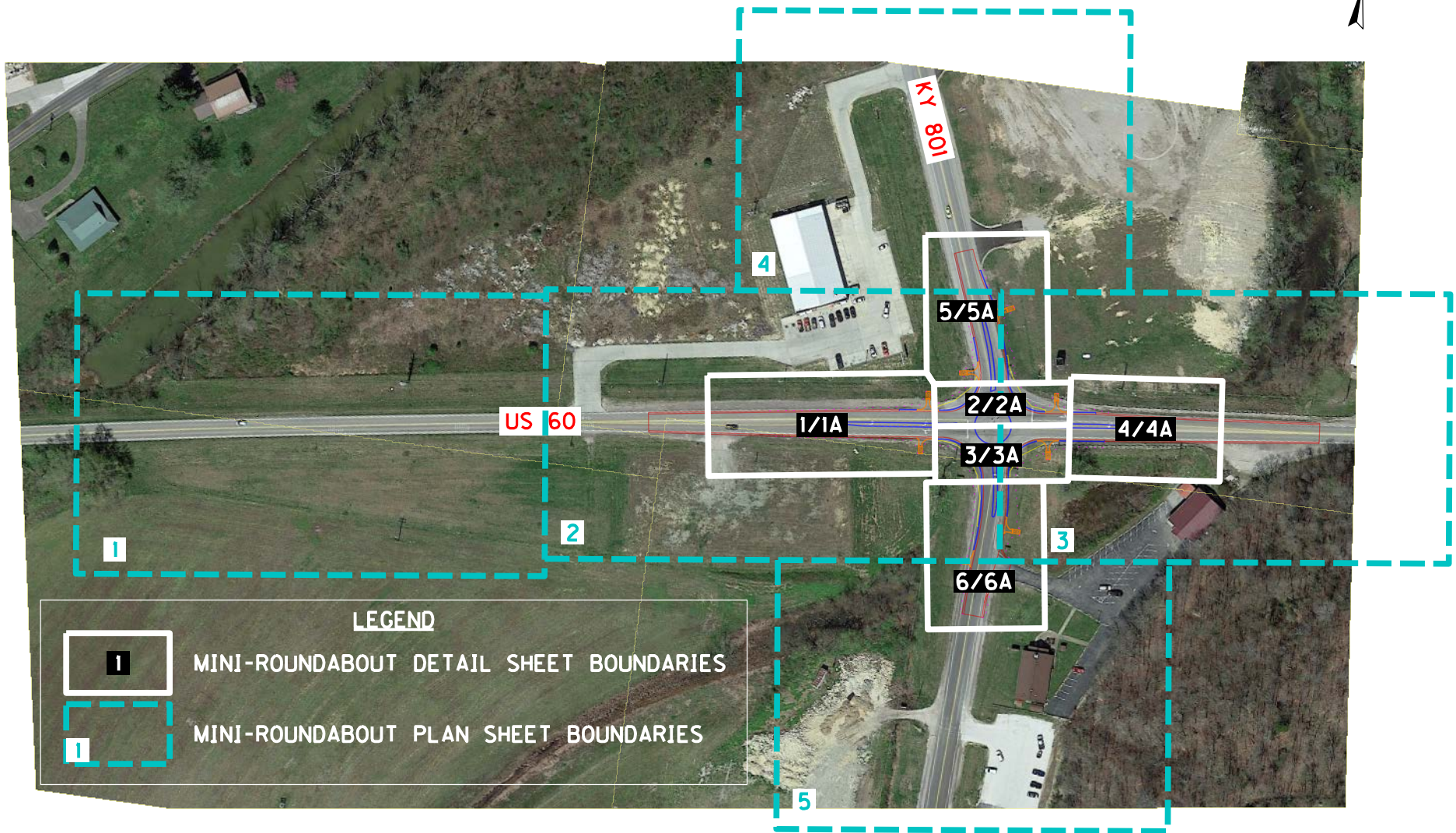
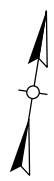


COUNTY OF	ITEM NO.
BATH/ ROWAN	9-9009.01



LEGEND

1

MINI-ROUNDABOUT DETAIL SHEET BOUNDARIES

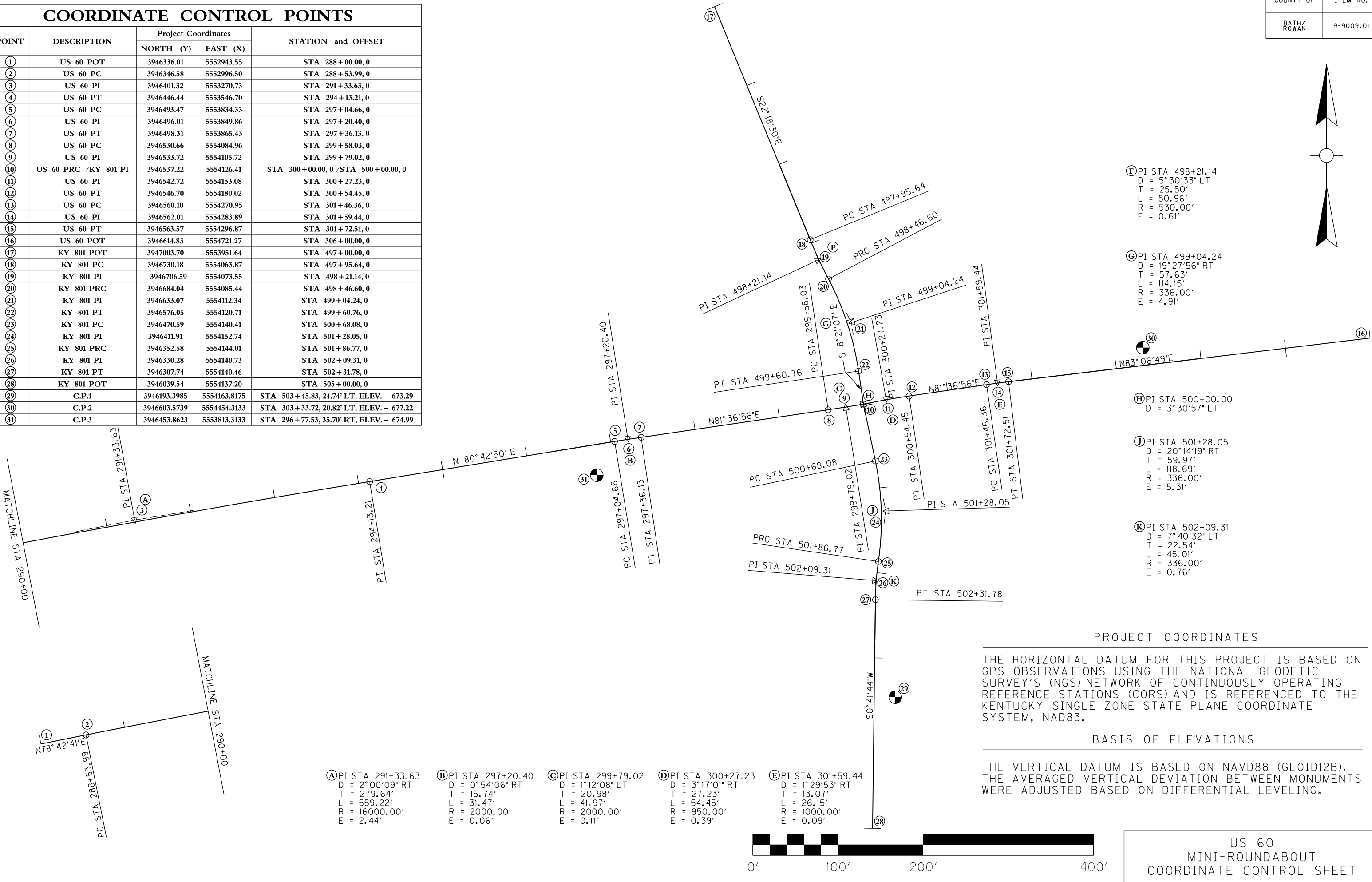
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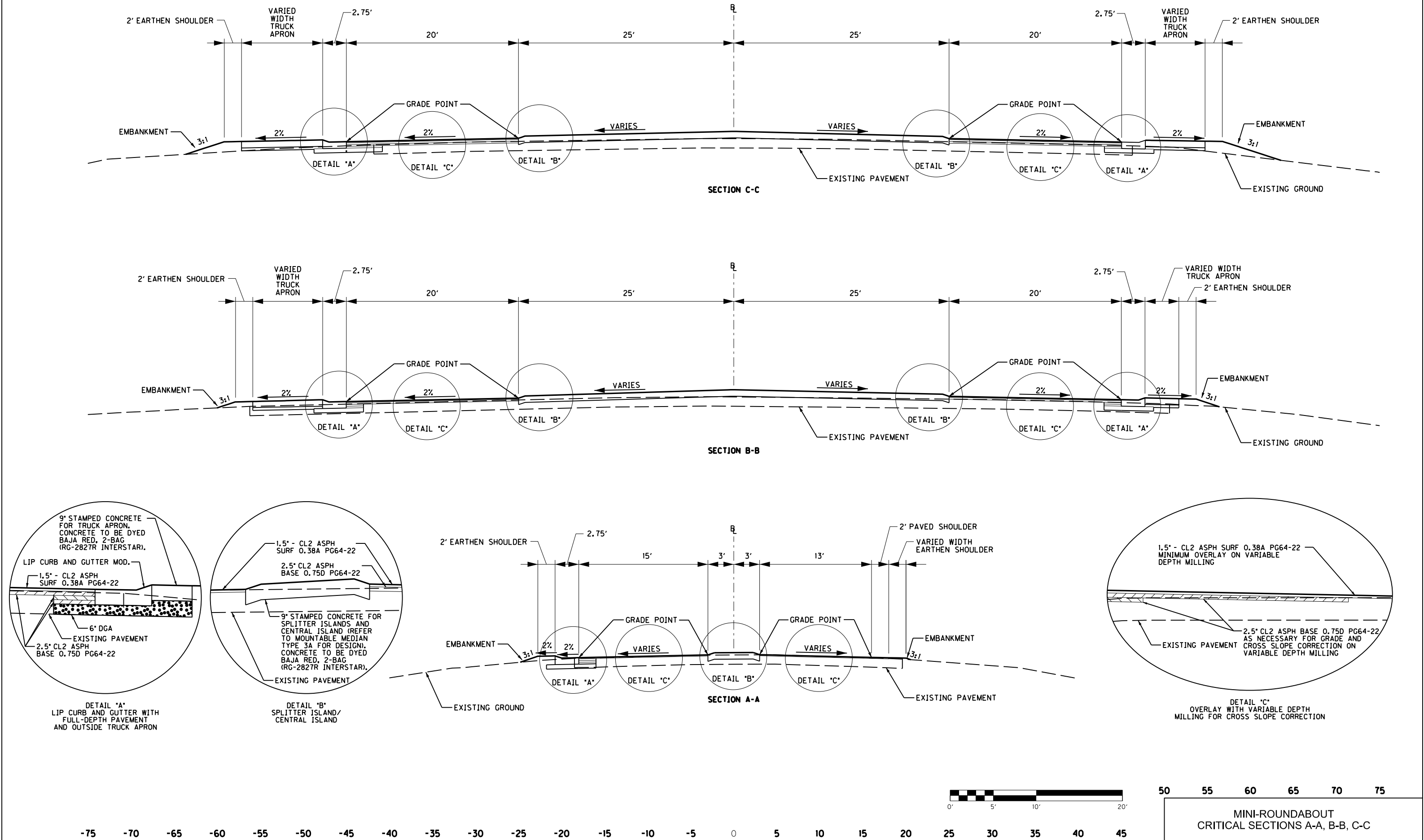
MINI-ROUNDABOUT PLAN SHEET BOUNDARIES

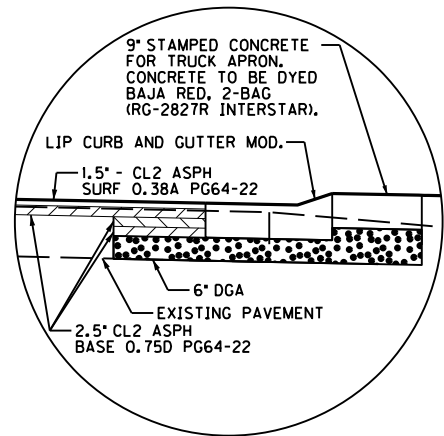
SCALE: 1"=200'

US 60 MINI-ROUNDABOUT
LAYOUT SHEET

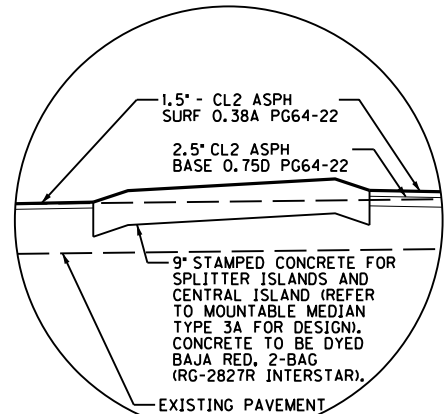
COORDINATE CONTROL POINTS				
POINT	DESCRIPTION	Project Coordinates		STATION and OFFSET
		NORTH (Y)	EAST (X)	
①	US 60 POT	3946336.01	5552943.55	STA 288+00.00, 0
②	US 60 PC	3946346.58	5552996.50	STA 288+53.99, 0
③	US 60 PI	3946401.32	5553270.73	STA 291+33.63, 0
④	US 60 PT	3946446.44	5553546.70	STA 294+13.21, 0
⑤	US 60 PC	3946493.47	5553834.33	STA 297+04.66, 0
⑥	US 60 PI	3946496.01	5553849.86	STA 297+20.40, 0
⑦	US 60 PT	3946498.31	5553865.43	STA 297+36.13, 0
⑧	US 60 PC	3946530.66	5554084.96	STA 299+58.03, 0
⑨	US 60 PI	3946533.72	5554105.72	STA 299+79.02, 0
⑩	US 60 PRC /KY 801 PI	3946537.22	5554126.41	STA 300+00.00, 0 /STA 500+00.00, 0
⑪	US 60 PI	3946542.72	5554153.08	STA 300+27.23, 0
⑫	US 60 PT	3946546.70	5554180.02	STA 300+54.45, 0
⑬	US 60 PC	3946560.10	5554270.95	STA 301+46.36, 0
⑭	US 60 PI	3946562.01	5554283.89	STA 301+59.44, 0
⑮	US 60 PT	3946563.57	5554296.87	STA 301+72.51, 0
⑯	US 60 POT	3946614.83	5554721.27	STA 306+00.00, 0
⑰	KY 801 POT	3947003.70	5553951.64	STA 497+00.00, 0
⑱	KY 801 PC	3946730.18	5554063.87	STA 497+95.64, 0
⑲	KY 801 PI	3946706.59	5554073.55	STA 498+21.14, 0
⑳	KY 801 PRC	3946684.04	5554085.44	STA 498+46.60, 0
㉑	KY 801 PI	3946633.07	5554112.34	STA 499+04.24, 0
㉒	KY 801 PT	3946576.05	5554120.71	STA 499+60.76, 0
㉓	KY 801 PC	3946470.59	5554140.41	STA 500+68.08, 0
㉔	KY 801 PI	3946411.91	5554152.74	STA 501+28.05, 0
㉕	KY 801 PRC	3946352.58	5554144.01	STA 501+86.77, 0
㉖	KY 801 PI	3946330.28	5554140.73	STA 502+09.31, 0
㉗	KY 801 PT	3946307.74	5554140.46	STA 502+31.78, 0
㉘	KY 801 POT	3946039.54	5554137.20	STA 505+00.00, 0
㉙	C.P.1	3946193.3985	5554163.8175	STA 503+45.83, 24.74' LT, ELEV. – 673.29
⑳	C.P.2	3946603.5739	5554454.3133	STA 303+33.72, 20.82' LT, ELEV. – 677.22
㉑	C.P.3	3946453.8623	5553813.3133	STA 296+77.53, 35.70' RT, ELEV. – 674.99



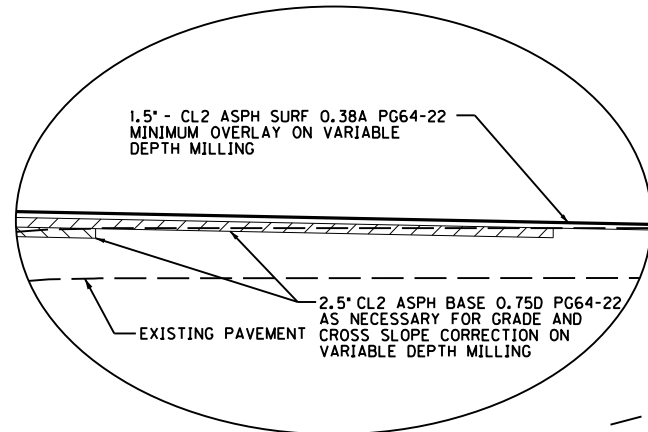




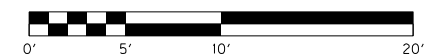
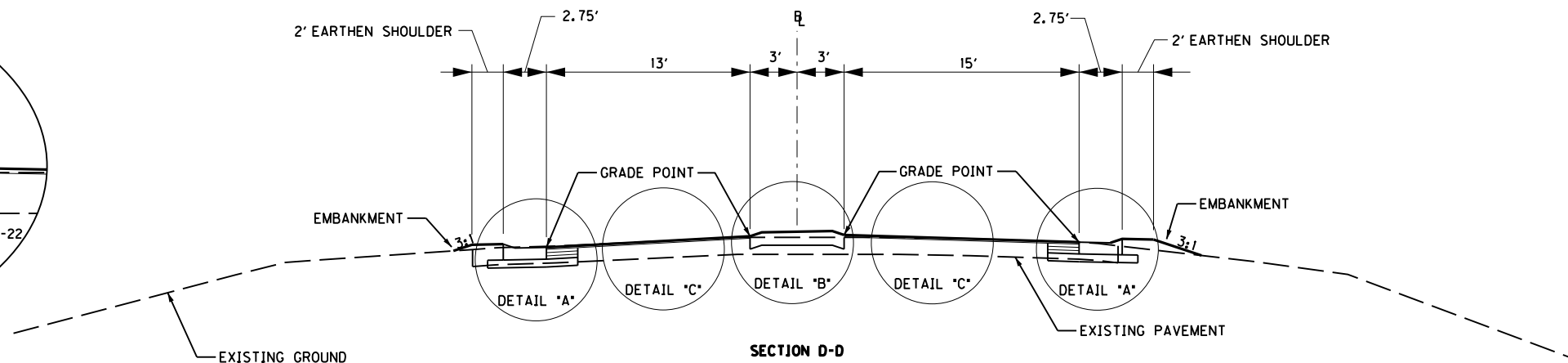
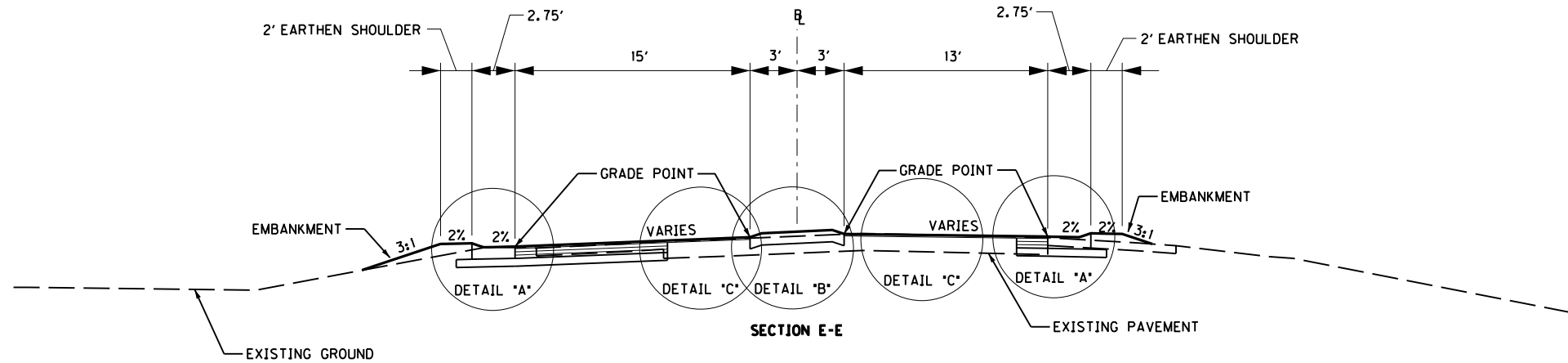
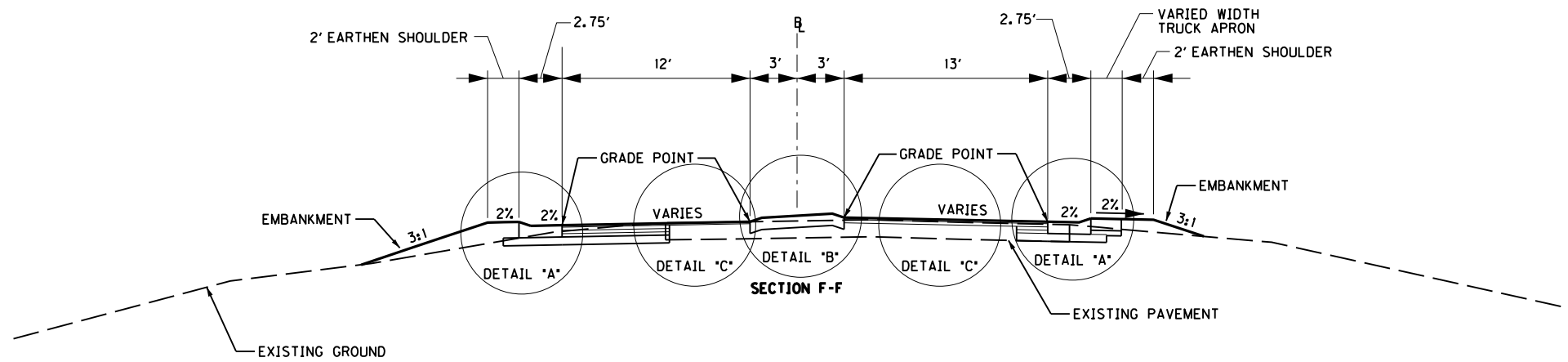
DETAIL "A"
LIP CURB AND GUTTER WITH
FULL-DEPTH PAVEMENT
AND OUTSIDE TRUCK APRON



DETAIL "B"
SPLITTER ISLAND/
CENTRAL ISLAND



DETAIL "C"
OVERLAY WITH VARIABLE DEPTH
MILLING FOR CROSS SLOPE CORRECTION



-75 -70 -65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40 45

50 55 60 65 70 75

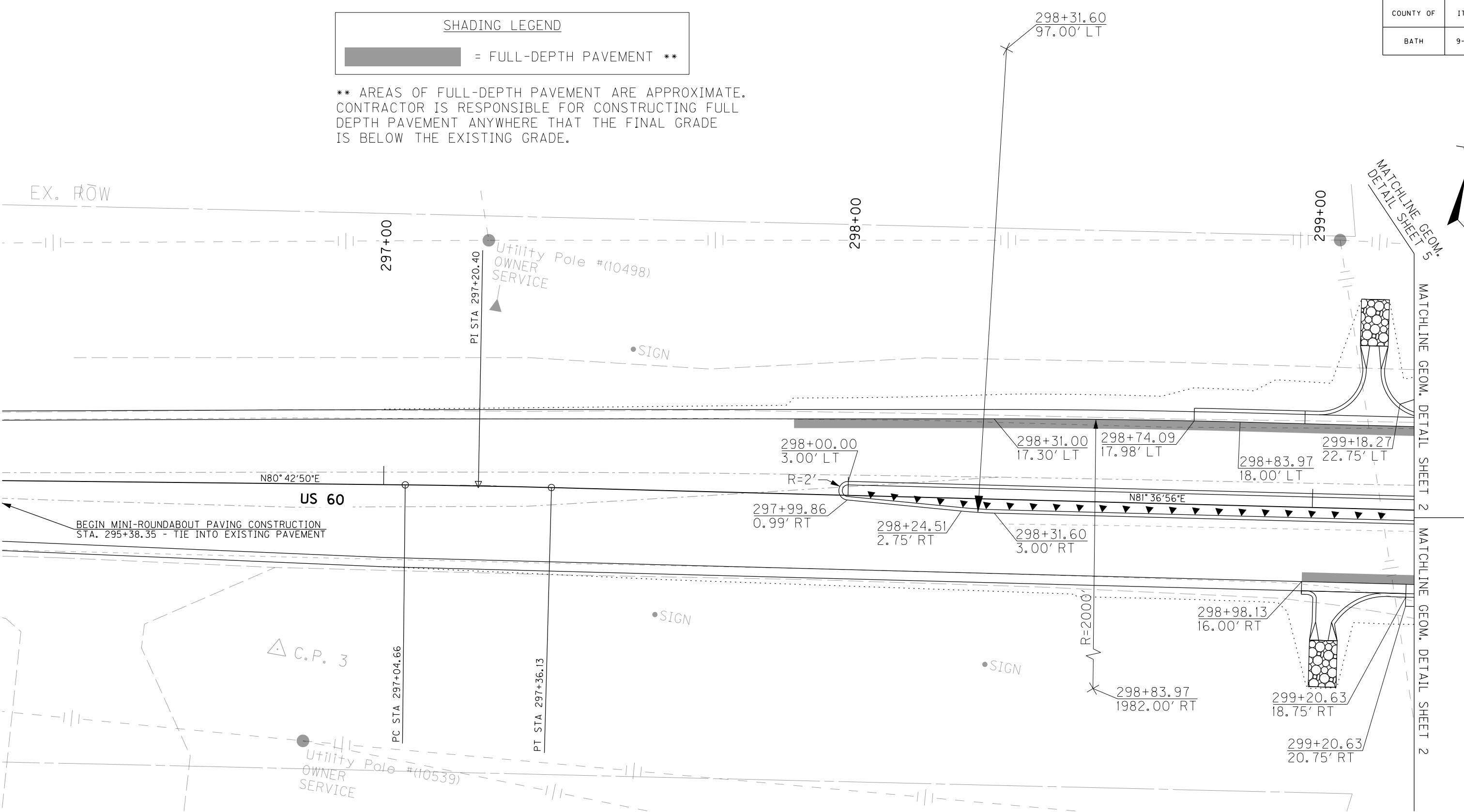
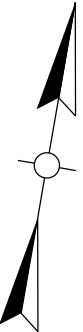
MINI-ROUNDABOUT
CRITICAL SECTIONS D-D, E-E, F-F

COUNTY OF	ITEM NO.
BATH	9-9009.01

SHADING LEGEND

= FULL-DEPTH PAVEMENT **

** AREAS OF FULL-DEPTH PAVEMENT ARE APPROXIMATE.
CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING FULL
DEPTH PAVEMENT ANYWHERE THAT THE FINAL GRADE
IS BELOW THE EXISTING GRADE.



SCALE: 1"=20'

CALL OUTS WITH RESPECT
TO US 60 ALIGNMENT

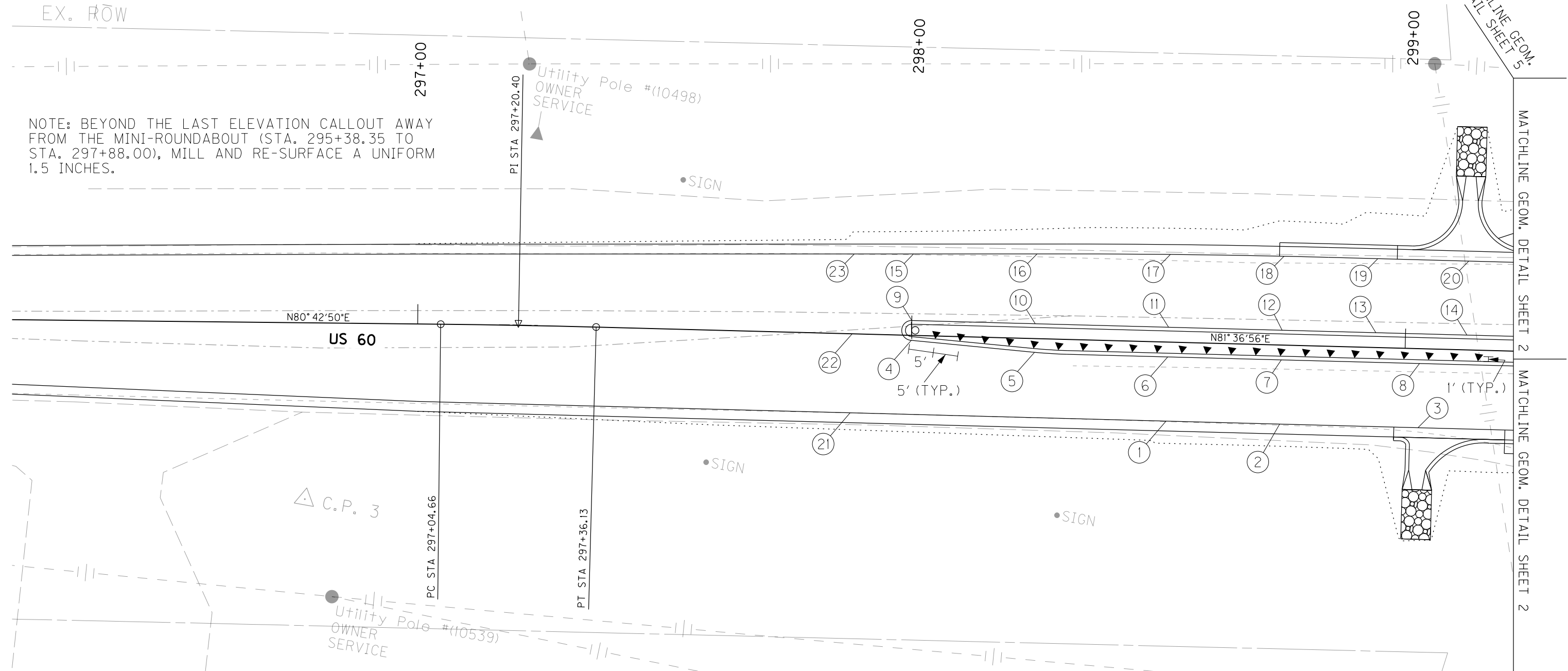
① 298+52.00 16.00' RT EXISTING	⑤ 298+25.00 2.78' RT 676.68'	⑨ 298+00.00 3.00' LT 676.60'	⑬ 298+94.00 3.00' LT 676.61'	⑰ 298+52.00 17.74' LT 676.26'	⑳ 297+88.00 16.00' RT EXISTING
② 298+75.00 16.00' RT 676.30'	⑥ 298+52.00 3.00' RT 676.58'	⑩ 298+25.00 3.00' LT 676.65'	⑭ 299+12.43 3.00' LT 676.61'	⑱ 298+75.00 17.98' LT 676.31'	㉒ 297+88.00 0.00' EXISTING
③ 299+03.00 16.00' RT 676.40'	⑦ 298+75.00 3.00' RT 676.73'	⑪ 298+52.00 3.00' LT 676.61'	⑮ 298+00.00 16.48' LT EXISTING	⑲ 298+94.00 18.00' LT 676.27'	㉓ 297+88.00 16.16' LT EXISTING
④ 298+00.00 1.01' RT 676.57'	⑧ 299+03.00 3.00' RT 676.63'	⑫ 298+75.00 3.00' LT 676.62'	⑯ 298+25.00 17.14' LT 676.13'	㉔ 299+12.43 18.00' LT 676.20'	

EX. ROW

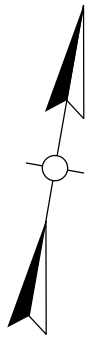
NOTE: BEYOND THE LAST ELEVATION CALLOUT AWAY
FROM THE MINI-ROUNDAABOUT (STA. 295+38.35 TO
STA. 297+88.00), MILL AND RE-SURFACE A UNIFORM
1.5 INCHES.

▼ PEXCO CITY POST LOCATIONS:

298+04.97 0.40' LT	298+34.91 1.25' RT	298+64.91 1.25' RT	298+94.91 1.25' RT
298+09.96 0.04' LT	298+39.91 1.25' RT	298+69.91 1.25' RT	298+99.91 1.25' RT
298+14.94 0.31' RT	298+44.91 1.25' RT	298+74.91 1.25' RT	299+04.91 1.25' RT
298+19.93 0.67' RT	298+49.91 1.25' RT	298+79.91 1.25' RT	299+09.91 1.25' RT
298+24.92 1.02' RT	298+54.91 1.25' RT	298+84.91 1.25' RT	299+14.91 1.25' RT
298+29.91 1.24' RT	298+59.91 1.25' RT	298+89.91 1.25' RT	



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BATH	9-9009.01



MATCHLINE GEOM. DETAIL SHEET 2
MATCHLINE GEOM. DETAIL SHEET 2

SCALE: 1"=20'

US 60 MINI-ROUNDAABOUT
ELEVATION DETAIL SHEET - 1A

- ① 299+32.09
16.00' RT

② 299+67.68
31.06' RT

③ 299+70.55
33.81' RT

④ 500+68.39
16.00' RT

⑤ 500+69.09
15.00' LT

⑥ 300+68.76
18.00' RT

⑦ 299+42.74
3.00' RT

⑧ 299+52.95
3.79' RT

⑨ 299+54.04
2.45' RT

⑩ 300+48.06
3.19' RT

⑪ 300+49.15
3.82' RT

⑫ 300+59.63
3.00' RT

⑬ 500+54.93
3.26' RT

⑭ 500+49.05
3.76' RT

⑮ 500+47.98
3.10' RT

⑯ 500+47.08
3.77' LT

⑰ 500+59.59
2.89' LT

⑱ 299+32.09
20.75' RT

⑲ 299+50.00
24.44' RT

⑳ 299+63.74
36.60' RT

㉑ 500+49.02
30.12' RT

㉒ 500+65.54
23.84' RT

㉓ 500+69.09
17.75' LT

㉔ 500+69.09
19.75' LT

㉕ 500+62.18
20.31' LT

㉖ 300+35.08
42.07' RT

㉗ 300+69.55
24.26' RT

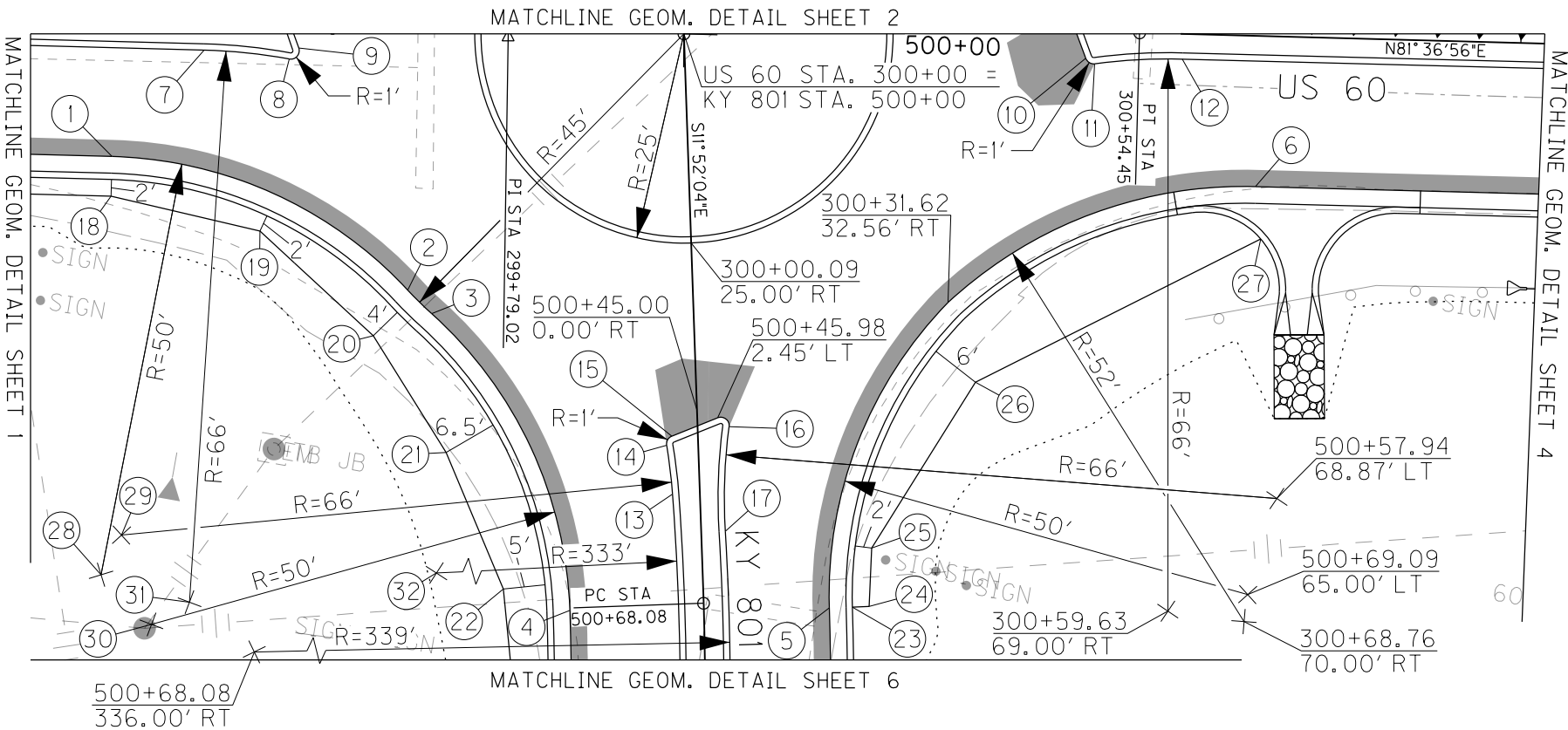
㉘ 299+32.09
66.00' RT

㉙ 500+57.53
69.21' RT

㉚ 500+68.39
66.00' RT

㉛ 299+42.74
69.00' RT

㉜ 500+68.08
336.00' RT

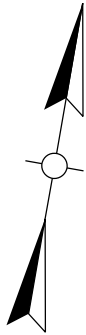


SHADING LEGEND

= FULL-DEPTH PAVEMENT **

** AREAS OF FULL DEPTH PAVEMENT ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING FULL DEPTH PAVEMENT ANYWHERE THAT THE FINAL GRADE IS BELOW THE EXISTING GRADE.

COUNTY OF	ITEM NO.
BATH	9-9009.01



CALL OUTS WITH RESPECT
TO US 60 ALIGNMENT

- 1

300+00.00
0.00'
677.42'
- 2

299+76.98
9.62' RT
676.91'
- 3

299+82.47
17.75' RT
676.64'
- 4

299+90.55
23.12' RT
676.33'
- 5

300+00.09
25.00' RT
676.21'
- 6

300+09.08
23.33' RT
676.31'
- 7

300+17.29
18.21' RT
676.61'
- 8

300+22.37
11.42' RT
676.85'
- 9

300+24.83
3.29' RT
676.93'
- 10

299+58.73
17.51' RT
676.51'
- 11

299+68.67
32.06' RT
676.24'
- 12

299+83.14
41.65' RT
675.93'
- 13

300+16.69
41.94' RT
675.91'
- 14

300+31.62
32.56' RT
676.20'
- 15

300+40.66
20.18' RT
676.45'
- 16

300+44.80
5.45' RT
676.53'
- 17

299+25.00
16.00' RT
676.51'
- 18

299+40.16
16.66' RT
676.57'
- 19

299+56.17
22.18' RT
676.48'
- 20

300+49.40
21.68' RT
676.42'
- 21

300+73.96
18.00' RT
676.34'
- 22

301+00.00
18.00' RT
676.43'
- 23

299+25.00
3.00' RT
676.61'
- 24

299+42.39
3.00' RT
676.60'
- 25

299+52.95
3.79' RT
676.59'
- 26

300+49.15
3.82' RT
676.72'
- 27

300+73.96
3.00' RT
676.89'
- 28

301+00.00
3.00' RT
676.93'

CALL OUTS WITH RESPECT
TO KY 801 ALIGNMENT

- 29

500+44.99
0.82' RT
675.81'
- 30

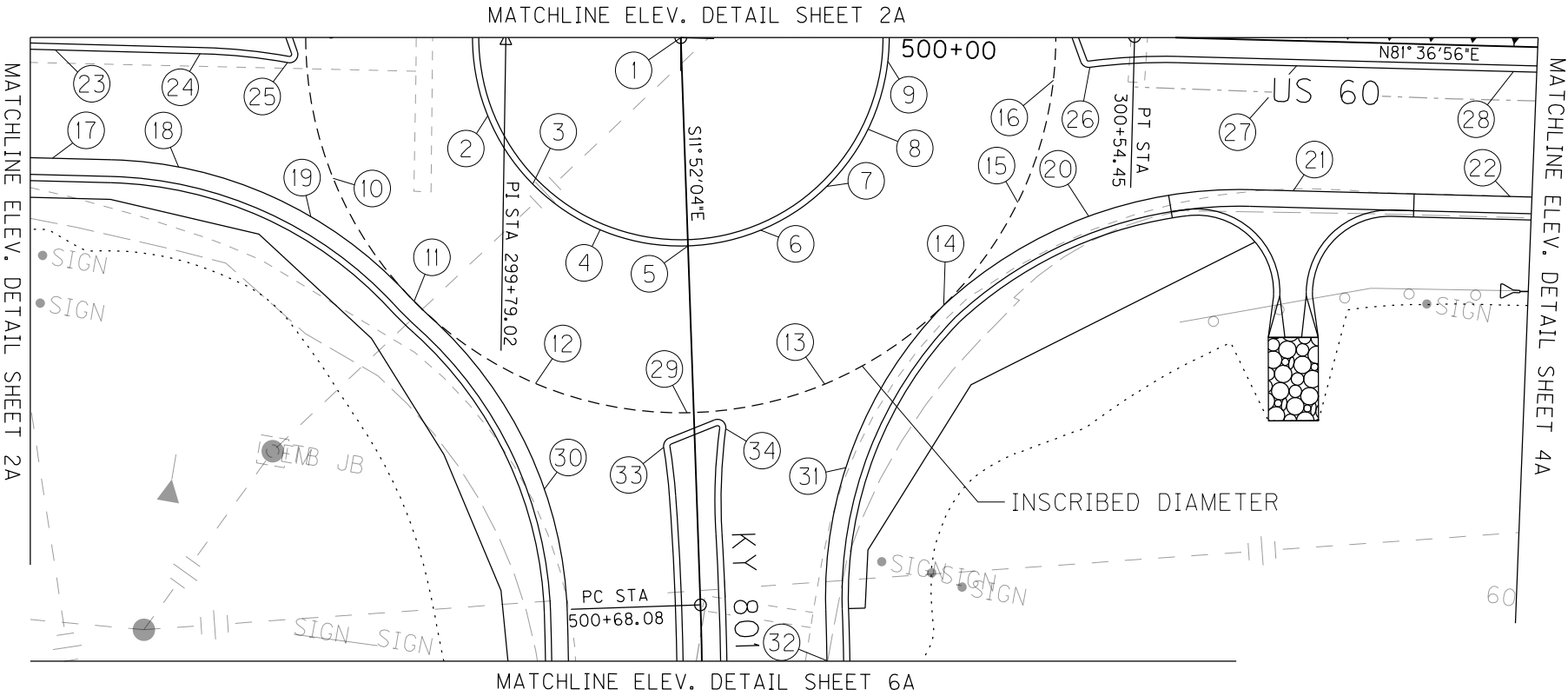
500+53.54
18.24' RT
675.73'
- 31

500+52.24
17.99' LT
675.72'
- 32

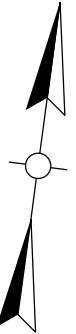
500+75.00
15.00' LT
675.35'
- 33

500+49.05
3.76' RT
675.81'
- 34

500+47.08
3.77' LT
675.80'



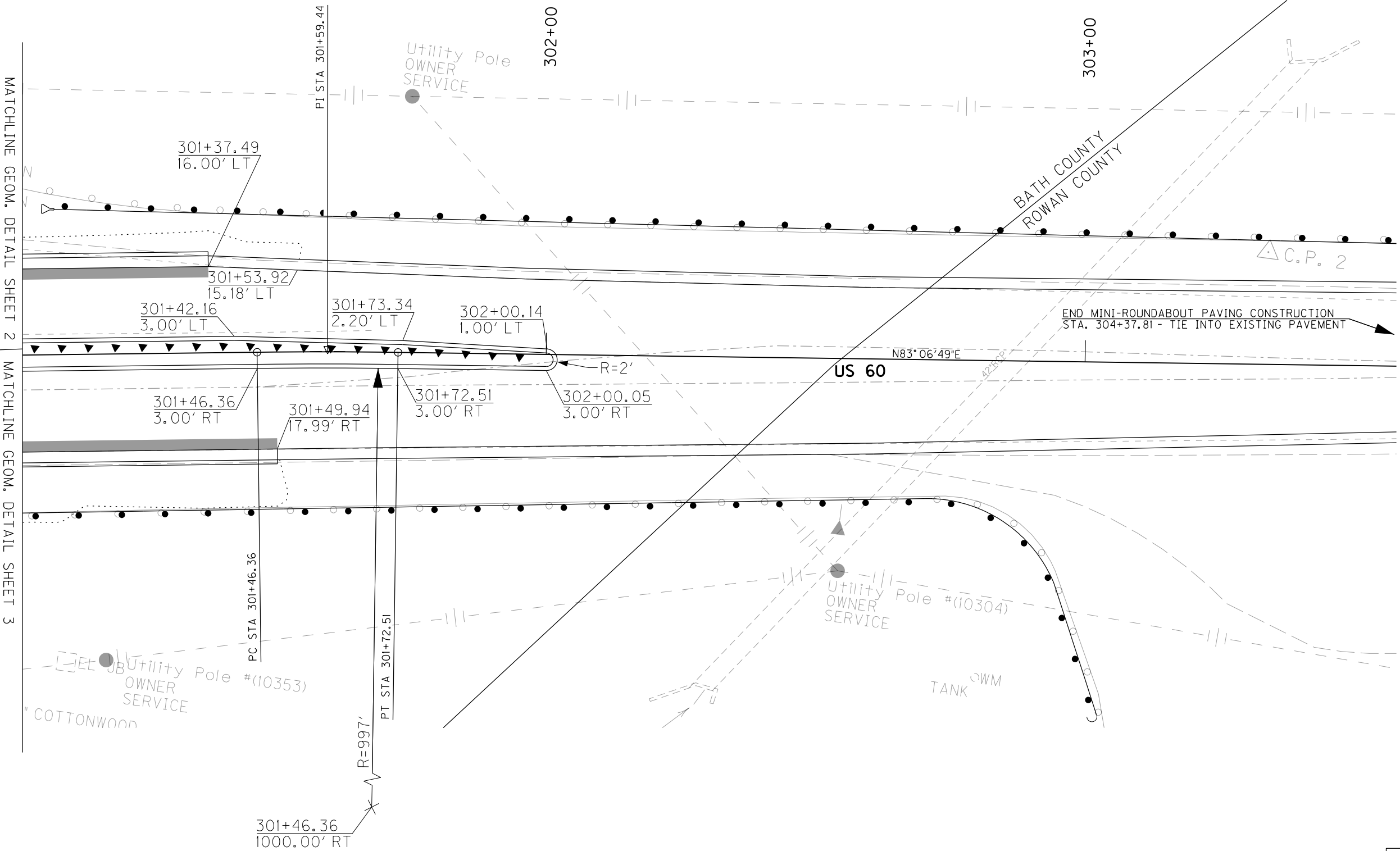
COUNTY OF	ITEM NO.
BATH/ ROWAN	9-9009.01



SHADING LEGEND

 = FULL-DEPTH PAVEMENT **

** AREAS OF FULL DEPTH PAVEMENT ARE APPROXIMATE.
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DEPTH PAVEMENT ANYWHERE THAT THE FINAL GRADE
IS BELOW THE EXISTING GRADE.



SCALE: 1"=20'

US 60 MINI-ROUNDABOUT
GEOMETRIC DETAIL SHEET - 4

COUNTY OF	ITEM NO.
BATH/ ROWAN	9-9009.01

CALL OUTS WITH RESPECT
TO US 60 ALIGNMENT

NOTE: BEYOND THE LAST ELEVATION CALLOUT AWAY
FROM THE MINI-ROUNDAABOUT (STA. 302+12.05 TO
STA. 304+37.81), MILL AND RE-SURFACE A UNIFORM
1.5 INCHES.

- ① 301+25.00
18.00' RT
676.56'

② 301+48.17
18.00' RT
EXISTING

③ 301+25.00
3.00' RT
676.89'

④ 301+48.17
3.00' RT
676.83'

⑤ 301+75.00
3.00' RT
676.99'

⑥ 302+00.00
3.00' RT
677.27'

⑦ 301+25.00
3.00' LT
676.80'

⑧ 301+48.17
2.78' LT
676.83'
- ⑨ 301+75.00
2.12' LT
676.95'

⑩ 302+00.00
1.00' LT
677.24'

⑪ 301+25.00
16.00' LT
676.27'

⑫ 301+48.17
15.45' LT
EXISTING

⑬ 302+12.05
16.76' RT
EXISTING

⑭ 302+12.05
0.00' RT
EXISTING

⑮ 302+12.05
13.77' LT
EXISTING

▼ PEXCO CITY POST LOCATIONS:

- 301+05.12
1.25' LT

301+10.12
1.25' LT

301+15.12
1.25' LT

301+20.12
1.25' LT

301+25.12
1.25' LT

301+30.12
1.25' LT

301+35.12
1.25' LT

301+40.12
1.25' LT

301+45.12
1.14' LT
- 301+50.11
0.96' LT

301+65.09
0.57' LT

301+70.09
0.49' LT

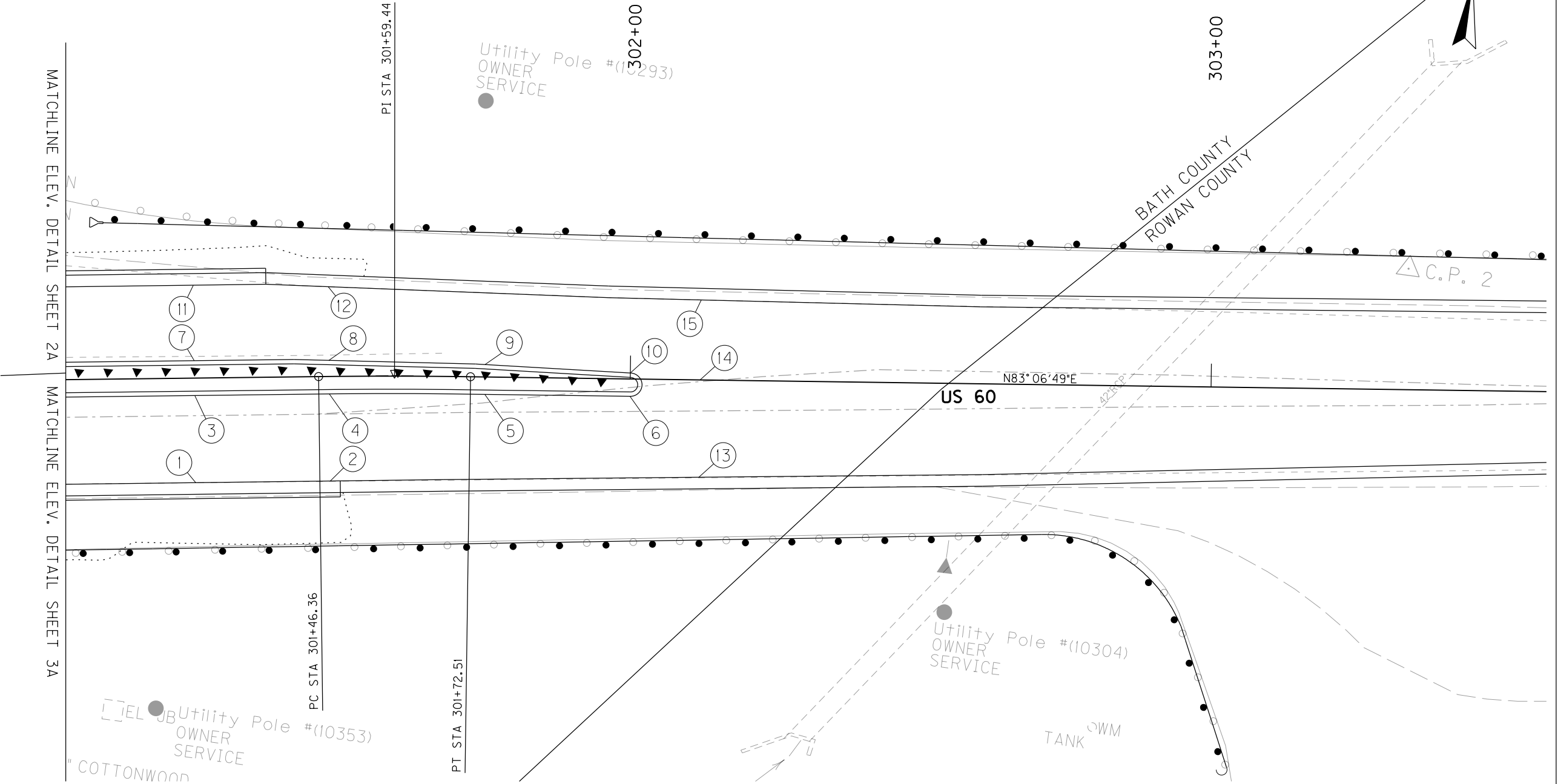
301+75.09
0.37' LT

301+80.08
0.14' LT

301+85.08
0.08' RT

301+90.07
0.30' RT

301+95.07
0.53' RT



SCALE: 1"=20'

US 60 MINI-ROUNDAABOUT
ELEVATION DETAIL SHEET - 4A

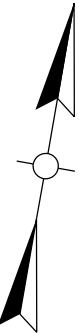
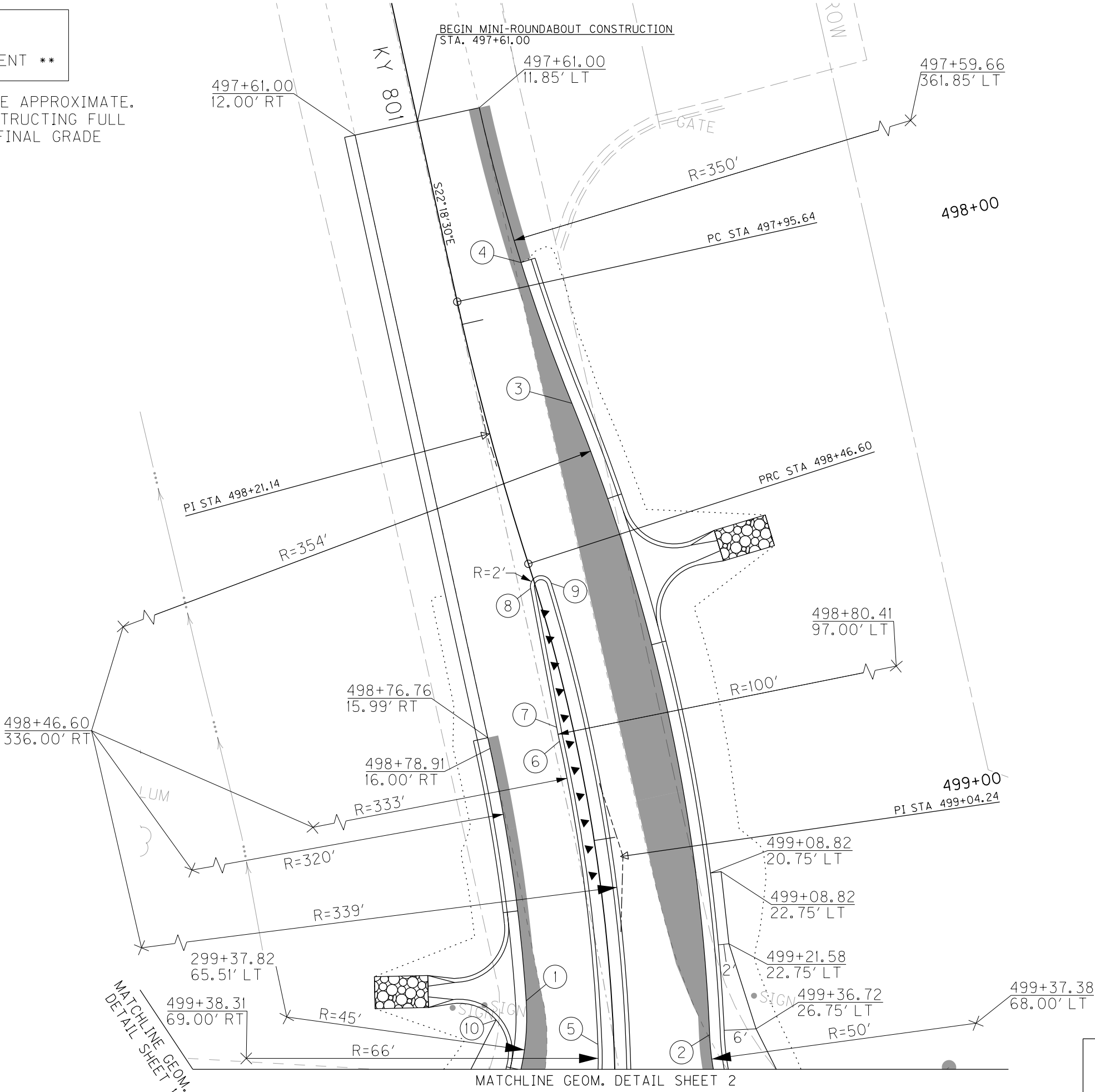
COUNTY OF	ITEM NO.
BATH	9-9009.01

SHADING LEGEND

= FULL-DEPTH PAVEMENT **

** AREAS OF FULL DEPTH PAVEMENT ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING FULL DEPTH PAVEMENT ANYWHERE THAT THE FINAL GRADE IS BELOW THE EXISTING GRADE.

- ① 499+29.20
16.00' RT
- ② 499+37.38
18.00' LT
- ③ 498+19.63
16.37' LT
- ④ 497+91.04
13.26' LT
- ⑤ 499+38.31
3.00' RT
- ⑥ 498+80.41
3.00' RT
- ⑦ 498+77.73
2.95' RT
- ⑧ 498+51.12
0.99' RT
- ⑨ 498+51.34
3.00' LT
- ⑩ 499+32.58
21.86' RT



CALL OUTS WITH RESPECT
TO KY 801 ALIGNMENT

- | | |
|--------------------------------------|--------------------------------------|
| ① 497+74.90
12.18' LT
EXISTING | ⑫ 498+53.82
1.28' RT
675.95' |
| ② 498+00.00
14.15' LT
675.40' | ⑬ 498+75.00
2.85' RT
675.96' |
| ③ 498+25.00
16.96' LT
675.17' | ⑭ 499+00.00
3.00' RT
675.99' |
| ④ 498+53.82
18.00' LT
674.99' | ⑮ 499+26.76
3.00' RT
675.89' |
| ⑤ 498+75.00
18.00' LT
675.07' | ⑯ 498+53.82
15.11' RT
EXISTING |
| ⑥ 499+00.00
18.00' LT
675.20' | ⑰ 498+75.00
15.98' RT
675.77' |
| ⑦ 499+25.00
18.00' LT
675.35' | ⑱ 499+00.00
16.00' RT
675.68' |
| ⑧ 498+53.82
3.00' LT
675.82' | ⑲ 499+26.76
16.00' RT
675.58' |
| ⑨ 498+75.00
3.00' LT
675.71' | ⑳ 497+74.90
0.00' RT
EXISTING |
| ⑩ 499+00.00
3.00' LT
675.73' | ㉑ 498+39.35
0.00' RT
EXISTING |
| ⑪ 499+25.00
3.00' LT
675.75' | ㉒ 498+39.35
13.85' RT
EXISTING |

▼ PEXCO CITY
POST LOCATIONS:

- | | |
|-----------------------|-----------------------|
| 498+56.28
0.22' LT | 498+86.30
1.25' RT |
| 498+61.26
0.23' RT | 498+91.32
1.25' RT |
| 498+66.25
0.61' RT | 498+96.34
1.25' RT |
| 498+71.25
0.92' RT | 499+01.35
1.25' RT |
| 498+76.26
1.15' RT | 499+06.37
1.25' RT |
| 498+81.28
1.25' RT | |

NOTE: BEYOND THE LAST ELEVATION CALLOUT
AWAY FROM THE MINI-ROUNDAABOUT (LT.
STA. 497+61.00 TO STA. 497+74.90 AND RT.
STA. 497+61.00 TO STA. 498+39.35), MILL AND
RE-SURFACE A UNIFORM 1.5 INCHES.



COUNTY OF	ITEM NO.
BATH	9-9009.01

SCALE: 1"=20'

US 60 MINI-ROUNDAABOUT
ELEVATION DETAIL SHEET - 5A

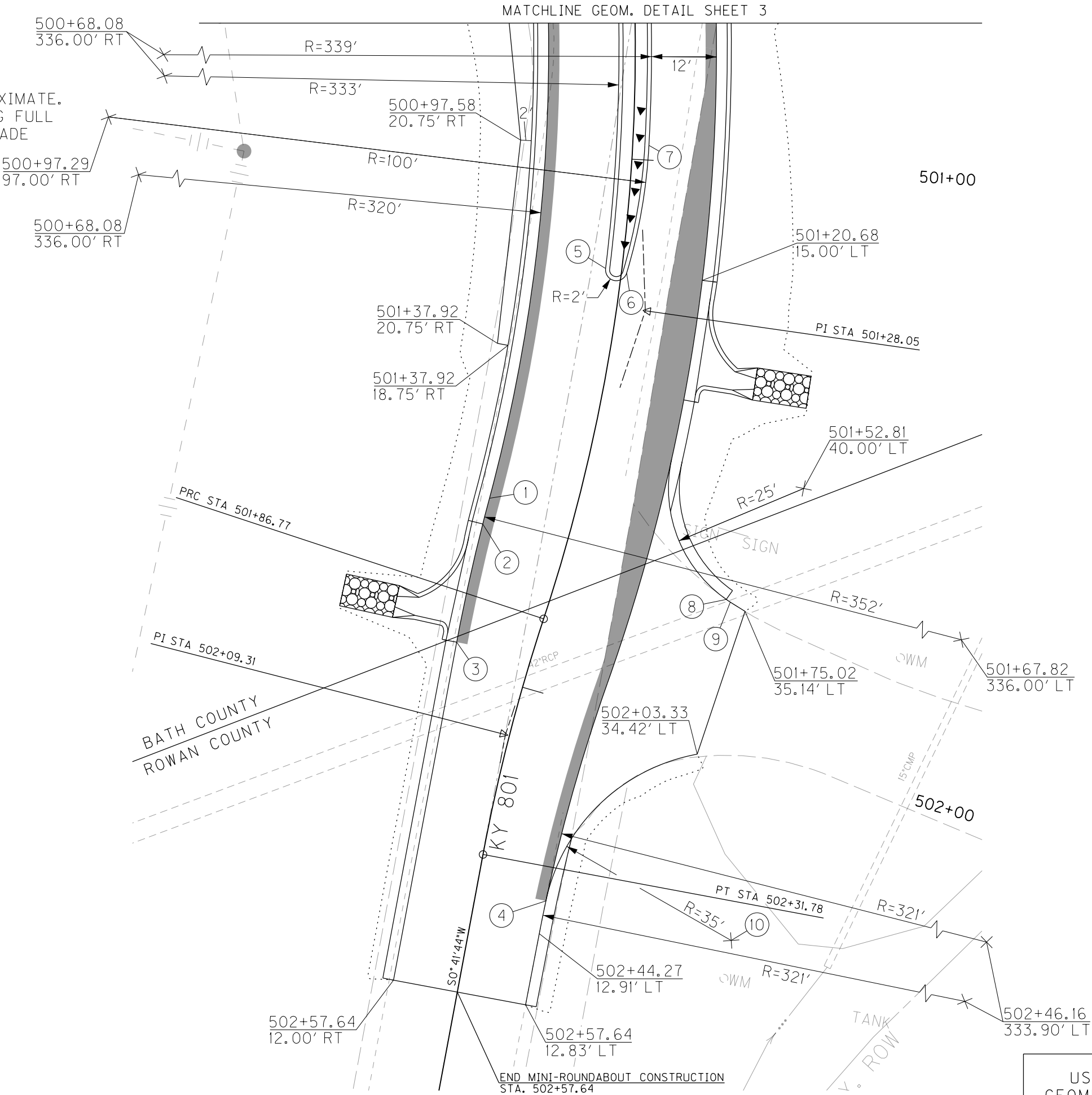
COUNTY OF	ITEM NO.
BATH/ ROWAN	9-9009.01

SHADING LEGEND

= FULL-DEPTH PAVEMENT **

** AREAS OF FULL DEPTH PAVEMENT ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING FULL DEPTH PAVEMENT ANYWHERE THAT THE FINAL GRADE IS BELOW THE EXISTING GRADE.

- ① 501+67.82
16.00' RT
- ② 501+72.99
15.93' RT
- ③ 501+95.54
14.03' RT
- ④ 502+38.09
13.00' LT
- ⑤ 501+20.68
3.00' RT
- ⑥ 501+21.02
0.97' LT
- ⑦ 500+97.29
3.00' LT
- ⑧ 501+73.97
31.19' LT
- ⑨ 501+74.31
32.39' LT
- ⑩ 502+38.97
47.99' LT



CALL OUTS WITH RESPECT
TO KY 801 ALIGNMENT

- | | |
|--------------------------------------|--|
| ① 500+75.00
16.00' RT
675.52' | ①⑨ 502+50.00
0.00'
674.86' |
| ② 501+00.00
16.00' RT
675.40' | ②⑩ 502+57.64
0.00'
EXISTING |
| ③ 501+25.00
16.00' RT
675.28' | ②⑪ 501+00.00
15.00' LT.
675.18' |
| ④ 501+37.00
16.00' RT
675.22' | ②⑫ 501+25.00
15.00' LT
675.05' |
| ⑤ 501+50.00
16.00' RT
675.16' | ②⑬ 501+37.00
15.00' LT
674.99' |
| ⑥ 501+75.00
15.86' RT
675.03' | ②⑭ 501+50.00
15.00' LT
674.96' |
| ⑦ 502+00.00
13.56' RT
674.83' | ②⑮ 501+75.00
15.00' LT.
674.79' |
| ⑧ 502+25.00
12.07' RT
674.61' | ②⑯ 502+00.00
14.60' LT.
674.69' |
| ⑨ 502+50.00
12.00' RT
674.53' | ②⑰ 502+25.00
13.52' LT.
674.66' |
| ⑩ 502+57.64
12.00' RT
EXISTING | ②⑱ 502+50.00
12.87' LT.
674.64' |
| ⑪ 500+75.00
3.00' RT
675.77' | ②⑲ 502+57.64
12.83' LT.
EXISTING |
| ⑫ 501+00.00
3.00' RT
675.66' | ③⑩ 500+75.00
3.00' LT
675.57' |
| ⑬ 501+25.00
3.00' RT
675.54' | ③⑪ 501+00.00
3.00' LT.
675.40' |
| ⑭ 501+37.00
3.00' RT
675.48' | ③⑫ 501+25.00
35.14' LT.
673.46' |
| ⑮ 501+50.00
3.00' RT
675.42' | ③⑬ 502+03.33
34.42' LT.
673.69' |
| ⑯ 501+75.00
3.00' RT
675.28' | |
| ⑰ 502+00.00
1.54' RT
675.09' | |
| ⑱ 502+25.00
0.13' RT
674.95' | |

▼ PEXCO CITY
POST LOCATIONS:

501+15.78
0.00' LT

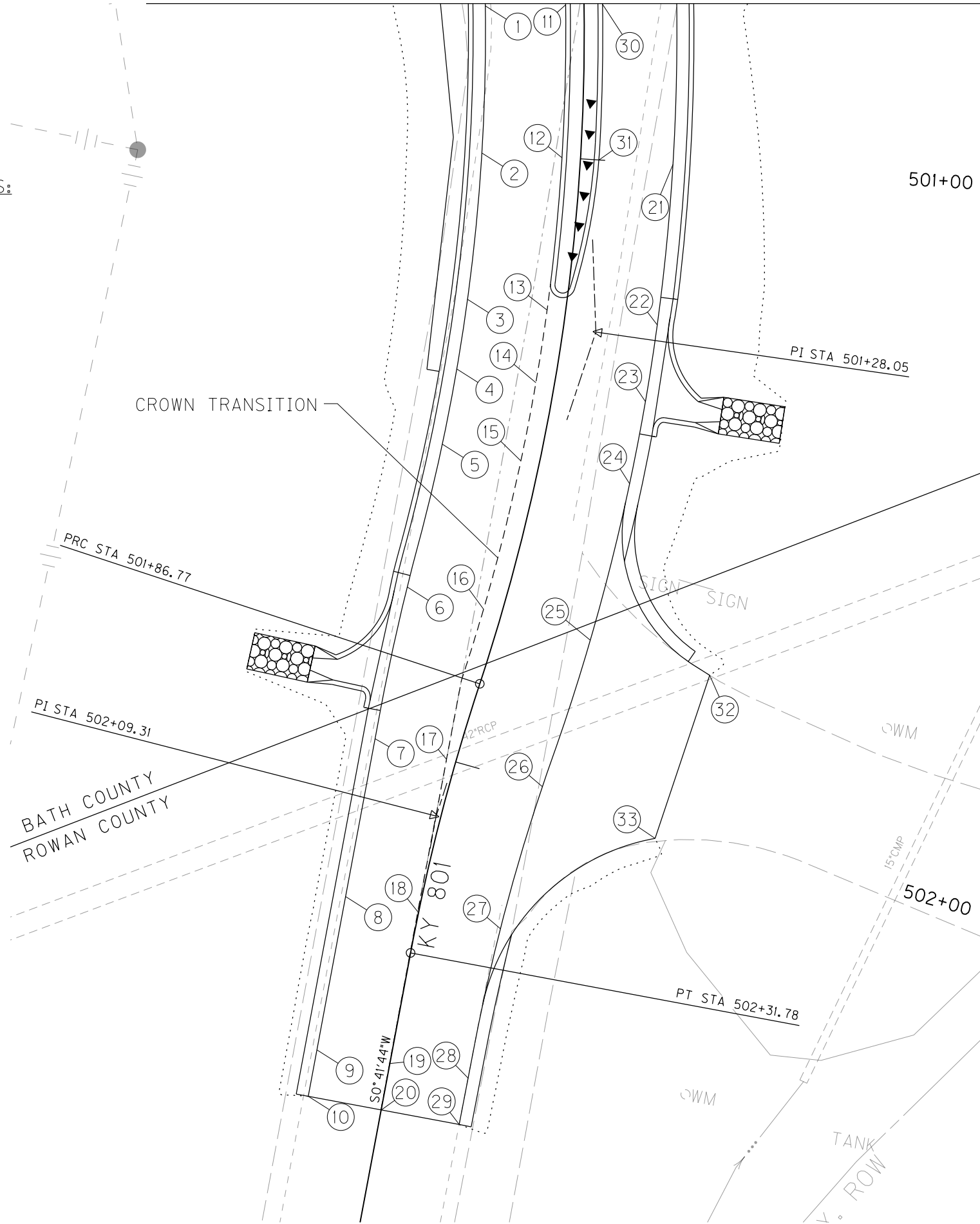
501+10.81
0.58' LT

501+05.84
0.98' LT

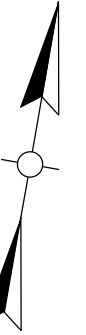
501+00.86
1.20' LT

500+95.88
1.24' LT

500+90.90
1.25' LT

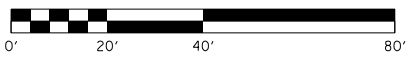
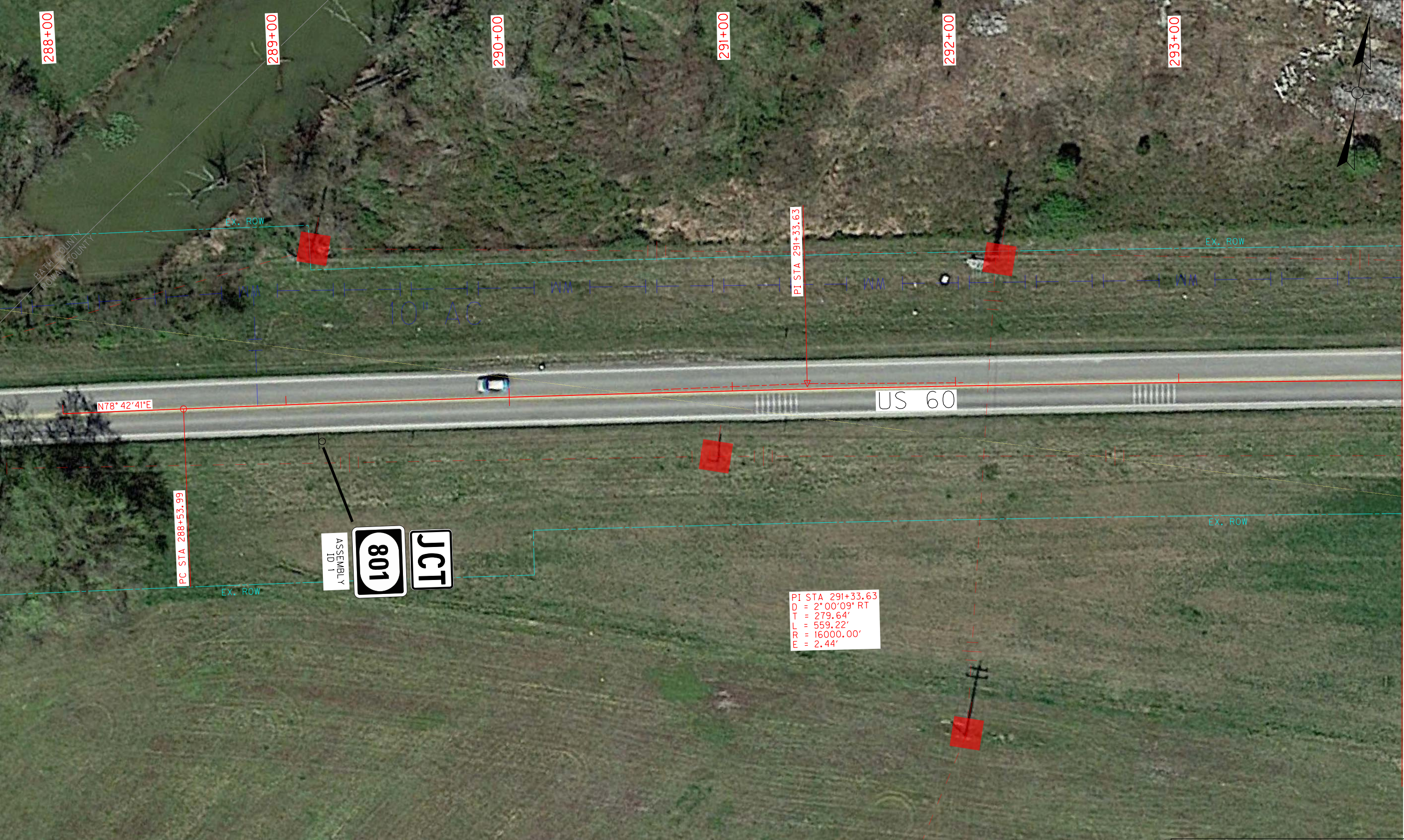


COUNTY OF	ITEM NO.
BATH/ ROWAN	9-9009.01



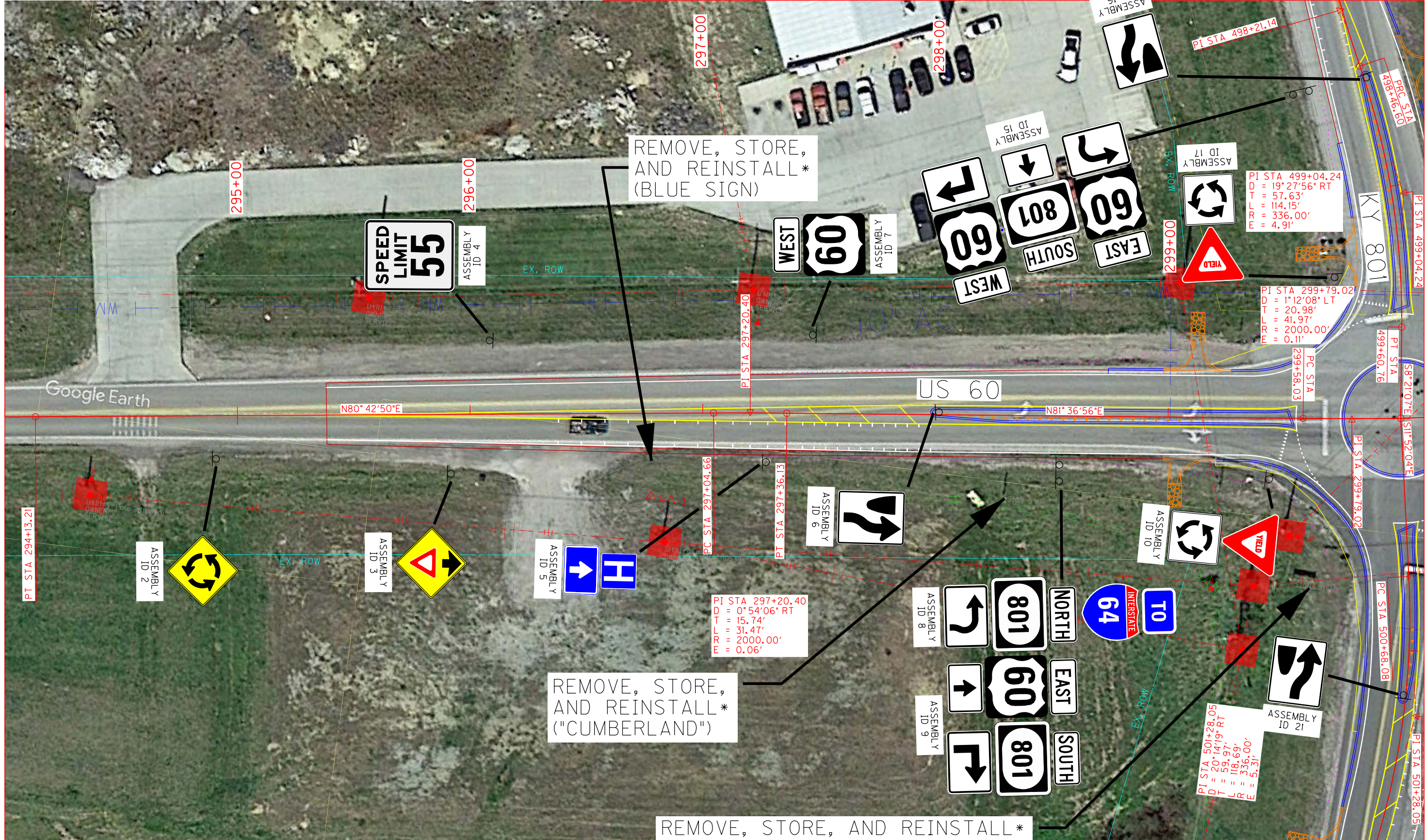
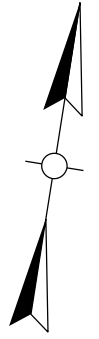
SCALE: 1"=20'

US 60 MINI-ROUNDAABOUT
ELEVATION DETAIL SHEET - 6A



PI STA 498+21.14
D = 5°30'33" LT
T = 25.50'
L = 50.96'
R = 530.00'
E = 0.61'

MATCHLINE STA. 498+17



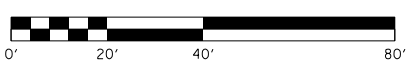
MATCHLINE STA. 294+00

MATCHLINE STA. 300+10

*REMOVE, STORE, AND REINSTALL SIGNS AT THE DISCRETION OF THE ENGINEER.

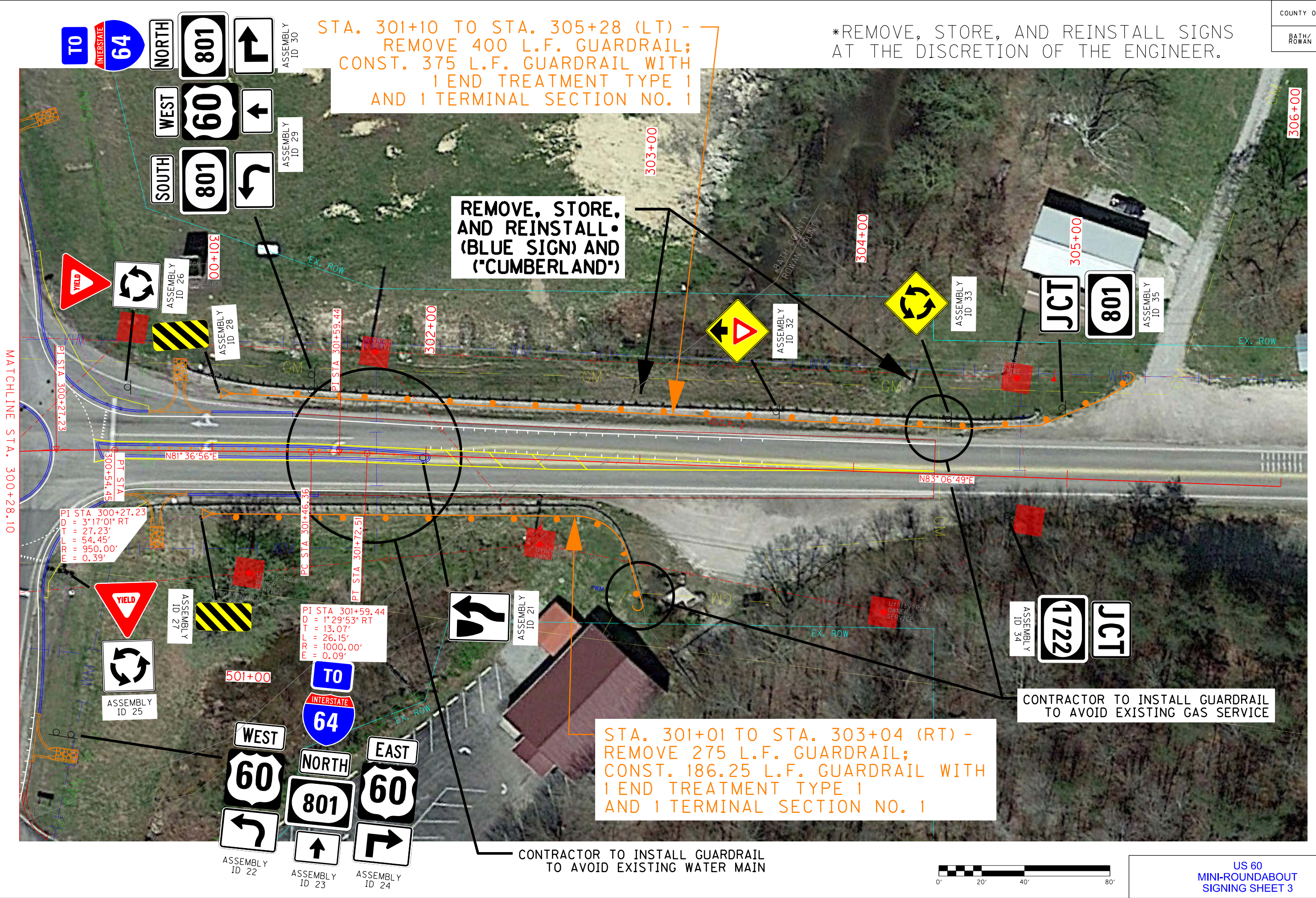
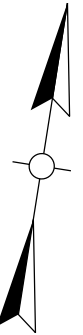
REMOVE, STORE, AND REINSTALL * ("LAKEVIEW COMMUNITY CHURCH")

REMOVE, STORE, AND REINSTALL * ("CUMBERLAND")



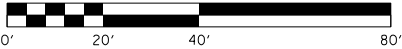
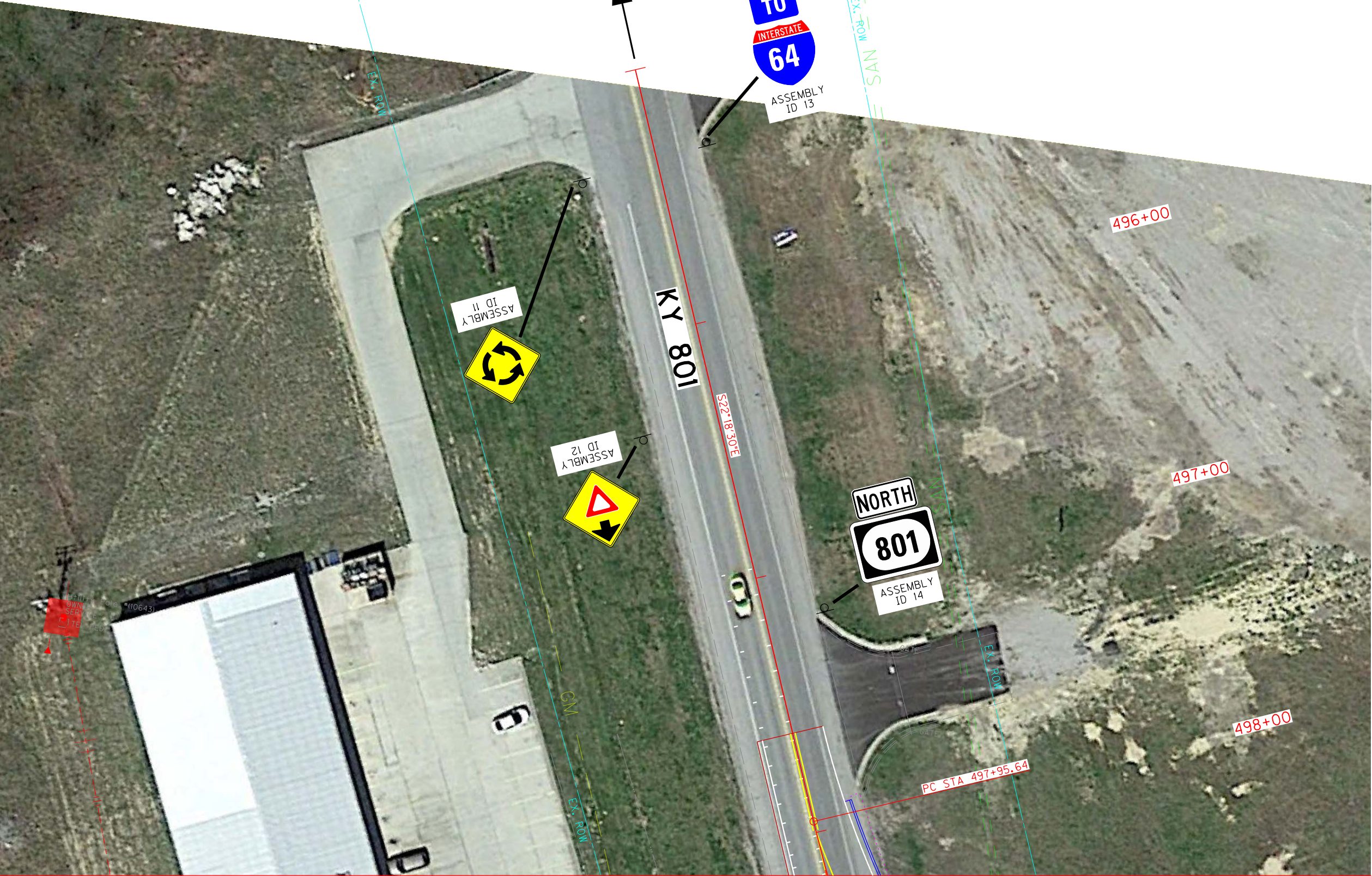
MATCHLINE STA. 501+83

US 60
MINI-ROUNDABOUT
SIGNING SHEET 2

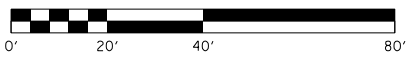


COUNTY OF	ITEM NO.
BATH	9-9009.01

REMOVE BOTH EXISTING STOP AHEAD
SIGNS FOR THE US 60/KY 801
INTERSECTION (APPROX. 730 FT
BEFORE THE INTERSECTION)



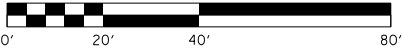
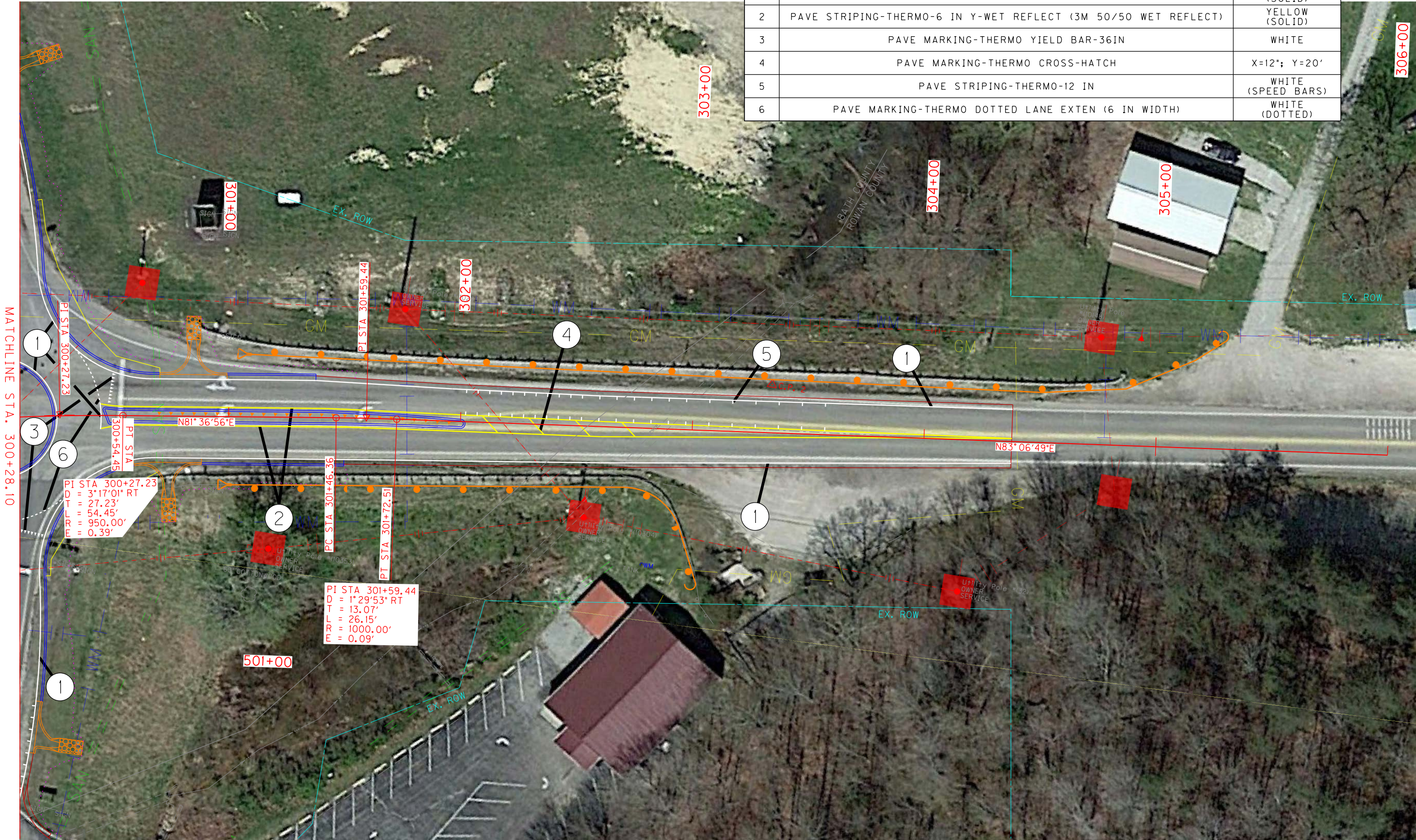
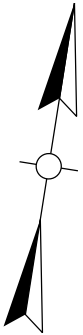
COUNTY OF	ITEM NO.
BATH	9-9009.01



US 60
MINI-ROUNDAABOUT
STRIPING SHEET 1

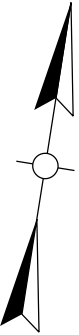
STRIPING LEGEND		
NO.	DESCRIPTION	SPECS
1	PAVE STRIPING-THERMO-6 IN W-WET REFLECT (3M 50/50 WET REFLECT)	WHITE (SOLID)
2	PAVE STRIPING-THERMO-6 IN Y-WET REFLECT (3M 50/50 WET REFLECT)	YELLOW (SOLID)
3	PAVE MARKING-THERMO YIELD BAR-36IN	WHITE
4	PAVE MARKING-THERMO CROSS-HATCH	X=12"; Y=20'
5	PAVE STRIPING-THERMO-12 IN	WHITE (SPEED BARS)
6	PAVE MARKING-THERMO DOTTED LANE EXTEN (6 IN WIDTH)	WHITE (DOTTED)

COUNTY OF	ITEM NO.
BATH/ ROWAN	9-9009.01

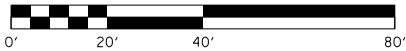


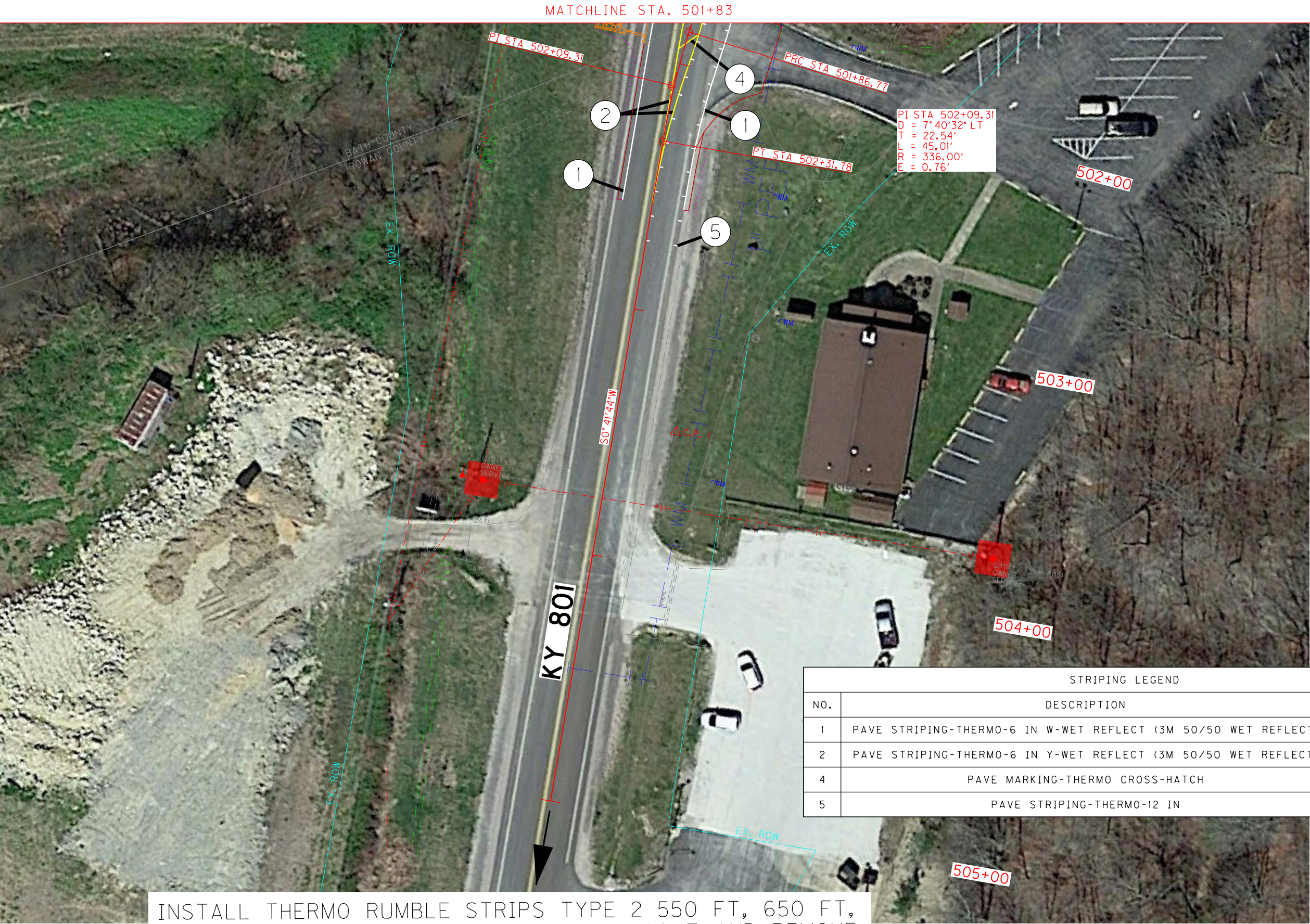
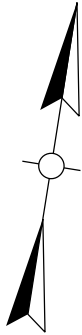
STRIPING LEGEND		
NO.	DESCRIPTION	SPECS
1	PAVE STRIPING-THERMO-6 IN W-WET REFLECT (3M 50/50 WET REFLECT)	WHITE (SOLID)
2	PAVE STRIPING-THERMO-6 IN Y-WET REFLECT (3M 50/50 WET REFLECT)	YELLOW (SOLID)
2A		YELLOW (DOUBLE SOLID)
3	PAVE MARKING-THERMO YIELD BAR-36IN	WHITE

COUNTY OF	ITEM NO.
BATH	9-9009.01



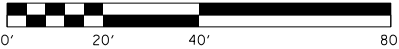
MATCHLINE STA. 498+17





STRIPING LEGEND		
NO.	DESCRIPTION	SPECS
1	PAVE STRIPING-THERMO-6 IN W-WET REFLECT (3M 50/50 WET REFLECT)	WHITE (SOLID)
2	PAVE STRIPING-THERMO-6 IN Y-WET REFLECT (3M 50/50 WET REFLECT)	YELLOW (SOLID)
4	PAVE MARKING-THERMO CROSS-HATCH	X=12"; Y=20'
5	PAVE STRIPING-THERMO-12 IN	WHITE (SPEED BARS)

INSTALL THERMO RUMBLE STRIPS TYPE 2 550 FT, 650 FT, AND 800 FT PRIOR TO THE MINI-ROUNDAABOUT AND REMOVE BOTH EXISTING STOP AHEAD SIGNS FOR THE US 60/KY 801 INTERSECTION (APPROX. 700 FT BEFORE THE INTERSECTION).

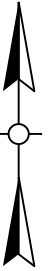


COUNTY OF

ITEM NO.

BATH/
ROWAN

9-9009.01



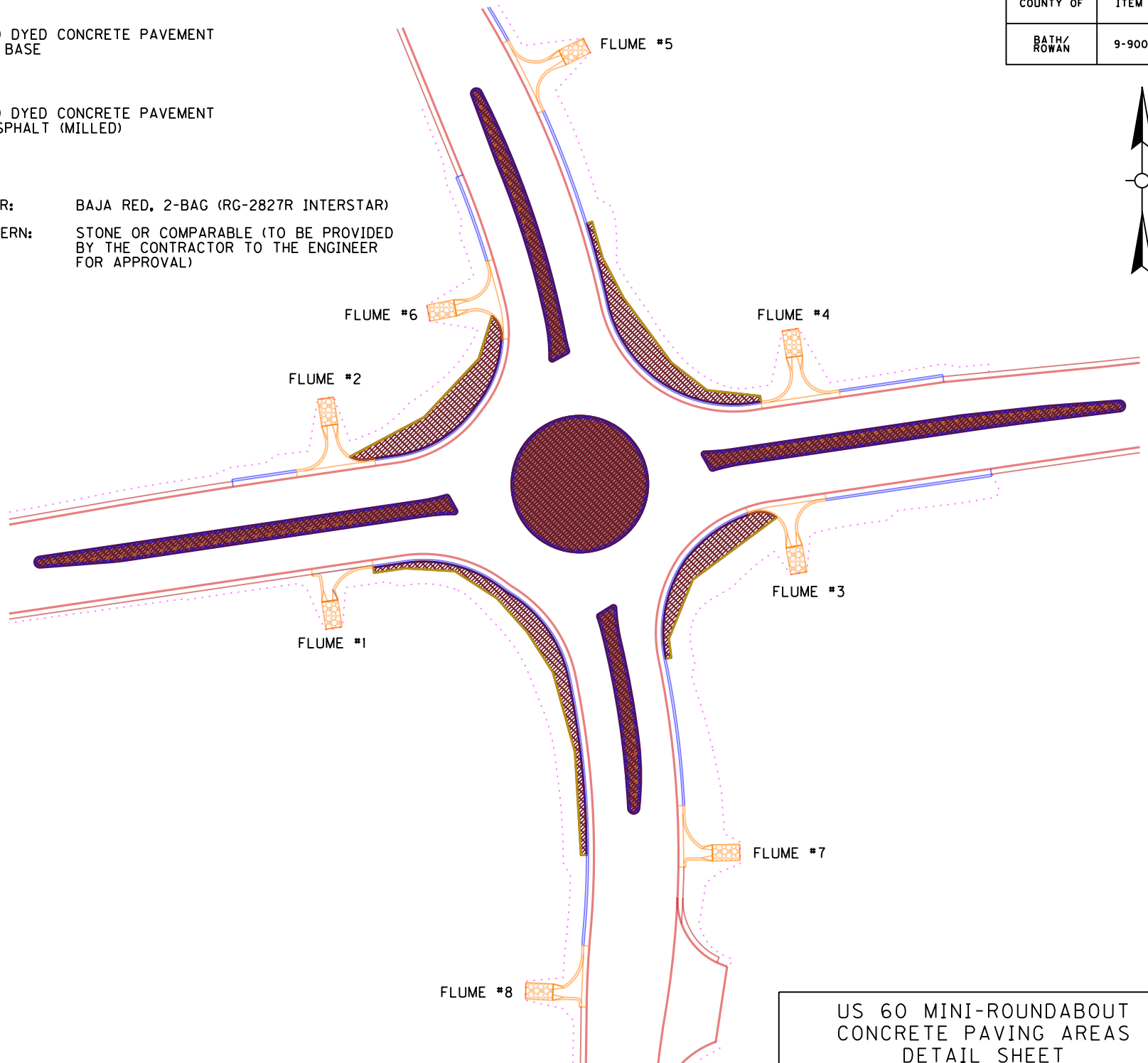
9" STAMPED AND DYED CONCRETE PAVEMENT
ON 6" MIN. DGA BASE



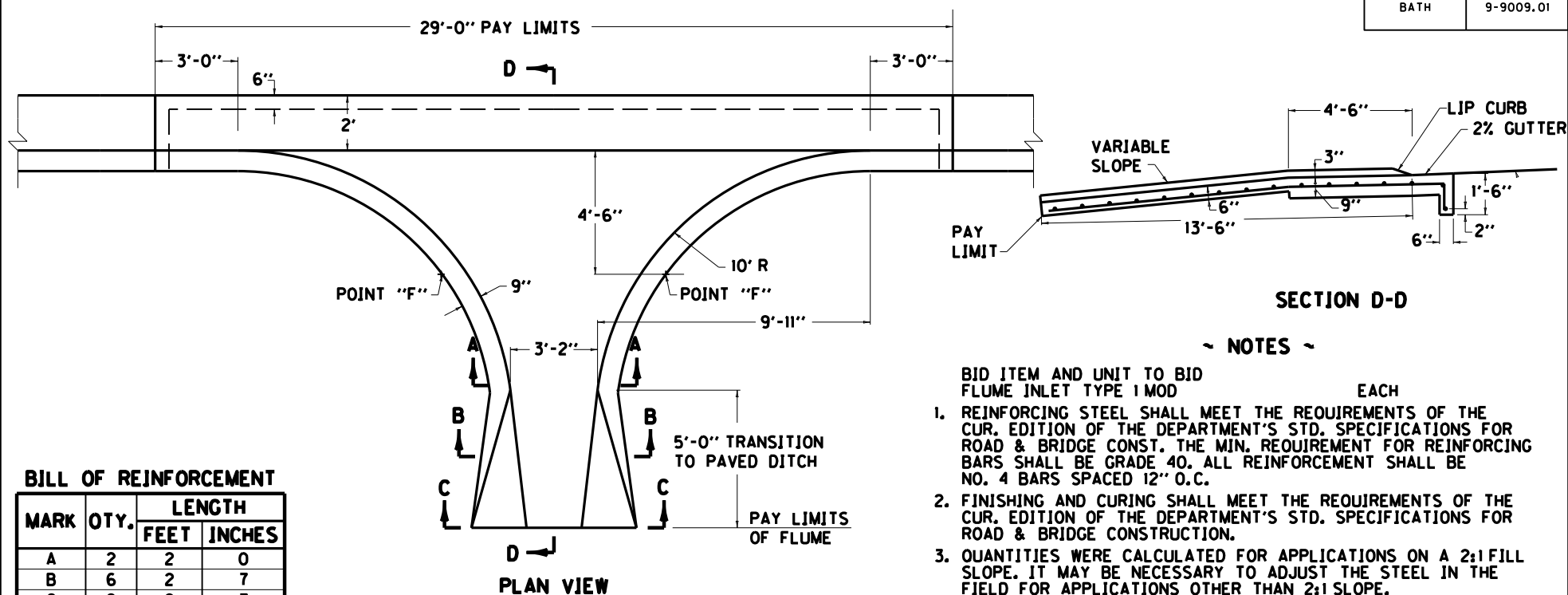
9" STAMPED AND DYED CONCRETE PAVEMENT
ON EXISTING ASPHALT (MILLED)

CONCRETE COLOR: BAJA RED, 2-BAG (RG-2827R INTERSTAR)

CONCRETE PATTERN: STONE OR COMPARABLE (TO BE PROVIDED
BY THE CONTRACTOR TO THE ENGINEER
FOR APPROVAL)

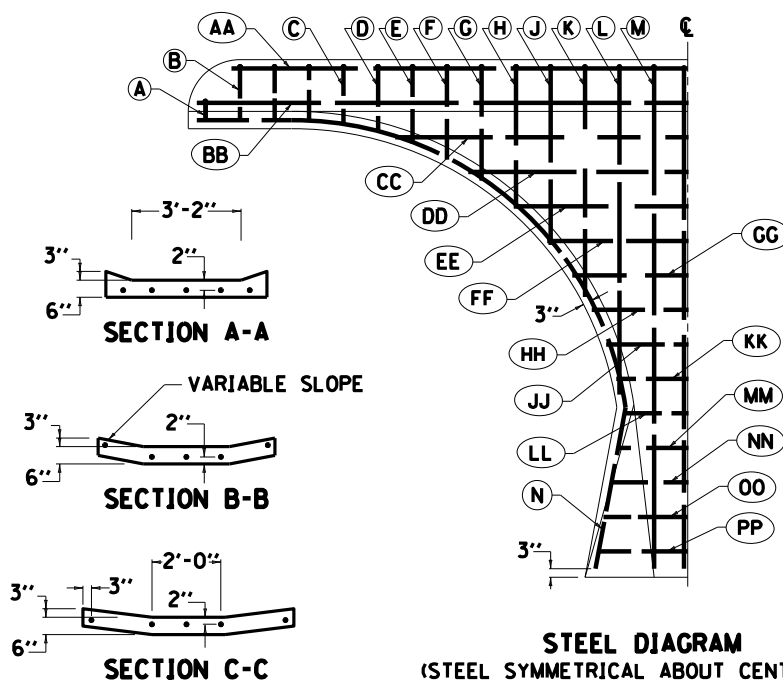


US 60 MINI-ROUNDAABOUT
CONCRETE PAVING AREAS
DETAIL SHEET

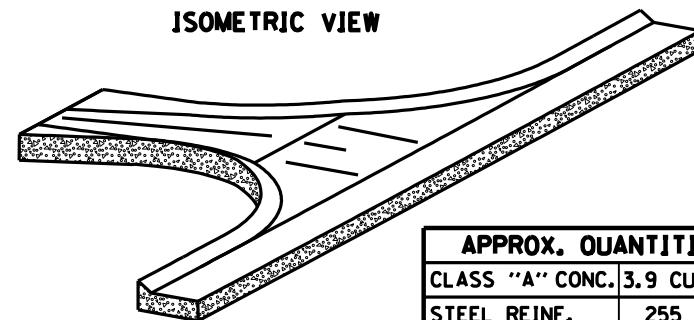


BILL OF REINFORCEMENT

MARK	QTY.	LENGTH	
		FEET	INCHES
A	2	2	0
B	6	2	7
C	2	2	7
D	2	3	3
E	2	3	2
F	2	3	8
G	2	4	3
H	2	5	0
J	2	6	0
K	2	7	6
L	2	10	0
M	3	15	7
N	2	21	7
AA	2	26	6
BB	1	28	4
CC	1	16	2
DD	1	12	3
EE	1	9	9
FF	1	8	0
GG	1	6	5
HH	1	5	4
JJ	1	4	4
KK	1	3	10
LL	1	3	10
MM	1	4	3
NN	1	4	7
OO	1	4	11
PP	1	5	4
T	5	2	0



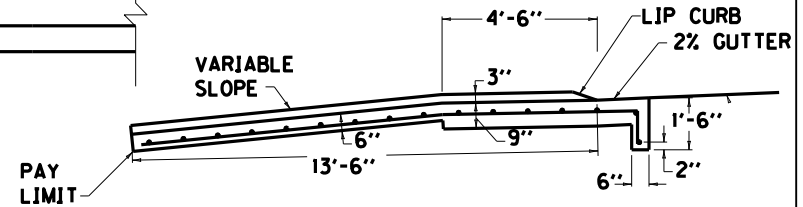
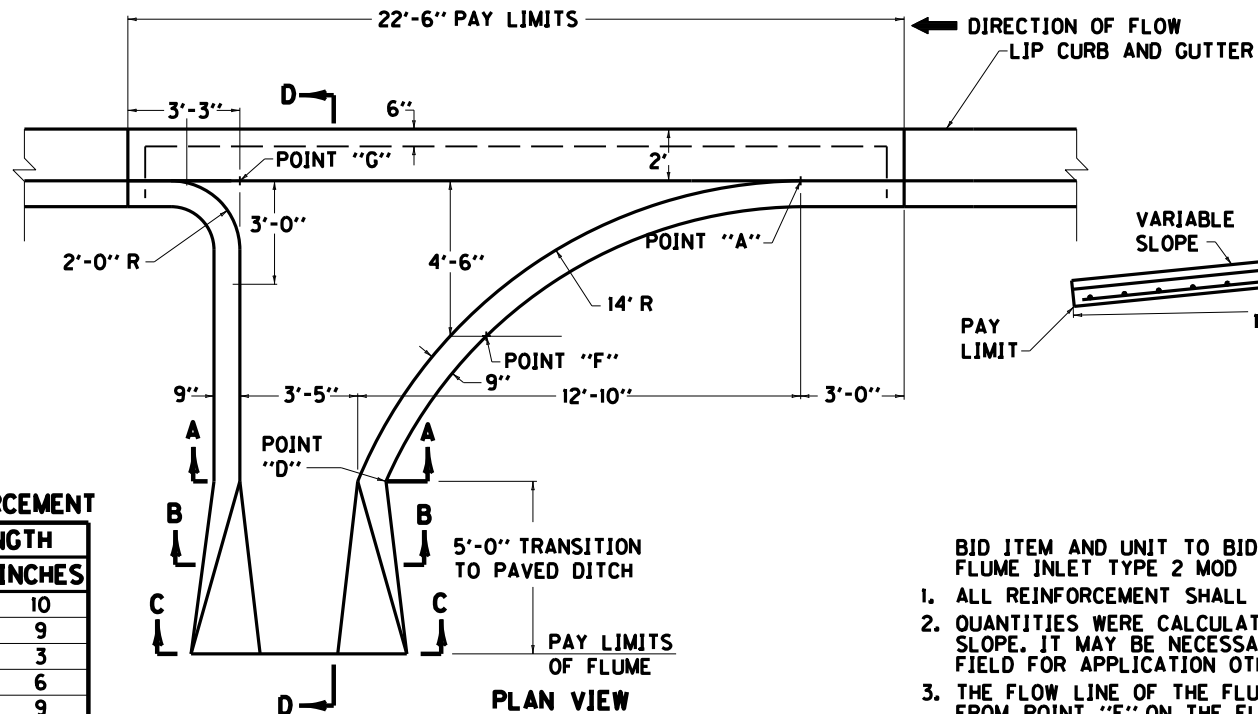
ISOMETRIC VIEW



APPROX. QUANTITIES

CLASS "A" CONC.	3.9 CU. YDS.
STEEL REINF.	255 LBS.

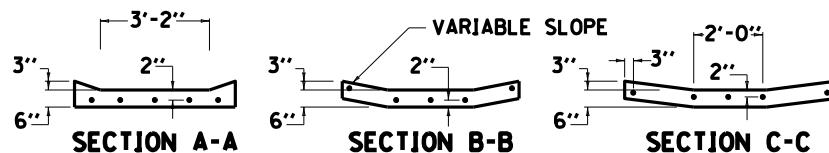
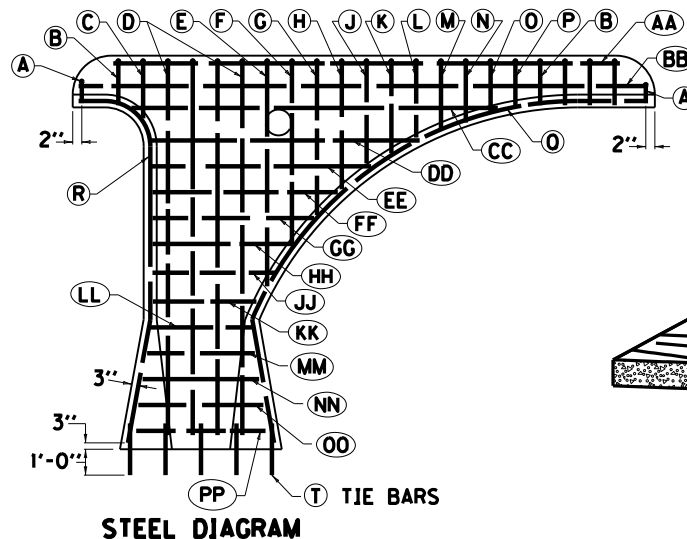
US 60 MINI-ROUNDBOULT
FLUME INLET TYPE 1 MOD.
DETAIL SHEET



SECTION D-D

BILL OF REINFORCEMENT

MARK	QTY.	LENGTH	
		FEET	INCHES
A	2	1	10
B	5	2	9
C	1	3	3
D	4	15	6
E	1	9	9
F	1	8	2
G	1	7	0
H	1	6	0
J	1	5	0
K	1	4	6
L	1	4	0
M	1	3	8
N	1	3	5
O	1	3	0
P	1	2	10
Q	1	24	5
R	1	15	7
AA	2	19	7
BB	1	22	0
CC	1	14	2
DD	1	10	6
EE	1	8	6
FF	1	7	2
GG	1	6	3
HH	1	5	5
JJ	1	4	9
KK	1	4	0
LL	1	4	0
MM	1	4	2
NN	1	4	6
OO	1	4	10
PP	1	5	0
T	5	2	0



~ NOTES ~

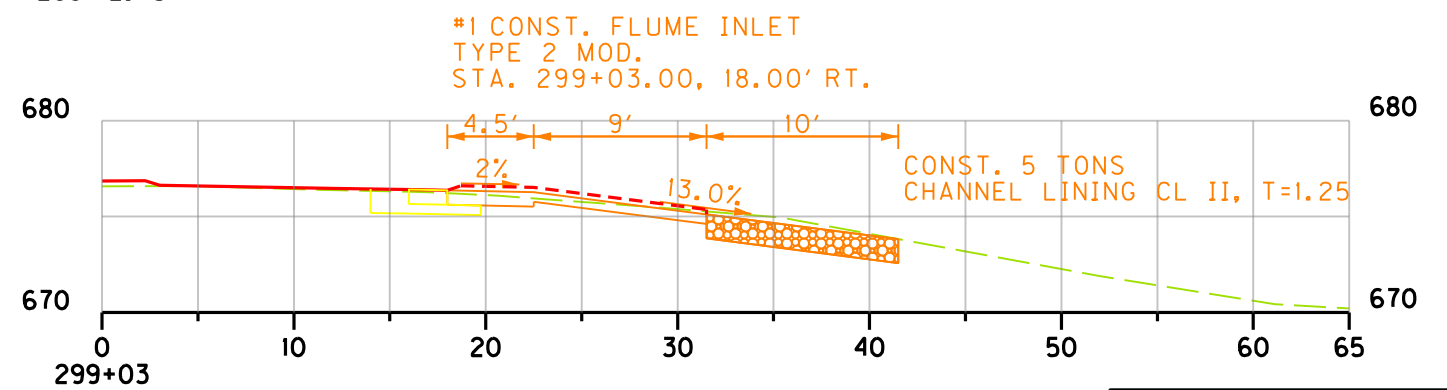
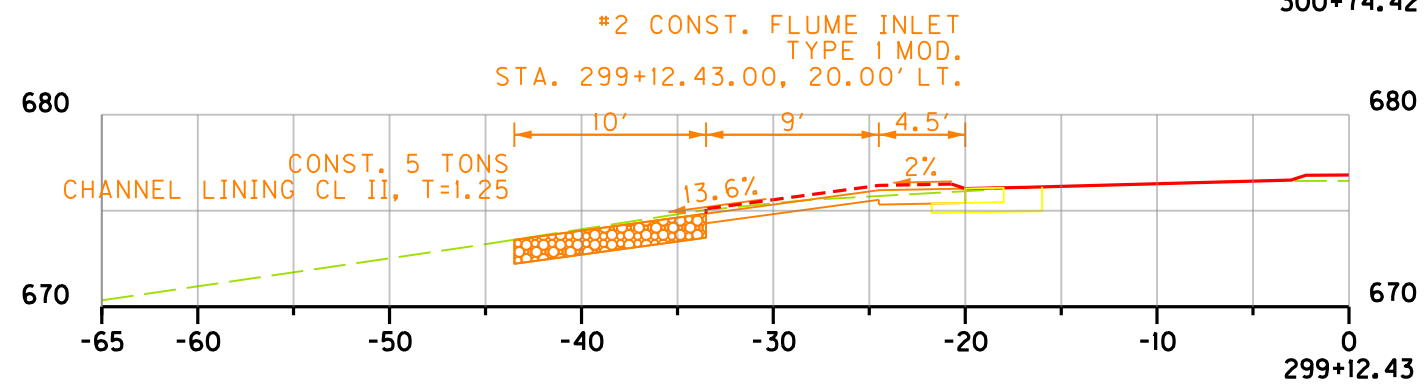
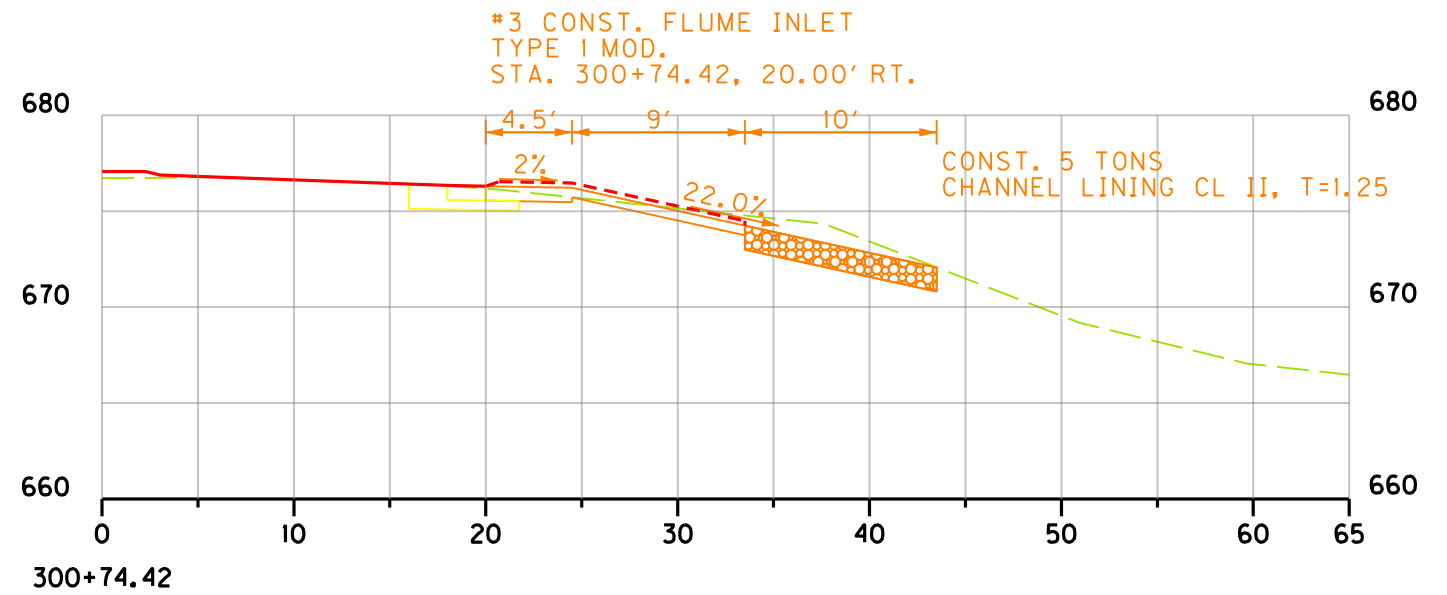
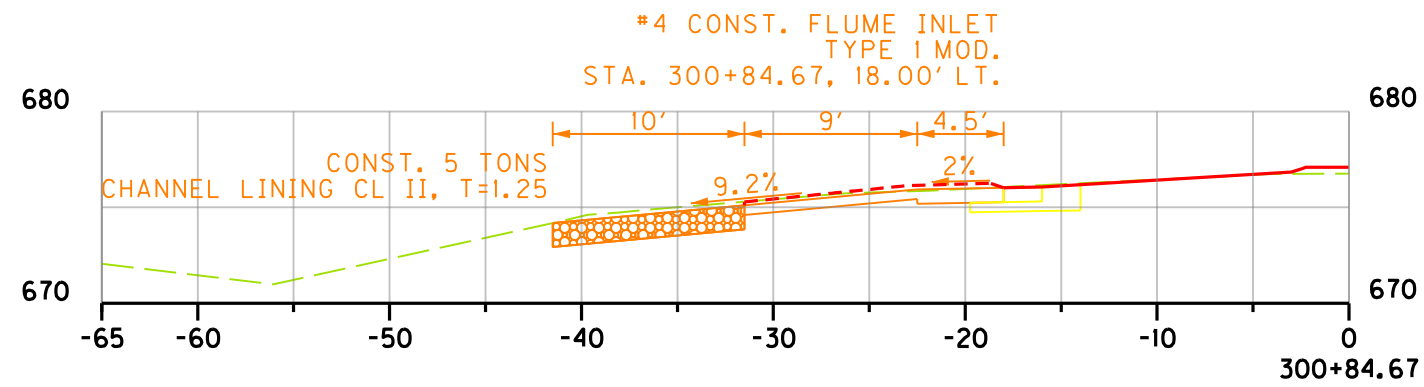
- BID ITEM AND UNIT TO BID
FLUME INLET TYPE 2 MOD EACH
- ALL REINFORCEMENT SHALL BE NO. 4 BARS SPACED 1'-0" O.C.
 - QUANTITIES WERE CALCULATED FOR APPLICATION ON A 2:1 FILL SLOPE. IT MAY BE NECESSARY TO ADJUST THE STEEL IN THE FIELD FOR APPLICATION OTHER THAN 2:1 SLOPE.
 - THE FLOW LINE OF THE FLUME AND THE NORMAL PAVED DITCH FROM POINT "F" ON THE FLUME TO THE LOWER END OF THE NORMAL PAVED DITCH SHALL BE A STRAIGHT LINE GRADE.
 - CONCRETE, REINFORCEMENT, AND EXCAVATION SHALL BE INCIDENTAL TO UNIT BID PRICE.

APPROX. QUANTITIES

CLASS "A" CONC.	3.7 CU. YDS.
STEEL REINF.	225 LBS.

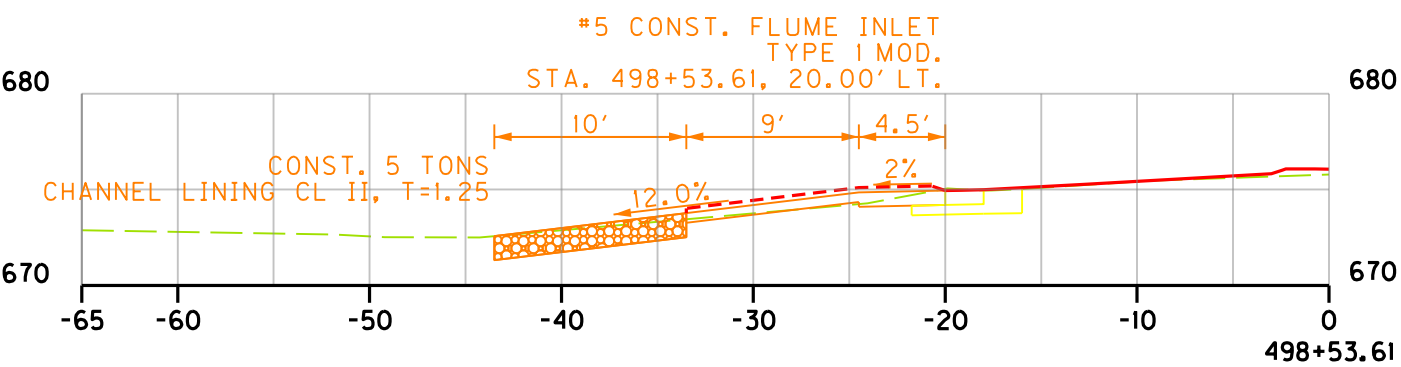
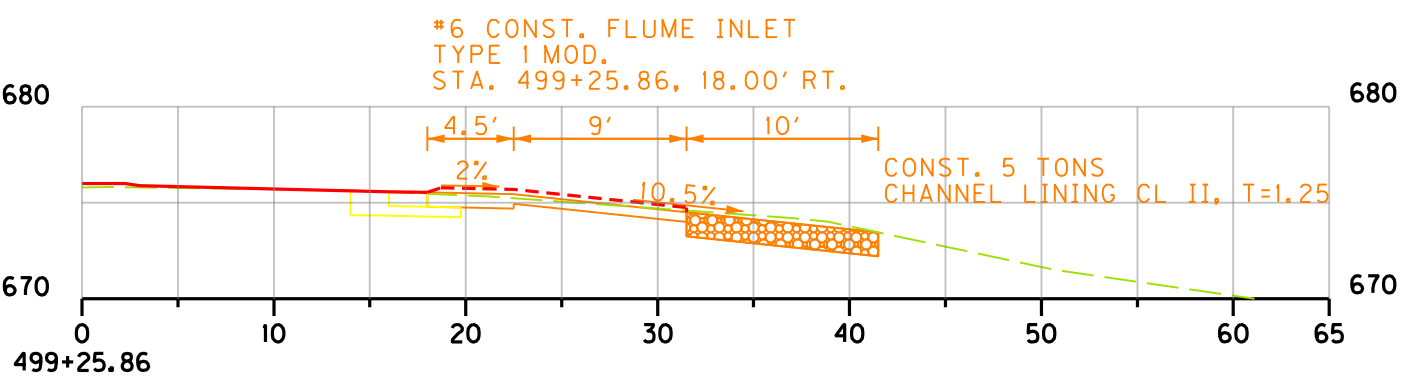
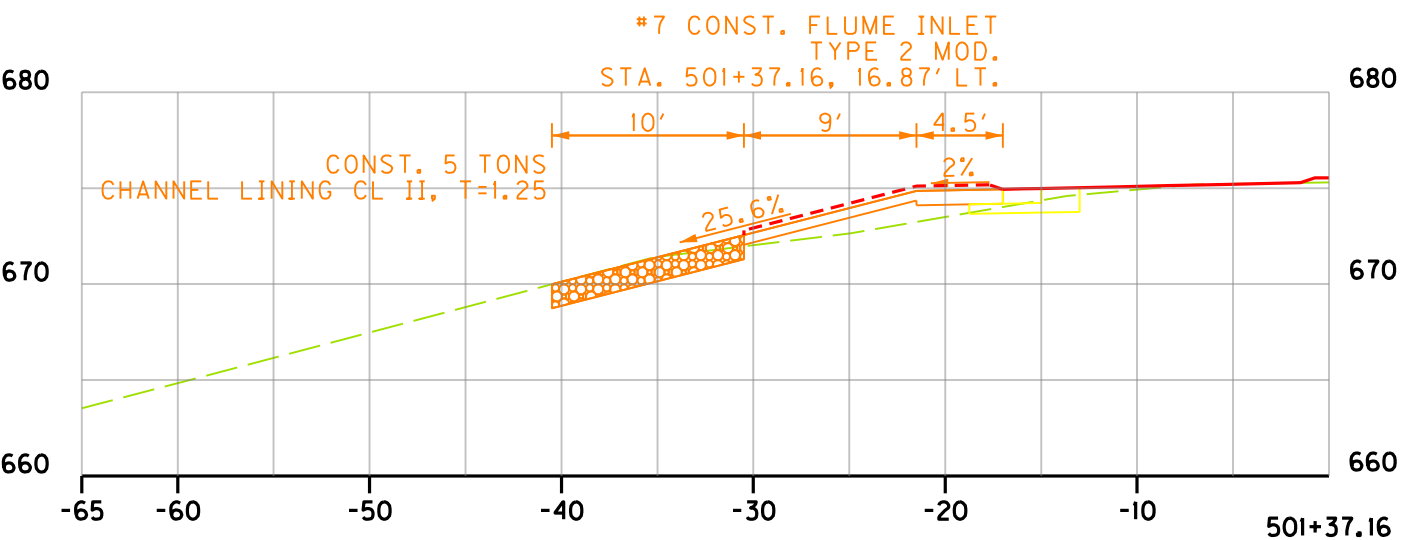
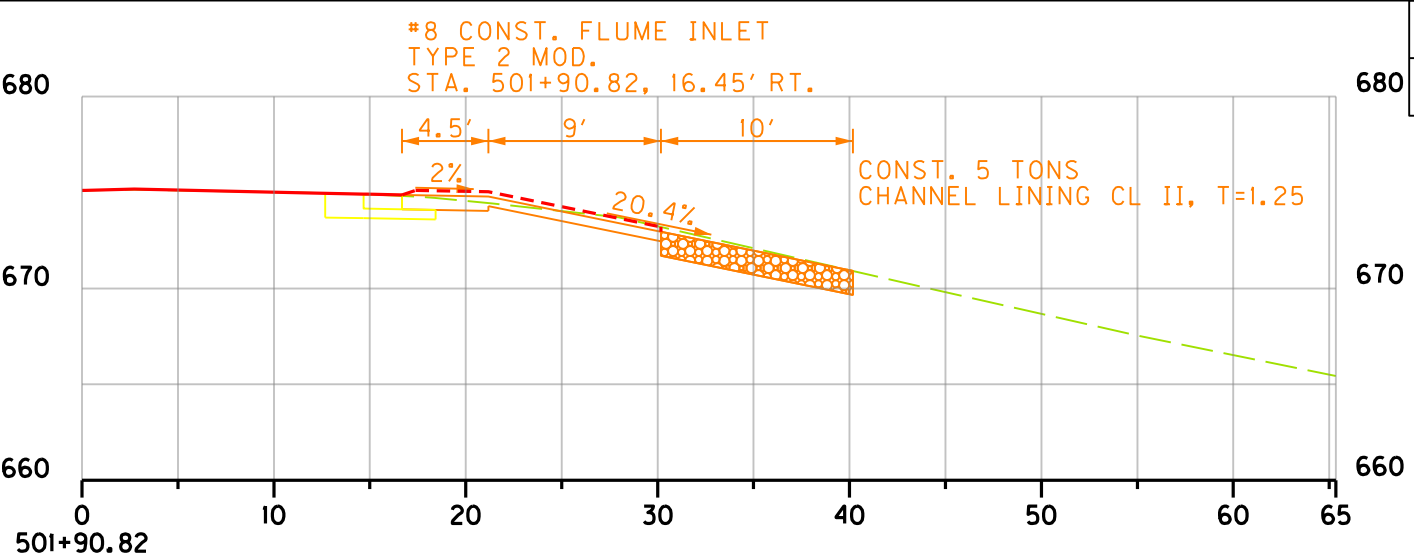
US 60 ROUNDABOUT
FLUME INLET TYPE 2 MOD.
DETAIL SHEET

COUNTY OF	ITEM NO.
BATH	9-9009.01



US 60 MINI-ROUNDBOUT
FLUME SECTIONS (US 60)

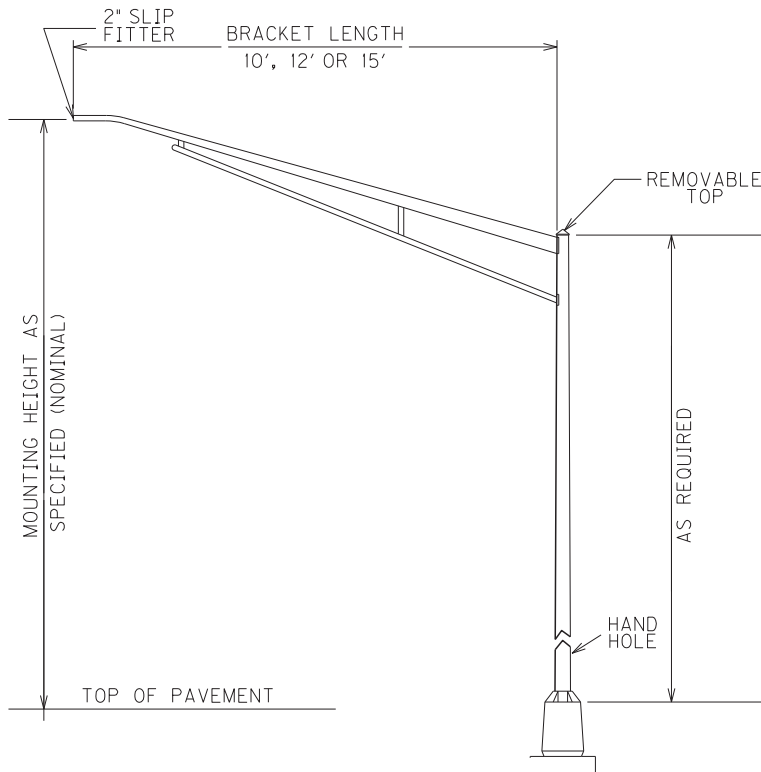
COUNTY OF	ITEM NO.
BATH/ ROWAN	9-9009.01



US 60 MINI-ROUNDBOUT
FLUME SECTIONS (KY 801)

FILE NAME: C:\USERS\JESSICA.GOODWIN\DESKTOP\MINIROUNDABOUT\PLANSET\T00100SU.DGN				COUNTY OF	ITEM NO.	SHEET NO.																																																												
				BATH/ROWAN	9009.01	T1																																																												
ROADWAY LIGHTING ESTIMATE OF QUANTITIES				CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 716 AND 834																																																														
<table><thead><tr><th>TOTAL</th><th>UNITS</th><th>CODE</th><th>ITEM DESCRIPTION</th></tr></thead><tbody><tr><td>2</td><td>EACH</td><td>4701</td><td>POLE 40’ MTG HT</td></tr><tr><td>2</td><td>EACH</td><td>4725</td><td>BRACKET 15’</td></tr><tr><td>2</td><td>EACH</td><td>4740</td><td>POLE BASE</td></tr><tr><td>2</td><td>EACH</td><td>4750</td><td>TRANSFORMER BASE</td></tr><tr><td>1</td><td>EACH</td><td>4761</td><td>LIGHTING CONTROL EQUIPMENT</td></tr><tr><td>4</td><td>EACH</td><td>4780</td><td>FUSED CONNECTOR KIT</td></tr><tr><td>150</td><td>LIN FT</td><td>4795</td><td>CONDUIT 2 INCH</td></tr><tr><td>125</td><td>LIN FT</td><td>4820</td><td>TRENCHING AND BACKFILLING</td></tr><tr><td>350</td><td>LIN FT</td><td>4832</td><td>WIRE-NO. 12</td></tr><tr><td>4</td><td>EACH</td><td>2039INS835</td><td>ELECTRICAL JUNCTION BOX TYPE A</td></tr><tr><td>150</td><td>LIN FT</td><td>21543EN</td><td>BORE AND JACK CONDUIT</td></tr><tr><td>2</td><td>EACH</td><td>24589ED</td><td>LED LUMINAIRE</td></tr><tr><td>125</td><td>LIN FT</td><td>24900EC</td><td>PVC CONDUIT - 1 1/4 INCH - SCHEDULE 80</td></tr><tr><td>1,100</td><td>LIN FT</td><td>23778EC</td><td>WIRE NO. 10</td></tr></tbody></table>				TOTAL	UNITS	CODE	ITEM DESCRIPTION	2	EACH	4701	POLE 40’ MTG HT	2	EACH	4725	BRACKET 15’	2	EACH	4740	POLE BASE	2	EACH	4750	TRANSFORMER BASE	1	EACH	4761	LIGHTING CONTROL EQUIPMENT	4	EACH	4780	FUSED CONNECTOR KIT	150	LIN FT	4795	CONDUIT 2 INCH	125	LIN FT	4820	TRENCHING AND BACKFILLING	350	LIN FT	4832	WIRE-NO. 12	4	EACH	2039INS835	ELECTRICAL JUNCTION BOX TYPE A	150	LIN FT	21543EN	BORE AND JACK CONDUIT	2	EACH	24589ED	LED LUMINAIRE	125	LIN FT	24900EC	PVC CONDUIT - 1 1/4 INCH - SCHEDULE 80	1,100	LIN FT	23778EC	WIRE NO. 10	SUBSECTION: 716.03.03 B TRENCHING. REVISION: REMOVE ENTIRE FOURTH SENTENCE IN FIRST PARAGRAPH; NO PAYMENT FOR ADDITIONAL JUNCTION BOXES FOR GREATER DEPTHS WILL BE ALLOWED. SUBSECTION: 834.14.02 TRANSFORMER BASES. REMOVE: REMOVE SENTENCE: CONSTRUCT THE DOOR OF A HIGH DENSITY POLYETHYLENE MATERIAL IN COLOR THAT MATCHES THE BASE. REVISION: REPLACE THE FOLLOWING SENTENCE WITH THE FOLLOWING: CONSTRUCT THE DOOR OF AN ALUMINUM MATERIAL IN A COLOR THAT MATCHES THE BASE. THE DOOR SHOULD HAVE A THEFT DETERRENT DEVICE THAT IS EQUAL TO THE LOCKDOWN LIGHTLOCK DOOR ASSEMBLY. THE DOOR LOCK WILL HAVE A LOCKING DEVICE WITH A KYTC CUSTOM KEY THAT WILL BE SEND TO CENTRAL OFFICE TRAFFIC OPERATIONS FROM THE MANUFACTURER AND BE ISSUED TO THE CONTRACTOR FOR THE INSTALLATION OF THE FINAL DOOR DEVICE. THE KEY FOR THE DOOR SHALL BE RETURNED TO CENTRAL OFFICE TRAFFIC OPERATIONS AFTER THE CLOSURE OF THE CONTRACT. THERE SHALL BE A 4" BY 6" ARC FLASH WARNING STICKER INSTALLED CENTER TOP OF EACH DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBINATE MATERIAL, AND WITH MC53FL PRESSURE SENSITIVE ADHESIVE. THE STICKER SHALL HAVE TWO COLORS OF BLACK AND CUSTOM COLOR ORANGE. THE WORDING FOR THE ARC FLASH STICKER SHALL BE THE FOLLOWING: "WARNING ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. REFER TO NFPA 70E."		
TOTAL	UNITS	CODE	ITEM DESCRIPTION																																																															
2	EACH	4701	POLE 40’ MTG HT																																																															
2	EACH	4725	BRACKET 15’																																																															
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2	EACH	4750	TRANSFORMER BASE																																																															
1	EACH	4761	LIGHTING CONTROL EQUIPMENT																																																															
4	EACH	4780	FUSED CONNECTOR KIT																																																															
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150	LIN FT	21543EN	BORE AND JACK CONDUIT																																																															
2	EACH	24589ED	LED LUMINAIRE																																																															
125	LIN FT	24900EC	PVC CONDUIT - 1 1/4 INCH - SCHEDULE 80																																																															
1,100	LIN FT	23778EC	WIRE NO. 10																																																															
THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED. ADD SENTENCE TO SECTION 834.06; ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 050I". ADD SENTENCE TO SECTION 834.09; ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 050I".				DESIGNED BY: JRG DATE SUBMITTED: 2/24/2020 Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS COUNTY OF BATH/ROWAN PROJECT NUMBERS: ROADWAY LIGHTING ESTIMATES OF QUANTITIES																																																														
10-17-2019																																																																		

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DESIGN CRITERIA FOR LED LUMINAIRES IN ROUNDABOUT

CENTER AREA OF ROUNDABOUT CONTAINED
WITHIN THE STOPBARS
ILLUMINANCE:
AVERAGE: NOT LESS THAN 1.42 FOOTCANDLES
AND NOT MORE THAN 1.562 FOOTCANDLES
MINIMUM: NOT LESS THAN .80 FOOTCANDLES
AVERAGE/MINIMUM: NOT MORE THAN 4:1

ALL POLE LOCATIONS, ARM LENGTHS, AND ORIENTATION OF LUMINAIRE (TO CURVE/ROAD) SHOULD BE MAINTAINED DUE TO UTILITIES/DRAINAGE/RIGHT-OF-WAY.

LUMINAIRE DESIGN:

DRIVER: NOT TO EXCEED 700 mA
TYPE II DISTRIBUTION
TYPE C: CAN NOT EXCEED 130 WATTS

LUMINAIRE DESIGNATION EXAMPLE

SPECIAL NOTE:
ALL LUMINAIRES SHALL HAVE THE NEMA LABEL
INSTALL ON THE BOTTOM OF THE FIXTURE TO
VERIFY THE WATTAGE. LABEL: C2

- LUMINAIRE WATTAGE
- LUMINAIRE NUMBER IN CIRCUIT
- CIRCUIT NUMBER

NOTE:

ALL TYPE C LUMINAIRES ARE MOUNTED AT 40' LED LUMINAIRE

1/6/2017

LED Luminaire Specifications

The following are the required Specifications for the LED Fixture:

1. The Luminaire shall be listed by a National Recognized Testing Laboratory (NRTL) as defined by the U.S. Department of Labor. The testing laboratory must be listed by OSHA in its scope of recognition for the applicable tests being conducted as required by this specification. A list of recognized testing labs for products sold in the United States may be found on the U.S. Department of Labor's web site: <http://www.osha.gov/>
2. The Luminaire shall be listed and labeled by a NRTL or CSA as being in compliance with UL 1598 and suitable for use in wet locations.
3. Key components including LED drivers, LED light sources, and surge protection devices shall be RoHS compliant.
4. The housing shall have an International Electrotechnical Commission (IEC) 529 Ingress Protection (IP) rating of IP 65 or greater.
5. Shall be in compliance with Electro Magnetic Interference (EMI) requirements as defined by FCC 47 Sub Part 15; CISPR15, CISPR22 Class A (120Vmin), EN61000-3-2, -3-3, -4-4, -4-5.
6. Shall be tested according to the most current version of Illuminating Engineering Society of North America (IESNA) LM-79.
7. Shall have lumen maintenance measured in accordance the most current version of Illuminating Engineering Society of North America (IESNA) LM-80.
8. Shall have long term lumen maintenance documented according to the most current version of Illuminating Engineering Society of North America (IESNA) TM-21.
9. The fixture shall have a diecast aluminum housing.
10. The luminaire finish shall be corrosion resistant with a polyester powdercoat of 2.5 mil nominal thickness. Finish shall pass per ASTM D1654 after 3000 hours of testing per ASTM B117.
11. All hardware on the exterior of the housing including cover and latch shall be stainless steel, zinc or steel with zinc alloy electroplate and chromate top coat.
12. The luminaire shall be easy to open when properly mounted and shall have readily accessible internal parts. Access to all internal parts requiring replacement shall not require tools (i.e. "tool-less entry").
13. The luminaire shall have a vibration rating of 3G per the American National Standard (ANSI) IEEE C136.31, Table 2 Roadway Lighting Equipment -Luminaire Vibration for both normal applications and bridge and overpass applications.
14. The luminaire shall be designed to allow water shedding.
15. The luminaire shall have a passive cooling method shall be employed to manage thermal output of LED light engine and power supply.
16. The luminaire shall have a label per ANSI C136.22 that states operating voltage and current range. The label must be clearly visible on the inside of the housing.
17. The luminaire shall fully operate in a temperature range of -40 degrees C up to 40 degrees C (-40 degrees F to 104 degrees F).
18. In retrofit applications, the LED luminaire shall not be more wattage than the original HPS fixture if you are replacing one for one. For the optimized proposal, we will allow the wattage to be greater than the original proposed luminaire.
19. The luminaire shall have an integral power supply (electronic driver). The power supply shall not have a manual, field-adjustable setting for current output.
20. The luminaire shall have a power supply (electronic driver) that will operate on a 480 volt single phase at 60 hertz.
21. The luminaire shall have a power supply (electronic driver) that has a power factor of .90 or greater at fullload.
22. The luminaire shall have a power supply (electronic driver) that has total harmonic distortion of 20% or less at fullload.
23. The luminaire shall have power supply (electronic driver) output ripple of less than 10%.
24. The luminaire shall have power supply (electronic driver) with a rated life of 100,000 hours with a luminaire operated at an ambient temperature of 25°C (77°F).
25. The luminaire shall have an isolated power supply (electronic driver) output.
26. The luminaire shall have a power supply (electronic driver) that has thermal overload protection.
27. The luminaire shall have a power supply (electronic driver) that is self-limited short circuit protected and over load protected.
28. The luminaire shall not use any active thermal cutback, such as in order to achieve a higher thermal performance.
29. The luminaire shall have a power supply (electronic driver) that is terminated with quick disconnect wire harnesses for easy maintenance. Wire nut termination is not acceptable.
30. The luminaire shall have a terminal block for terminating wiring to the luminaire. The terminal block shall be a 3 station, tunnel lug terminal board that will accommodate #6 thru #18 AWG pole wire.
31. Fixture shall have a surge protection that meets 10KV/5KA per ANSI/IEEE C62.41.
32. The luminaire shall have life rating on all electrical components of 100,000 hours or greater when operated at full lumen output at 25 degrees C.
33. All LED components shall be L70 rated when operated in a luminaire at 25 degrees C (77 degrees F) at 100,000 hours.
34. Electrical components shall be protected per ANSI/IEEE standard C62.41, for Class C applications.
35. The LED shall fully operate in a temperature range -40 degrees C to 40 degrees C (-40 degrees F to 104 degrees F).
36. The LED shall lose no more than a 15% optical intensity of initial delivered lumens due to thermal loading when operated at 25°C (77°F).

37. The LED shall deliver an average 80% of initial delivered lumens after 70,000 hours of operation when operated at 25°C (77°F).
38. The LED shall have a rated life of 100,000 hours when operated at 40 °C.
39. The LED shall have a minimum Luminaire efficacy of 120 lumens/watt.
40. The Correlated Color Temperature (CCT) shall be 4000K with a variance of 250K, white, that conforms to LM-79. The Correlated Color Temperature (CCT) shall be 5000K with a variance of 250K, white, that conforms to LM-79 (HIGH MAST ONLY).
41. The minimum color rendering index (CRI) shall not be less than 70.
42. The optics shall have a completely sealed optical system.
43. The optical system shall have a (IEC) (IP) rating of 66 or greater.
44. The optics shall have an Illuminating Engineering Society of North America (IESNA) Backlight, Uplight and Glare (BUG) rating as follows:
 - a. Backlight rating shall not exceed 3; (highmast fixture backlight rating shall not exceed 5)
 - b. Uplight rating shall not exceed 0;
 - c. Glare rating shall not exceed 3/4
45. The Light Loss Factor (LLF) shall be calculated for each fixture as follows:

LLF = LLD X LDD

Lamp Lumen Depreciation Factor (LLD) shall be the specified percentage of LED lumen maintenance at 70,000 hours at 25°C (77°F) from the TM-21 report. This LLD should be according to LM -80 and TM -21 reports. This report shall be submitted for verification.

Luminaire Dirt Depreciation (LDD)= .9
46. The TM-21 Report must show the drive current used for the submitted luminaire. The report can show a larger drive current to represent a worst case scenario.
47. The Lumen Maintenance Life L_{70} from the TM-21 Report must not be below 80% at 70,000 hours at 25°C (77°F).
48. The manufacturer shall provide certified test laboratories IES photometrics which verify light levels. Product submittal shall be accompanied by IES TM-21 compliant test reports from a CALiPER qualified or NVLAP accredited testing laboratory for the specific model being submitted.
49. **WARRANTY:** The Manufacturer shall ensure that the LED Luminaires have a minimum standard warranty of 10 years for all parts, materials, paint finish, and shipping (both ways) required to repair or replace the luminaire. The warranty shall begin upon the date the luminaire is received. The warranty shall be transferable.

The warranty shall cover all failures including:

 - (1) Failure in luminaire LED, housing, wiring, connections, and drivers.
 - (2) More than 10 percent decrease in lumen output.
 - (3) Significant change in light output color.

Technical Support. During the warranty period, technical support shall be available from the manufacturer via telephone within 24 hours of the time the call is made from KYTC, and this support shall be made available from factory certified personnel or factory certified installers at no additional charge to the Department.
50. **MINIMUM REQUIRED SUBMITTALS:**

Luminaire specification sheet.

LED driver specification sheet.

LM-79 Luminaire photometric report.

The vendor must submit LM-79 in-situ test data to confirm thermal operating temperatures of the luminaire.

LM-80 Lumen maintenance report.

TM-21 calculations as defined .

Backlight, Uplight, Glare (BUG) rating of the luminaire.

Written product warranty.

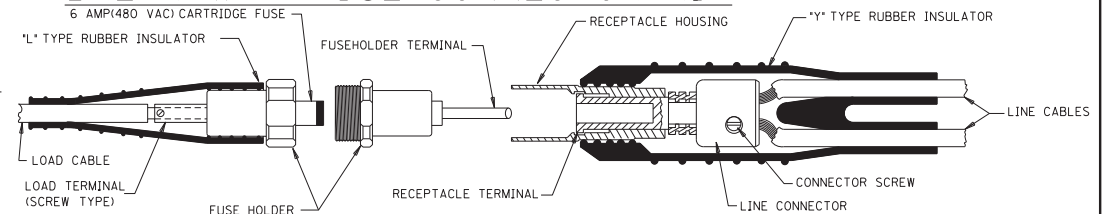
Certified test lab IES photometric reports.

Including IES electronic file.

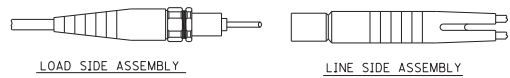
Including intensity and chromaticity data.

Instructions for installation and maintenance.
51. The luminaire shall be equipped with a shorting cap and a 7-pin photocontrol receptacle that meets ANSI 2013 standard C136.41

BREAKAWAY FUSE CONNECTOR KIT



DETAILS OF TYPE HEB-JW-RYC CONNECTOR



TYPE HEB-JW-RYC CONNECTOR SHOWN

LED LUMINAIRE/FUSE CONNECTOR DETAILS

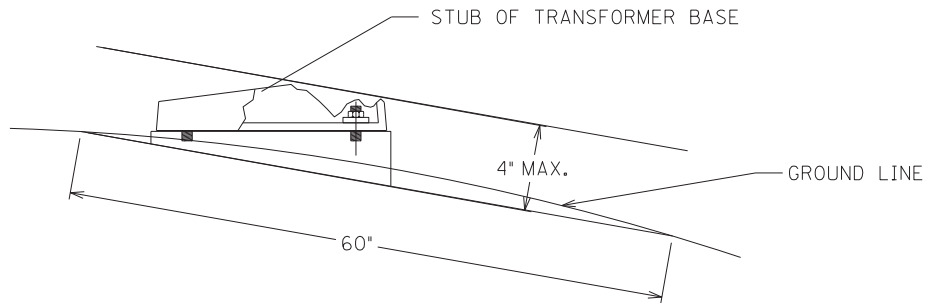
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USER: jessica.goodwin
DATE PLOTTED: March 2, 2020

E-SHEET NAME: T00200CL

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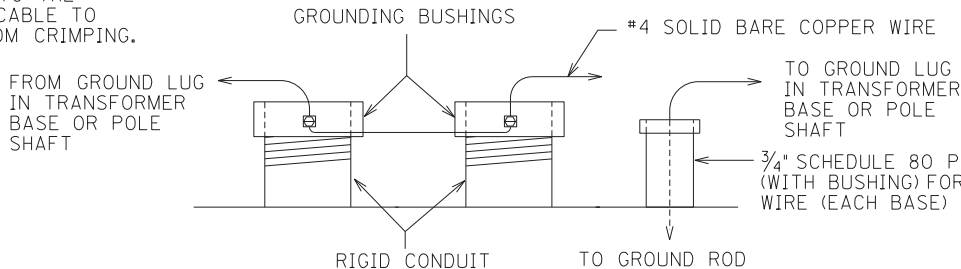


THE ANCHOR BOLTS AND CONDUITS SHALL NOT BE PROJECTED MORE 4 INCHES ABOVE A GROUND LINE BETWEEN THE STRADDLING WHEELS OF A VEHICLE.

BREAKAWAY SUPPORT STUB HEIGHT MEASUREMENT

IF DUCTED CABLE INSTALLED BETWEEN POLE BASES:
INSTALL RIGID STEEL/DUCTED CABLE COUPLING. USE BONDUIT CONDUIT ADHESIVE OR APPROVED EQUAL TO CONNECT THE RIGID STEEL TO DUCTED CABLE. RACEWAYS SHALL BE THE SAME SIZE AS THE DUCTED CABLE WHICH ATTACHS TO THE RIGID STEEL CONDUIT. ALTERNATELY IF DUCTED CABLE IS USED, THE CONTRACTOR CAN INSTALL RIGID STEEL CONDUIT TWO TIMES THE SIZE OF THE DUCT AND RUN THE DUCT INSIDE THIS CONDUIT. THE SWEEP FOR THE CONDUIT SHALL BE INCREASED TO ADHERE TO THE BENDING RADIUS RECOMMENDED BY THE MANUFACTURER OF THE DUCT.

DUCTED CABLE INSTALLED THROUGH 3" CONDUIT CROSSINGS TO LUMINAIRE POLE BASE:
INSTALL DUCTED CABLE INTO THE POLE BASE. THE DUCT SHOULD BE EXTENDED 1" ABOVE THE CONDUIT. THE CONDUIT SWEEP SHOULD BE INSTALL ACCORDING TO THE MANUFACTURER OF THE DUCTED CABLE TO PREVENT THE DUCTED CABLE FROM CRIMPING.



TYPICAL GROUNDING DETAIL

GROUNDING REQUIREMENTS:

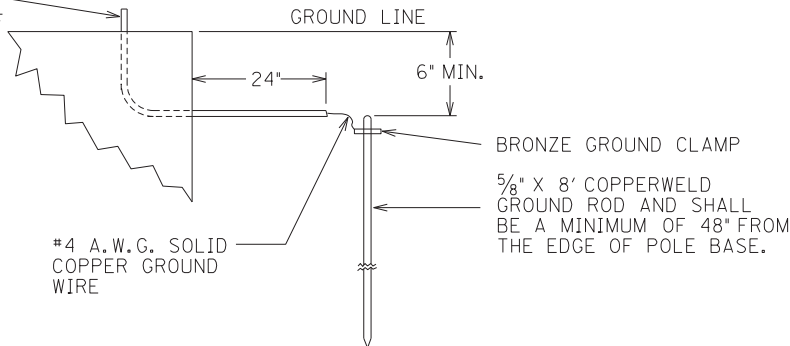
CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO TRANSFORMER BASE.

POLE/TRANSFORMER BASE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE TRANSFORMER BASE/POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING.

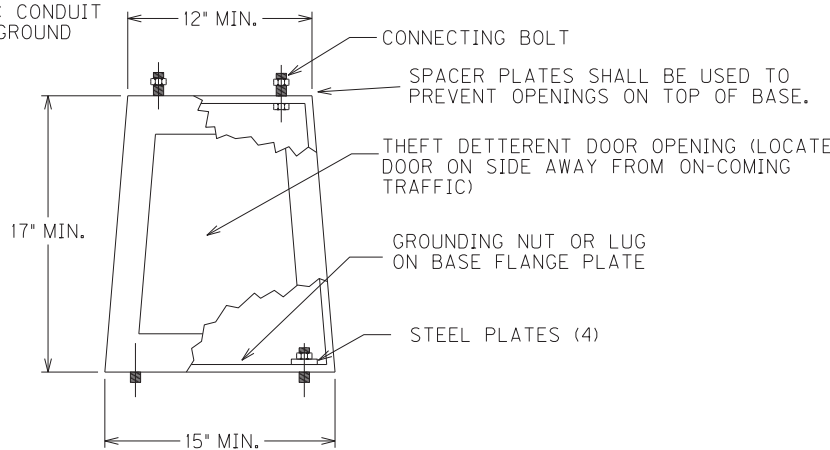
NOTES:

ALL CONDUITS USED FOR THE GROUNDING, SPARES AND CONDUCTORS THAT ARE INSTALLED IN THE POLE BASE ARE INCIDENTAL TO BID ITEM "4740". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE POLE BASE.

3/4" SCHEDULE 80 PVC CONDUIT (WITH BUSHING) FOR GROUND WIRE (EACH BASE) AND SHALL BE A MIN OF 24" FROM THE EDGE OF THE POLE BASE.



GROUNDING DETAIL



CONCRETE BASES SHALL BE POURED LEVEL. NO MORE THAN A 3/8" GAP SHALL EXIST BETWEEN CONCRETE BASE AND TRANSFORMER BASE WHEN THE POLE IS PLUMBED.

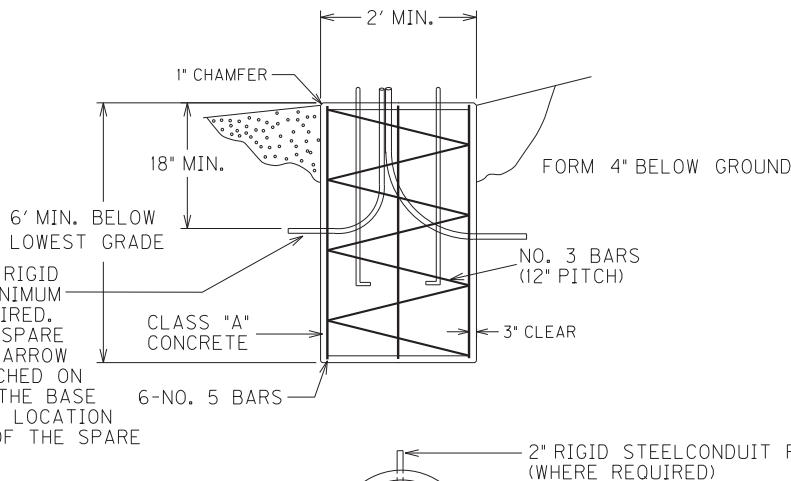
TYPICAL

CAST ALUMINUM TRANSFORMER BASE

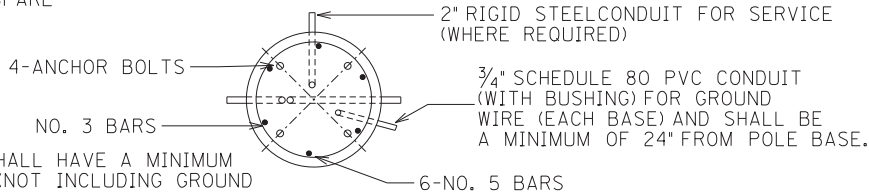
NOTE:
THE TRANSFORMER BASE DOOR SHALL HAVE A 4" BY 6" ARC FLASH WARNING STICKER INSTALL 3" FROM THE TOP OF THE DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC53FL PRESSURE SENSITIVE ADHESIVE OR APPROVAL EQUAL. THIS SHALL BE INCIDENTAL TO PROJECT.

SPECIAL NOTE FOR TRANSFORMER BASES:
FURNISH AN ARC FLASH AND SHOCK HAZARD WARNING STICKER ON TRANSFORMER BASE WITH THE FOLLOWING INFORMATION:
VOLTAGE (480 VOLT)
GLOVE CLASS (0)
LIMITED APPROACH BOUNDARY (42 IN)
RESTRICTED APPROACH BOUNDARY (12 IN)
MINIMUM CLOTHING ARC RATING (CAT 2)
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

TRANSFORMER BASE DETAIL



RACEWAY 1 1/4" RIGID STEEL MIN. MINIMUM OF TWO REQUIRED. IF ONE IS A SPARE CONDUIT, AN ARROW SHALL BE ETCHED ON THE TOP OF THE BASE TO SHOW THE LOCATION /DIRECTION OF THE SPARE CONDUIT.

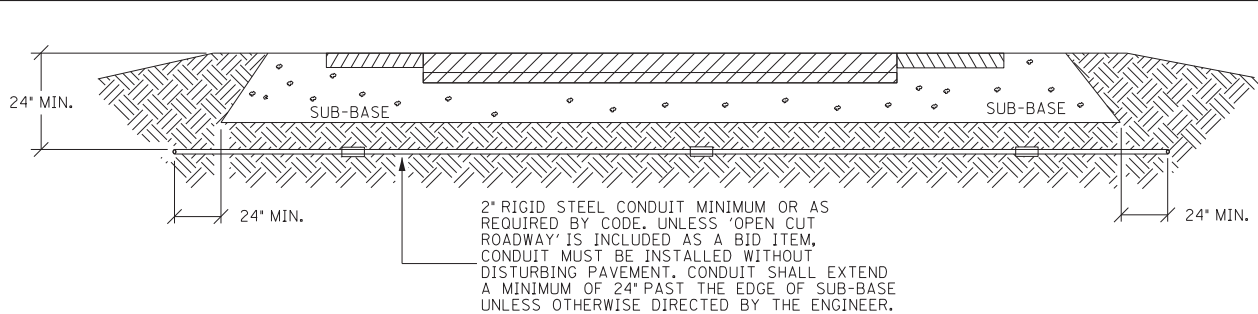


ALL POLE BASES SHALL HAVE A MINIMUM OF TWO CONDUITS (NOT INCLUDING GROUND CONDUIT). THE SPARE CONDUIT SHALL BE 180 DEGREE FROM THE CONDUIT FOR THE CONDUCTORS.

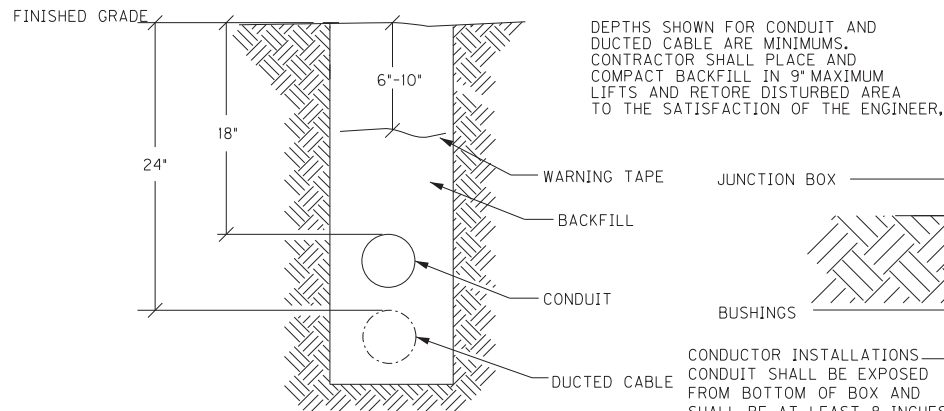
NOTE: PRECAST CONCRETE BASES ARE NOT ACCEPTABLE

FOUNDATION DETAIL

FILE NAME: C:\USERS\JESSICA.GOODWIN\DESKTOP\MINIROUNDABOUT\PLANSET\T00400JUB.DGN
USER: Jessica.goodwin
DATE PLOTTED: March 2, 2020
E-SHEET NAME: T00400JUB
MicroStation v8.11.9.832

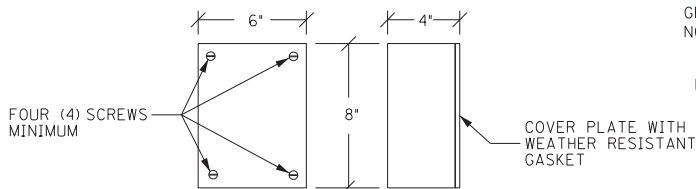


CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL

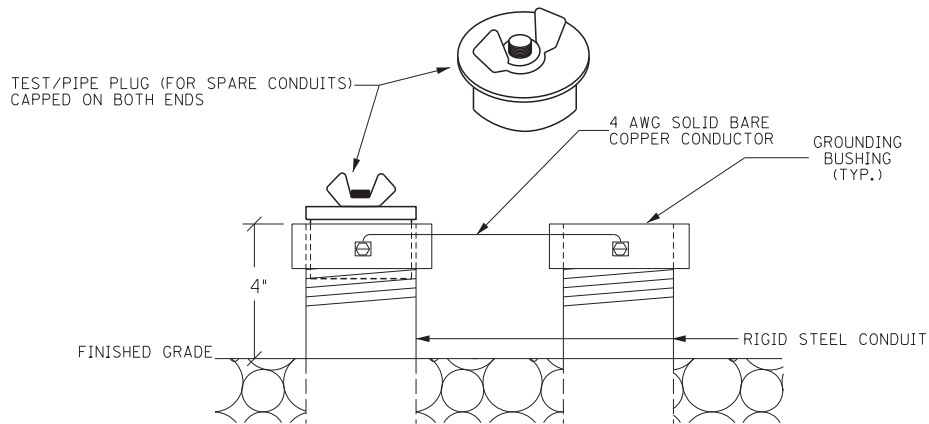


CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH

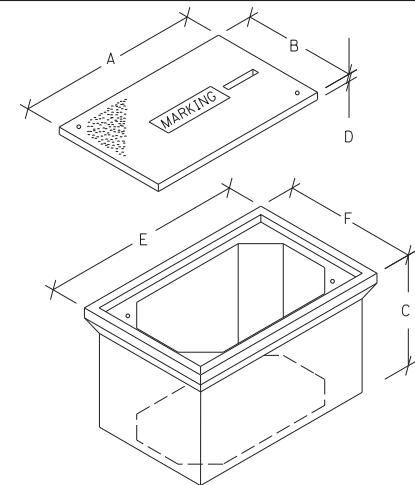
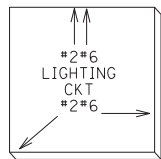
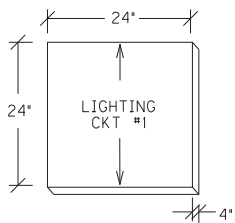
ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 12 GAUGE STEEL AND GALVANIZED AFTER FABRICATION. BOXES SHALL HAVE NO KNOCKOUTS AND SHALL BE PROVIDED WITH A PLATE COVER WITH A WEATHER RESISTANT GASKET AND A MINIMUM OF FOUR SCREWS FOR ATTACHING THE PLATE COVER TO THE BOX. CABLE CLAMPS SHALL BE PROVIDED FOR CABLES ENTERING AND EXITING THE BOX.



ABOVE GROUND BOX

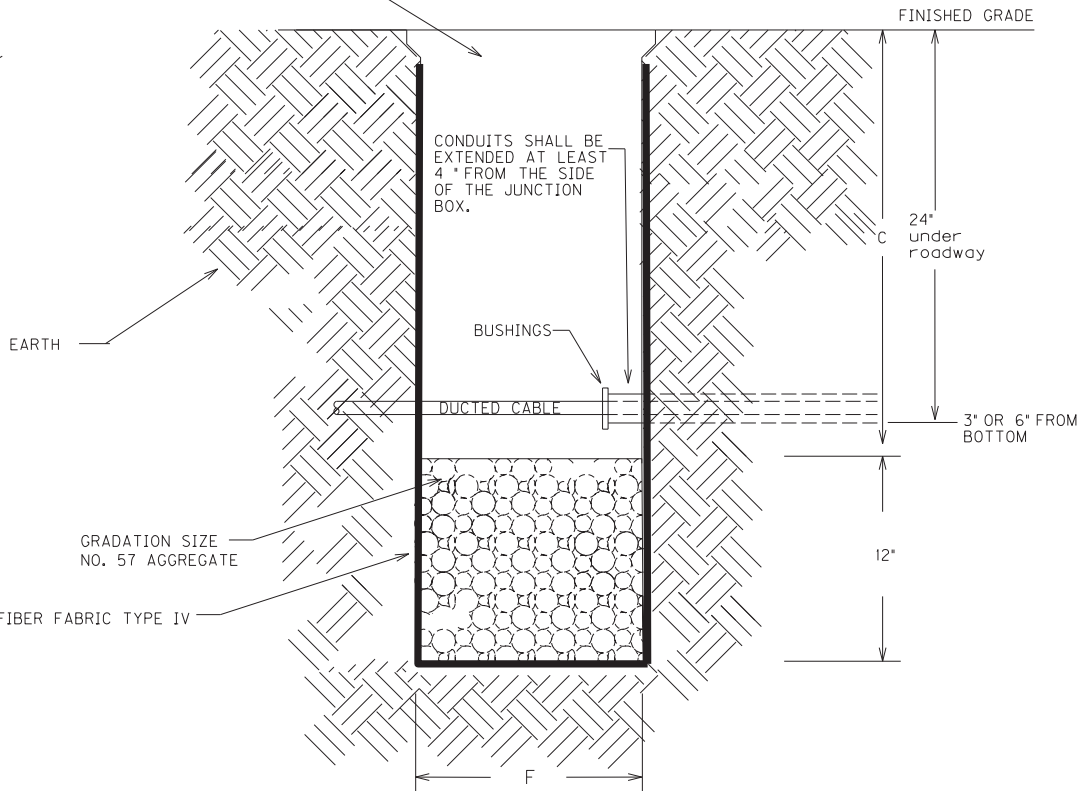


TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL CONCRETE CABLE MARKERS

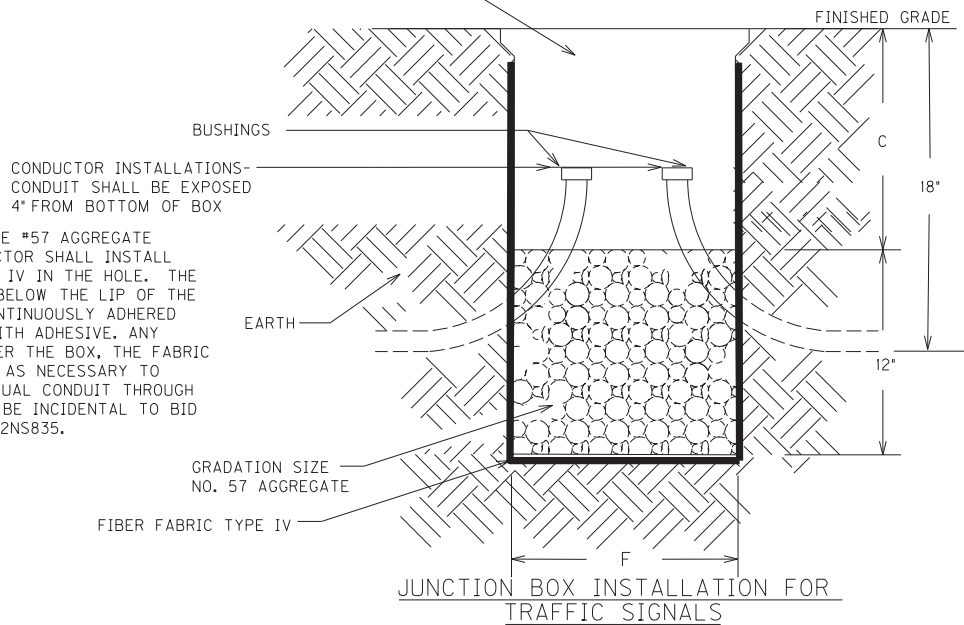


JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1 3/4" *	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

* MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED
JUNCTION BOX

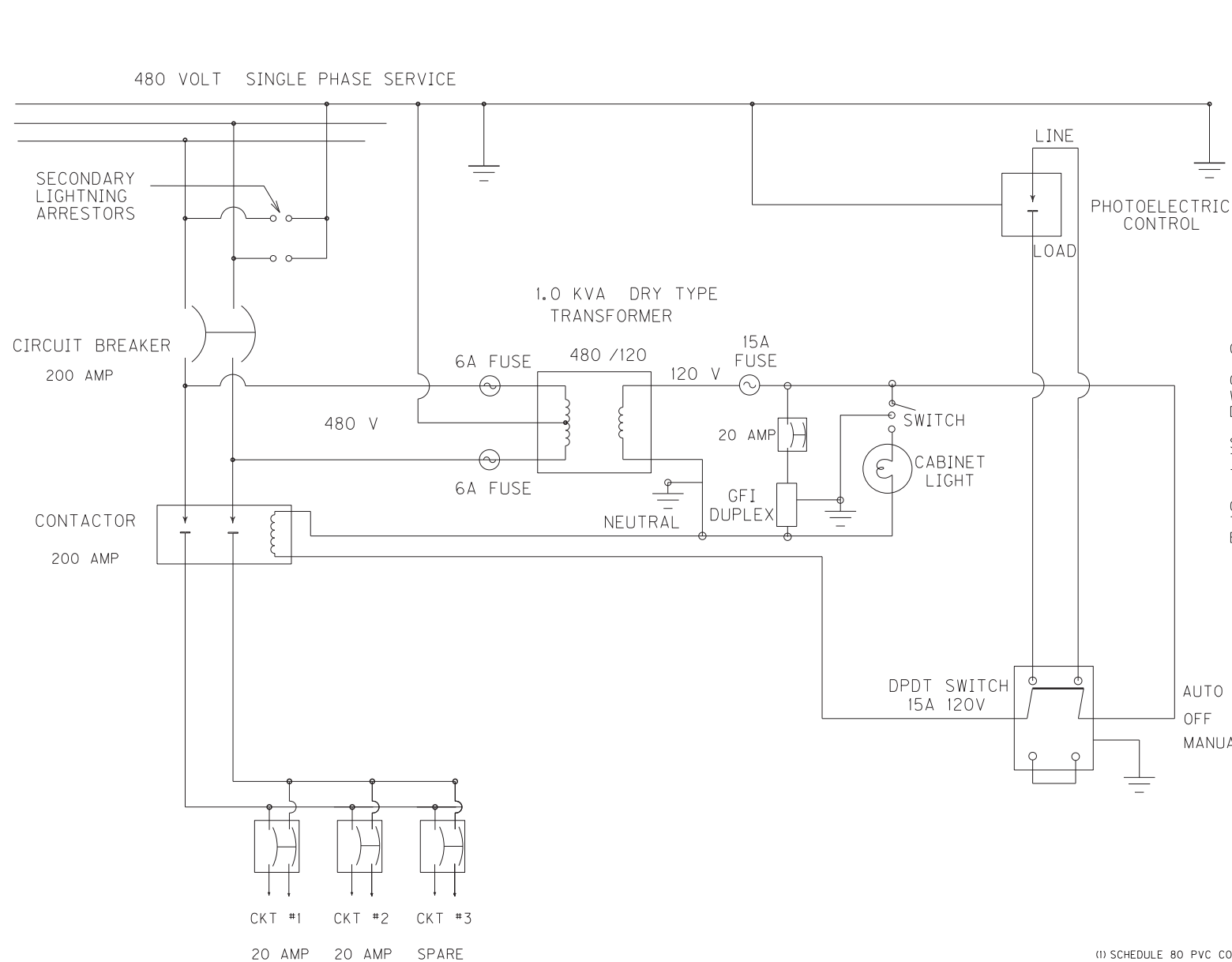


JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING



JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS

TRAFFIC SIGNAL AND
ROADWAY LIGHTING
JUNCTION BOX AND CONDUIT DETAILS



GROUNDING REQUIREMENTS:

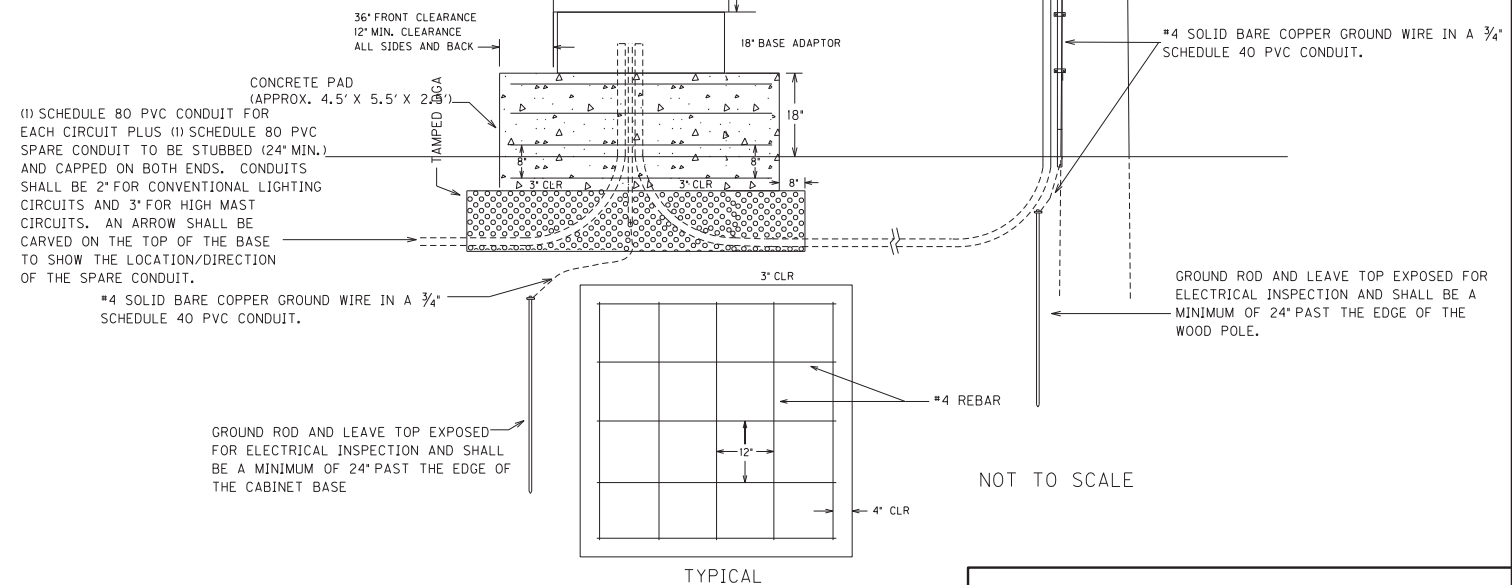
CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR POLE.

SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE DISCONNECT AND THEN TO EACH RIGID STEEL (R S) GROUNDING BUSHING.

CABINET GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BUS AND THEN TO EACH R S GROUNDING BUSHING.

PHOTOELECTRIC CONTROL SHALL BE INSTALLED SO MOUNT IS WATERTIGHT AND THE SENSOR SHOULD BE DIRECTED AWAY FROM TRAFFIC.

NOTE: THE CABINET ENCLOSURE SHALL INCLUDE AN ALUMINUM BASE ADAPTOR THAT WILL ELEVATE THE CABINET 18 INCHES OFF THE CONCRETE BASE. THE ADAPTOR SHALL HAVE THE SAME BOTTOM OPENING AS THE ORIGINAL CABINET. THERE SHALL BE A CONTINUOUS BEAD OF CAULK INSTALLED AROUND THE BOTTOM OF CABINET.



SPECIAL NOTE: DISCONNECTS (SAFETY SWITCH) AND METER BASE SHALL BE UL RATED FOR COMMERCIAL USE. DISCONNECTS (SAFETY SWITCH) AND METER BASE SHALL BE STAINLESS STEEL ENCLOSURE. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALCULATE THE MAXIMUM AVAILABLE FAULT CURRENT FOR THE SERVICE EQUIPMENT THAT IS INSTALLED. THE CONTRACTOR SHALL SUPPLY A STICKER THAT WILL BE INSTALLED IN THE DISCONNECT WITH THE SYMMETRICAL RMS AMPERES AND THE DATE THAT THIS FAULT CURRENT IS CALCULATED. THE STICKER SHALL BE 4" LONG AND 4" WIDE AND BE METALCRAFT PLY425 PREM STYLEMARK LABEL (OR APPROVED EQUAL) WITH .007 THICKNESS, WITH UV WHITE POLYCARBONATE MATERIAL, AND WITH MC778 PRESSURE SENSITIVE ADHESIVE OR APPROVED EQUAL.

SPECIAL NOTE FOR THE DISCONNECT AND CABINET: FURNISH AN ARC FLASH AND SHOCK HAZARD WARNING STICKER ON DISCONNECT/CABINET WITH THE FOLLOWING INFORMATION: VOLTAGE (480 VOLT) GLOVE CLASS (0) LIMITED APPROACH BOUNDARY (42 IN) RESTRICTED APPROACH BOUNDARY (12 IN) MINIMUM CLOTHING ARC RATING (CAT 2) SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED

NOT TO SCALE

BASE MOUNTED SERVICE DETAIL

NOTES:

CONTRACTOR SHALL INSTALL ALL LIGHTING CONTROL EQUIPMENT AS INDICATED.

CONCRETE SHALL BE CLASS A. CONCRETE SHALL BE POURED ON 12" OF POWER TAMPED DENSE GRADE ROCK. PAD SHALL BE 30" THICK WITH 18" ABOVE GRADE.

PAD SHALL BE OF SUFFICIENT SIZE TO ALLOW A MINIMUM 36" IN FRONT OF THE CABINET AND 12" MINIMUM CLEARANCE AROUND THE SIDES AND BACK OF THE CABINET.

CONCRETE SHALL BE SLOPED 1/8 "PER FOOT TO PREVENT STANDING WATER. OUTSIDE EDGE SHALL HAVE A ONE INCH CHAMFER.

#4 REBAR SHALL BE COMPRISED OF RUNS AS SHOWN AND TIED AT EACH JOINT.

ALL CONSTRUCTION (TO INCLUDE EXCAVATION WORK) AND MATERIALS (CONCRETE , STEEL REINFORCEMENT, ETC.) FOR THE CONCRETE PAD SHALL BE INCIDENTAL TO THE POLE FOR THE LIGHTING CONTROL EQUIPMENT BID ITEM.

ALL CONDUITS USED FOR GROUNDING, SPARE, AND SERVICE THAT ARE INSTALLED ON THE POLE AND/OR IN/TO THE CABINET ARE INCIDENTAL TO BID ITEM "4761". THIS INCLUDES PROVIDING A MINIMUM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CABINET BASE FOR THE SPARE.

FILE NAME: C:\USERS\JESSICA.GOODWIN\DESKTOP\MINI-ROUNDABOUT\PLANSET\T00600L.T.DGN

USER: jessica.goodwin
DATE PLOTTED: January 1, 2001

E-SHEET NAME: T00600L.T

MicroStation v8.11.9.832

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LUMINAIRES	STATIONS/ COORDINATES	WIRE SIZE
1-1-C-15	N 3946574.78 E 5554076.83	3-#10 AWG
1-2-C-15	N 3946499.88 E 5554175.87	3-#10 AWG

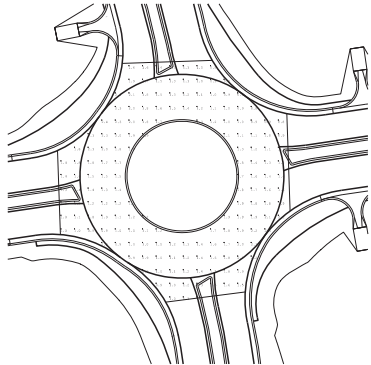


IMAGE TO THE LEFT SHOWS THE CALCULATION ZONE

CONVENTIONAL LIGHTING:

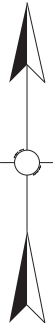
ALL POLES SHALL HAVE A #12 AWG GREEN GROUND WIRE RUN FROM BOTTOM OF POLE TO THE LUMINAIRE FOR GROUNDING . ALL POLES SHALL HAVE A GREEN WIRE THE SAME SIZE AS THE CIRCUIT WIRE RUN FROM POLE TO POLE FOR GROUNDING. GROUNDING WIRES SHALL BE CONNECTED TO GROUNDING LUGS ON CONDUITS OR ON THE POLE/TRANSFORMER BASE.

POLE HEIGHTS, ARM LENGTHS AND SETBACKS ARE DENOTED AS STATED ON "LUMINAIRE DESIGNATION EXAMPLE" ON LUMINAIRE/FUSE CONNECTOR DETAIL SHEET.

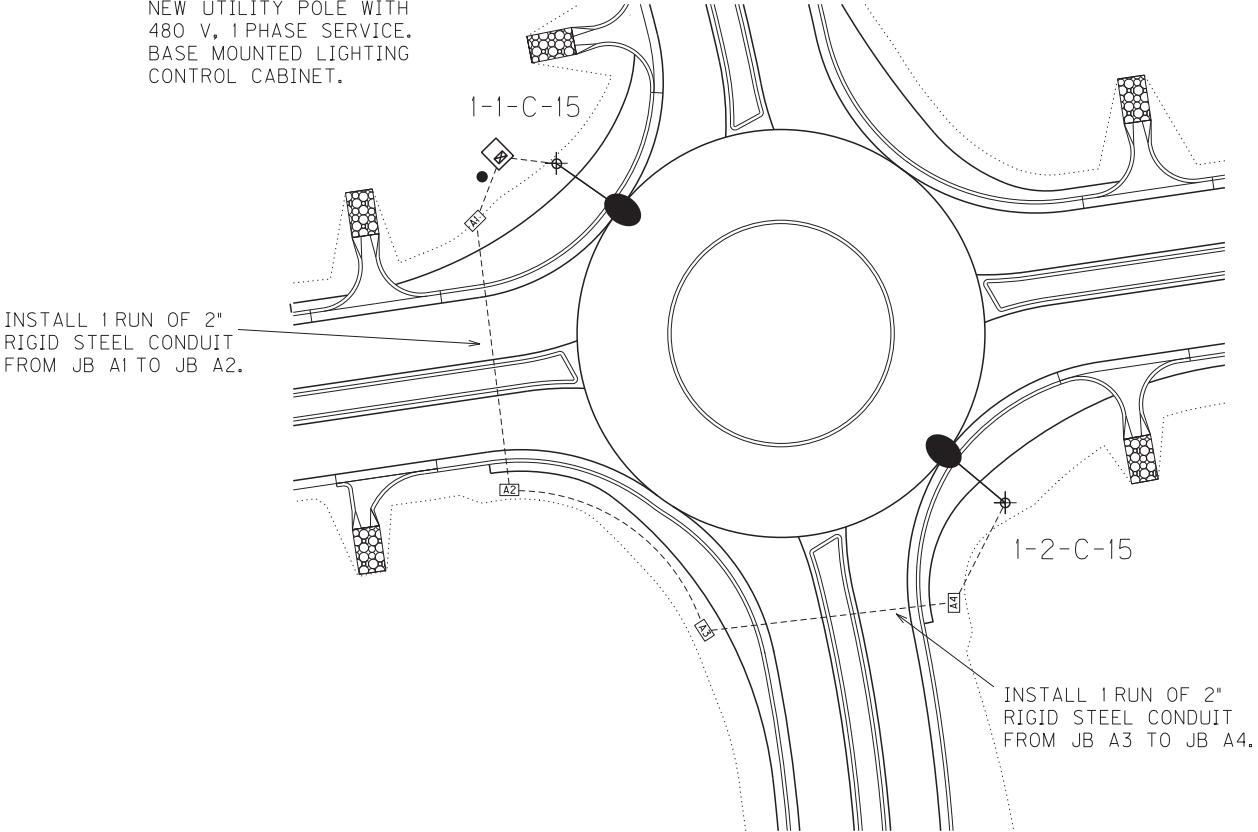
POLES SHALL BE PLACED AS CLOSE TO STATIONS AS STATED ON PLANS TO PROVIDE PROPER ILLUMINATION. IF ANY POLE NEEDS TO BE MOVED FROM THE STATION INDICATED, C.O. TRAFFIC SHALL BE CONTACTED AT 502-564-3020.

GENERAL CONVENTIONAL NOTES:

ALL SPLICES NOTED ON THIS PLAN SHALL BE APPROVED BY CENTRAL OFFICE TRAFFIC OPERATIONS. THESE SPLICES SHALL BE WATERPROOF AND SHALL BE OF THE CORRECT SIZE FOR THE WIRE USED AND SHALL BE RAYCHEM GTAP-2(B18), OR APPROVED EQUAL. ALL SPLICES SHALL BE INCIDENTAL TO THE WIRE AND CABLE BEING INSTALLED.



SERVICE AREA
NEW UTILITY POLE WITH
480 V, 1 PHASE SERVICE.
BASE MOUNTED LIGHTING
CONTROL CABINET.



LEGEND

	BASE MOUNTED CABINET
	JUNCTION BOXES - TYPES A (AS DESIGNATED)
	1 1/4" SCHEDULE 80 PVC CONDUIT (UNLESS OTHERWISE NOTED)
	LUMINAIRE POLE
	NEW 35 FT. WOOD SERVICE POLE

SCALE: 1"=20'

US 60 @ KY 801
MINI-ROUNDABOUT LIGHTING