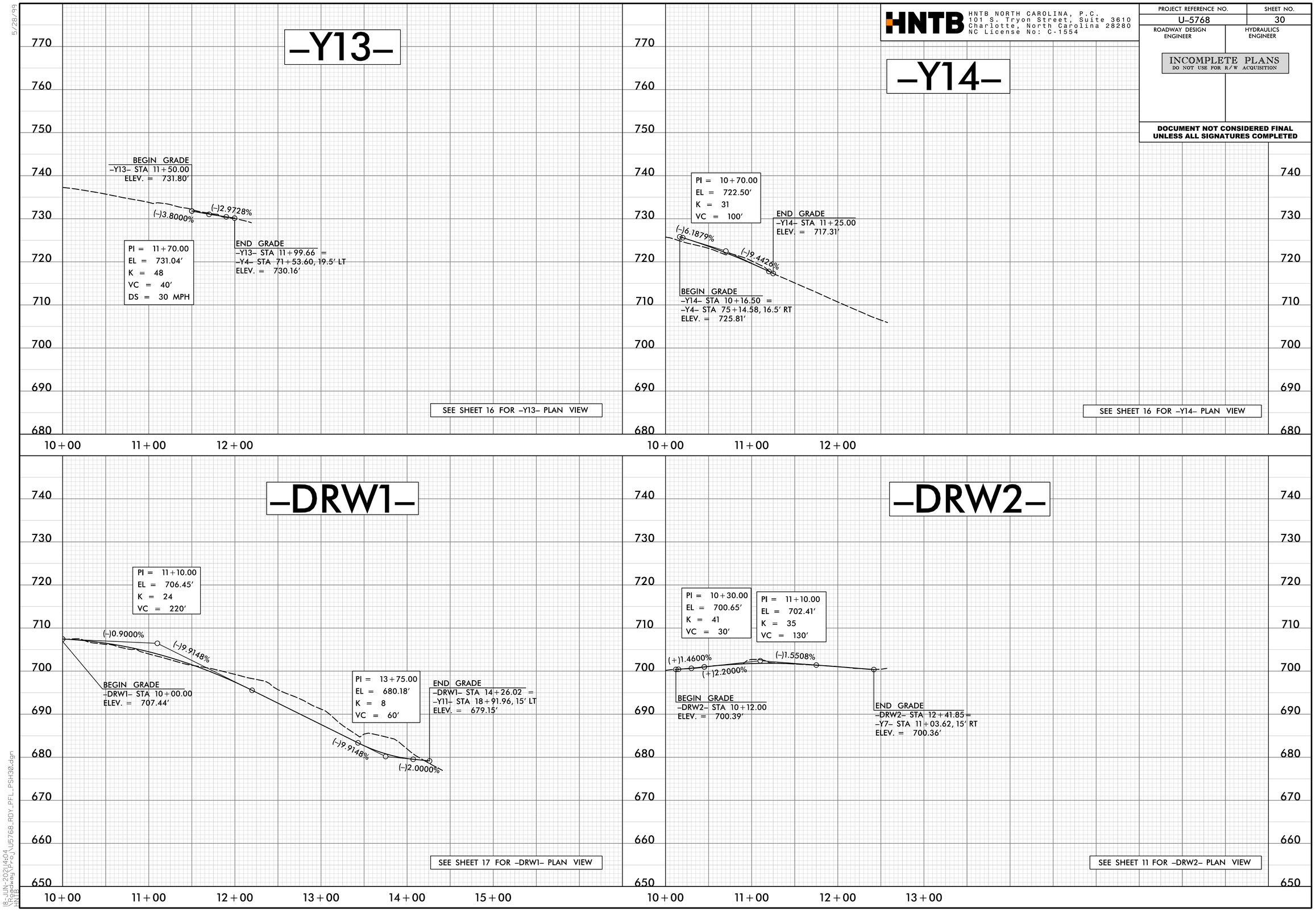
18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH29.dgn
HNTB

HNTB NORTH CAROLINA, P.C.
101 S. Tryon Street, Suite 3610
Charlotte, North Carolina 28280
NC License No: C-1554

PROJECT REFERENCE NO.	SHEET NO.
U-5768	30
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



5/28/99

18-JUN-2021 14:04
\Roadway\Proj\U5768_RDY_PFL_PSH30.dgn
HNTB