



**TRANSPORTATION CABINET**

Frankfort, Kentucky 40622  
www.transportation.ky.gov/

**Steven L. Beshear**  
Governor

**Michael W. Hancock, P.E.**  
Secretary

February 17, 2011

CALL NO. 333  
CONTRACT ID NO. 111303  
ADDENDUM # 2

Subject: Campbell County, JL03 019 2345 000-002  
Letting February 18, 2011

- (1) Revised - Plan Sheets - U1, U2, U3, U5, U8, U9, & U11
- (2) Revised - Water Specifications - Pages 40-42 of 153

Proposal revisions are available at <http://transportation.ky.gov/contract/>.  
Plan revisions are available at <http://www.lynnimaging.com/kytransportation/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in blue ink that reads "Ryan Griffith".

Ryan Griffith  
Director  
Division of Construction Procurement

RG:ks  
Enclosures



An Equal Opportunity Employer M/F/D

CONSTRUCT SOD		
STATION - STATION	SY	
LT 410+77 - 411+31 (SIDEWALK)	32	
RT 410+77 - 411+40 (SIDEWALK)	35	

CONSTRUCT 4" CONC. SIDEWALK & RAMPS				
STATION - STATION	SY	RAMP TYPE	WARNING (SF)	
LT 410+77 - 411+45	37	3 (COND.#2)	26	
RT 410+88 - 411+60	46	3 (COND.#2)	40	

DITCH CONSTRUCTION				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
406+80 - 408+40 LT.	SPECIAL 2' F.B. DITCH	ECB	1'	217 SY
408+40 - 410+60 LT.	SPECIAL V. DITCH	ECB	1'	249 SY

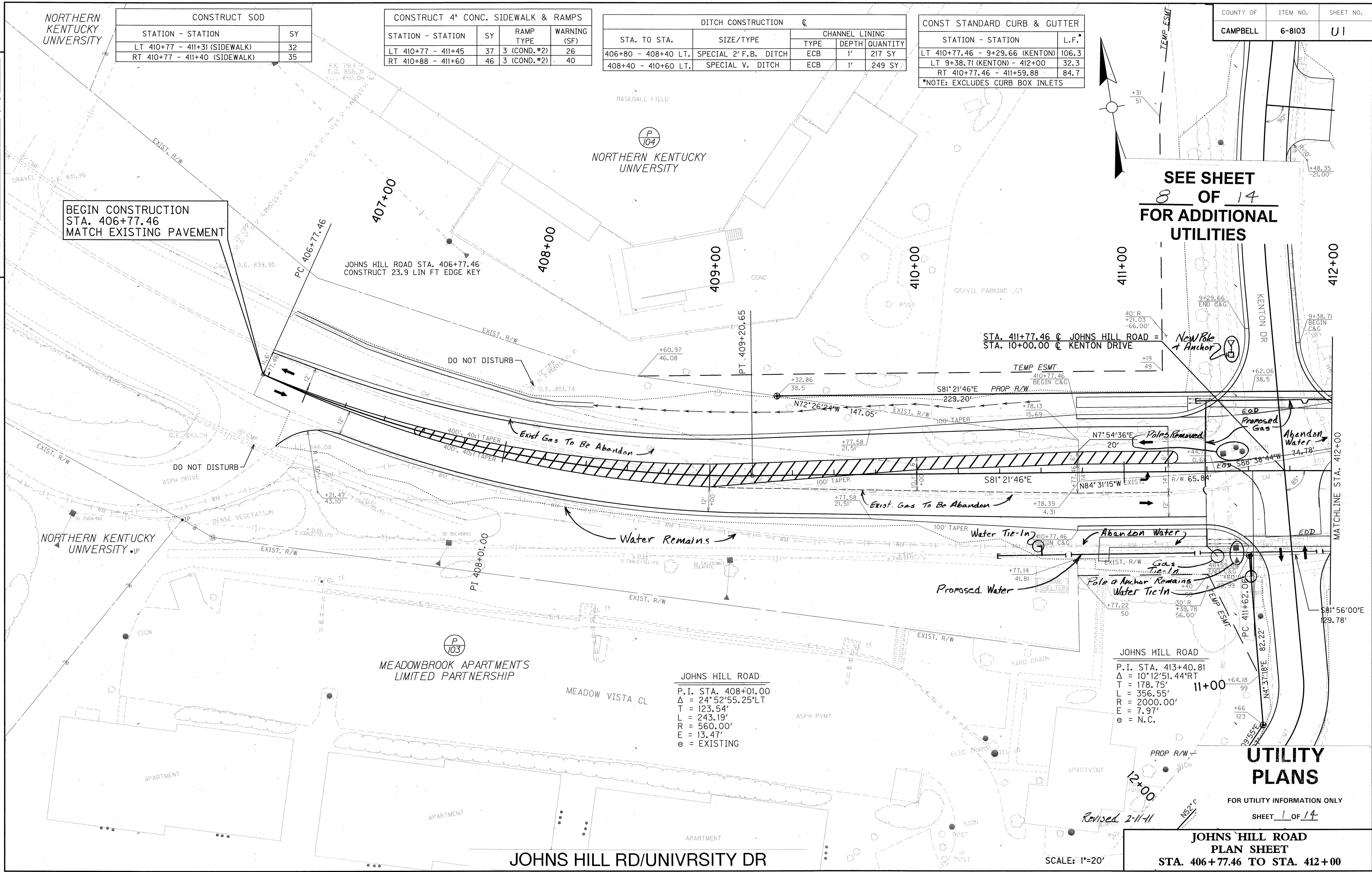
CONST STANDARD CURB & GUTTER	
STATION - STATION	L.F.*
LT 410+77.46 - 9+29.66 (KENTON)	106.3
LT 9+38.71 (KENTON) - 412+00	32.3
RT 410+77.46 - 411+59.88	84.7

\*NOTE: EXCLUDES CURB BOX INLETS

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

BEGIN CONSTRUCTION  
 STA. 406+77.46  
 MATCH EXISTING PAVEMENT

SEE SHEET  
8 OF 14  
 FOR ADDITIONAL  
 UTILITIES



USER: \$\$\$USER\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 FILE NAME: \$\$\$design\$filespecification\$\$\$  
 E-SHEET NAME:

JOHNS HILL ROAD  
 P.I. STA. 408+01.00  
 $\Delta = 24^{\circ}52'55.25''$ LT  
 T = 123.54'  
 L = 243.19'  
 R = 560.00'  
 E = 13.47'  
 e = EXISTING

JOHNS HILL ROAD  
 P.I. STA. 413+40.81  
 $\Delta = 10^{\circ}12'51.44''$ RT  
 T = 178.75'  
 L = 356.55'  
 R = 2000.00'  
 E = 7.97'  
 e = N.C.

### UTILITY PLANS

FOR UTILITY INFORMATION ONLY  
 SHEET 1 OF 14

JOHNS HILL ROAD  
 PLAN SHEET  
 STA. 406+77.46 TO STA. 412+00

SCALE: 1"=20'

Revised 2-11-11

REVISED 02-16-2011

CONSTRUCT SOD		
STATION - STATION	SY	
LT 410+77 - 411+31 (SIDEWALK)	32	
RT 410+77 - 411+40 (SIDEWALK)	35	

CONSTRUCT 4" CONC. SIDEWALK & RAMPS				
STATION - STATION	SY	RAMP TYPE	WARNING (SF)	
LT 410+77 - 411+45	37	3 (COND.#2)	26	
RT 410+88 - 411+60	46	3 (COND.#2)	40	

DITCH CONSTRUCTION					
STA. TO STA.	SIZE/TYPE	CHANNEL LINING			
		TYPE	DEPTH	QUANTITY	
406+80 - 408+40 LT.	SPECIAL 2' F.B. DITCH	ECB	1'	217 SY	
408+40 - 410+60 LT.	SPECIAL V. DITCH	ECB	1'	249 SY	

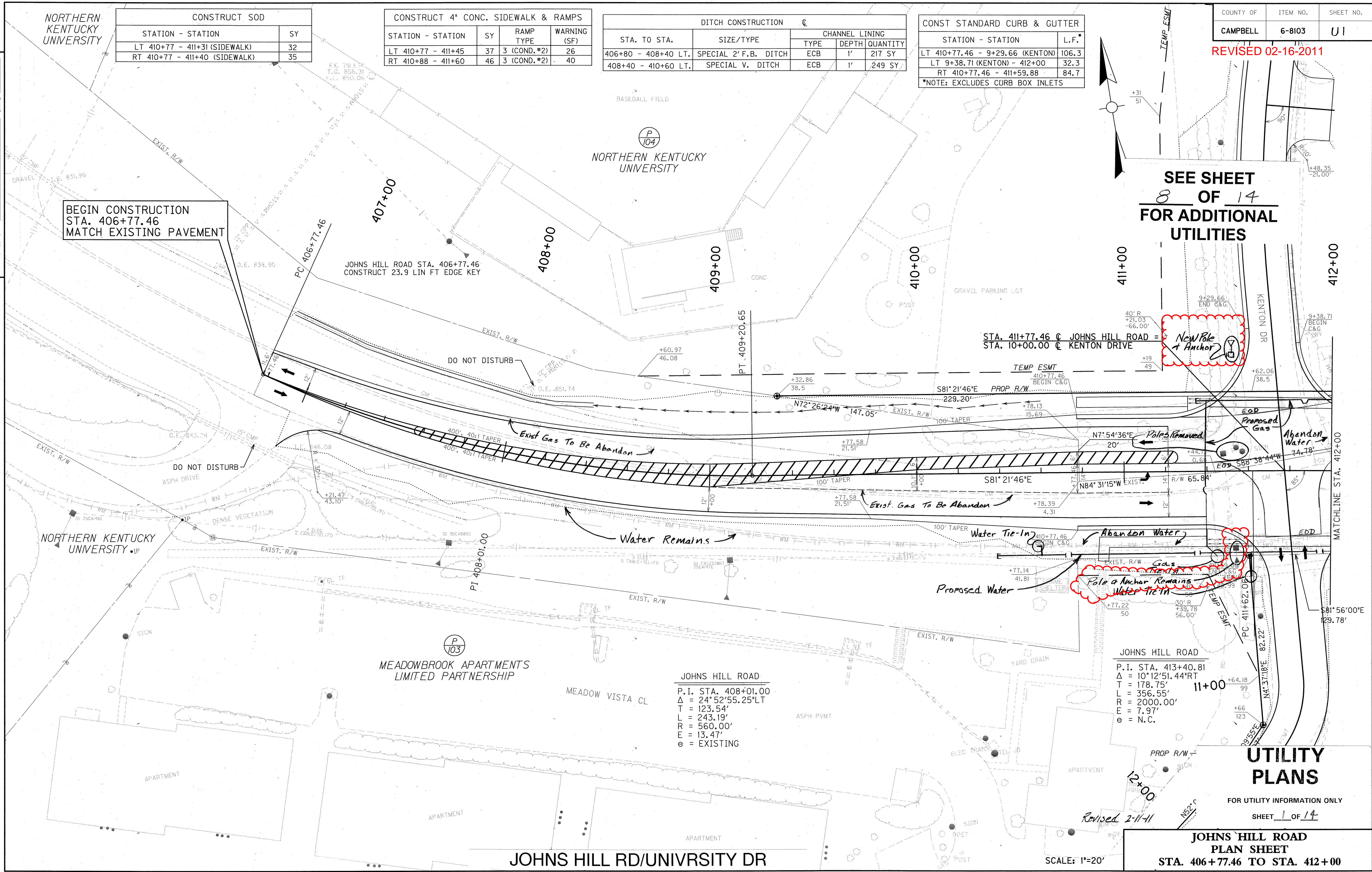
CONST STANDARD CURB & GUTTER		
STATION - STATION	L.F.*	
LT 410+77.46 - 9+29.66 (KENTON)	106.3	
LT 9+38.71 (KENTON) - 412+00	32.3	
RT 410+77.46 - 411+59.88	84.7	

\*NOTE: EXCLUDES CURB BOX INLETS

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
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BEGIN CONSTRUCTION  
 STA. 406+77.46  
 MATCH EXISTING PAVEMENT

SEE SHEET  
 8 OF 14  
 FOR ADDITIONAL  
 UTILITIES



New Pole + Anchor

Pole + Anchor Remains  
 Water Tie-In

JOHNS HILL ROAD  
 P.I. STA. 408+01.00  
 $\Delta = 24^{\circ}52'55.25''$ LT  
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 P.I. STA. 413+40.81  
 $\Delta = 10^{\circ}12'51.44''$ RT  
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 e = N.C.

### UTILITY PLANS

FOR UTILITY INFORMATION ONLY  
 SHEET 1 OF 14

JOHNS HILL ROAD  
 PLAN SHEET  
 STA. 406+77.46 TO STA. 412+00

SCALE: 1"=20'

USER: \$\$\$USER\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 FILE NAME: \$\$\$design\$filespecification\$\$\$  
 E-SHEET NAME:

CONSTRUCT MEDIAN BARRIER TYPE 5	
STATION - STATION	SY
412+33.93 - 413+29.91 (MEDIAN)	92

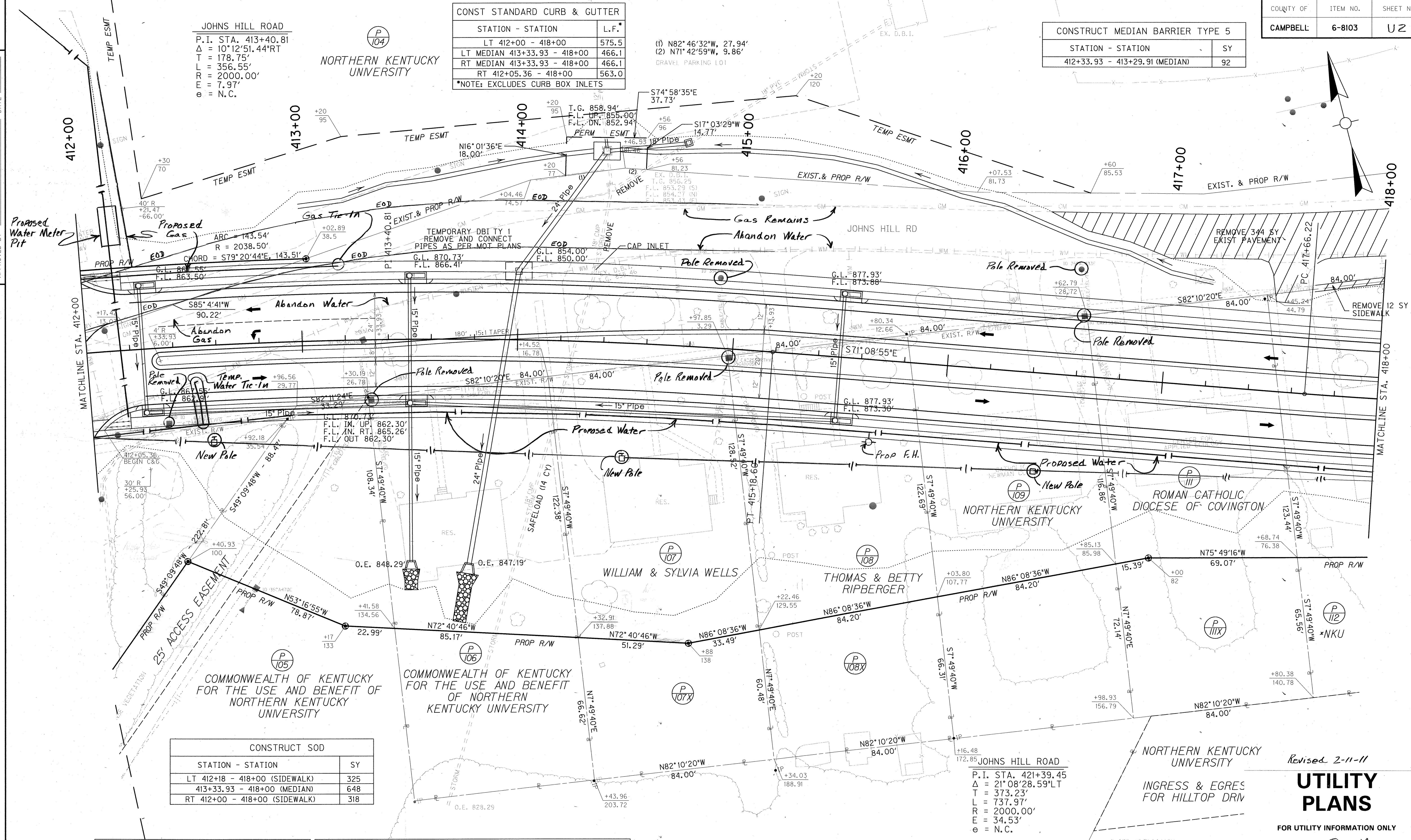
CONST STANDARD CURB & GUTTER	
STATION - STATION	L.F.*
LT 412+00 - 418+00	575.5
LT MEDIAN 413+33.93 - 418+00	466.1
RT MEDIAN 413+33.93 - 418+00	466.1
RT 412+05.36 - 418+00	563.0

\*NOTE: EXCLUDES CURB BOX INLETS

JOHNS HILL ROAD  
 P.I. STA. 413+40.81  
 $\Delta = 10^\circ 12' 51.44''$  RT  
 $T = 178.75'$   
 $L = 356.55'$   
 $R = 2000.00'$   
 $E = 7.97'$   
 $e = N.C.$

NORTHERN KENTUCKY UNIVERSITY

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



CONSTRUCT SOD	
STATION - STATION	SY
LT 412+18 - 418+00 (SIDEWALK)	325
413+33.93 - 418+00 (MEDIAN)	648
RT 412+05 - 418+00 (SIDEWALK)	318

CONSTRUCT 4" CONC. SIDEWALK & RAMPS			
STATION - STATION	SY	RAMP TYPE	WARNING (SF)
LT 411+98 - 418+00	338	3 (COND.#2)	38
RT 412+05 - 418+00	327	3 (COND.#2)	24

DITCH CONSTRUCTION				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
413+00 - 414+40 LT.	SPCL. 2' F.B.	ECB	1'	125 SY
414+40 - 417+20 LT.	2' F.B. SURF. W/ BERM	ECB	1'	258 SY

JOHNS HILL ROAD  
 P.I. STA. 421+39.45  
 $\Delta = 21^\circ 08' 28.59''$  LT  
 $T = 373.23'$   
 $L = 737.97'$   
 $R = 2000.00'$   
 $E = 34.53'$   
 $e = N.C.$

Revised 2-11-11  
**UTILITY PLANS**

FOR UTILITY INFORMATION ONLY  
 SHEET 2 OF 14

\*NKU = COMMONWEALTH OF KENTUCKY FOR THE USE AND BENEFIT OF NORTHERN KENTUCKY UNIVERSITY

**JOHNS HILL ROAD**  
**PLAN SHEET**  
**STA. 412+00 TO STA. 418+00**

USER: \$\$\$USER\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 FILE NAME: \$\$\$designs\$filespecification\$\$\$  
 E-SHEET NAME:

REVISED 02-16-2011

CONSTRUCT MEDIAN BARRIER TYPE 5	
STATION - STATION	SY
412+33.93 - 413+29.91 (MEDIAN)	92

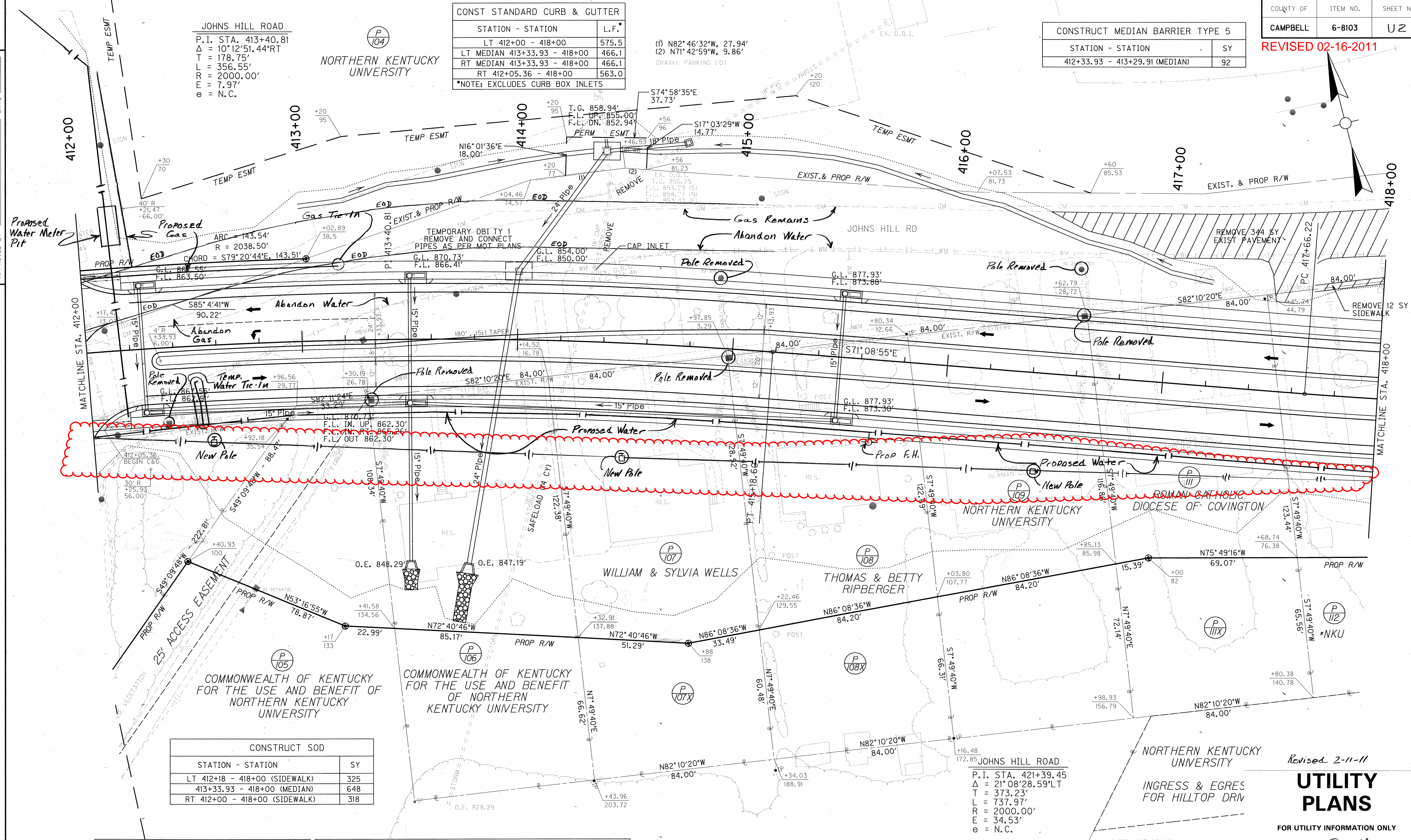
CONST STANDARD CURB & GUTTER	
STATION - STATION	L.F.*
LT 412+00 - 418+00	575.5
LT MEDIAN 413+33.93 - 418+00	466.1
RT MEDIAN 413+33.93 - 418+00	466.1
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 P.I. STA. 413+40.81  
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NORTHERN KENTUCKY UNIVERSITY

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
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 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



CONSTRUCT SOD	
STATION - STATION	SY
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CONSTRUCT 4" CONC. SIDEWALK & RAMPS			
STATION - STATION	SY	RAMP TYPE	WARNING (SF)
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DITCH CONSTRUCTION				
STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
413+00 - 414+40 LT.	SPCL. 2' F.B.	ECB	1'	125 SY
414+40 - 417+20 LT.	2' F.B. SURF. W/ BERM	ECB	1'	258 SY

JOHNS HILL ROAD  
 P.I. STA. 421+39.45  
 $\Delta = 21^{\circ}08'28.59''LT$   
 $T = 373.23'$   
 $L = 737.97'$   
 $R = 2000.00'$   
 $E = 34.53'$   
 $e = N.C.$

NORTHERN KENTUCKY UNIVERSITY  
 INGRESS & EGRES FOR HILLTOP DRN

Revised 2-11-11  
**UTILITY PLANS**

FOR UTILITY INFORMATION ONLY  
 SHEET 2 OF 14

\*NKU = COMMONWEALTH OF KENTUCKY FOR THE USE AND BENEFIT OF NORTHERN KENTUCKY UNIVERSITY

**JOHNS HILL ROAD  
 PLAN SHEET  
 STA. 412+00 TO STA. 418+00**

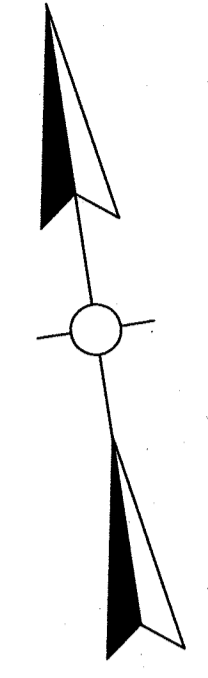
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 E-SHEET NAME:

COMMONWEALTH OF KENTUCKY  
FOR THE USE AND BENEFIT  
OF NORTHERN KENTUCKY UNIVERSITY

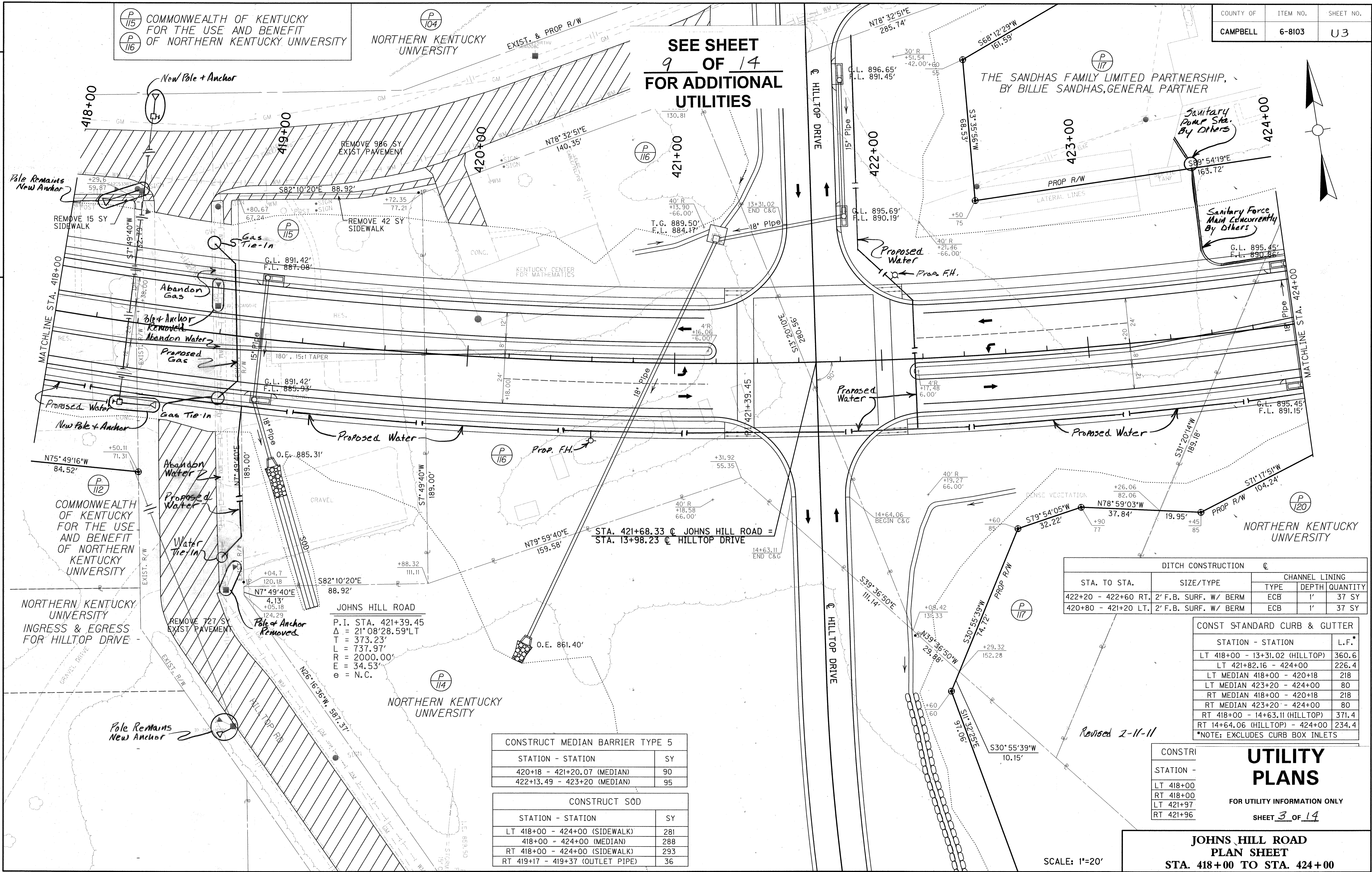
NORTHERN KENTUCKY  
UNIVERSITY

SEE SHEET  
9 OF 14  
FOR ADDITIONAL  
UTILITIES

THE SANDHAS FAMILY LIMITED PARTNERSHIP,  
BY BILLIE SANDHAS, GENERAL PARTNER



PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



JOHNS HILL ROAD  
P.I. STA. 421+39.45  
Δ = 21° 08' 28.59" LT  
T = 373.23'  
L = 737.97'  
R = 2000.00'  
E = 34.53'  
e = N.C.

STA. 421+68.33 C JOHNS HILL ROAD =  
STA. 13+98.23 C HILLTOP DRIVE

STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
422+20 - 422+60	RT. 2' F.B. SURF. W/ BERM	ECB	1'	37 SY
420+80 - 421+20	LT. 2' F.B. SURF. W/ BERM	ECB	1'	37 SY

CONST STANDARD CURB & GUTTER	
STATION - STATION	L.F.*
LT 418+00 - 13+31.02 (HILLTOP)	360.6
LT 421+82.16 - 424+00	226.4
LT MEDIAN 418+00 - 420+18	218
LT MEDIAN 423+20 - 424+00	80
RT MEDIAN 418+00 - 420+18	218
RT MEDIAN 423+20 - 424+00	80
RT 418+00 - 14+63.11 (HILLTOP)	371.4
RT 14+64.06 (HILLTOP) - 424+00	234.4

\*NOTE: EXCLUDES CURB BOX INLETS

CONSTRUCT MEDIAN BARRIER TYPE 5	
STATION - STATION	SY
420+18 - 421+20.07 (MEDIAN)	90
422+13.49 - 423+20 (MEDIAN)	95

CONSTRUCT SOD	
STATION - STATION	SY
LT 418+00 - 424+00 (SIDEWALK)	281
418+00 - 424+00 (MEDIAN)	288
RT 418+00 - 424+00 (SIDEWALK)	293
RT 419+17 - 419+37 (OUTLET PIPE)	36

CONSTRI	
STATION -	
LT 418+00	
RT 418+00	
LT 421+97	
RT 421+96	

# UTILITY PLANS

FOR UTILITY INFORMATION ONLY  
SHEET 3 OF 14

JOHNS HILL ROAD  
PLAN SHEET  
STA. 418+00 TO STA. 424+00

SCALE: 1"=20'

USER: \$\$\$USER\$\$\$  
DATE: \$\$\$DATE\$\$\$  
FILE NAME: \$\$\$design\$filespecification\$\$\$  
E-SHEET NAME:

Revised 2-11-11

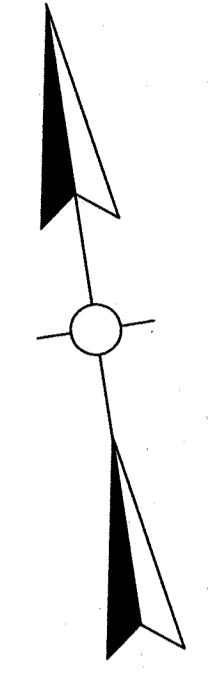
REVISED 02-16-2011

COMMONWEALTH OF KENTUCKY  
FOR THE USE AND BENEFIT  
OF NORTHERN KENTUCKY UNIVERSITY

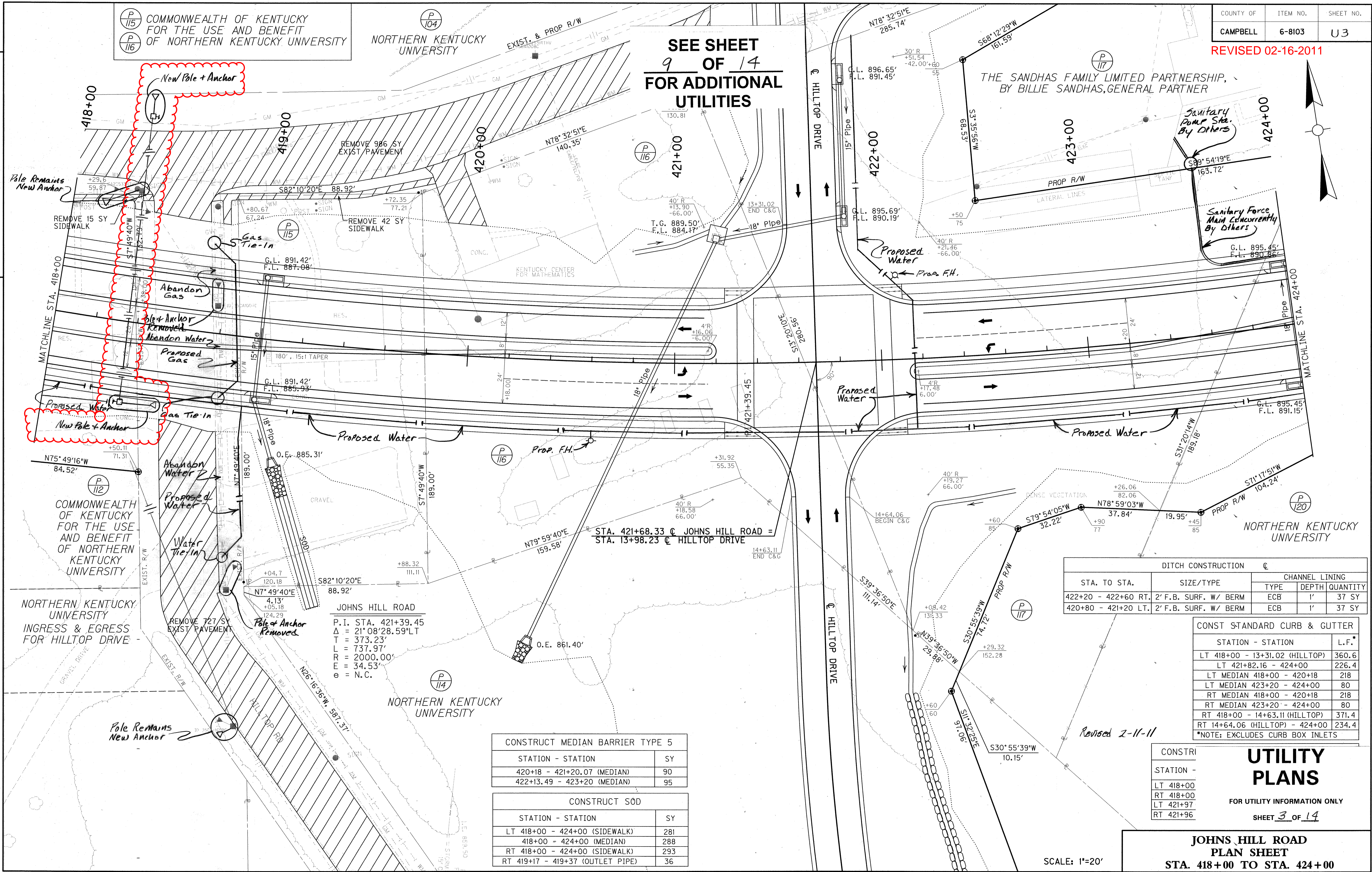
NORTHERN KENTUCKY  
UNIVERSITY

SEE SHEET  
9 OF 14  
FOR ADDITIONAL  
UTILITIES

THE SANDHAS FAMILY LIMITED PARTNERSHIP,  
BY BILLIE SANDHAS, GENERAL PARTNER



PREPARED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



JOHNS HILL ROAD  
P.I. STA. 421+39.45  
Δ = 21° 08' 28.59" LT  
T = 373.23'  
L = 737.97'  
R = 2000.00'  
E = 34.53'  
e = N.C.

CONSTRUCT MEDIAN BARRIER TYPE 5	
STATION - STATION	SY
420+18 - 421+20.07 (MEDIAN)	90
422+13.49 - 423+20 (MEDIAN)	95

CONSTRUCT SOD	
STATION - STATION	SY
LT 418+00 - 424+00 (SIDEWALK)	281
418+00 - 424+00 (MEDIAN)	288
RT 418+00 - 424+00 (SIDEWALK)	293
RT 419+17 - 419+37 (OUTLET PIPE)	36

STA. TO STA.	SIZE/TYPE	DITCH CONSTRUCTION		
		TYPE	DEPTH	QUANTITY
422+20 - 422+60	RT. 2' F.B. SURF. W/ BERM	ECB	1'	37 SY
420+80 - 421+20	LT. 2' F.B. SURF. W/ BERM	ECB	1'	37 SY

CONST STANDARD CURB & GUTTER	
STATION - STATION	L.F.*
LT 418+00 - 13+31.02 (HILLTOP)	360.6
LT 421+82.16 - 424+00	226.4
LT MEDIAN 418+00 - 420+18	218
LT MEDIAN 423+20 - 424+00	80
RT MEDIAN 418+00 - 420+18	218
RT MEDIAN 423+20 - 424+00	80
RT 418+00 - 14+63.11 (HILLTOP)	371.4
RT 14+64.06 (HILLTOP) - 424+00	234.4

\*NOTE: EXCLUDES CURB BOX INLETS

CONSTRI	
STATION -	
LT 418+00	
RT 418+00	
LT 421+97	
RT 421+96	

# UTILITY PLANS

FOR UTILITY INFORMATION ONLY  
SHEET 3 OF 14

JOHNS HILL ROAD  
PLAN SHEET  
STA. 418+00 TO STA. 424+00

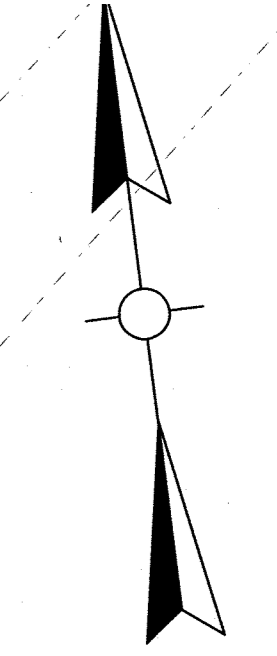
SCALE: 1"=20'

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FILE NAME: \$\$\$design\$filespecification\$\$\$  
E-SHEET NAME:



REVISED 02-16-2011

SEE SHEET  
**14 OF 14**  
FOR ADDITIONAL  
UTILITIES



HIGHLAND HEIGHTS  
OF KENTUCKY  
LIMITED PARTNERSHIP

STA. 434+10.57 @ JOHNS HILL ROAD =  
STA. 30+00.00 @ JOHNS HILL TIE

DITCH CONSTRUCTION		CHANNEL LINING		
STA. TO STA.	SIZE/TYPE	TYPE	DEPTH	QUANTITY
430+84 - 433+53 RT.	SPCL. 2' F.B.	ECB	1'	306 SY
435+71 - 435+93 RT.	SPCL. 2' F.B.	CLASS II	1.5'	25 TONS

CONSTRUCT SOD		SY
STATION - STATION		
LT 61+00 UD - LT 435+82 (SIDEWALK)		423
ROUNDBOUT AND SPLITTER ISLANDS		936
RT 57+46 UD - 436+00 (SIDEWALK)		635

SEE SHEET  
**12 OF 14**  
FOR ADDITIONAL  
UTILITIES

STA. 430+40.61 @ JOHNS HILL ROAD =  
STA. 60+05.36 @ KNOLLWOOD/UNIVERSITY

Prop Electric  
Duct System  
for Future Use  
Concurrently  
By Others

2 - 6" CONDUITS  
FOR FUTURE USE  
(SEE LIGHTING PLANS)

ARC = 29.72', R = 15.00',  
CHORD = S24°12'03"E, 25.09'

NORTHERN KENTUCKY  
UNIVERSITY

HIGHLAND MEADOWS  
CONDOMINIUMS

JOHNS HILL ROAD  
P.I. STA. 435+77.25  
Δ = 44°50'42.63"RT  
T = 330.11'  
L = 626.16'  
R = 800.00'  
E = 65.43'  
e = 2.00%

CONSTRUCT GUARDRAIL & END TREATMENTS		
STATION - STATION	L.F.	END TREATMENT
LT 435+34 - 435+80	50	TY 2A
RT 433+60 - 436+32	275	TY 4A, TY 2A

Revised 2-11-11

# UTILITY PLANS

FOR UTILITY INFORMATION ONLY  
SHEET 5 OF 14

JOHNS HILL ROAD  
PLAN SHEET  
STA. 430+00 TO STA. 436+00

SCALE: 1"=20'

CONST STANDARD INTEGRAL CURB	
STATION - STATION	L.F.*
LT 430+95.43 - 431+35.95	64.6

\*NOTE: EXCLUDES CURB BOX INLETS

CONST ISLAND CURB & GUTTER	
STATION - STATION	L.F.*
UD MEDIAN 58+76.87 - 58+87.09	18.5
UD MEDIAN 58+93.12 - 59+11.27	62.1
UD MEDIAN 60+61.19 - 60+86.67	97.6
LT 431+02.03 - 431+52.36	63.1
RT MEDIAN 431+14.45 - 431+33.97	83.6
RT MEDIAN 431+39.94 - 431+68.38	68.2

\*NOTE: EXCLUDES CURB BOX INLETS

CONST STANDARD CURB & GUTTER	
STATION - STATION	L.F.*
LT 61+00 (UD) - 430+95.43	35.6
LT 431+52.36 - 433+86.03	250
RT 57+46.15 UD - 436+00	695
UD MEDIAN 60+92.67 - 61+00	23

\*NOTE: EXCLUDES CURB BOX INLETS

CONC PARKING LOT  
ROUNDBOUT OUTER ISLAND  
CONSTRUCT 267.8' OF  
ISLAND CURB & GUTTER

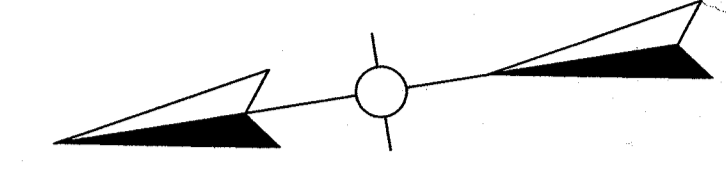
ROUNDBOUT INNER ISLAND  
CONSTRUCT 232.0' OF  
STANDARD INTEGRAL CURB  
(EXCLUDES 10' FOR CBI)

CONSTRUCT 4" CONC. SIDEWALK & RAMPS			
STATION - STATION	SY	RAMP TYPE	WARNING (SF)
LT 61+00 UD - 433+82	287	4, 1	34, 34, 13
LT 431+97	-	BIKE RAMP	-
LT 434+25 - 435+82.32	90	DETECTABLE WARNING	35
RT 57+60.67 UD - 436+00	577	4	35, 34
RT 58+07 (UD) (SEE SHT R24)	-	BIKE RAMP	-
RT 432+25	-	BIKE RAMP	-

USER: \*\*\*\*\*  
DATE: \*\*\*\*\*  
FILE NAME: \*\*\*\*\*  
E-SHEET NAME: \*\*\*\*\*

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

MEADOW TRAIL  
P.I. STA. 11+17.35  
Δ = 37°31'17" RT  
T = 16.98'  
L = 32.74'  
R = 50.00'  
E = 2.81'  
e = R.C.



MEADOW TRAIL DRIVE STA. 12+00.00  
CONSTRUCT 24.3 LIN FT EDGE KEY

COMMONWEALTH OF KENTUCKY  
FOR THE USE AND BENEFIT OF  
NORTHERN KENTUCKY  
UNIVERSITY

**SEE SHEETS  
1 & 2 OF 14  
FOR ADDITIONAL  
UTILITIES**

**END CONSTRUCTION  
STA. 12+00.00**

MEADOW TRAIL DRIVE  
ENTRANCE LT  
P.I. STA. 10+49.55  
Δ = 52°11'53.29" RT  
T = 24.49'  
L = 45.55'  
R = 50.00'  
E = 5.68'

*Underground Utilities  
to be lowered in advance  
by utility owners.*

Revised 2-11-11

**UTILITY  
PLANS**

FOR UTILITY INFORMATION ONLY

SHEET 8 OF 14

**KENTON DR. / MEADOW TRAIL DR.  
PLAN SHEET**

SCALE: 1"=20'

KENTON DRIVE  
P.I. STA. 7+43.50  
Δ = 13°25'39.34" RT  
T = 58.86'  
L = 117.18'  
R = 500.00'  
E = 3.45'  
e = R.C.

KENTON DRIVE  
P.I. STA. 8+58.85  
Δ = 11°04'53.47" LT  
T = 48.50'  
L = 96.70'  
R = 500.00'  
E = 2.35'  
e = R.C.

**BEGIN CONSTRUCTION  
STA. 7+87.30**

KENTON DRIVE STA. 7+87.30  
SAW-CUT 26.3 LIN FT OF EXISTING PVMT

STA. 411+77.46 @ JOHNS HILL ROAD =  
STA. 10+00.00 @ KENTON DRIVE

CONSTRUCT ENTRANCE						
STATION	SIDE	TYPE	WIDTH (L.F.)	8" CC ENT PAVING	ENTRANCE TYPE	ENT. PAVING (SQ. YD.)
KENTON DRIVE/MEADOW TRAIL						
8+22.17	LT	COMMERCIAL	30.0	-	ASPH	73.4
11+89.24	LT	RESIDENTIAL	24.0	-	ASPH	171.0

PREPARED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

USER: \$\$\$USER\$\$\$  
DATE: \$\$\$DATE\$\$\$  
FILE NAME: \$\$\$designsfile\$\$\$specificlocation\$\$\$  
E-SHEET NAME:

REVISED 02-16-2011

MEADOW TRAIL  
P.I. STA. 11+17.35  
Δ = 37°31'17" RT  
T = 16.98'  
L = 32.74'  
R = 50.00'  
E = 2.81'  
e = R.C.

MEADOW TRAIL DRIVE STA. 12+00.00  
CONSTRUCT 24.3 LIN FT EDGE KEY

COMMONWEALTH OF KENTUCKY  
FOR THE USE AND BENEFIT OF  
NORTHERN KENTUCKY  
UNIVERSITY

**SEE SHEETS  
1 & 2 OF 14  
FOR ADDITIONAL  
UTILITIES**

END CONSTRUCTION  
STA. 12+00.00

*Underground Utilities  
to be lowered in advance  
by utility owners.*

MEADOW TRAIL DRIVE  
ENTRANCE LT  
P.I. STA. 10+49.55  
Δ = 52°11'53.29" RT  
T = 24.49'  
L = 45.55'  
R = 50.00'  
E = 5.68'

Revised 2-11-11

**UTILITY  
PLANS**

FOR UTILITY INFORMATION ONLY

SHEET 8 OF 14

**KENTON DR. / MEADOW TRAIL DR.  
PLAN SHEET**

SCALE: 1"=20'

KENTON DRIVE  
P.I. STA. 7+43.50  
Δ = 13°25'39.34" RT  
T = 58.86'  
L = 117.18'  
R = 500.00'  
E = 3.45'  
e = R.C.

KENTON DRIVE  
P.I. STA. 8+58.85  
Δ = 11°04'53.47" LT  
T = 48.50'  
L = 96.70'  
R = 500.00'  
E = 2.35'  
e = R.C.

BEGIN CONSTRUCTION  
STA. 7+87.30

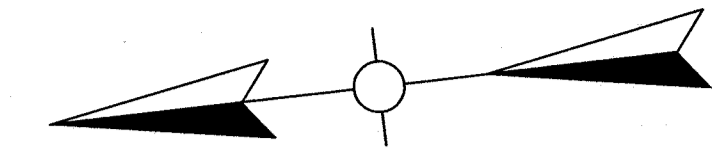
KENTON DRIVE STA. 7+87.30  
SAW-CUT 26.3 LIN FT OF EXISTING PVMT

STA. 411+77.46 @ JOHNS HILL ROAD =  
STA. 10+00.00 @ KENTON DRIVE

CONSTRUCT ENTRANCE						
STATION	SIDE	TYPE	WIDTH (L.F.)	8" CC ENT PAVING	ENTRANCE TYPE	ENT. PAVING (SQ. YD.)
KENTON DRIVE/MEADOW TRAIL						
8+22.17	LT	COMMERCIAL	30.0	-	ASPH	73.4
11+89.24	LT	RESIDENTIAL	24.0	-	ASPH	171.0

PREPARED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

USER: \$\$\$USER\$\$\$  
DATE: \$\$\$DATE\$\$\$  
FILE NAME: \$\$\$designsfile\$\$\$specificlocation\$\$\$  
E-SHEET NAME:



PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

END CONSTRUCTION  
 STA. 12+33.51

NORTHERN KENTUCKY  
 UNIVERSITY

NORTHERN KENTUCKY  
 UNIVERSITY

HILLTOP DRIVE  
 P.I. STA. 15+98.54  
 $\Delta = 5^{\circ}34'37.89''$   
 $T = 48.71'$   
 $L = 97.30'$   
 $R = 1000.00'$   
 $E = 1.19'$   
 $e = N.C.$

STATION	TYPE	WIDTH (L.F.)	8" CC ENT PAVING	ENTRANCE TYPE	ENT. PAVING (SQ. YD.)
HILLTOP DRIVE ENTRANCE LEFT					
RT 11+74	COMMERCIAL	30.0	-	CONC	71.6

HILLTOP DRIVE APPROACH  
 ENTRANCE RIGHT STA. 0+31.02  
 SAW-CUT 30.0 LIN FT OF EXISTING PVMT

THE SANDHAS FAMILY  
 LIMITED PARTNERSHIP,  
 BY BILLIE SANDHAS,  
 GENERAL PARTNER

NORTHERN KENTUCKY  
 UNIVERSITY

HILLTOP DRIVE STA. 10+00.00  
 SAW-CUT 30.6 LIN FT OF EXISTING PVMT

BEGIN CONSTRUCTION  
 STA. 10+00.00

SEE SHEET  
 3 OF 14  
 FOR ADDITIONAL  
 UTILITIES

STATION - STATION	L.F.
HILLTOP DRIVE	
LT 11+00 - 11+90.19	118
LT 12+23.45 - 13+32.04	95.4
HILLTOP DRIVE APPR. LT.	
LT 10+60.22 - 11+70	109.8
RT 10+29.49 - 11+54.90	125.4
RT 11+92.89 - 12+33.51	40.6

\*NOTE: EXCLUDES CURB BOX INLETS

STA. TO STA.	SIZE/TYPE	DITCH CONSTRUCTION @		
		TYPE	DEPTH	QUANTITY
11+00 - 13+00 RT.	NORMAL	ECB	1'	178 SY
13+00 - 13+30 RT.	SPCL. 2' F.B.	ECB	1'	28 SY
14+70 - 15+60 LT.	SPCL. 2' F.B.	ECB	1'	83 SY
15+60 - 16+00 LT.	SPCL. 2' F.B.	CLASS II	1'	23 TONS

STA. 12+23.50 @ HILLTOP DRIVE =  
 STA. 10+00.00 @ HILLTOP DRIVE APPR. LT.

STA. 421+68.33 @ JOHNS HILL ROAD =  
 STA. 13+98.23 @ HILLTOP DRIVE

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 OF NORTHERN KENTUCKY  
 UNIVERSITY

Revised 2-11-11

# UTILITY PLANS

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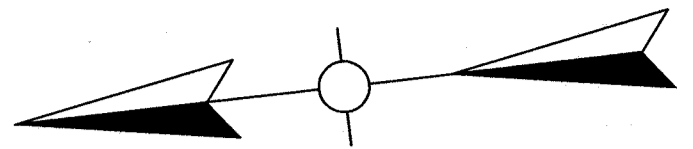
SHEET 9 OF 14

HILLTOP DRIVE  
 PLAN SHEET  
 STA. 10+00 TO STA. 16+00

SCALE: 1"=20'

USER: \$\$\$USER\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 FILE NAME: \$\$\$designfilespecification\$\$\$  
 E-SHEET NAME:

REVISED 02-16-2011



PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

CONSTRUCT ENTRANCE

STATION	TYPE	WIDTH (L.F.)	8" CC ENT PAVING	ENTRANCE TYPE	ENT. PAVING (SQ. YD.)
RT 11+74	COMMERCIAL	30.0	-	CONC	71.6

CONST STANDARD CURB & GUTTER

STATION - STATION	L.F.*
HILLTOP DRIVE	
LT 11+00 - 11+90.19	118
LT 12+23.45 - 13+32.04	95.4
HILLTOP DRIVE APPR. LT.	
LT 10+60.22 - 11+70	109.8
RT 10+29.49 - 11+54.90	125.4
RT 11+92.89 - 12+33.51	40.6

\*NOTE: EXCLUDES CURB BOX INLETS

DITCH CONSTRUCTION @

STA. TO STA.	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
11+00 - 13+00 RT.	NORMAL	ECB	1'	178 SY
13+00 - 13+30 RT.	SPCL. 2' F.B.	ECB	1'	28 SY
14+70 - 15+60 LT.	SPCL. 2' F.B.	ECB	1'	83 SY
15+60 - 16+00 LT.	SPCL. 2' F.B.	CLASS II	1'	23 TONS

END CONSTRUCTION STA. 12+33.51

HILLTOP DRIVE STA. 10+00.00  
SAW-CUT 30.6 LIN FT OF EXISTING PVMT

BEGIN CONSTRUCTION STA. 10+00.00

STA. 12+23.50 @ HILLTOP DRIVE =  
STA. 10+00.00 @ HILLTOP DRIVE APPR. LT.

STA. 421+68.33 @ JOHNS HILL ROAD =  
STA. 13+98.23 @ HILLTOP DRIVE

# UTILITY PLANS

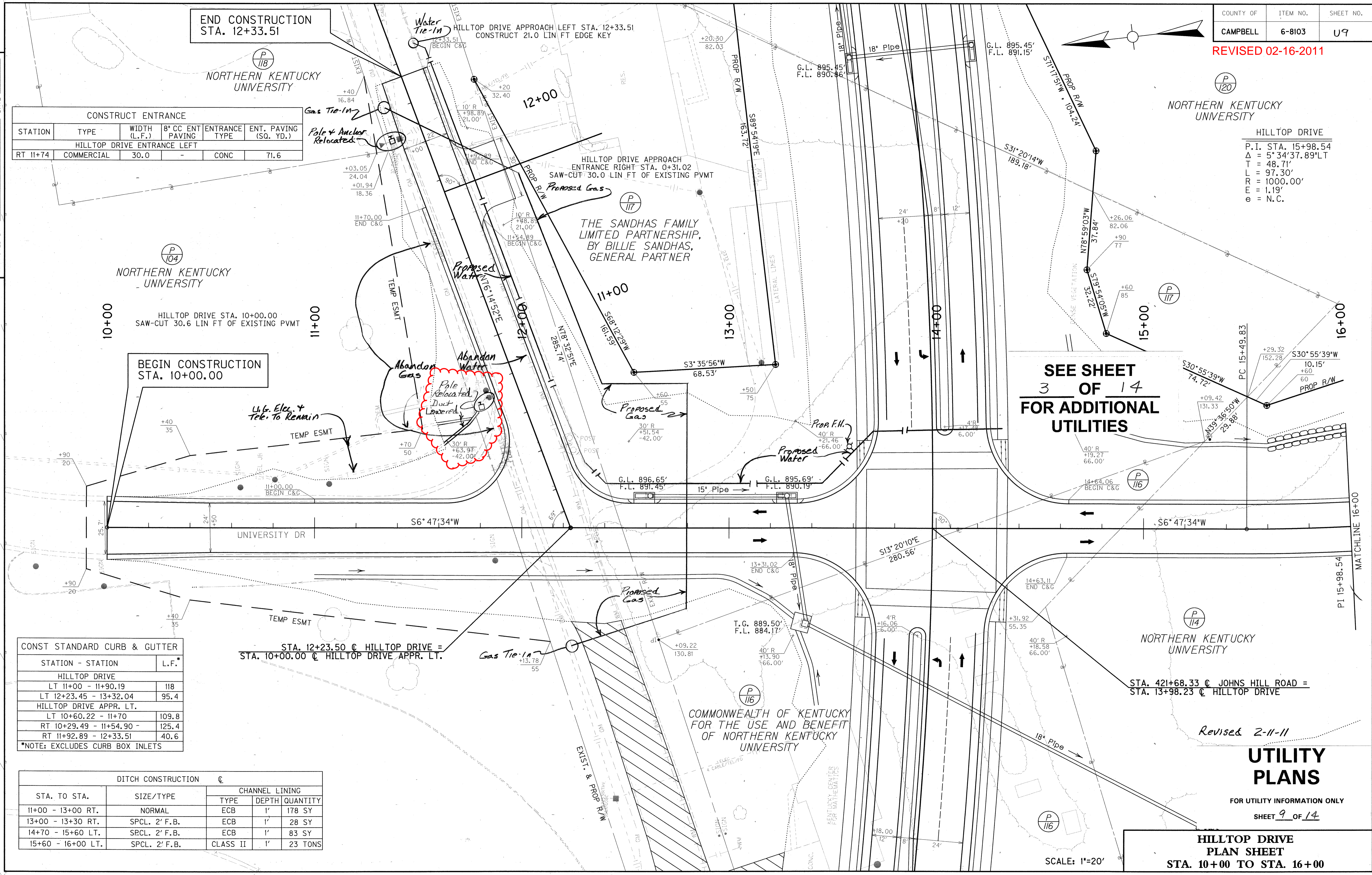
FOR UTILITY INFORMATION ONLY

SHEET 9 OF 14

HILLTOP DRIVE  
PLAN SHEET  
STA. 10+00 TO STA. 16+00

SCALE: 1"=20'

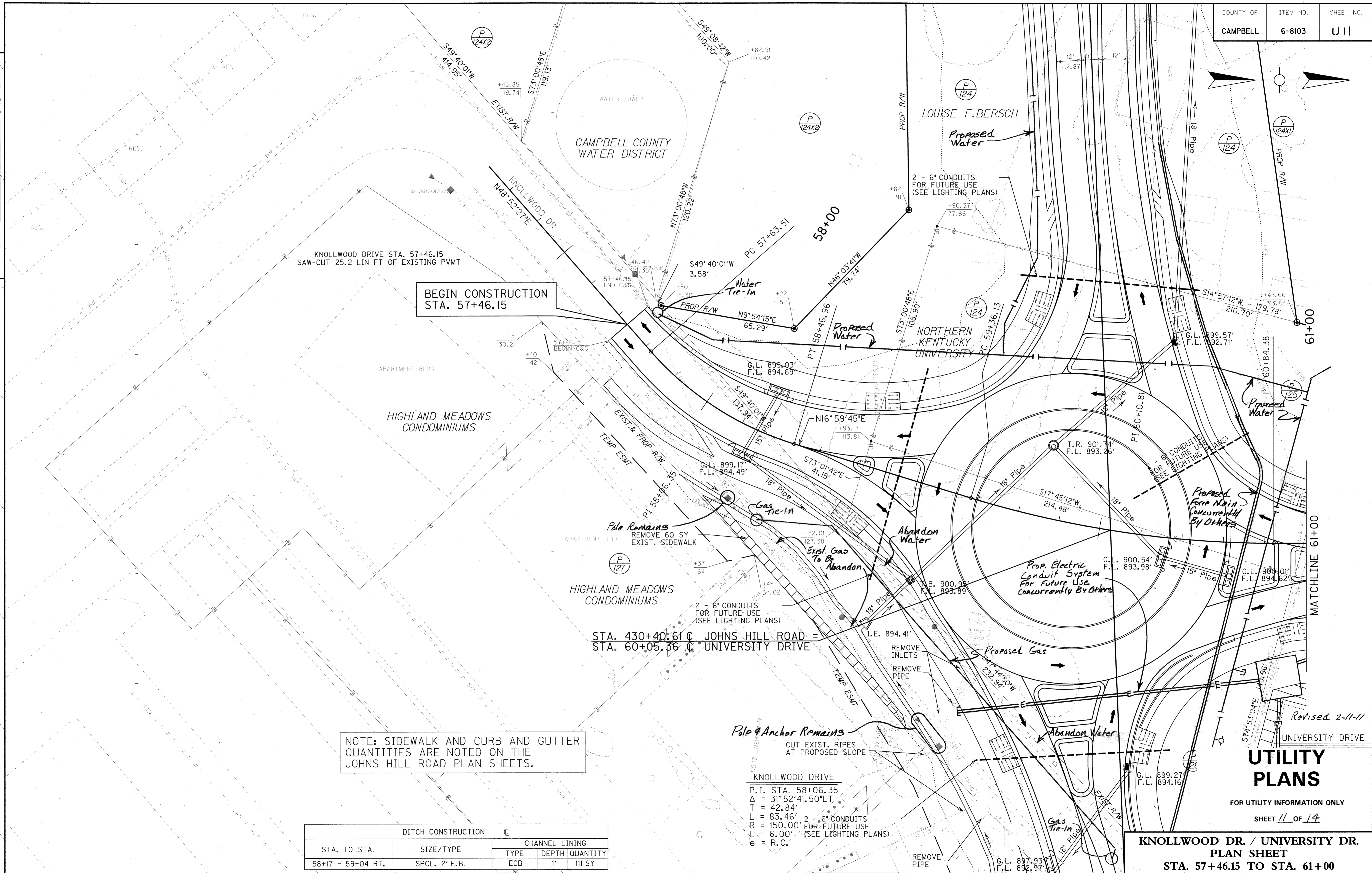
SEE SHEET  
3 OF 14  
FOR ADDITIONAL  
UTILITIES



USER: \$\$\$USER\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 FILE NAME: \$\$\$designfilespecification\$\$\$  
 E-SHEET NAME:

PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

USER: \$\$\$USER\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 FILE NAME: \$\$\$design\$filespecification\$\$\$  
 E-SHEET NAME:



**BEGIN CONSTRUCTION  
STA. 57+46.15**

NOTE: SIDEWALK AND CURB AND GUTTER QUANTITIES ARE NOTED ON THE JOHNS HILL ROAD PLAN SHEETS.

STA. TO STA.	SIZE/TYPE	DITCH CONSTRUCTION		
		CHANNEL LINING TYPE	DEPTH	QUANTITY
58+17 - 59+04 RT.	SPCL. 2' F.B.	ECB	1'	111 SY

**KNOLLWOOD DRIVE**  
 P.I. STA. 58+06.35  
 $\Delta = 31^{\circ}52'41.50''$   
 $T = 42.84'$   
 $L = 83.46'$   
 $R = 150.00'$   
 $E = 6.00'$   
 $\theta = R.C.$

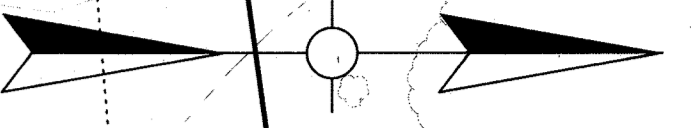
**KNOLLWOOD DR. / UNIVERSITY DR.**  
**PLAN SHEET**  
 STA. 57+46.15 TO STA. 61+00

# UTILITY PLANS

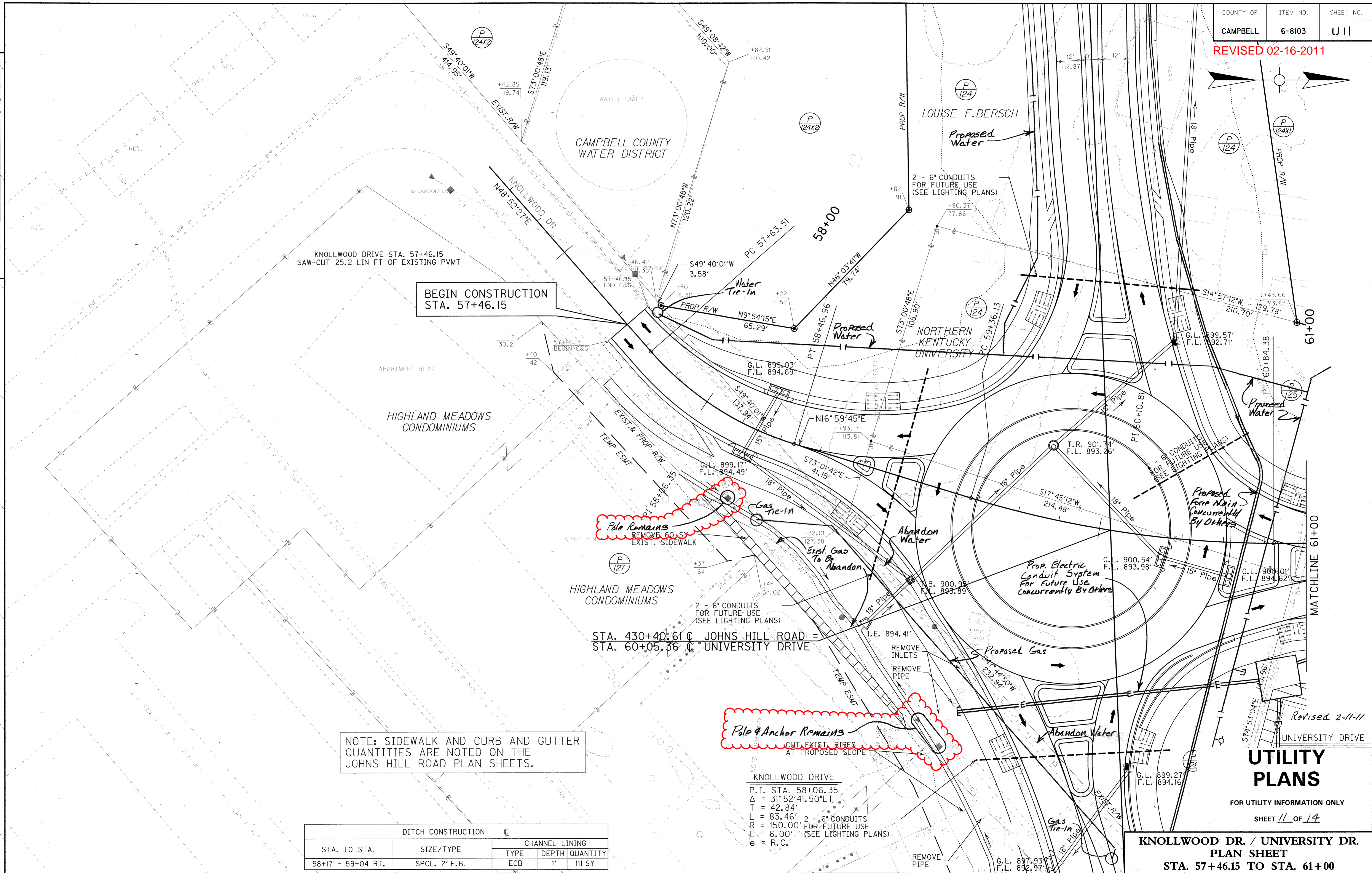
FOR UTILITY INFORMATION ONLY  
 SHEET 11 OF 14

Revised 2-11-11

REVISED 02-16-2011



PREPARED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_



BEGIN CONSTRUCTION  
 STA. 57+46.15

NOTE: SIDEWALK AND CURB AND GUTTER QUANTITIES ARE NOTED ON THE JOHNS HILL ROAD PLAN SHEETS.

Pole & Anchor Remains  
 CUT EXIST. PIPES AT PROPOSED SLOPE

STA. 430+40.61 @ JOHNS HILL ROAD =  
 STA. 60+05.36 @ UNIVERSITY DRIVE

KNOLLWOOD DRIVE  
 P.I. STA. 58+06.35  
 Δ = 31°52'41.50"LT  
 T = 42.84'  
 L = 83.46'  
 R = 150.00' 2 - 6" CONDUITS FOR FUTURE USE (SEE LIGHTING PLANS)  
 E = 6.00'  
 e = R.C.

STA. TO STA.	SIZE/TYPE	DITCH CONSTRUCTION		
		CHANNEL LINING TYPE	DEPTH	QUANTITY
58+17 - 59+04 RT.	SPCL. 2' F.B.	ECB	1'	III SY

# UTILITY PLANS

FOR UTILITY INFORMATION ONLY  
 SHEET 11 OF 14

KNOLLWOOD DR / UNIVERSITY DR  
 PLAN SHEET  
 STA. 57+46.15 TO STA. 61+00

USER: \$\$\$USER\$\$\$  
 DATE: \$\$\$DATE\$\$\$  
 FILE NAME: \$\$\$design\$file\$specification\$\$\$  
 E-SHEET NAME:

# Water Specifications

## Section I

### DESCRIPTION OF BID ITEMS

1. DUCTILE IRON PIPE (ALL SIZES) Includes the specified pipe, tracing wire with test boxes, polyethylene wrap, labor, equipment, excavation, bedding, restoration, disinfection, testing, backfill, etc. required to install the specified pipe at the location shown on the plans, or as directed, in accordance with the specifications and standard drawings complete and ready for use. No additional payment will be made for rock excavation. Paid LINEAR FEET (LF)
2. TEES, ANCHORING TEES, BENDS, CROSSES, REDUCERS, AND INCREASERS (ALL SIZES) Includes the specified ductile iron mechanical joint fitting, polyethylene wrap, labor, equipment, excavation, blocking if required per plans, anchoring, disinfection, backfill, restoration, etc. to install the specified fitting at the locations shown on the plans in accordance with the specifications and standard drawing complete and ready for use. If required on plans and/or proposed DIP is restrained, the specified ductile iron mechanical joint fitting shall be restrained using mechanical joint restraint devices consisting of multiple gripping wedges incorporated into a follower gland compatible with all mechanical joints (Megalug Series 1100®, MJ Field Lok® or approved equal) Paid EACH (EA) when complete.
3. VALVES (ALL SIZES) Includes the specified resilient seat gate valve for valve sizes of 12" and smaller, and butterfly valves for larger valves, 250 psi working pressure, polyethylene wrap, labor, equipment, excavation, anchoring (if any), valve box and valve stem extensions, backfill, 2'x2'x4" concrete pad (if outside paved or concrete areas), restoration, testing, disinfection, etc. required to install the specified valve at the location shown on the plans in accordance with the specifications and standard drawings complete and ready for use. If required on plans and/or proposed DIP is restrained, valves shall be restrained using mechanical joint restraint devices consisting of multiple gripping wedges incorporated into a follower gland compatible with all mechanical joints (Megalug Series 1100®, MJ Field Lok® or approved equal) Paid EACH (EA) when complete.
4. COPPER SERVICE (ALL SIZES and TYPES) Includes the specified copper service, labor, equipment, excavation, backfill, testing, disinfection, and restoration to install the pipe at the locations shown on the plans or as directed, in accordance with the specifications and standard drawings, complete and ready for use. No additional payment will be made for rock excavation or for bedding required in rock excavation. Paid LINEAR FEET (LF)
5. RECONNECT TO SERVICE or CONNECT COPPER SERVICE TO SERVICE LINE (ALL SIZES) Includes all labor and materials, including fittings and bends necessary to connect new service line to existing service line. Paid EACH (EA) when complete.
6. RELOCATE WATER METERS (ALL SIZES) Includes all labor, equipment, excavation, additional fittings, disinfection, testing, restoration, etc. to relocate the existing water meter (whatever size exists), meter yoke, meter box, casting, etc. from its old location to the location shown on the plans or as directed, in accordance with the specifications and standard drawings complete and ready for use. The required new service pipe will be paid under separate bid items. Paid EACH (EA) when complete.

7. RECONNECT TO MAIN or CONNECT COPPER SERVICE TO MAIN (ALL SIZES) Includes all labor and materials, including fittings, bends, valves, tracing wire jumper necessary to connect service line to the water main. Where the reconnect is made to an existing main this item includes reusing the existing service tap or abandoning the existing service tap by shutting off the curbstop at the existing main and disconnecting the copper service which is being abandoned. Paid EACH (EA) when complete.
8. ADJUST WATER METER TO GRADE Include all labor, equipment, excavation, materials, backfill, restoration, etc. to adjust the meter casting to finished grade (whatever size exists) at the location shown on the plans or as directed in accordance with the specifications and standard drawings complete and ready for use. Paid EACH (EA) when complete.
9. TIE-IN TO (ALSO, CONNECT TO) EXISTING MAIN (ALL SIZES) Includes all labor, equipment, excavation, ductile iron mechanical joint fitting which shall be restrained using mechanical joint restraint devices consisting of multiple gripping wedges incorporated into a follower gland compatible with all mechanical joints (Megalug Series 1100®, MJ Field Lok® or approved equal), sleeves, couplings, blocking, anchoring, restoration, disinfection, testing and backfill required to make the tie-in as shown on the plans, and in accordance with the specifications complete and ready for use. Pipe for tie-ins shall be paid under separate bid items and shall be measured thru tie-in fittings. Paid EACH (EA) when complete.
10. ADJUST FIRE HYDRANT TO GRADE Includes all labor, equipment, excavation, materials and backfill to adjust the existing fire hydrant using the fire hydrant manufacturer's extension kit for adjustments of 18" or less. Adjustments greater than 18" require anchoring couplings and vertical bends to adjust to grade. The Contractor will supply and install all anchor couplings, bends, fire hydrant extension, concrete blocking, restoration, granular drainage material, etc, needed to adjust the fire hydrant complete and ready for use as shown on the plans, and in accordance with the specifications and standard drawings. This also includes allowing for Northern Kentucky Water District's Inspector to inspect the existing fire hydrant prior to adjusting, returning unusable fire hydrants to the Northern Kentucky Water District Warehouse and picking up a replacement hydrant and piping for use if the existing fire hydrant is determined unfit for adjustment. If it is determined by the Northern Kentucky Water District that the existing hydrant is unfit for adjustment the District will supply the hydrant and piping necessary to make adjustment. The Contractor shall furnish the equipment, labor and materials (other than fire hydrant and piping) to install the hydrant, piping, concrete blocking, restoration, granular drainage material, etc, needed to adjust the fire hydrant complete and ready for use as shown on the plans and in accordance with the specifications and standard drawings. No additional payment will be made for rock excavation. Paid EACH (EA) when complete.
11. AIR RELEASE VALVES (ALL SIZES) This item shall include the air release valve, copper service line, manhole and lid, tapping the main, labor, equipment, excavation, proper backfill and restoration required to install the air release valve at the location shown on the plans or as directed in accordance with the specifications. Paid EACH (EA) when complete.
12. FIRE HYDRANT ASSEMBLY Includes all labor, equipment, excavation, materials and backfill to install fire hydrant. The Contractor will supply and install all anchor couplings, bends, fire hydrant extension, concrete blocking, restoration, granular drainage material, etc, needed to install the fire hydrant complete and ready for use as shown on the plans, and in accordance with the specifications and standard drawings. No additional payment will be made for rock excavation. Paid EACH (EA) when complete.

13. TAPPING SLEEVE & VALVE (ALL SIZES) Includes the specified ductile iron tapping sleeve and valve, polyethylene wrap, labor, equipment, pressure testing, hot tap, excavation, blocking, anchoring, disinfection, backfill, restoration, etc. to install the specified fitting at the locations shown on the plans in accordance with the specifications and standard drawing complete and ready for use. Mechanical joint side of the valves shall be restrained using restraint devices consisting of multiple gripping wedges incorporated into a follower gland compatible with all mechanical joints (Megalug Series 1100®, MJ Field Lok® or approved equal) Paid EACH (EA) when complete.
14. ADJUST EXISTING WATER VALVE BOX TO GRADE Includes all labor, equipment, valve box and valve stem extensions (if required), excavation, backfill, 2'x2'x4" concrete pad, restoration, etc. to adjust the top of the box to finished grade complete and ready for use. Paid EACH (EA) when complete.
15. RELOCATE FIRE HYDRANT: Includes allowing for Northern Kentucky Water District's Inspector to inspect the existing fire hydrant prior to reuse, returning unusable fire hydrants to the Northern Kentucky Water District Warehouse and picking up a replacement hydrant for use if the existing fire hydrant is determined unfit for reuse. Includes all labor, equipment, excavation, materials and backfill to relocate existing fire hydrant to valve, pipe, and anchoring tee as indicated on plans and on standard drawings contained in the plans. The pipe, valve and anchoring tee shall be paid under separate bid items when required. The Contractor to supply and install all anchoring couplings, fire hydrant extensions, concrete blocking, restoration, granular drainage material, etc. needed to install the fire hydrant complete and ready for use as shown on the plans, and in accordance with the specifications and standard drawings. No additional payment will be made for rock excavation. Paid EACH (EA) when complete.
16. PROPOSED METER PIT BOX Includes all labor, equipment, excavation, restoration, etc. to construction a new concrete water meter pit to the location shown on the plans or as directed, in accordance with the specifications and standard drawings of the Northern Kentucky Water District, complete and ready for use. The required new piping and valves will be paid under separate bid items. Paid EACH (EA) when complete.
17. PROPOSED METER PIT INTERNAL PIPING Includes all labor, equipment, new piping, valves, fittings, sleeves, couplings, blocking, anchoring, disinfection, and testing required to construct the meter pit internal piping arrangement as shown on the plans, and in accordance with the specifications and standard drawings of the Northern Kentucky Water District, complete and ready for use. Meter will be provided by NKWD. Paid EACH (EA) when complete.
18. PLUG AND BLOCK (ALL SIZES) This item shall include the specified plug and any labor, equipment, excavation, concrete, backfill and restoration required to install the plug and blocking at the location shown on the plans or as directed in accordance with the specifications. Paid EACH (EA) when complete.
19. P.V.C. DRAIN LINE (ALL SIZES) Includes all labor, equipment, P.V.C. drain line piping, fittings, couplings, blocking, backfill and anchoring required to construct the drain line piping as shown on the plans, and in accordance with the specifications, complete and ready for use. Paid LINEAR FEET (LF) when complete.