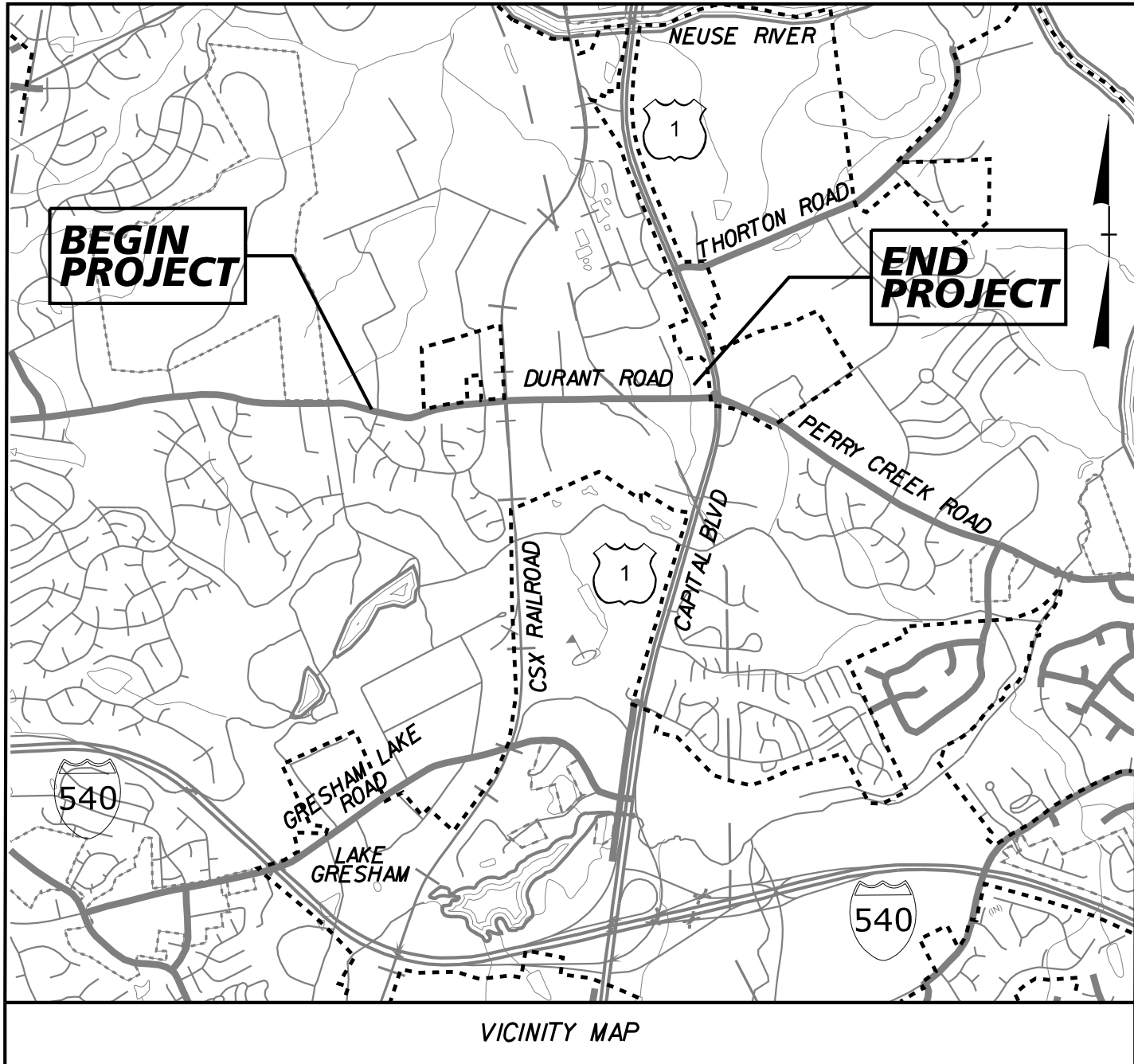


09/08/19

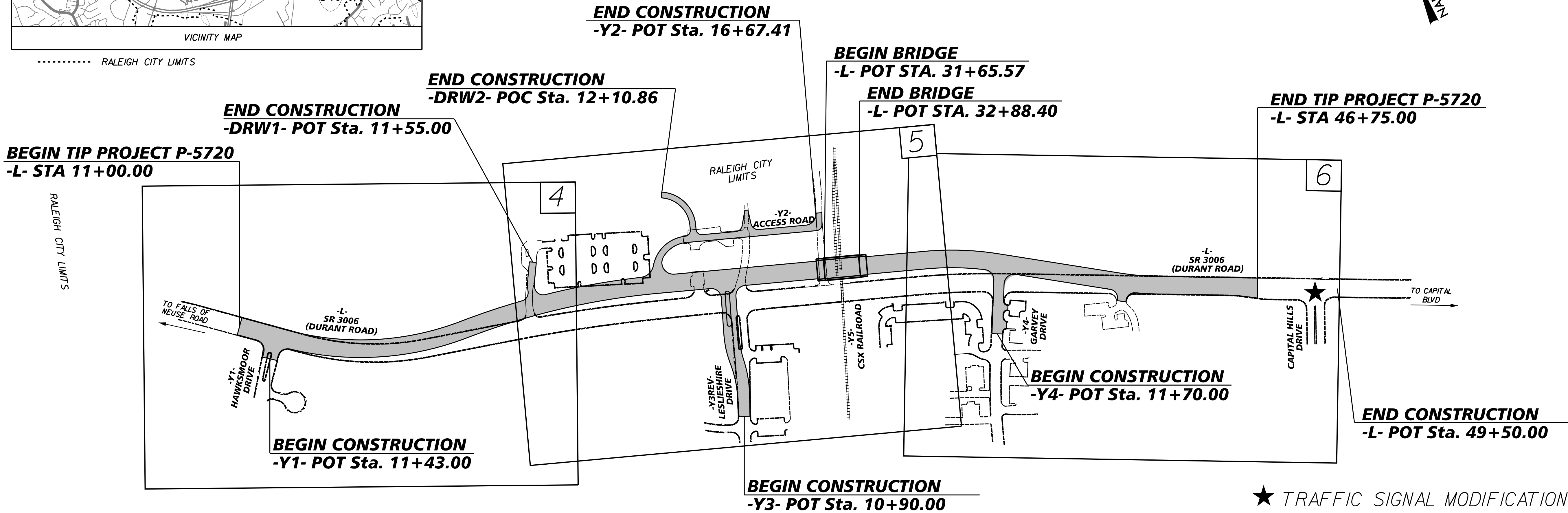
6/6/2018

CONTRACT: C204204 TIP PROJECT: P-5720

SEE SHEET 1A FOR INDEX OF SHEETS
SEE SHEET 1B FOR CONVENTIONAL PLAN SHEET SYMBOLS

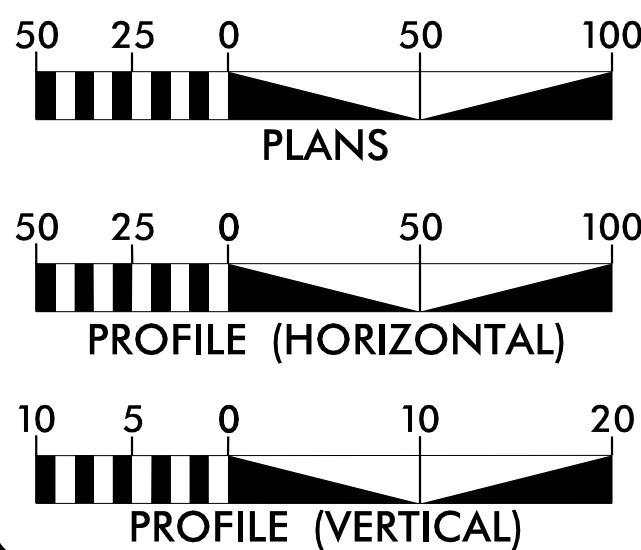


----- RALEIGH CITY LIMITS



A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF RALEIGH
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III

GRAPHIC SCALES



DESIGN DATA

ADT 2019 = 21,000
ADT 2040 = 31,100
K = 8%
D = 55%
T = 3%*
V = 50 MPH
CLASSIFICATION:
URBAN COLLECTOR
* 1% TTST 2% DUAL
SUBREGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT P-5720 = 0.657 MILES
LENGTH STRUCTURE TIP PROJECT P-5720 = 0.023 MILES
TOTAL LENGTH TIP PROJECT P-5720 = 0.680 MILES

Prepared in the Office of:

Kimley »Horn

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
JUNE 7, 2018

LETTING DATE:
MARCH 19, 2019

GREGORY BREW, P.E.
PROJECT ENGINEER

RACHEL ABROMAITIS, P.E.
PROJECT DESIGN ENGINEER

KUMAR TRIVEDI, P.E.
PROJECT MANAGER
NCDOT RAIL DIVISION

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN
ENGINEER

SIGNATURE: P.E.



STATE OF NORTH CAROLINA
RAIL DIVISIONS

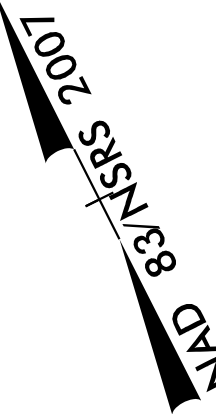
WAKE COUNTY

LOCATION: PROPOSED GRADE-SEPARATION OF DURANT ROAD (SR 2006)
OVER CSX S LINE RAILROAD IN RALEIGH

TYPE OF WORK: GRADING, DRAINAGE, PAVING, RETAINING WALLS, STRUCTURE
AND SIGNALS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	P-5720	1	
STATE PROJ.NO.		F. A. PROJ.NO.	DESCRIPTION
46932.1.1			PE
46932.2.1			RW & UTIL
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

RIGHT OF WAY PLANS



5/14/99

REVISIONS

6/6/2008

-L-
PI Sta 15+89.00
 $\Delta = 36' 14'' 39.9''$ (LT)
 $D = 5' 43'' 46.5''$
 $L = 632.58'$
 $T = 327.28'$
 $R = 1,000.00'$
 $SE = 0.04$

-L-
PI Sta 22+40.96
 $\Delta = 15' 47'' 19.4''$ (RT)
 $D = 2' 17'' 30.6''$
 $L = 688.91'$
 $T = 346.65'$
 $R = 2,500.00'$
 $SE = 0.03$

-DRWI-
PI Sta 10+66.76
 $\Delta = 20' 22'' 45.8''$ (RT)
 $D = 38' 11'' 49.9''$
 $L = 53.35'$
 $T = 26.96'$
 $R = 150.00'$

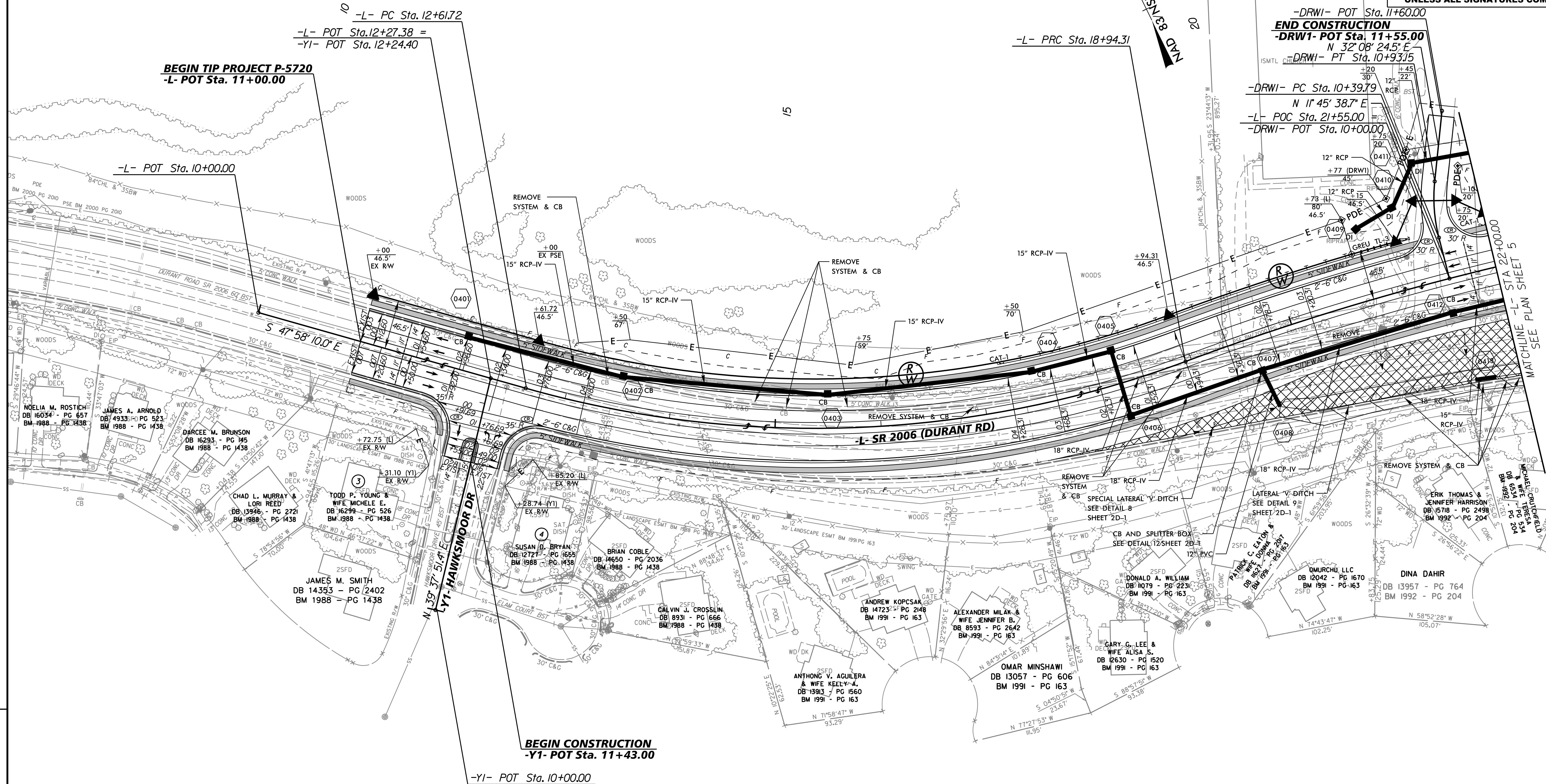
①
MALLINCKRODT INC.
DB 8529 - PG 944
BM 1976 - PG 28
BM 2000 - PG 2010
BM 2014 - PG 1348

Kimley » Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

②
LIFEPOINTE CHRISTIAN
CHURCH INC.
DB 14386 - PG 2347
BM 2013 - PG 204
BM 1982 - PG 677
BM 2000 - PG 2012

PROJECT REFERENCE NO.		SHEET NO.
P-5720		4
RW SHEET NO.		
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



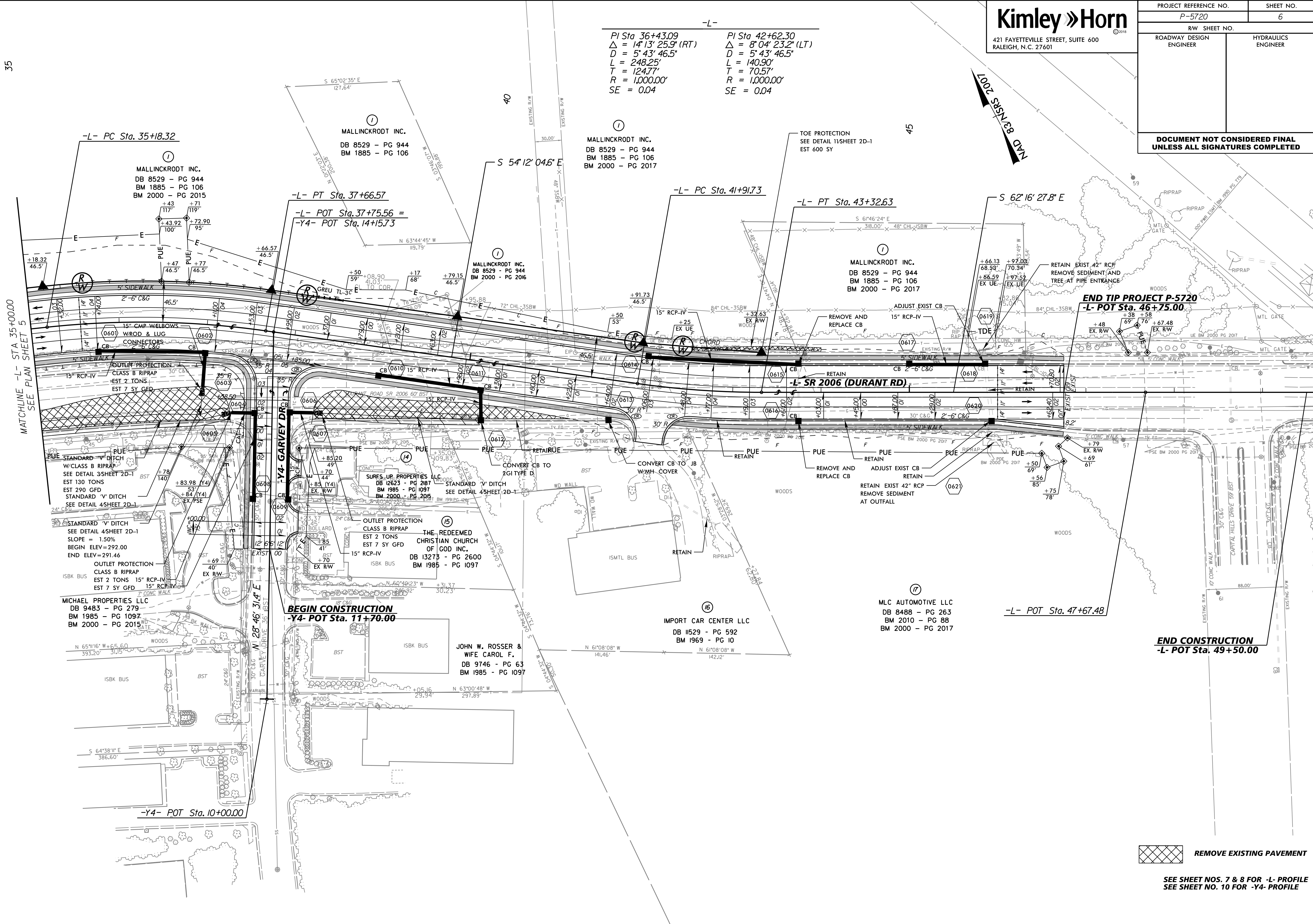
REMOVE EXISTING PAVEMENT

SEE SHEET NO. 7 FOR -L- PROFILE
SEE SHEET NO. 8 FOR -Y1- PROFILE
SEE SHEET NO. 10 FOR -DRWI- PROFILE

Kimley » Horn

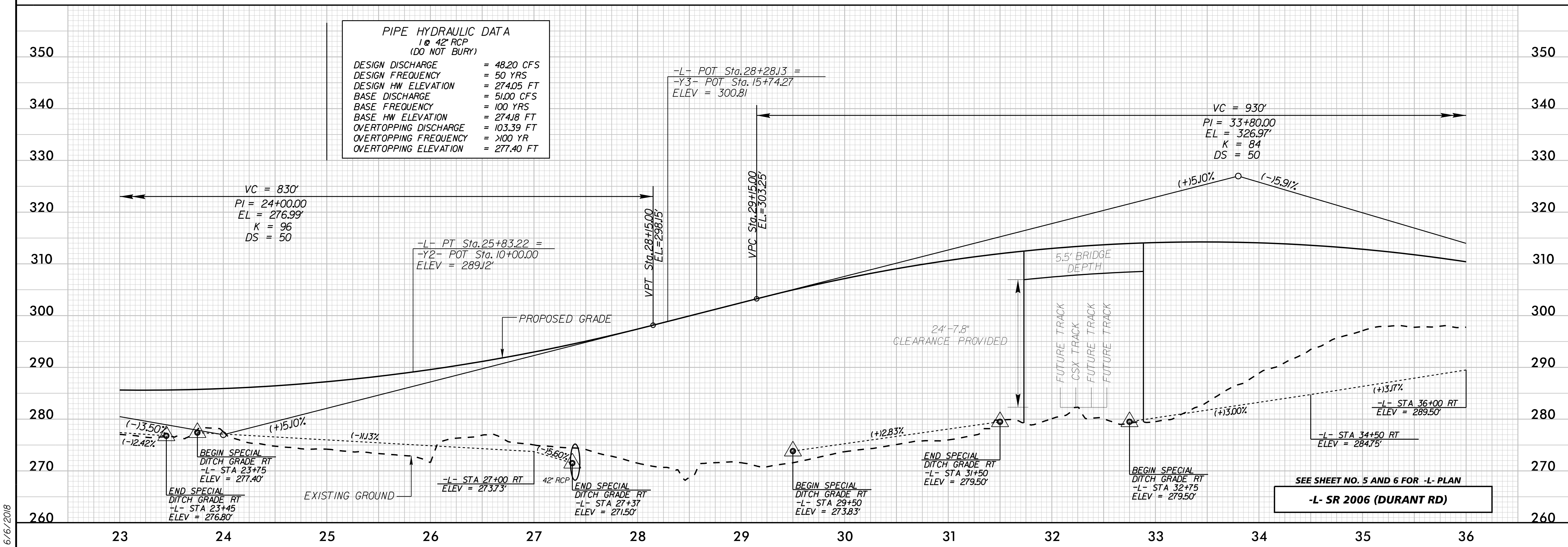
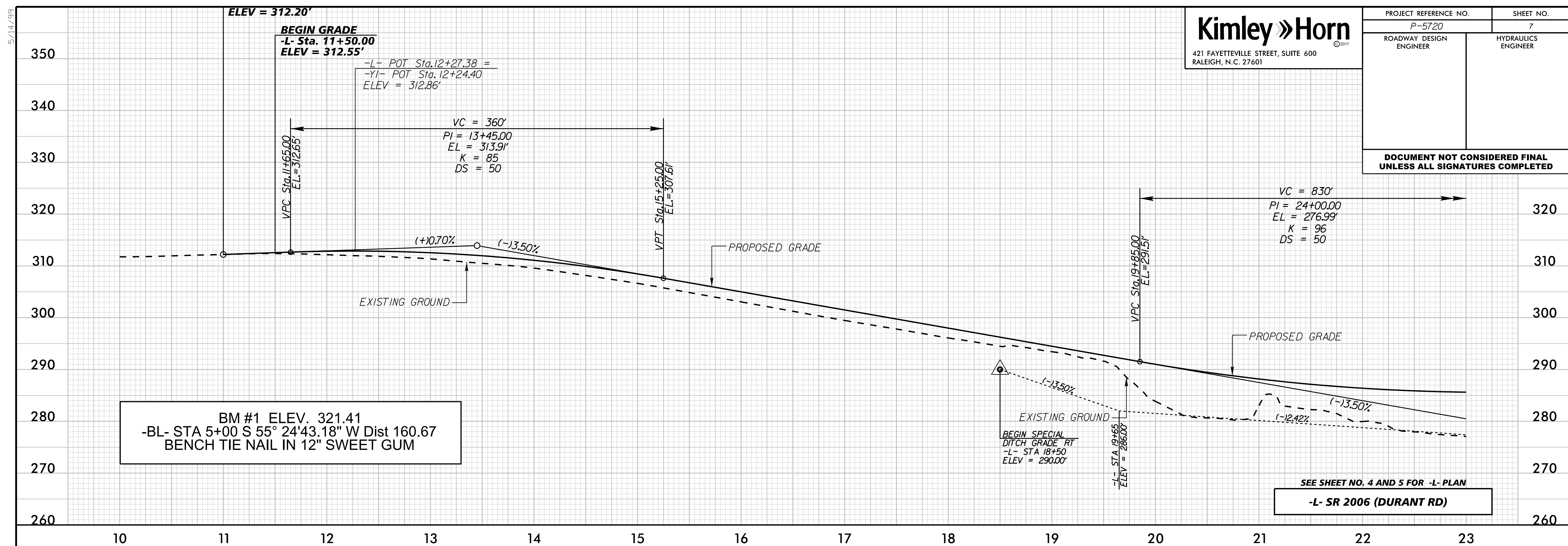
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

PROJECT REFERENCE NO.		SHEET NO.
P-5720		6
R/W SHEET NO.		
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



REMOVE EXISTING PAVEMENT

SEE SHEET NOS. 7 & 8 FOR -L- PROFILE
SEE SHEET NO. 10 FOR -Y4- PROFILE



5/14/99

6/6/2008

PROJECT REFERENCE NO.

P-5720

ROADWAY DESIGN ENGINEER

SHEET NO.

9

HYDRAULICS ENGINEER

Kimley » Horn

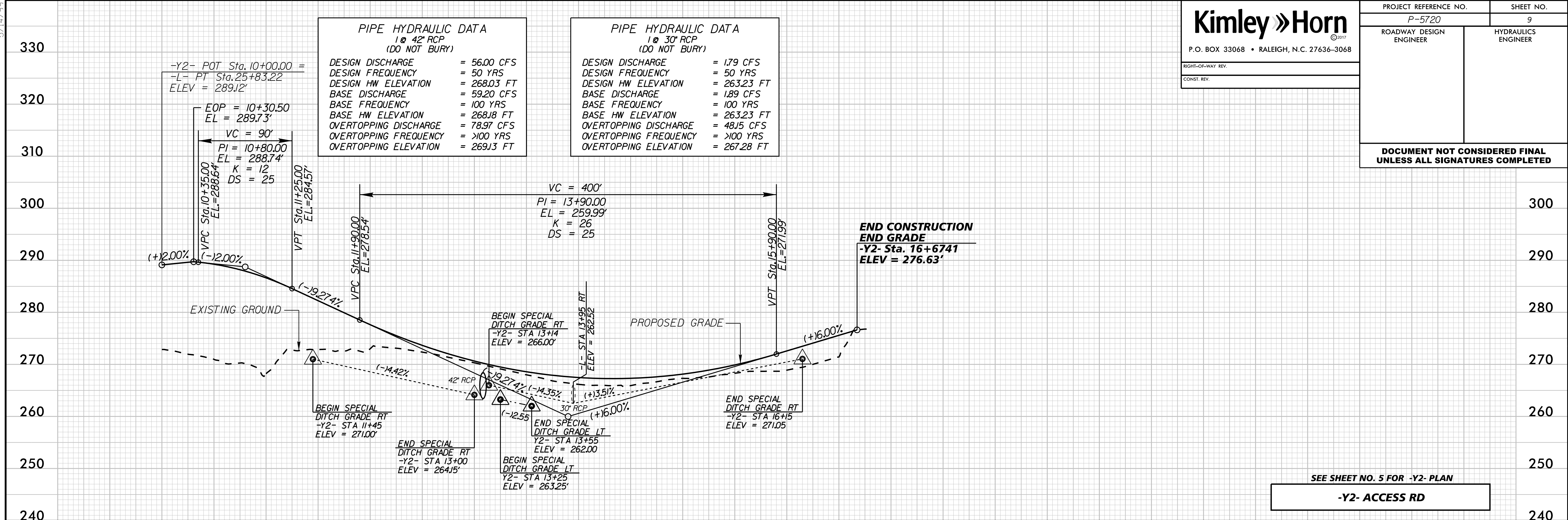
P.O. BOX 33068 • RALEIGH, N.C. 27636-3068

RIGHT-OF-WAY REV.

CONST. REV.

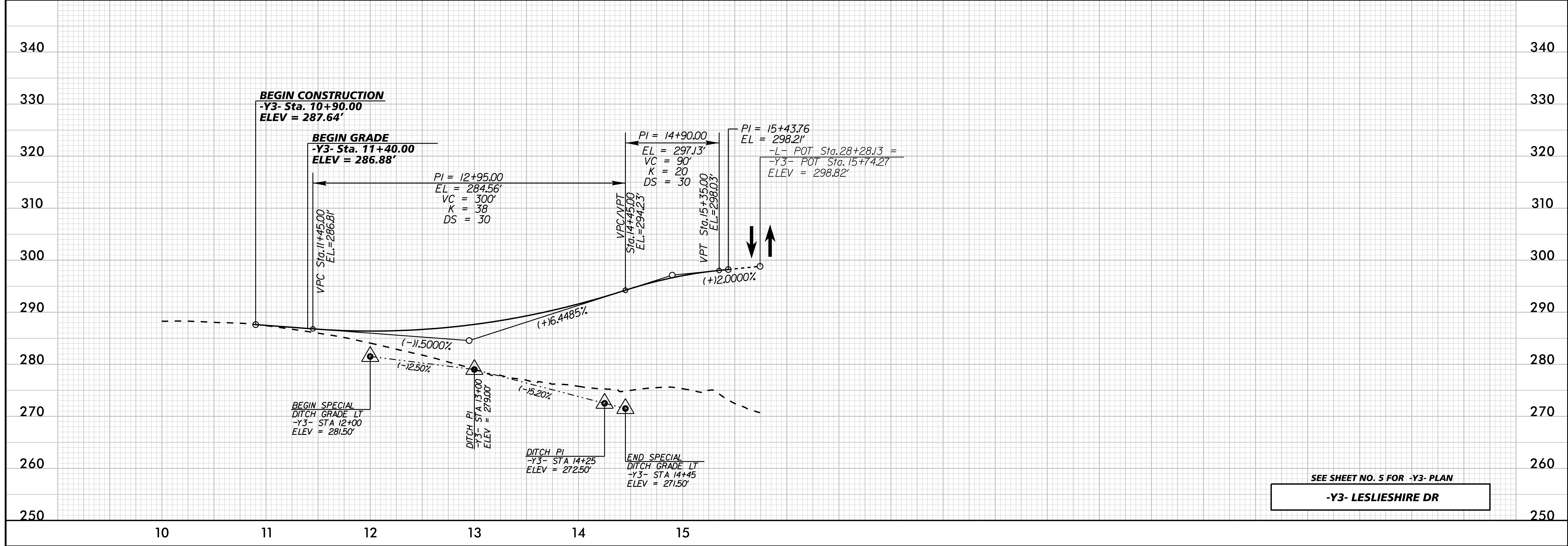
DOCUMENT NOT CONSIDERED FINAL

UNLESS ALL SIGNATURES COMPLETED



SEE SHEET NO. 5 FOR -Y2- PLAN

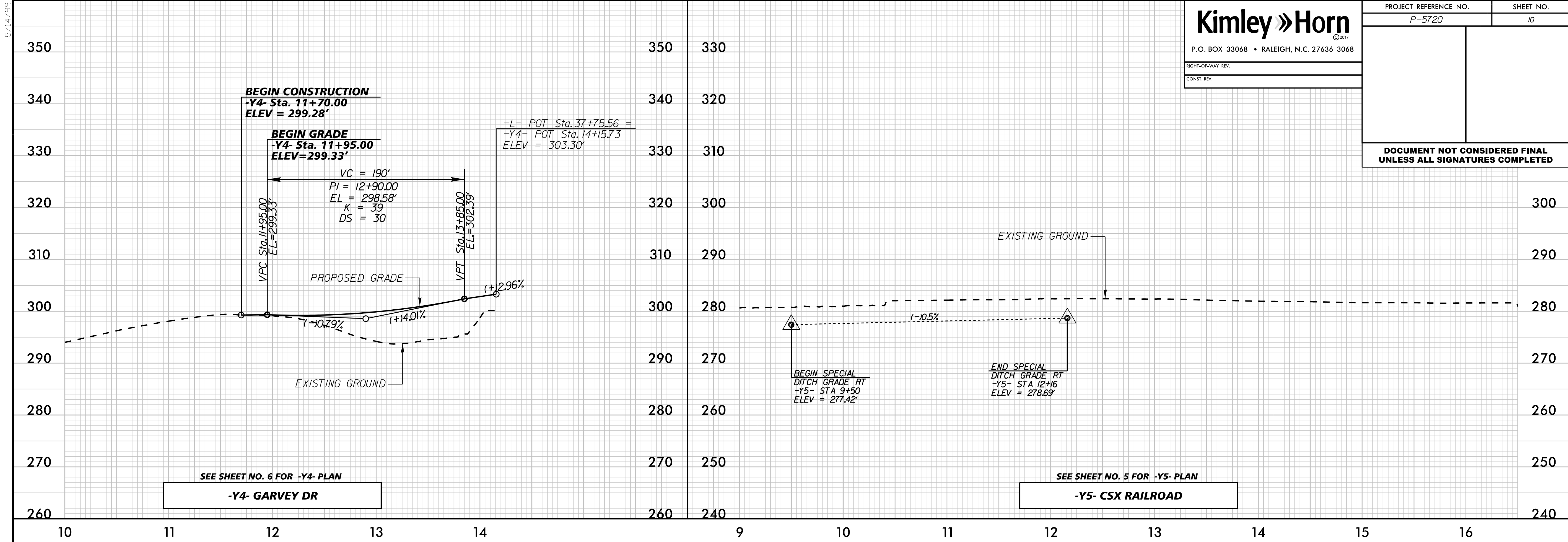
-Y2- ACCESS RD



SEE SHEET NO. 5 FOR -Y3- PLAN

-Y3- LESLIESHIRE DR

5/14/99



Kimley»Horn

P.O. BOX 33068 • RALEIGH, N.C. 27636-3068

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

P-5720

SHEET NO.

10

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

VC = 35'
PI = 10+50.00
EL = 287.59'
K = 3
DS = 15

EOP = 10+30.50
EL = 287.98'

-DRW1- POT Sta. 10+00.00
-L- POC Sta. 21+55.00 =
ELEV = 287.06'

VPC Sta. 10+32.50
EL=287.94'

VPT Sta. 10+67.50
EL=284.97'

VC = 80'
PI = 11+50.00
EL = 277.86'
K = 7
DS = 15

**END CONSTRUCTION
END GRADE**
-DRW1- Sta. 11+55.00
ELEV = 276.66'

EXISTING GROUND

PROPOSED GRADE

(+13.00%)

(-12.00%)

(-11.49%)

(-13.00%)

SEE SHEET NO. 4 FOR -DRW1- PLAN

-DRW1-

VC = 40'
PI = 10+40.00
EL = 273.57'
K = 13
DS = 25

EOP = 10+10.00
EL = 274.47'

-DRW2- POT Sta. 10+00.00 =
-Y2- POT Sta. 12+40.00
ELEV = 274.38'

VPC Sta. 10+20.00
EL=274.17'

VPT Sta. 10+60.00
EL=272.37'

VC = 210'
PI = 11+90.00
EL = 264.57'
K = 26
DS = 25

**END CONSTRUCTION
END GRADE**
-DRW2- Sta. 15+08.16
ELEV = 270.91'

PROPOSED GRADE

EXISTING GROUND

(+10.87%)

(-13.00%)

(-16.00%)

(-12.98%)

(+11.99%)

BEGIN SPECIAL
DITCH GRADE LT
-DRW2- STA 11+50
ELEV = 265.8'

END SPECIAL
DITCH GRADE LT
-DRW2- STA 12+10
ELEV = 264.4'

SEE SHEET NO. 5 FOR -DRW2- PLAN

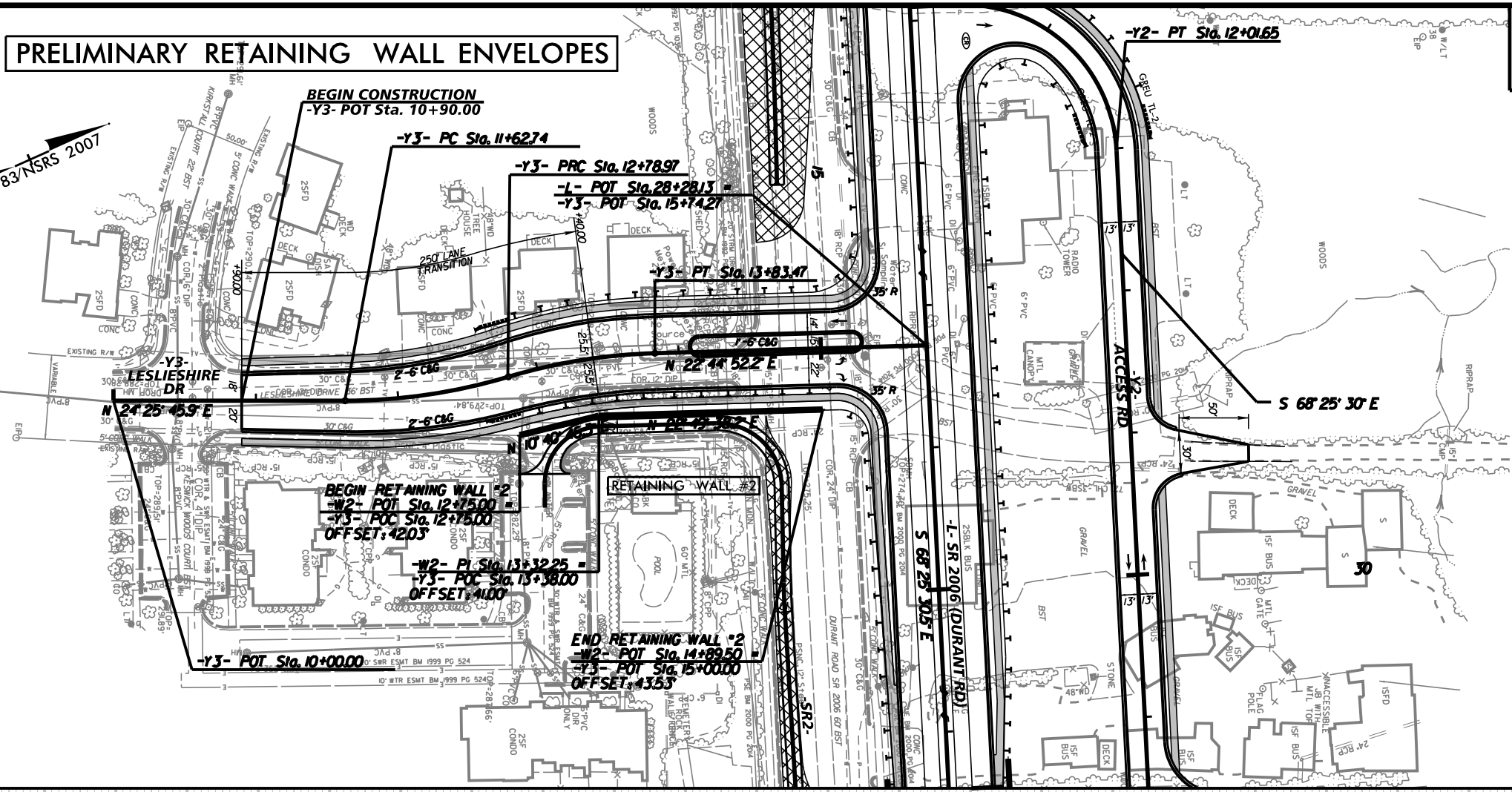
-DRW2-

6/6/2008

PRELIMINARY RETAINING WALL ENVELOPES

Kimley » Horn
421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

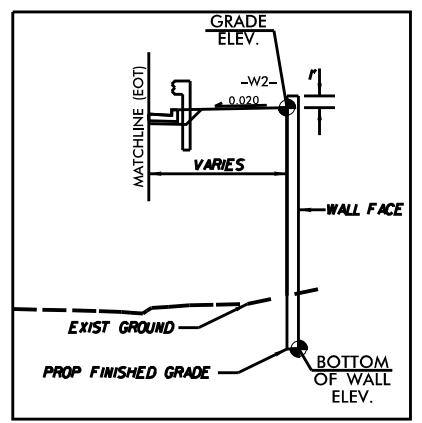
PROJECT REFERENCE NO.	SHEET NO.
P-5720	26-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



-L-
PI Sta 22+40.96
Δ = 15' 47" 19.4' (RT)
D = 2' 17" 30.6'
L = 688.9'
T = 346.65'
R = 2500.00'
SE = 0.03

-Y3-
PI Sta 12+21.27
Δ = 16' 38' 57.7' (LT)
D = 14' 19' 26.2'
L = 116.23'
T = 58.53'
R = 400.00'
SE = RC
PI Sta 13+31.52
Δ = 14' 58' 04.0' (RT)
D = 14' 19' 26.2'
L = 104.49'
T = 52.55'
R = 400.00'
SE = RC

-Y2-
PI Sta 11+40.00
Δ = 90' 00' 00.0' (RT)
D = 53' 03' 06.0'
L = 169.65'
T = 108.00'
R = 108.00'
SE = 0.03



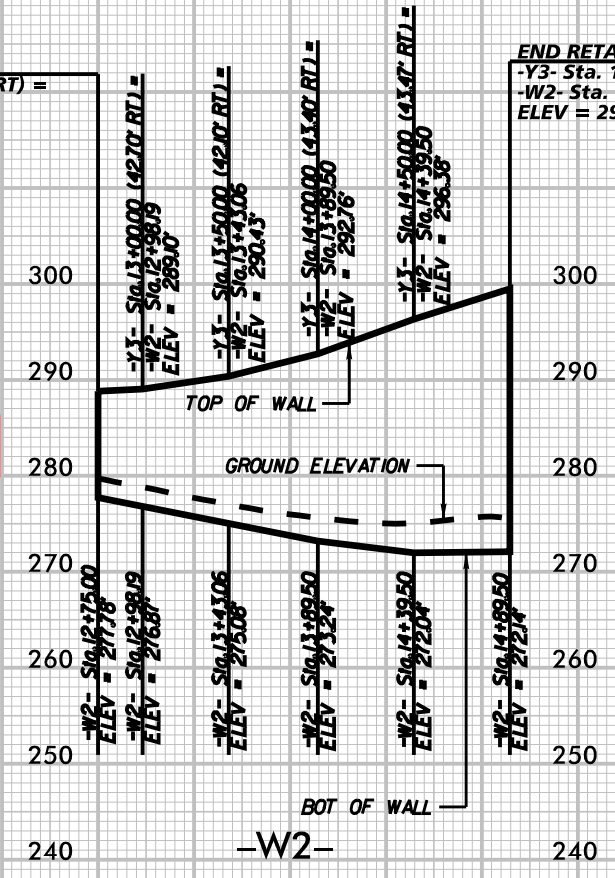
BEGIN RETAINING WALL
-Y3- Sta. 12+75.00 (42' RT) =
-W2- Sta. 12+75.00
ELEV = 288.86'

END RETAINING WALL
-Y3- Sta. 15+00.00 (43.54' RT) =
-W2- Sta. 14+89.50
ELEV = 299.55'

APPROX. WALL FACE AREA =
4100 SF

approx 9' above ground

approx 24' above ground



REVISIONS

5/14/99

11/20/2019

Kimley » Horn

421 FAYETTEVILLE STREET, SUITE 600
RALEIGH, N.C. 27601

LIFEPOINT CHRISTIAN
CHURCH INC.
DB 14386 - PG 2347
BM 2013 - PG 204
BM 1982 - PG 677
BM 2000 - PG 2012

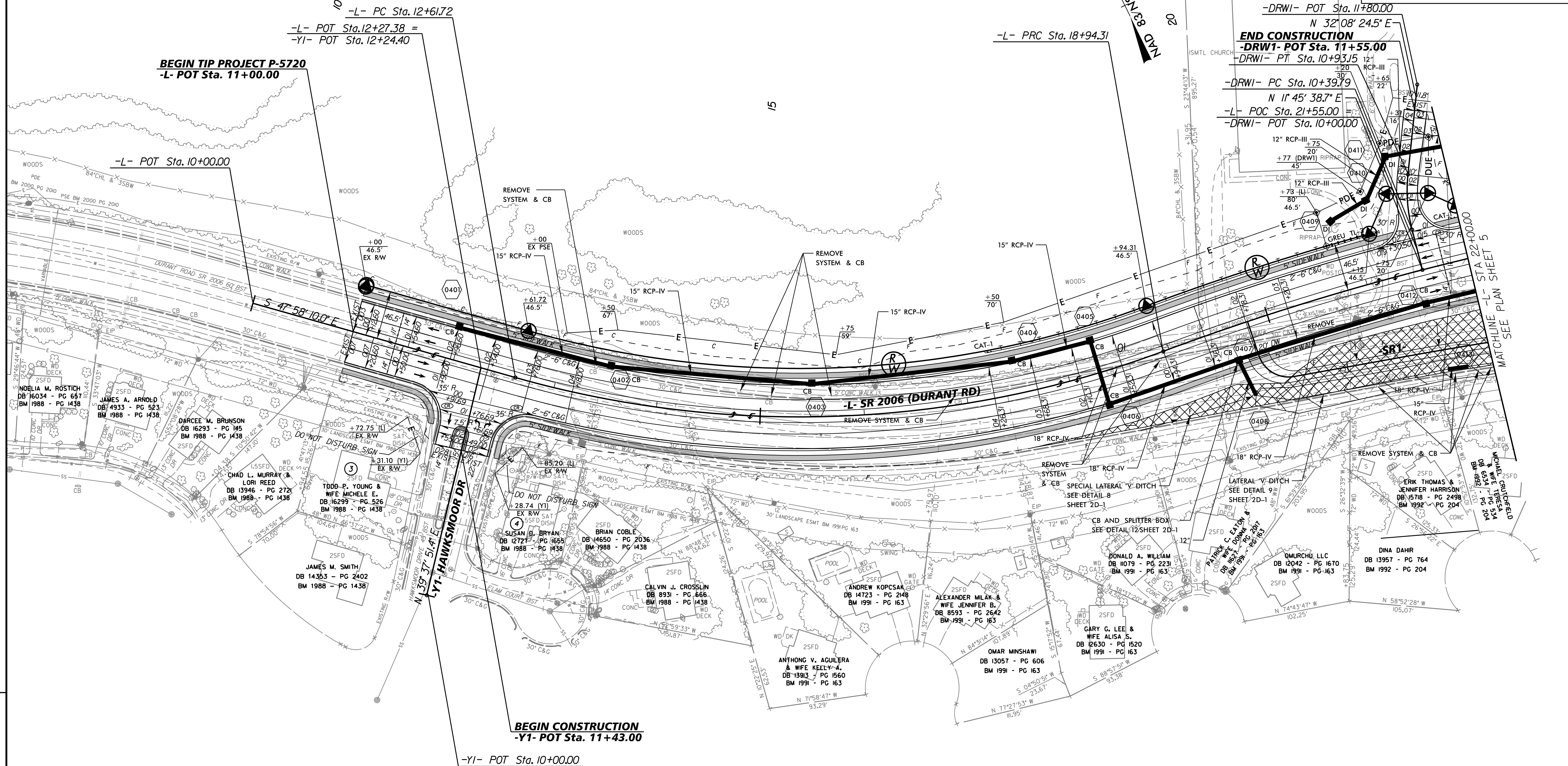
PROJECT REFERENCE NO.		SHEET NO.
P-5720		4
RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER		
		
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

-L-
PI Sta 15+89.00
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 $D = 5'43''46.5''$
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 $T = 327.28'$
 $R = 1,000.00'$
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PI Sta 10+66.76
 $\Delta = 20'22''45.8''$ (RT)
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MALLINCKRODT INC.
DB 8529 - PG 944
BM 1976 - PG 28
BM 2000 - PG 210
BM 2014 - PG 1348



 REMOVE EXISTING PAVEMENT

SEE SHEET NO. 7 FOR -L- PROFILE
SEE SHEET NO. 8 FOR -Y1- PROFILE
SEE SHEET NO. 10 FOR -DRWI- PROFILE
SEE SHEET NO. 2B-1 FOR -SR1- DETAIL

124 668 .521 sq. feet
2.977 acres

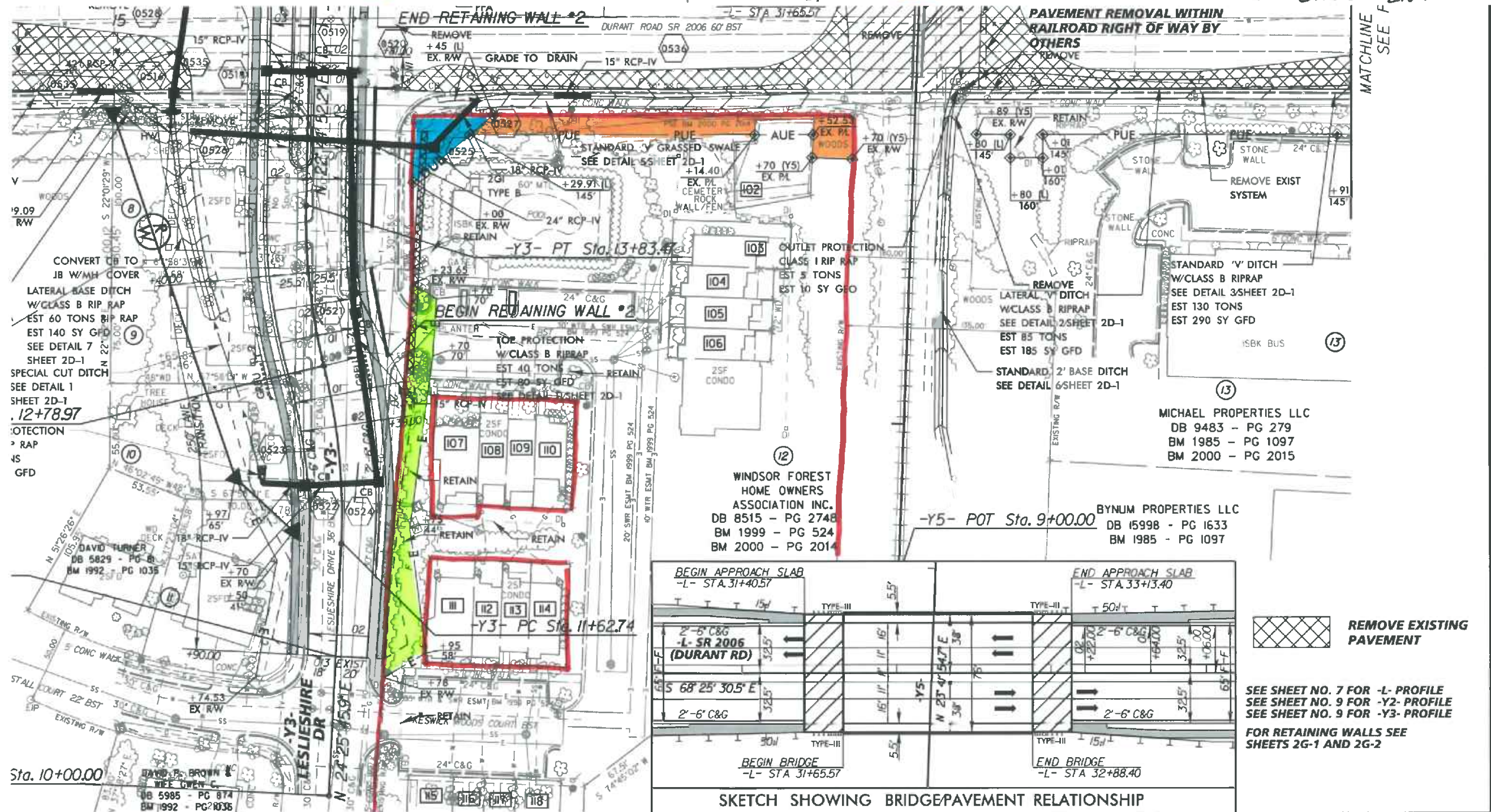
1114.041 sq. feet.
0.026 acres

3064.805 sq. feet
0.070 acres

 - PROPERTY LINE

- DRAINAGE UTILITY EASEMENT

- PERMANENT UTILITY EASEMENT



- TEMP. CONSTRUCTION ASSESSMENT

3796.628 sq. feet.

0.087 acres