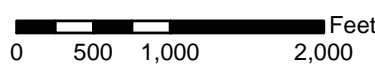


# **APPENDIX A**

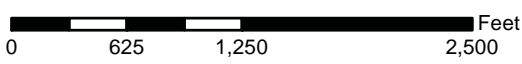
## **EXHIBITS**



**Exhibit 1**  
**Ramp Spacing**  
 I-75/Mall Road  
 Boone County, KY



- ▬▬ Tank - 1 - Florence Mall
- ▬▬ Tank - 32X - Burlington Express
- ▬ Sidewalk
- ▬ Multi-Use Path



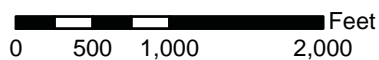
**Exhibit 2**  
**Existing Other Modes**  
 I-75/Mall Road  
 Boone County, KY



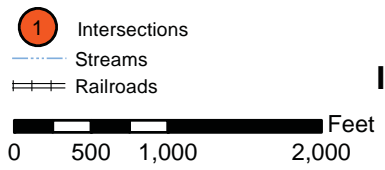
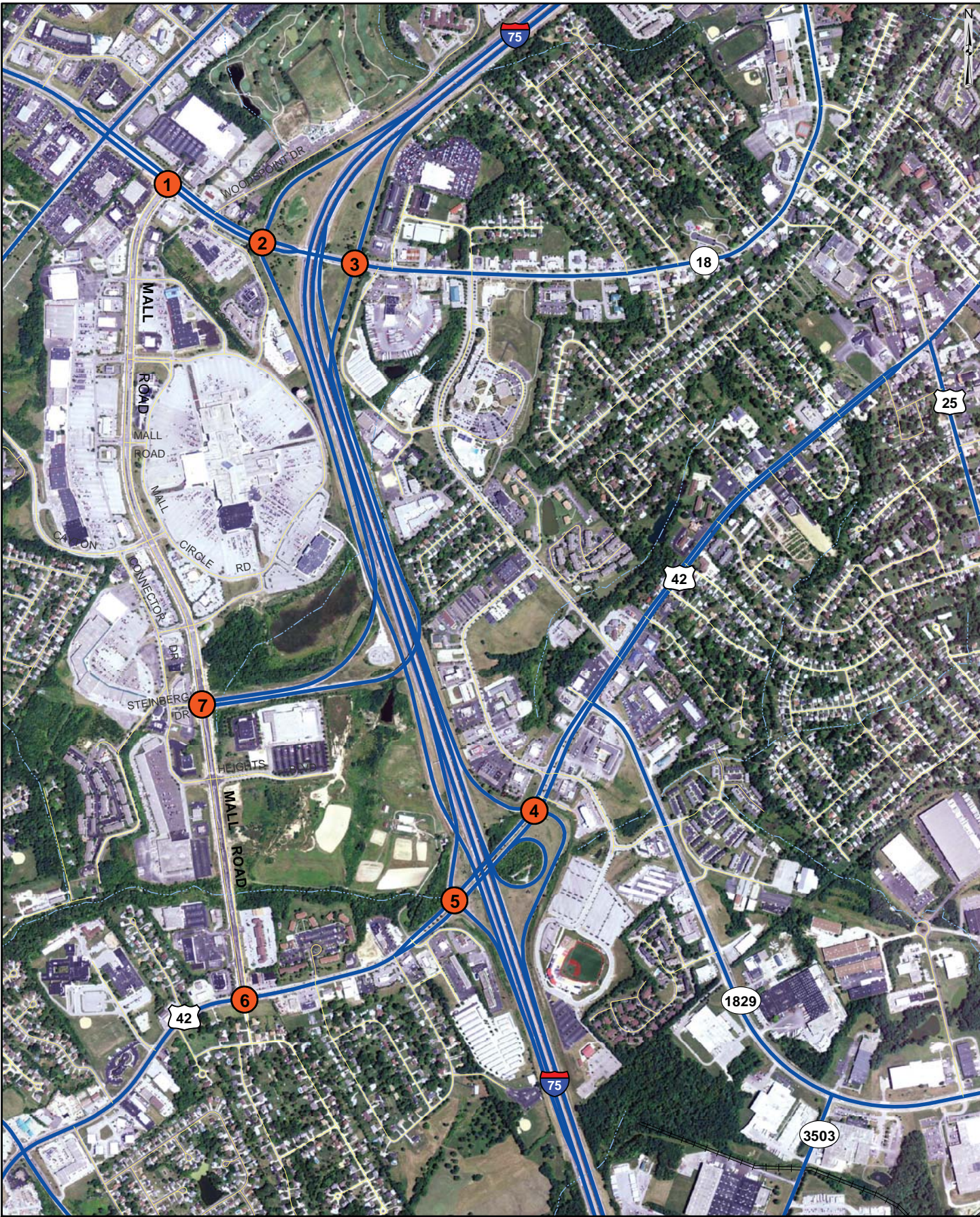
Groundbreaking by Design



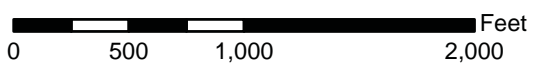
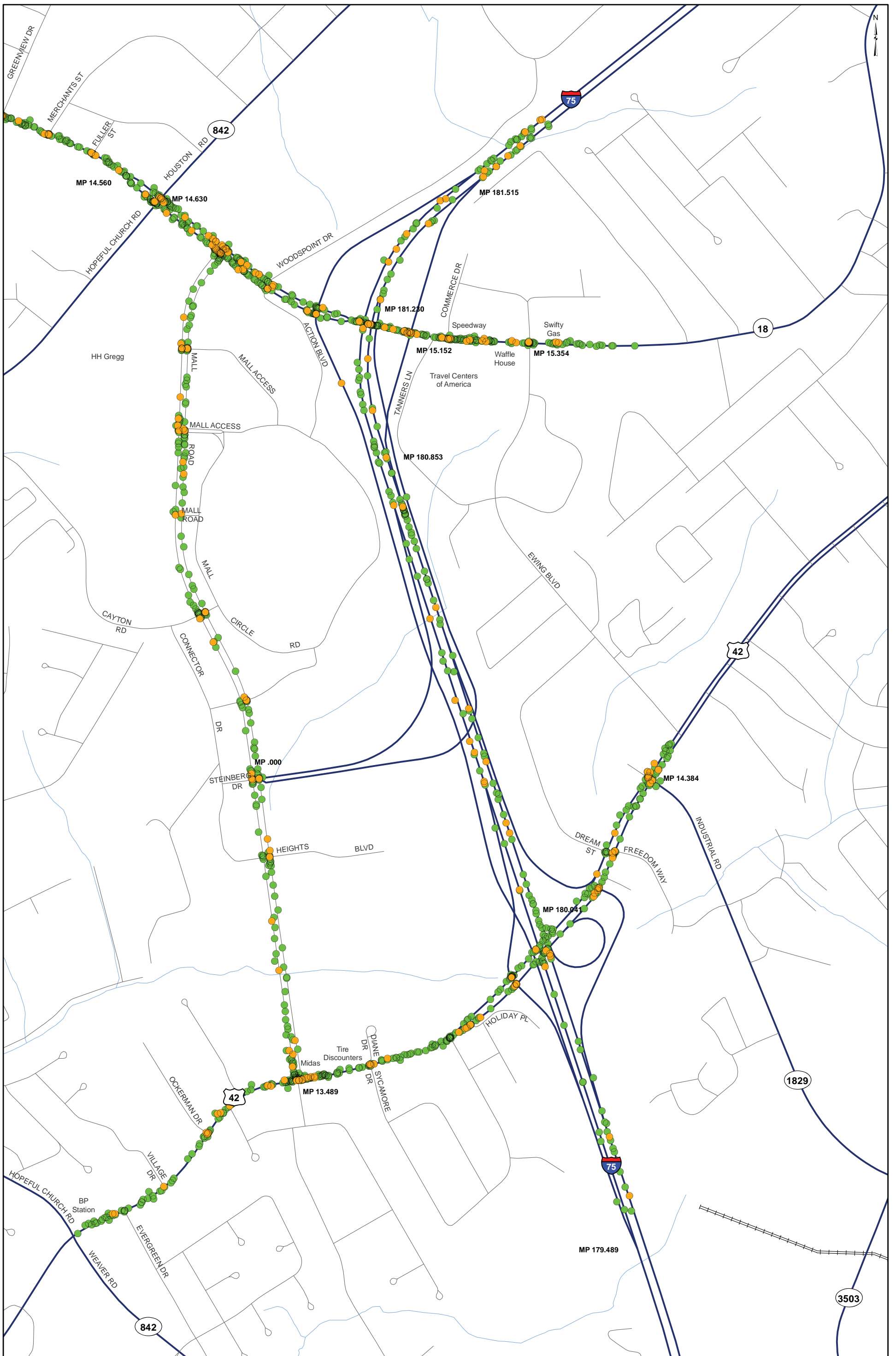
- Interchange Deficiencies
- Streams
- Railroads



**Exhibit 3**  
**Study Area Deficiencies**  
 I-75/Mall Road  
 Boone County, KY



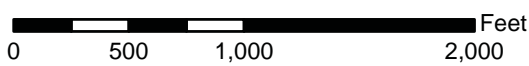
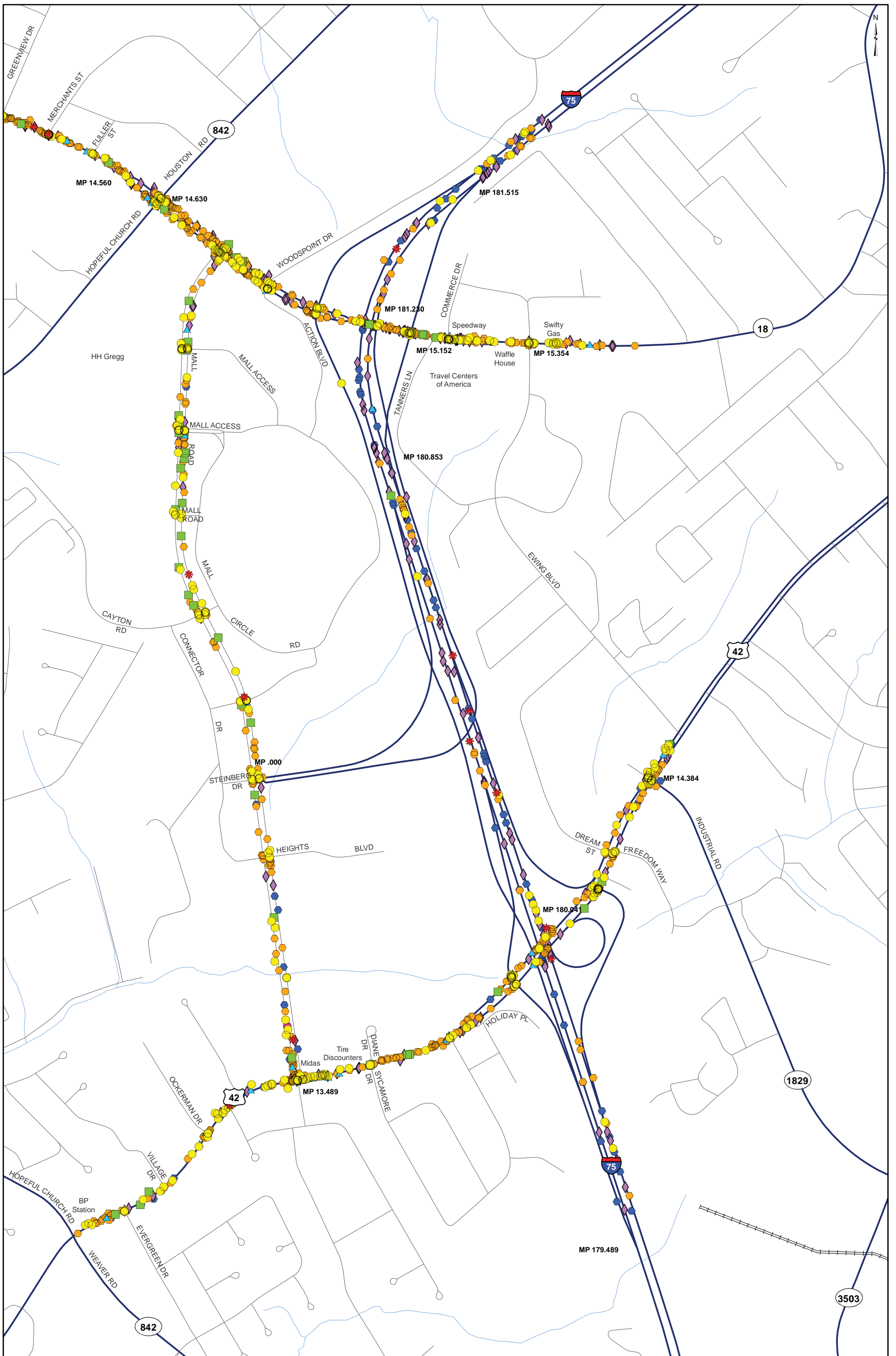
**Exhibit 4**  
**Intersections in Area of Influence**  
 I-75/Mall Road  
 Boone County, KY



**Crash Data 2009-2011**

- Fatality
- Injury
- Property Damage Only
- Railroads
- Streams

**Exhibit 5**  
**Crash Data**  
 I-75/Mall Road  
 Boone County, KY



- 2009-2011 Crash Data**
- Angle
  - Backing
  - ★ Head On
  - Rear to Rear
  - ▲ Opposing Left Turn
  - Rear End
  - ◆ Side Swipe
  - Single Vehicle

- Exhibit 6  
Manner of Collision  
I-75/Mall Road  
Boone County, KY**
- Railroads
  - Streams





### 2040 TRAFFIC OPERATIONS SUMMARY

Intersection Number	INTERSECTIONS		2040																				2040 Build vs No Build Change in Delay															
			Direction	Movement	No Build Design Hour 2040 ADT	Build Design Hour 2040 ADT	No Build					Build					Change in Delay AM	Change in Delay PM	No Build Design Hour						Build Design Hour 2040 PM	Build Design Hour Adj Flow Rt	Build Design Hour Delay	Build Design Hour Vol x Delay	Build Design Hour LOS									
							2040 AM	Adj Flow Rt	Delay	Vol x Delay	LOS	2040 AM	Adj Flow Rt	Delay	Vol x Delay	LOS			2040 PM	Adj Flow Rt	Delay	Vol x Delay								LOS								
1	Mall Rd @ KY 18	Northbound	Left	5200	128	128	55.6	7116.8	E	120	128	55.6	7116.8	E	0.0	0.0	650	691	103.4	71449.4	F	650	691	103.4	71449.4	F												
			7	Mall Rd @ I-75 Ramps	Northbound	Left	450	300	20	24	57.1	1370.4	E	10	12	55.4	664.8	E	-1.7	-0.2	50	52	82.2	4274.4	F	60	62	82.0	5084.0	F								
		Total Volume				1725					1691					2939					3373					AM	PM											
		Total Delay			43967					41993.4					492356.3					907561.1					AM	PM												
		Average Delay			25.5					24.8					167.5					269.1					AM	PM	-2.6%	60.6%										

**Exhibit 8**  
**2040 Traffic Operations Summary**  
  
I-75/Mall Road  
Boone County, KY

*Note: Right Turns on Red are excluded from this analysis*

Key	
ADT	vehicles/day
Design Hour	vehicles/hour
Delay	seconds/vehicle
Adjusted Flow	vehicles/hr
Total Delay	seconds/vehicle

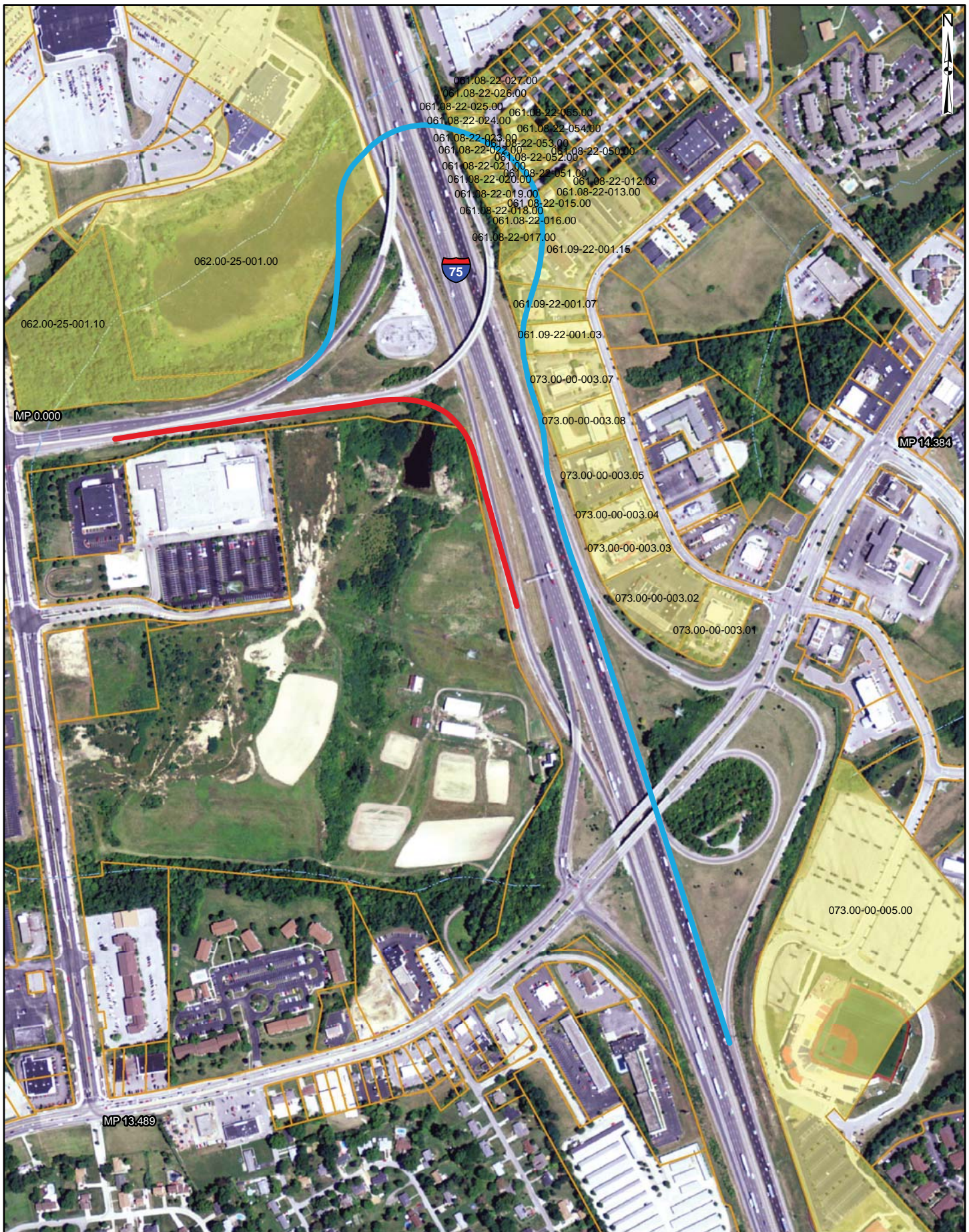
Total All Intersections: 24383  
Total Delay all Intersections: 2822242.8  
Total Average Delay: 115.7

24736  
2834586.2  
114.6

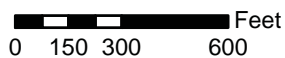
38650  
13733357.5  
355.3

39515  
14327721  
362.6

AM PM  
-1.0% 2.0%



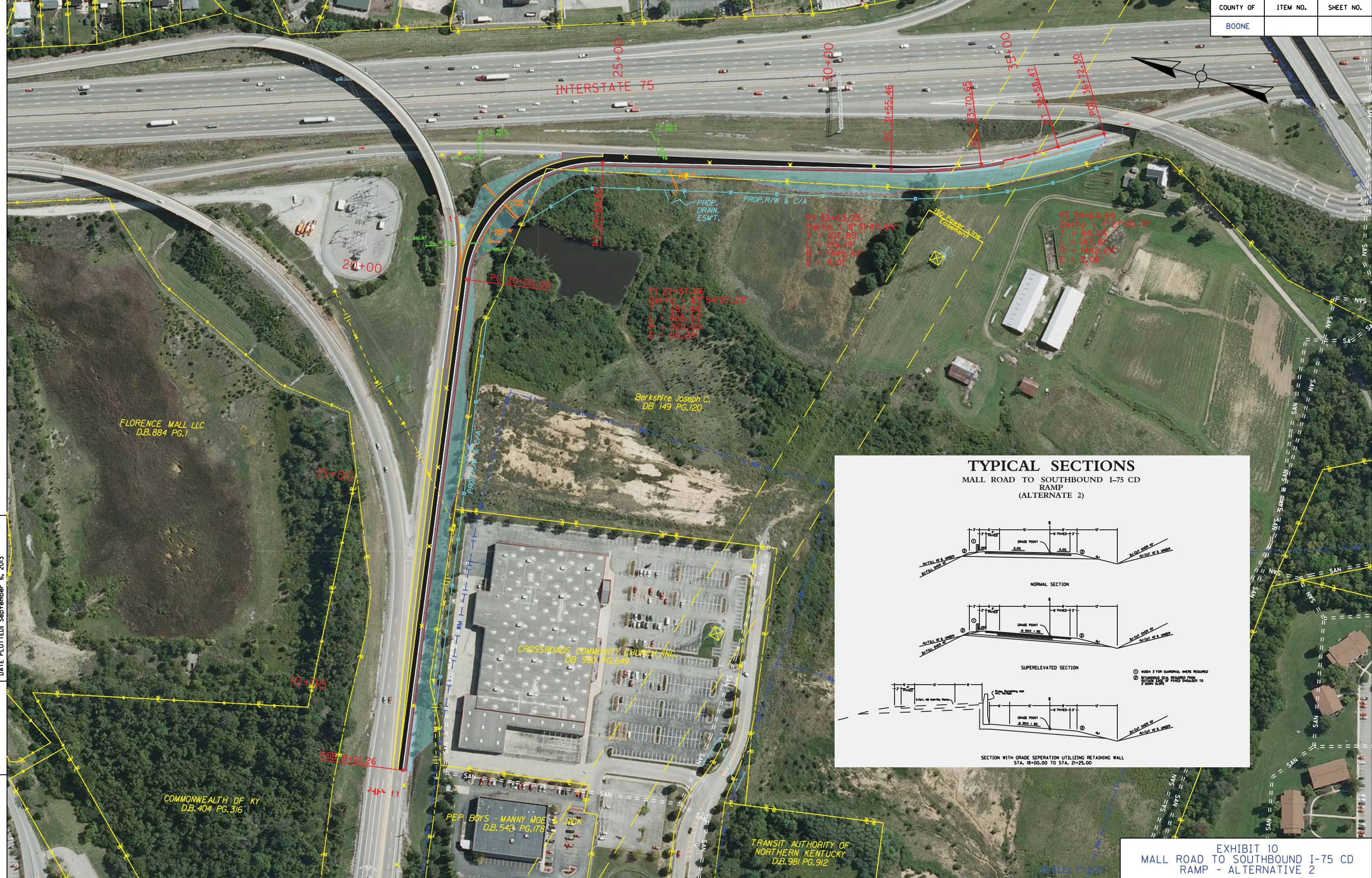
- I-75 SB Entrance Ramp at Mall Road
- I-75 NB Exit Ramp at Mall Road
- Properties Potentially Impacted by I-75 NB Exit Ramp at Mall Road
- Parcel Boundary



**Exhibit 9**  
**Alternative 1**  
 I-75/Mall Road  
 Boone County, KY

COUNTY OF	ITEM NO.	SHEET NO.
BOONE		

FILE NAME: U:\12408 - SW PLANNING\01MALL\PRELIMINARY DESIGN\REFERENCES\AL T2 PROPOSED.DGN  
 USER: glocorbill  
 DATE PLOTTED: September 6, 2013  
 E-SHEET NAME:  
 MicroStation v8.11.7.443



INTERSTATE 75  
 25+00  
 30+00  
 35+00

FLORENCE MALL LLC  
 D.B.884 PG.1

Berkshire Joseph C.  
 DB 149 PG.120

CROSSROADS COMMUNITY CHURCH, INC.  
 DB 990 PG.699

PEP BOYS - MANNY MOE'S JACK  
 D.B.542 PG.178

TRANSIT AUTHORITY OF  
 NORTHERN KENTUCKY  
 D.B.981 PG.912

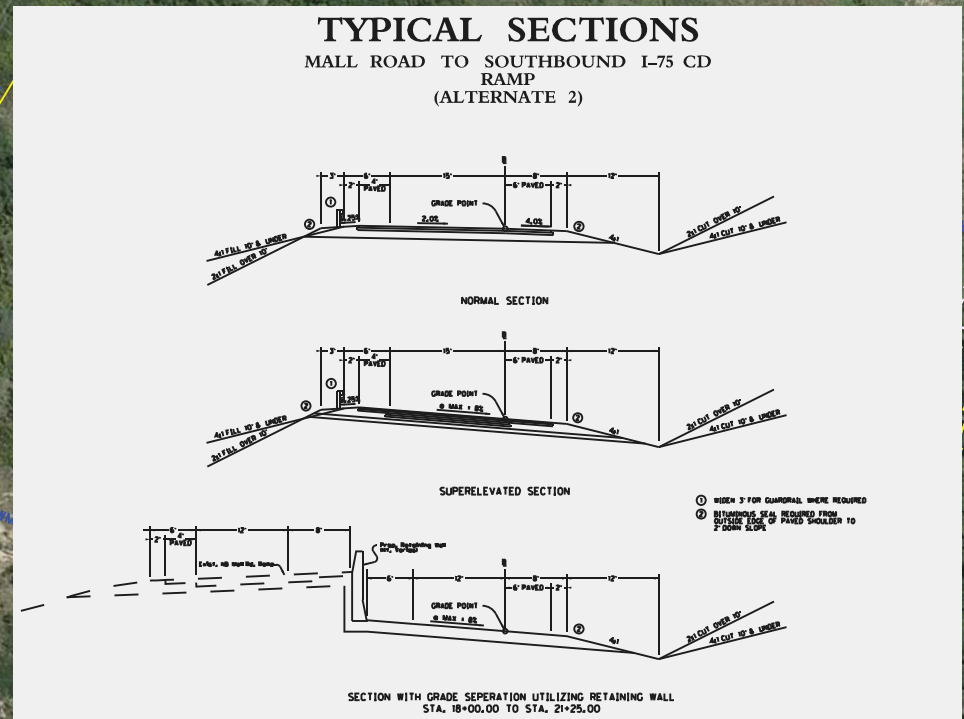


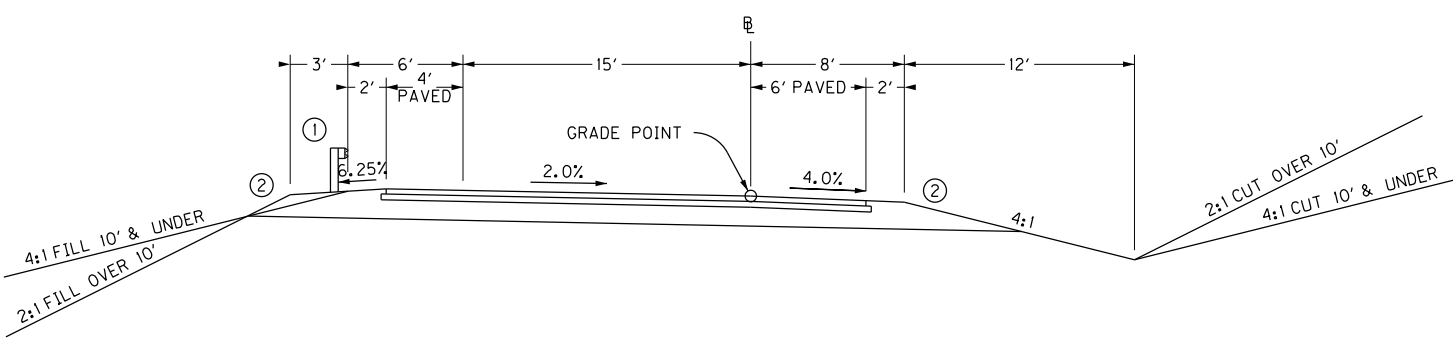
EXHIBIT 10  
 MALL ROAD TO SOUTHBOUND I-75 CD RAMP - ALTERNATIVE 2

COUNTY OF	ITEM NO.	SHEET NO.
BOONE		

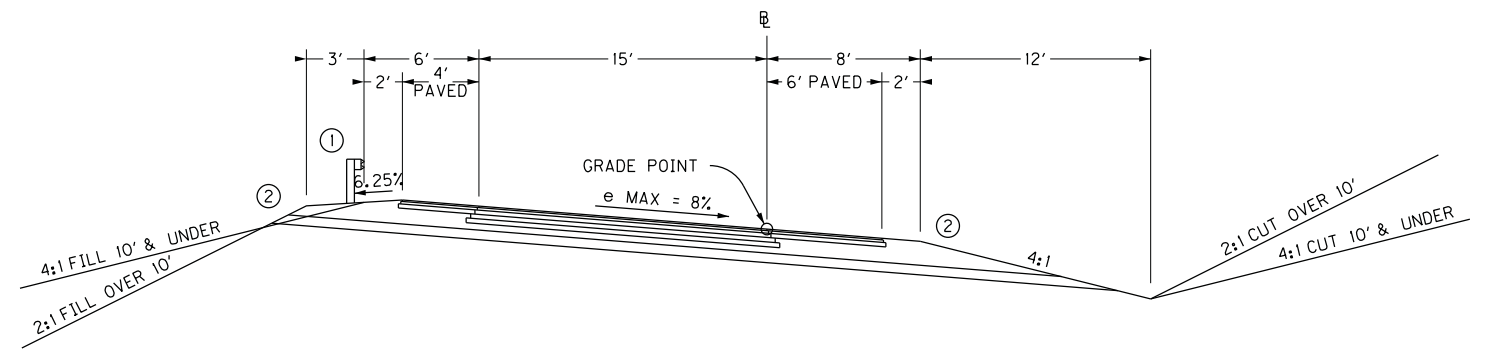
# TYPICAL SECTIONS

## MALL ROAD TO SOUTHBOUND I-75 CD RAMP (ALTERNATE 2)

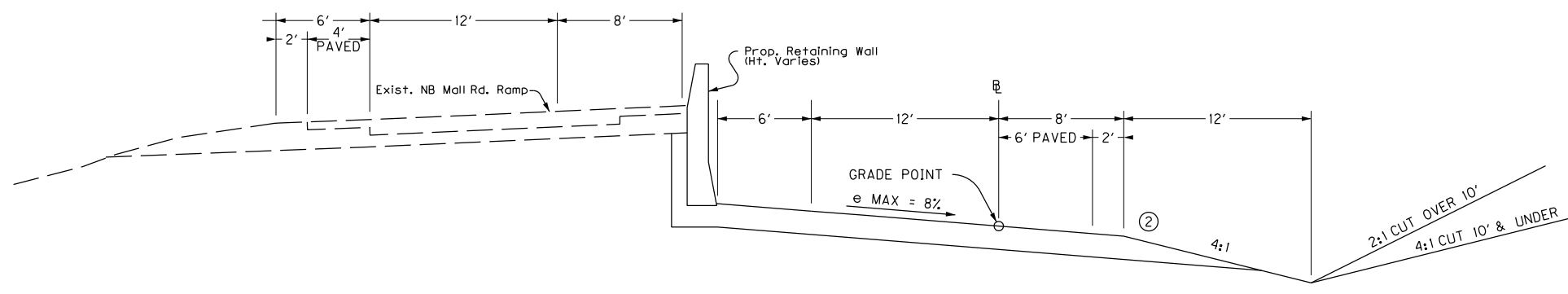
- ① WIDEN 3' FOR GUARDRAIL WHERE REQUIRED
- ② BITUMINOUS SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO 2' DOWN SLOPE



NORMAL SECTION



SUPERELEVATED SECTION



SECTION WITH GRADE SEPERATION UTILIZING RETAINING WALL

STA. 18+00.00 TO STA. 21+25.00

FILE NAME: U:\12408 - SW PLANNING\01MALL\PRELIMINARY DESIGN\00\VALTI CHANGED TO ALT 2\TYPICALS\ALT1TYPICALS.DGN  
 USER: ciccocari  
 DATE PLOTTED: September 20, 2013  
 E-SHEET NAME:  
 MicroStation v8.11.7.443

SCALE: 1"=5'

EXHIBIT 11  
MALL ROAD TO SOUTHBOUND I-75 CD  
RAMP - ALTERNATE 2

FILE NAME: U:\12408 - SW PLANNING\DMALL\PRELIMINARY DESIGN\DMALL\TI CHANGED TO ALT 2\PROFILE\ALT TI PROFILE.DGN

USER: ciccocelli  
DATE PLOTTED: September 20, 2013

E-SHEET NAME:

MicroStation v8.11.7.443

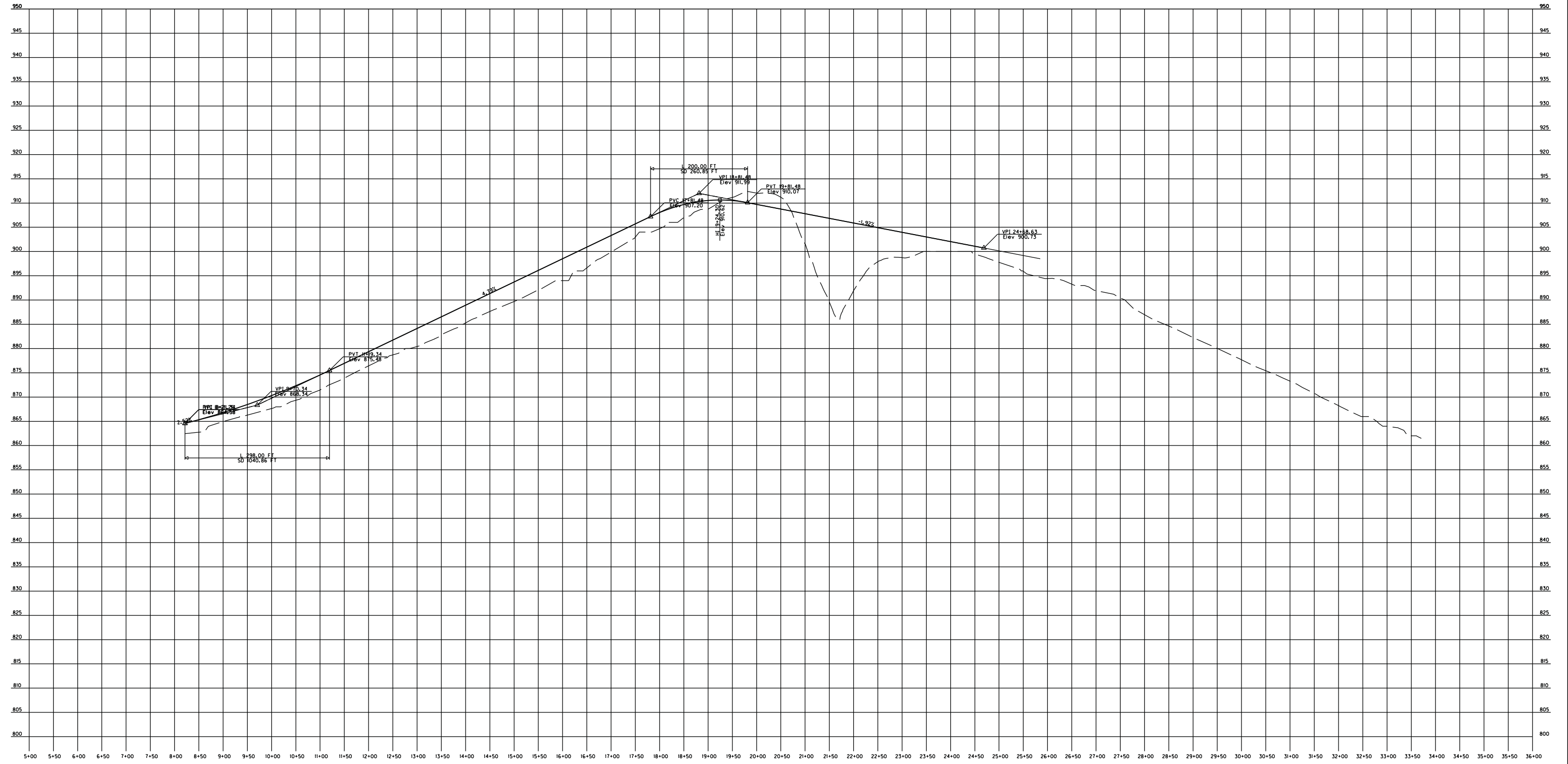
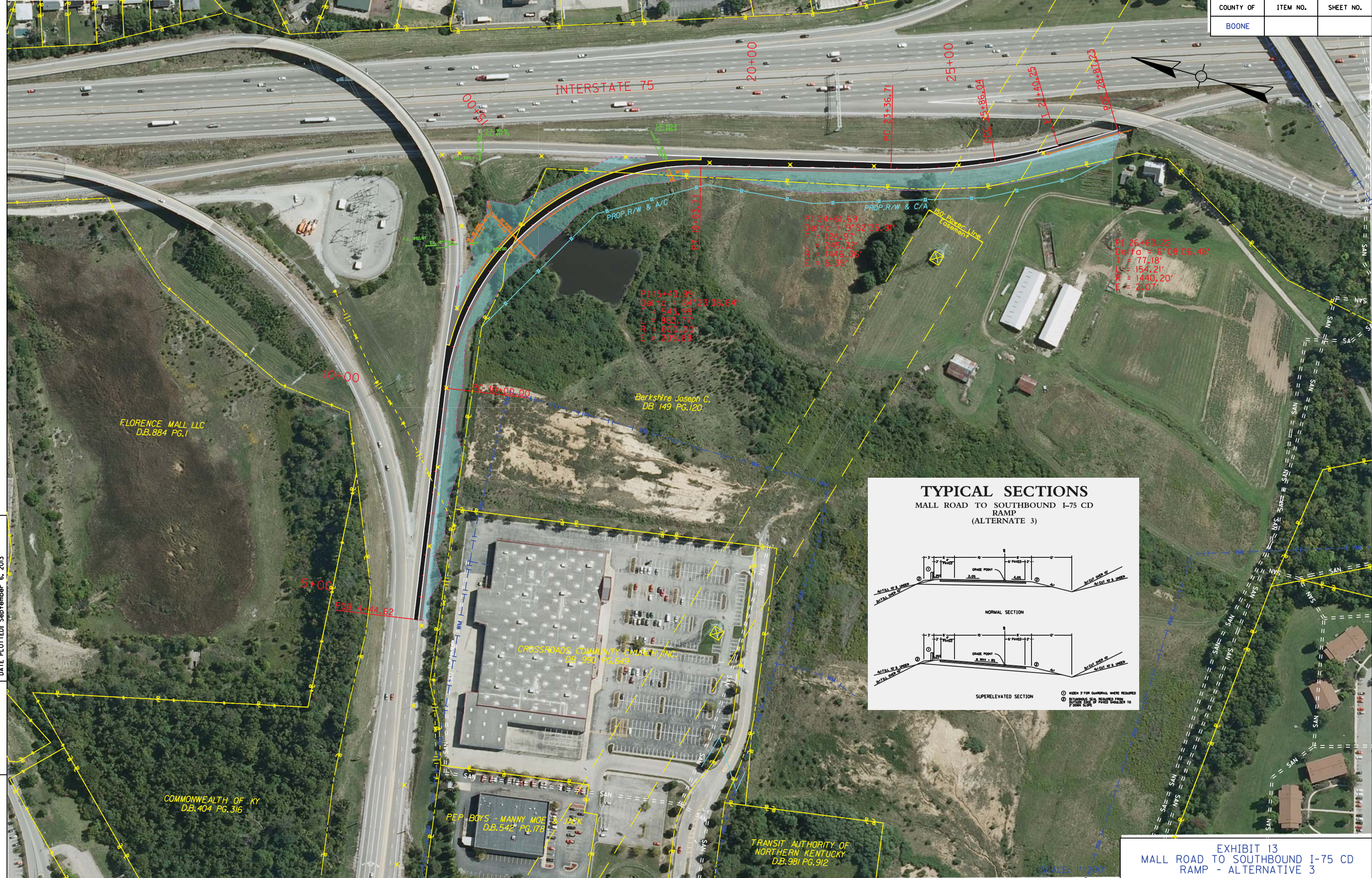


EXHIBIT 12  
MALL ROAD TO SOUTHBOUND I-75 CD  
RAMP - ALTERNATE 2  
SCALE: 1"=100'

FILE NAME: I:\12408 - SW PLANNING\01MALL\PRELIMINARY DESIGN REFERENCES\AL T3 PROPOSED.DGN  
 USER: glccorall  
 DATE PLOTTED: September 6, 2013  
 E-SHEET NAME:  
 MicroStation v8.11.7.443



PI 15+43.99  
 Delta = 84°23'38.84"  
 T = 543.99'  
 L = 883.77'  
 R = 600.00'  
 E = 205.89'

PI 24+61.69  
 Delta = 9°52'35.91"  
 T = 124.97'  
 L = 249.12'  
 R = 1446.35'  
 E = 5.39'

PI 26+63.22  
 Delta = 6°08'06.48"  
 T = 77.18'  
 L = 154.21'  
 R = 1440.20'  
 E = 21.07'

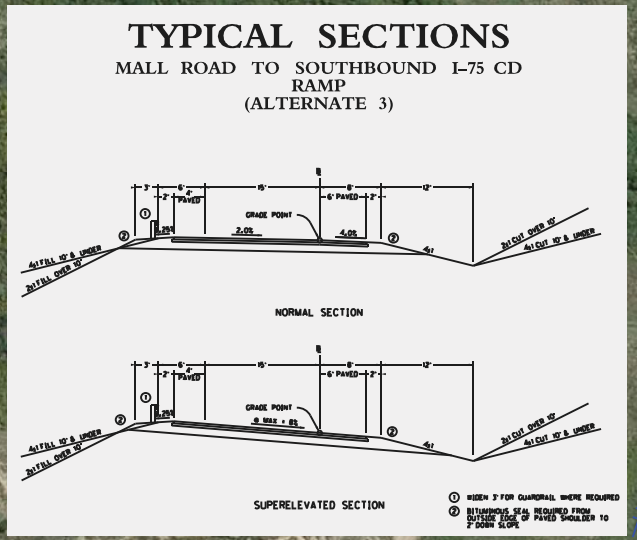


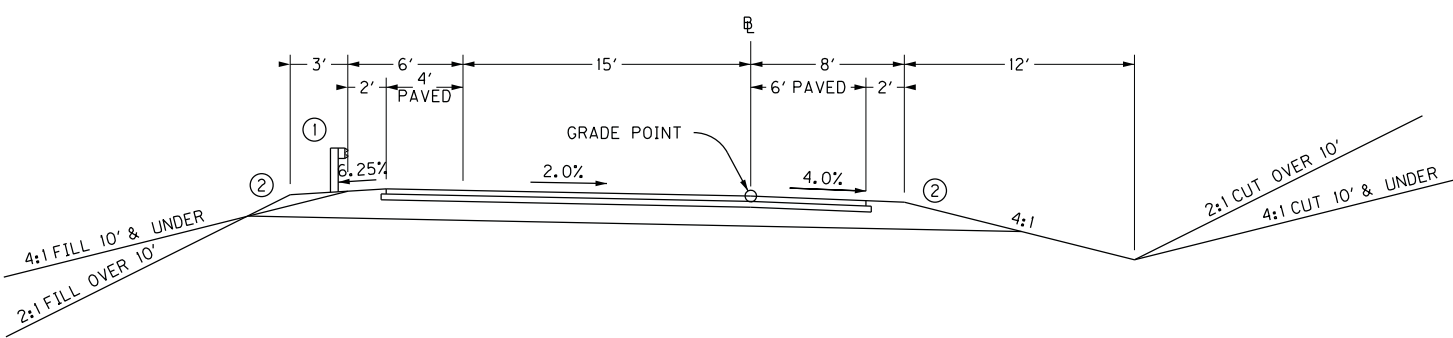
EXHIBIT 13  
 MALL ROAD TO SOUTHBOUND I-75 CD RAMP - ALTERNATIVE 3  
 SCALE: 1"=100'

COUNTY OF	ITEM NO.	SHEET NO.
BOONE		

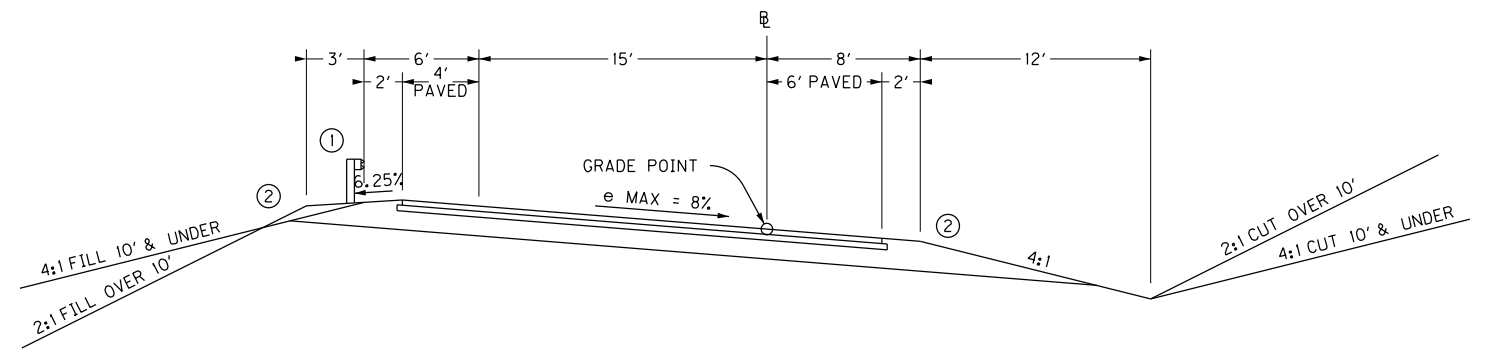
# TYPICAL SECTIONS

## MALL ROAD TO SOUTHBOUND I-75 CD RAMP (ALTERNATE 3)

- ① WIDEN 3' FOR GUARDRAIL WHERE REQUIRED
- ② BITUMINOUS SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO 2' DOWN SLOPE



NORMAL SECTION



SUPERELEVATED SECTION

FILE NAME: U:\2408 - SW PLANNING\MALL\PRELIMINARY DESIGN\DOGN\ALT2 CHANGED TO ALT 3\TYPICALS\ALT2TYPICALS.DGN

USER: ciccocelli  
DATE PLOTTED: September 20, 2013

E-SHEET NAME:

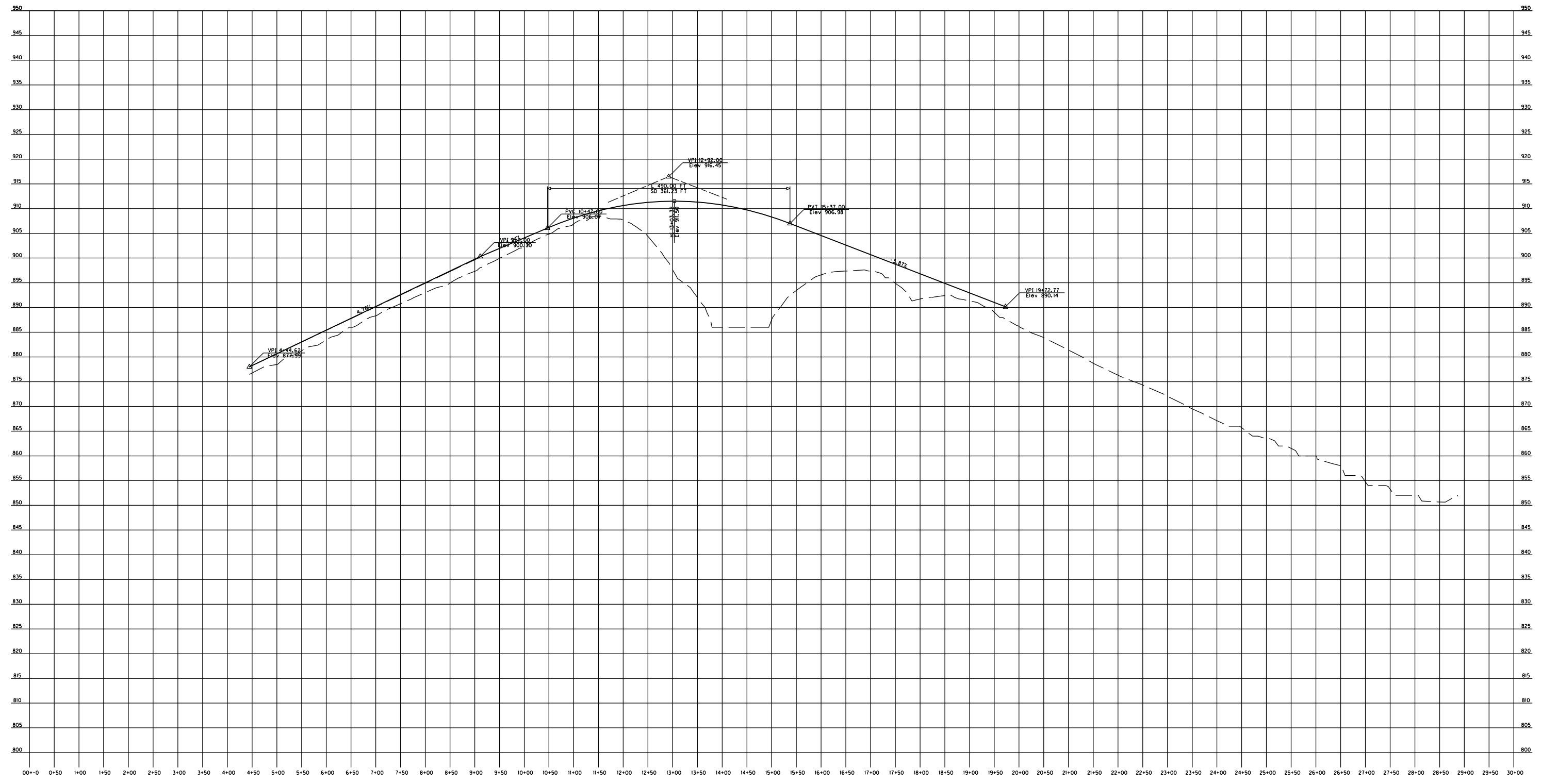
MicroStation v8.11.7.443

SCALE: 1"=5'

EXHIBIT 14  
MALL ROAD TO SOUTHBOUND I-75 CD  
RAMP - ALTERNATE 3

COUNTY OF	ITEM NO.	SHEET NO.
BOONE		

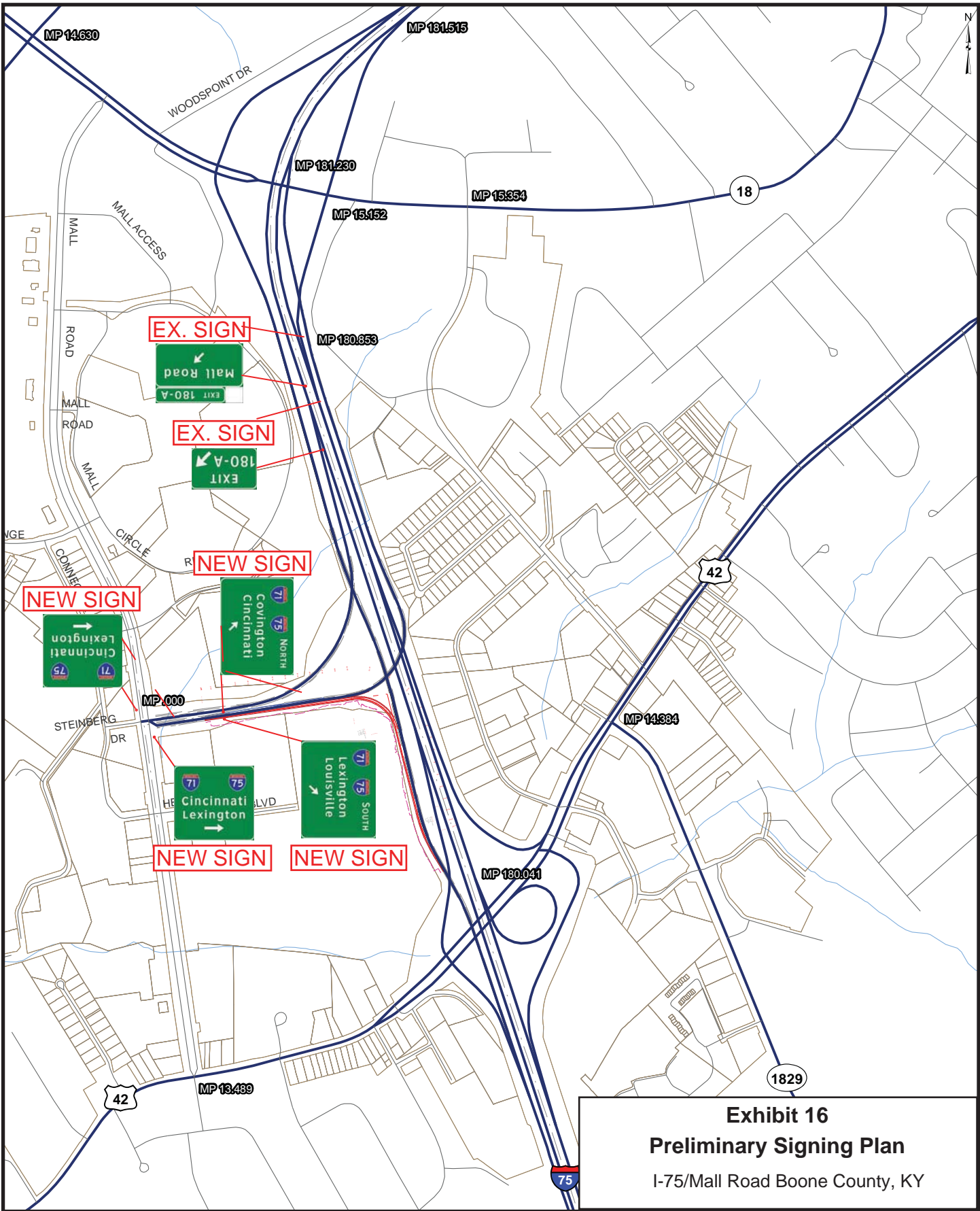
FILE NAME: U:\12408 - SW PLANNING\SMALL\PRELIMINARY DESIGN\DN\ALT2 CHANGED TO ALT 3\PROFILE\ALT2 PROFILE.DGN  
 USER: ciccocelli  
 DATE PLOTTED: September 20, 2013  
 E-SHEET NAME:  
 MicroStation v8.11.7.443



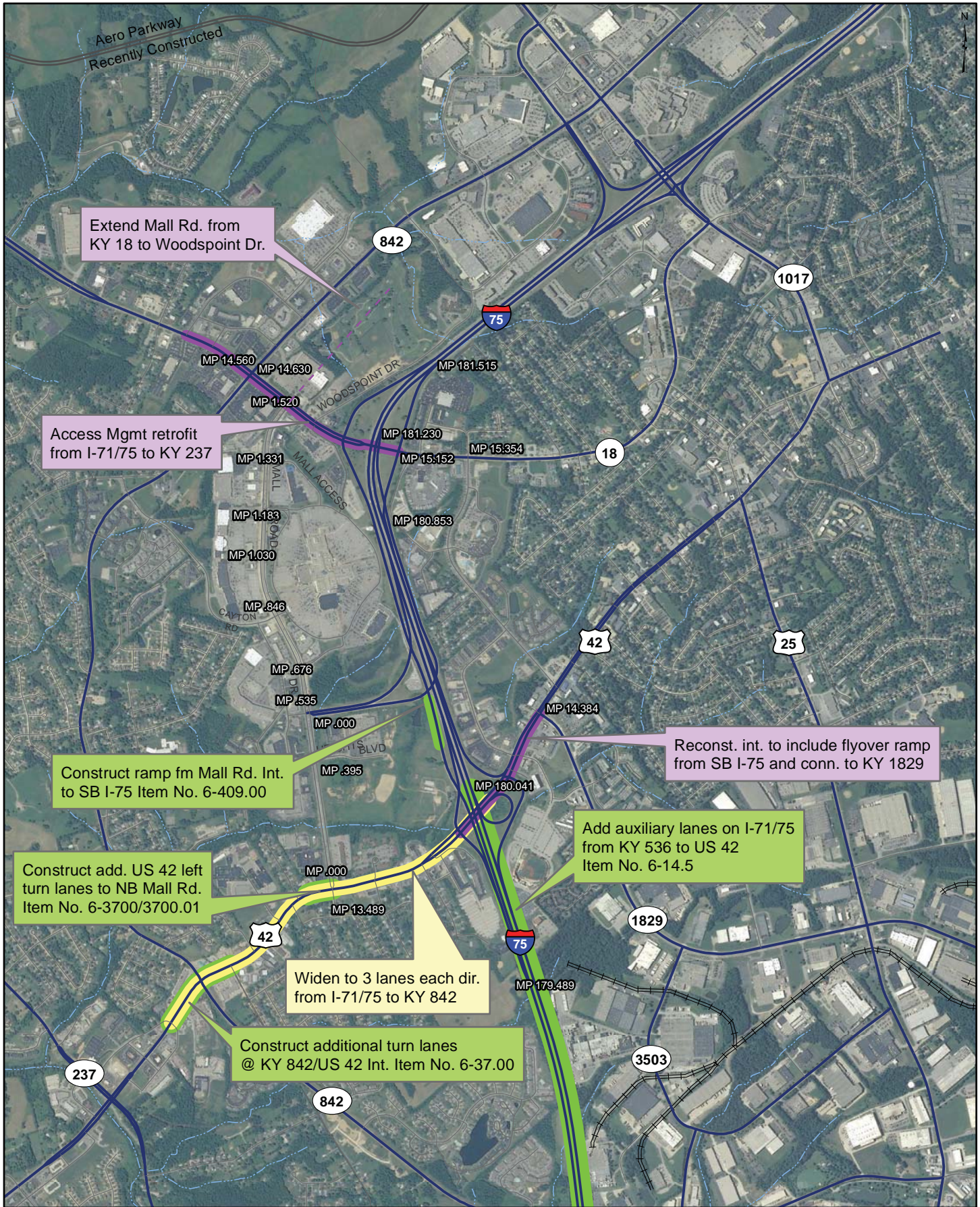
SCALE: 1"=100'

EXHIBIT 15  
 MALL ROAD TO SOUTHBOUND I-75 CD  
 RAMP - ALTERNATE 3





**Exhibit 16**  
**Preliminary Signing Plan**  
 I-75/Mall Road Boone County, KY



Extend Mall Rd. from  
KY 18 to Woodspoint Dr.

Access Mgmt retrofit  
from I-71/75 to KY 237

Construct ramp from Mall Rd. Int.  
to SB I-75 Item No. 6-409.00

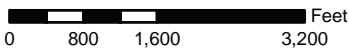
Construct add. US 42 left  
turn lanes to NB Mall Rd.  
Item No. 6-3700/3700.01

Widen to 3 lanes each dir.  
from I-71/75 to KY 842

Construct additional turn lanes  
@ KY 842/US 42 Int. Item No. 6-37.00

Reconst. int. to include flyover ramp  
from SB I-75 and conn. to KY 1829

Add auxiliary lanes on I-71/75  
from KY 536 to US 42  
Item No. 6-14.5



- Current Highway Plan
- OKI 2030 Transportation Plan
- OKI 2040 Transportation Plan

**Planned Projects**  
I-75/Mall Road  
Boone County, KY  
Exhibit 17