



November **2014** 

Preliminary Line & Grade Mountain Parkway Widening Item No. 10-168.00 KY 191 Overpass Bridge to KY 205 Interchange Wolfe County, Kentucky Kentucky Transportation Cabinet

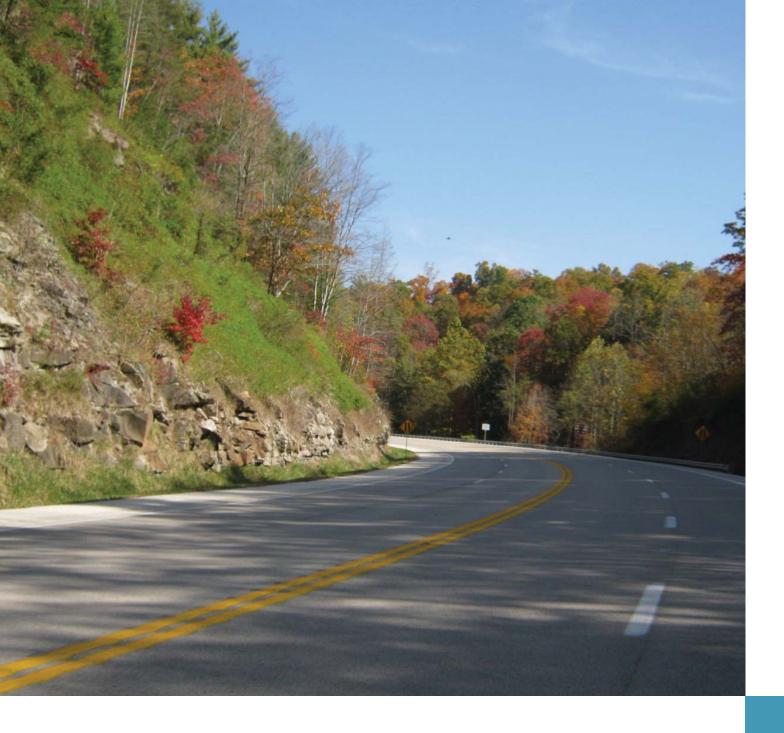






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# **01** Preliminary Report



# Preliminary Report

## **Existing Conditions**

The project corridor begins just west of the KY 191 over-pass bridge running between mile point 46.2 for approximately 11 miles to mile point 57.2 just west of the KY 205 interchange. The Mountain Parkway corridor serves as a vital arterial for the Appalachian area of Kentucky, providing connectivity from Central Kentucky via I-64 to surrounding regions of eastern Kentucky and Virginia via US 23. Designed and constructed in the 1960's, the parkway has served eastern Kentucky residents and local industries for roughly 50 years.

This section of the parkway has a number of geometric deficiencies, does not meet current design standards, and has a projected increase in future traffic demands – all of which factor in the need for improvements to better serve the region and those who travel this route.

Additionally the Mountain Parkway is being widened and expanded from Campton to Prestonsburg in multiple design and construction sections. This project is section 4.

## **Proposed Improvements**

The project team met on August 7, 2014 for an Alternate Alignment Review meeting. Presented at that meeting were two distinct parkway widening alternates, one widening to the north and one widening to the south. Additionally a third alternate was presented that blended both the north and south alternates.

Each alternate proposed improvements to include widening the parkway from the existing 2 lane roadway to a 4 lane divided roadway with a 40 foot median (28 foot grass), with improvements to interchanges at KY 191 and KY 1010 that maintain or provide full access to the parkway. Additional interchanges were studied for KY 2491, KY 1812 and KY 1419 and were presented at the alignment review meeting.

Each widening alternate included proposed new twin bridges for the parkway at the KY 191 interchange, KY 2491, KY 1812, and KY 1419. A new overpass bridge is proposed for the KY 1010 interchange. An existing "wagon box" at KY 3034 is also being considered for replacement with a new twin bridge.

The design team decided at the alignment review meeting that interchanges at KY 191 and KY 1010 are to remain. The team eliminated from further study new interchanges at KY 2491, KY 1812 and KY 1419 since there are no current interchanges at these locations.

A public meeting was held on September 23, 2014 in Campton, Kentucky. Alternates 1 and 2 were presented with interchanges at KY 191 and KY 1010. Most people attending the public meeting support widening the Parkway.

## Preliminary Line & Grade Inspection

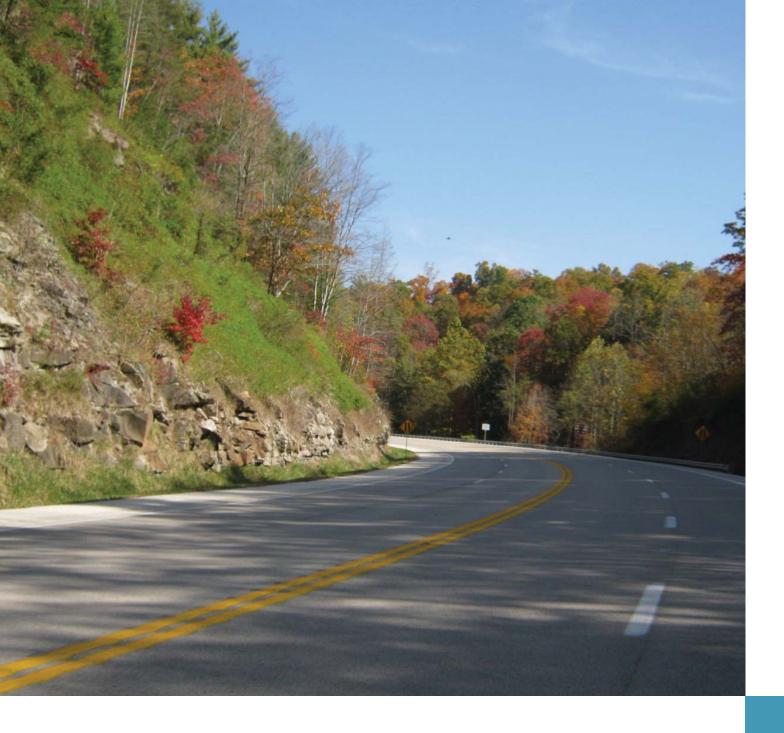
Presented for this inspection are preliminary plans of the Mountain Parkway Widening (Alternates 1 and 2), with diamond interchanges at KY 191 and KY 1010. Typical sections, construction cost estimates, utility estimates, right of way summaries and maintenance of traffic descriptions are included in this report. A summary of costs is provided for alternates comparison.

## ALTERNATES 1 & 2 SUMMARY OF COSTS

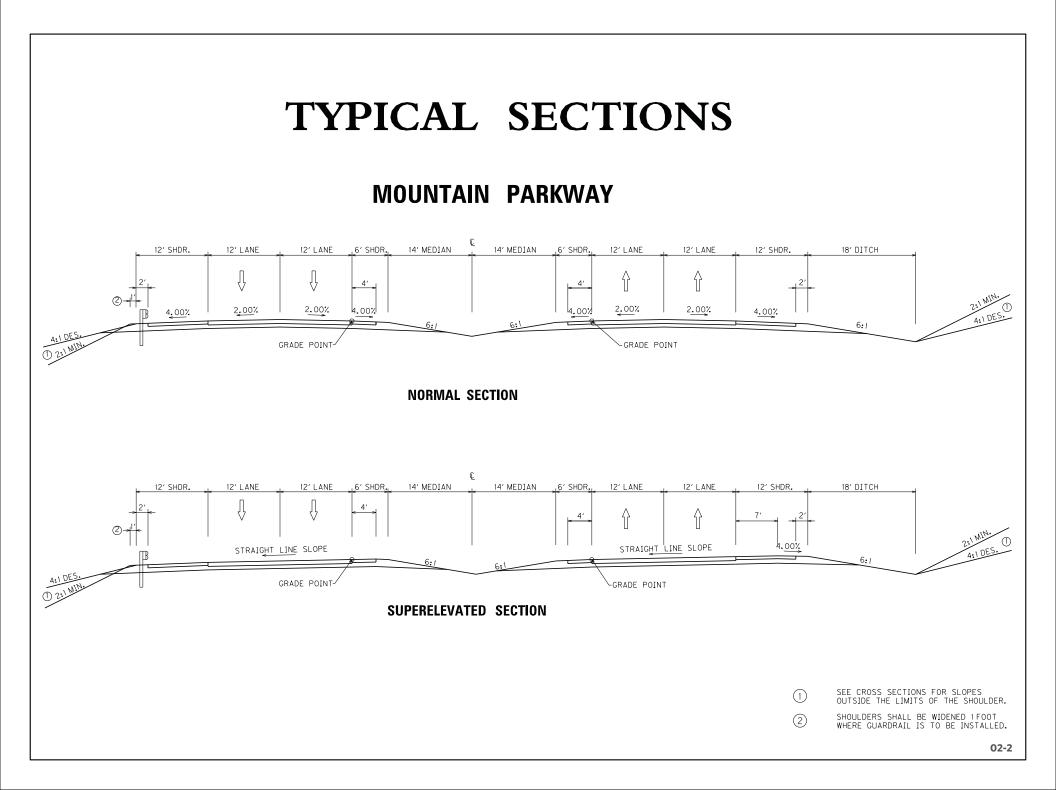
	ALTERNATE 1	ALTERNATE 2
Construction Cost <sup>3</sup>	\$98,000,000	\$110,540,000
Utility Cost	\$1,100,000	\$723,800
Right of Way Cost <sup>1, 3</sup>	\$3,890,000	\$2,370,000
Stream Impacts Cost <sup>2</sup>	\$8,042,000	\$4,500,000
TOTAL COST	\$111,032,000	\$118,133,800

<sup>1</sup> Based on \$150,000 for each residential relocation, \$50,000 for each barn, \$5,000 per acre acquired, and 20% miscellaneous for contingencies.

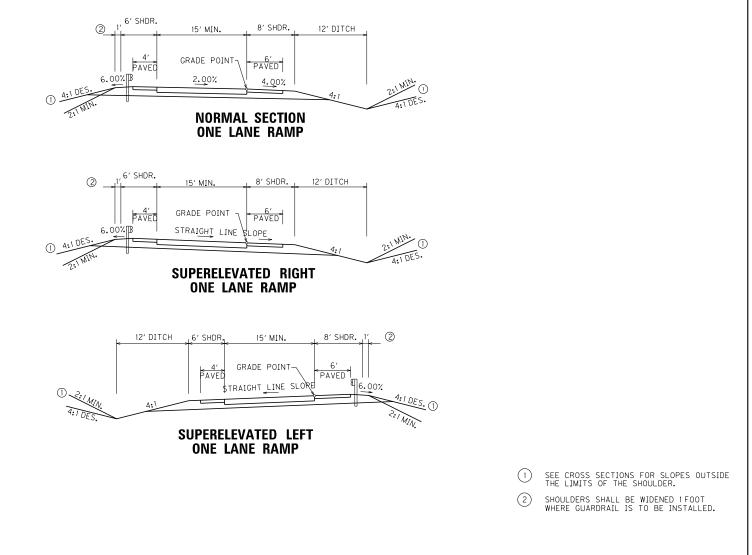
- <sup>2</sup> From Preliminary Stream Impact Summary Memo by Third Rock Consultants dated 10/03/2014.
- <sup>3</sup> Construction and Right of Way costs updated after PL&G meeting with the revised KY 1010 interchange for Alternate 2. Alternate 1 interchange at KY 1010 was not revised for this estimate.

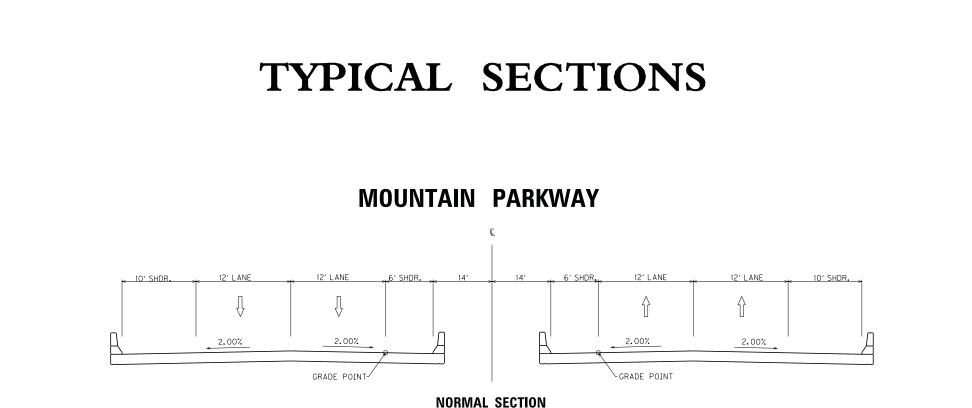


# Typical Sections

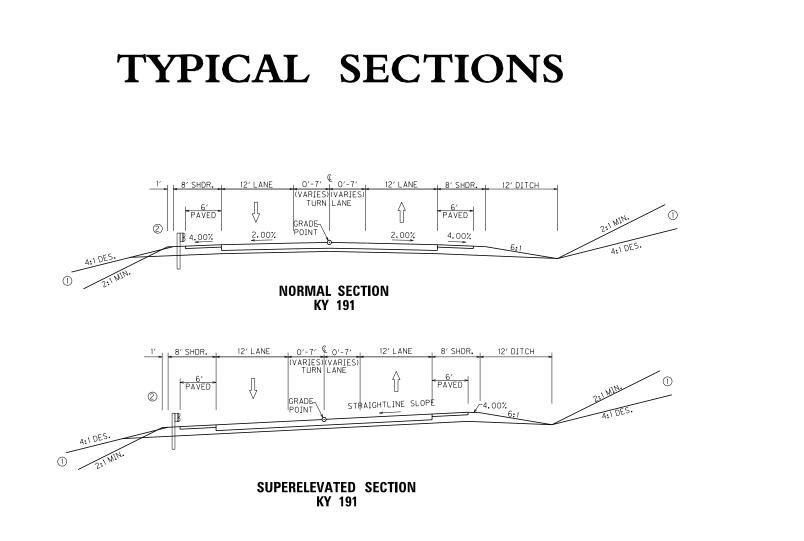


## **TYPICAL SECTIONS**





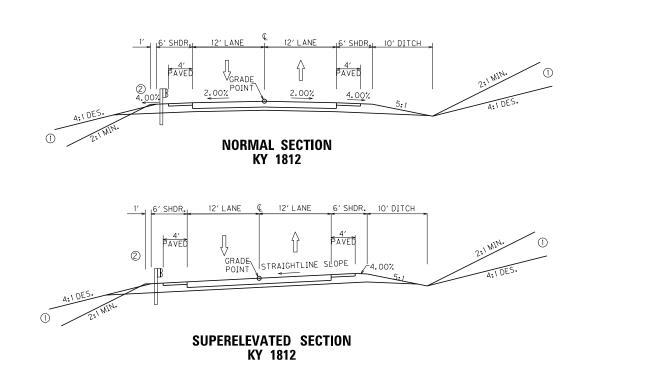
TWIN BRIDGE



(1) SEE CROSS SECTIONS FOR SLOPES OUTSIDE THE LIMITS OF THE SHOULDER.

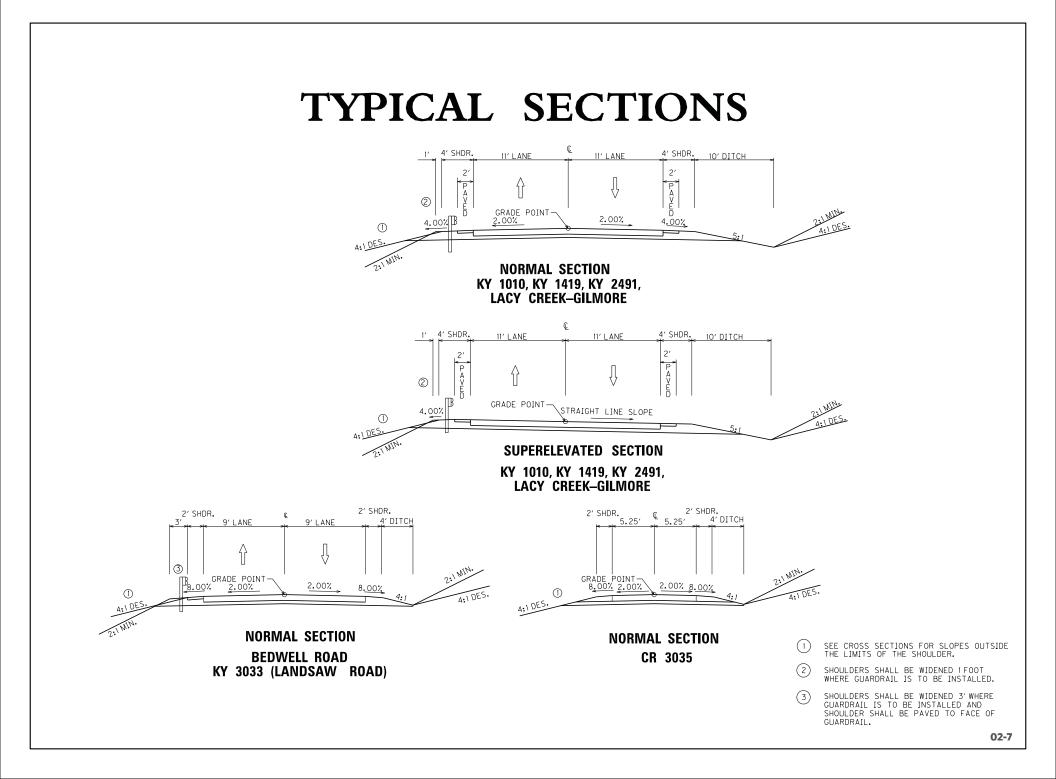
2 SHOULDERS SHALL BE WIDENED 1 FOOT WHERE GUARDRAIL IS TO BE INSTALLED.

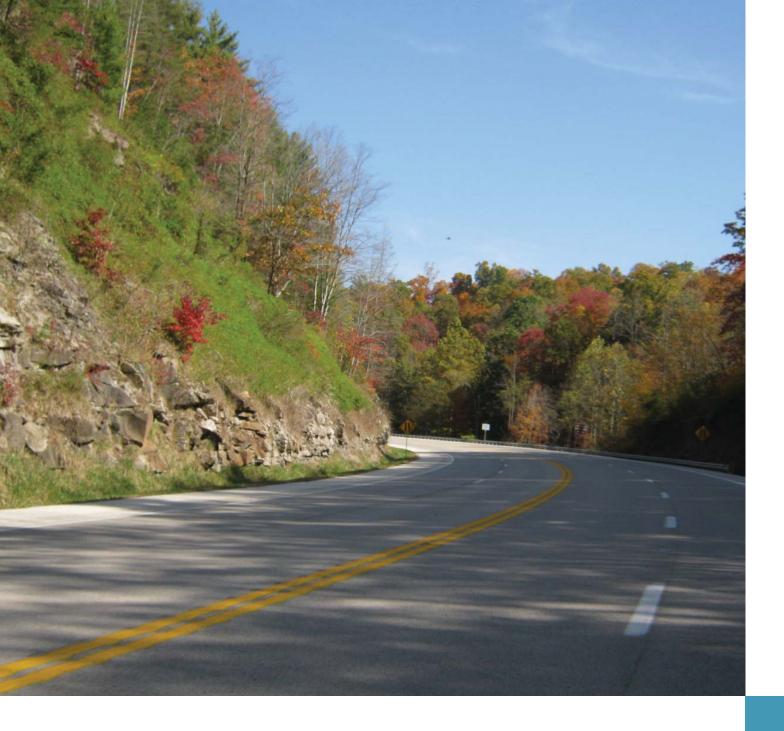
## **TYPICAL SECTIONS**



() SEE CROSS SECTIONS FOR SLOPES OUTSIDE THE LIMITS OF THE SHOULDER.

(2) SHOULDERS SHALL BE WIDENED I FOOT WHERE GUARDRAIL IS TO BE INSTALLED.





# **03** Construction Cost Estimates

## Estimate 10-168.00

Estimated Cost:\$89,089,983.72 Contingency: 10.00% Estimated Total: \$97,998,982.09 **MOUNTAIN PARKWAY ALTERNATE 1** Base Date: 11/21/14 Spec Year: 08 Unit System: E Work Type: GRADE & DRAIN WITH ASPHALT SURFACE Highway Type: STATE Urban/Rural Type: RURAL Season: SPRING County: WOLFE Latitude of Midpoint: 344432 Longitude of Midpoint: -832827 District: 10 Federal/State Project Number: FD52 1550 C119 E143 STP 0061(048)

Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	Extension
Group 0001: PAVING				
0066 00388 CL3 ASPH SURF 0.38B PG64-22	43,500.00	TON	\$80.00	\$3,480,000.00
0067 00214 CL3 ASPH BASE 1.00D PG64-22	246,000.00	TON	\$70.00	\$17,220,000.00
0068 00003 CRUSHED STONE BASE	157,000.00	TON	\$26.50	\$4,160,500.00
0069 00190 LEVELING & WEDGING PG64-22	11,000.00	TON	\$82.75	\$910,250.00

## Total for Group 0001:\$25,770,750.00

## Group 0002: ROADWAY

0005 ROAI	02200 DWAY EXCAVATION	4,235,000.00	CUYD	\$5.00	\$21,175,000.00
	02351 RDRAIL-STEEL W BEAM-S FACE	61,500.00	LF	\$12.83	\$789,045.00
	02352 RDRAIL-STEEL W BEAM-D FACE	1,500.00	LF	\$23.48	\$35,220.00
0008 GUAF	02360 RDRAIL TERMINAL SECTION NO 1	2.00	EACH	\$42.46	\$84.92
	02363 RDRAIL CONNECTOR TO BRIDGE EN		EACH	\$2,447.17	\$58,732.08
0011 GUAF	02367 RDRAIL END TREATMENT TYPE 1	70.00	EACH	\$2,004.54	\$140,317.80
•••-	02369 RDRAIL END TREATMENT TYPE 2A	20.00	EACH	\$585.15	\$11,703.00
0013 GUAF	02387 RDRAIL CONNECTOR TO BRIDGE EN	20.00 ID TY A-1	EACH	\$317.03	\$6,340.60
0014 GUAF	02391 RDRAIL END TREATMENT TYPE 4A	5.00	EACH	\$1,923.76	\$9,618.80
CLEA	02545 RING AND GRUBBING oximately 382 Acres	1.00	LS	\$600,000.00	\$600,000.00
0016	02650 ITAIN & CONTROL TRAFFIC	1.00	LS	\$900,000.00	\$900,000.00

Estimate: 10-168.00

Estimate: 10-168.00 <u>Line #</u> <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	Quantity	<u>Units</u>	Unit Price	Extension
0017 21415ND EROSION CONTROL	1.00	LS	\$1,039,000.00	\$1,039,000.00
0018 02726 STAKING	1.00	LS	\$880,000.00	\$880,000.00
0019 02731 REMOVE STRUCTURE	1.00	LS	\$100,000.00	\$100,000.00
Exist. KY 191 Bridge 0020 02731 REMOVE STRUCTURE	1.00	LS	\$80,000.00	\$80,000.00
Exist. KY 2491 Bridge 0021 02731 REMOVE STRUCTURE	1.00	LS	\$90,000.00	\$90,000.00
Exist. KY 1812 Bridge 0022 02731 REMOVE STRUCTURE	1.00	LS	\$15,000.00	\$15,000.00
Exist. KY 3034 Wagon Box 0023 02731 REMOVE STRUCTURE	1.00	LS	\$100,000.00	\$100,000.00
Exist. KY 1010 Bridge 0024 02731 REMOVE STRUCTURE	1.00	LS	\$15,000.00	\$15,000.00
Exist. DBL. 12'x6' RCBC 0025 02731 REMOVE STRUCTURE	1.00	LS	\$80,000.00	\$80,000.00
Exist. KY 1419 Bridge 0027 02262 FENCE-WOVEN WIRE TYPE 1	90,000.00	LF	\$6.50	\$585,000.00
0028 02555 CONCRETE-CLASS B	590.00	CUYD	\$429.06	\$253,145.40
For Retaining Walls			Total for Crow	~ 0000.000 000 007 c0

## Total for Group 0002:\$26,963,207.60

## Group 0003: DRAINAGE

0029 00462 CULVERT PIPE-18 IN	23,300.00	LF	\$48.46	\$1,129,118.00
0030 00464 CULVERT PIPE-24 IN	2,150.00	LF	\$54.19	\$116,508.50
0031 00466 CULVERT PIPE-30 IN	630.00	LF	\$55.48	\$34,952.40
0032 00468 CULVERT PIPE-36 IN	1,450.00	LF	\$79.78	\$115,681.00
0033 00469 CULVERT PIPE-42 IN	250.00	LF	\$114.72	\$28,680.00

9:50:24AM Wednesday, November 19, 2014 Estimate: 10-168.00

Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	Unit Price	Extension
0034 00470 CULVERT PIPE-48 IN	400.00	LF	\$105.58	\$42,232.00
0035 00471 CULVERT PIPE-54 IN	320.00	LF	\$150.59	\$48,188.80
0036 00472 CULVERT PIPE-60 IN	860.00	LF	\$163.57	\$140,670.20
0037 00474 CULVERT PIPE-72 IN	70.00	LF	\$359.66	\$25,176.20
0039 01204 PIPE CULVERT HEADWALL-18 IN	260.00	EACH	\$1,082.81	\$281,530.60
0040 01208 PIPE CULVERT HEADWALL-24 IN	35.00	EACH	\$1,161.92	\$40,667.20
0041 01210 PIPE CULVERT HEADWALL-30 IN	15.00	EACH	\$1,817.66	\$27,264.90
0042 01212 PIPE CULVERT HEADWALL-36 IN	25.00	EACH	\$1,988.79	\$49,719.75
0043 01214 PIPE CULVERT HEADWALL-42 IN	6.00	EACH	\$2,366.46	\$14,198.76
0044 01216 PIPE CULVERT HEADWALL-48 IN	7.00	EACH	\$2,975.92	\$20,831.44
0045 24026EC PIPE CULVERT HEADWALL-54 IN	4.00	EACH	\$7,920.00	\$31,680.00
0046 01220 PIPE CULVERT HEADWALL-60 IN	9.00	EACH	\$4,950.00	\$44,550.00
0047 24025EC PIPE CULVERT HEADWALL-72 IN	2.00	EACH	\$10,499.93	\$20,999.86
0048 01000 PERFORATED PIPE-4 IN	195,000.00	LF	\$6.86	\$1,337,700.00
0049 01010 NON-PERFORATED PIPE-4 IN	5,600.00	LF	\$8.68	\$48,608.00
0050 01020 PERF PIPE HEADWALL TY 1-4 IN	335.00	EACH	\$387.79	\$129,909.65

Estimate: 10-168.00

Line # <u>Item Number</u> <u>Description</u> <u>Supplemental Description</u>	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0051 01480 CURB BOX INLET TYPE B	14.00	EACH	\$3,902.69	\$54,637.66
0052 01505 DROP BOX INLET TYPE 5B	205.00	EACH	\$4,555.86	\$933,951.30
0053 08100 CONCRETE-CLASS A	5,450.00	CUYD	\$383.50	\$2,090,075.00
0054 08150 STEEL REINFORCEMENT	1,040,000.00	LB	\$0.79	\$821,600.00
			Total for Group 0003:\$7,62	29,131.22
Group 0004: BRIDGE				
0055 99999 KY 191 BRIDGE	1.00	LS	\$2,400,000.00	\$2,400,000.00
0056 99999 KY 2491 BRIDGE	1.00	LS	\$2,200,000.00	\$2,200,000.00
0057 99999 KY 1812 BRIDGE	1.00	LS	\$2,350,000.00	\$2,350,000.00
0058 99999 KY 3034 BRIDGE	1.00	LS	\$1,420,000.00	\$1,420,000.00
0059 99999 KY 1010 BRIDGE	1.00	LS	\$980,000.00	\$980,000.00
0060 99999 KY 1419 BRIDGE	1.00	LS	\$1,485,000.00	\$1,485,000.00
			Total for Group 0004:\$10,83	35,000.00
Group 0007: signing				
0061 06515 PAVE STRIPING-PERM PAINT-6 IN	375,000.00	LF	\$0.15	\$56,250.00
0062 06592 PAVEMENT MARKER TYPE V-B W/R	1,430.00	EACH	\$21.43	\$30,644.90
			Total for Group 0007:\$8	36,894.90
Group 0017: MISCELLANEOUS				
0063 10020NS	1,630,000.00	DOLL	\$1.00	\$1,630,000.00
FUEL ADJUSTMENT	.,,	- 011	÷	÷.,,
9:50:24AM Wednesday, November 19, 2014				Page 5 of 6

Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0064 10030NS ASPHALT ADJUSTMENT	1,175,000.00	DOLL	\$1.00	\$1,175,000.00
0065 99999 MISCELLANEOUS 20%	1.00	LS	\$15,000,000.00	\$15,000,000.00
			Total for Group 0017:\$17,8	05,000.00

## Estimate 10-168.00

Estimated Cost:\$100,489,896.24

Contingency: 10.00%

#### Estimated Total: \$110,538,885.86

MOUNTAIN PARKWAY ALTERNATE 2

#### Base Date: 11/21/14

Spec Year: 08

Unit System: E

Work Type: GRADE & DRAIN WITH ASPHALT SURFACE

Highway Type: STATE

Urban/Rural Type: RURAL

Season: SPRING

County: WOLFE

Latitude of Midpoint: 344432

Longitude of Midpoint: -832827

District: 10

Federal/State Project Number: FD52 1550 C119 E143

STP 0061(048)

Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
Group 0001: PAVING				
0067 00388 CL3 ASPH SURF 0.38B PG64-22	42,100.00	TON	\$80.00	\$3,368,000.00
0068 00214 CL3 ASPH BASE 1.00D PG64-22	239,000.00	TON	\$70.00	\$16,730,000.00
0069 00003 CRUSHED STONE BASE	155,000.00	TON	\$26.50	\$4,107,500.00
0070 00190 LEVELING & WEDGING PG64-22	11,000.00	TON	\$82.75	\$910,250.00
			Total for Group (	001.\$25 115 750 00

## Total for Group 0001:\$25,115,750.00

## Group 0002: ROADWAY

0005 02200	5,915,000.00		\$E 00	\$20 EZE 000 00
0005 02200 ROADWAY EXCAVATION	5,915,000.00	COID	\$3.00	\$29,575,000.00
0006 02351 GUARDRAIL-STEEL W BEAM-S FACE	60,800.00	LF	\$12.84	\$780,672.00
0007 02352 GUARDRAIL-STEEL W BEAM-D FACE	1,500.00	LF	\$23.48	\$35,220.00
0008 02360 GUARDRAIL TERMINAL SECTION NO 1	6.00	EACH	\$41.36	\$248.16
0009 02363 GUARDRAIL CONNECTOR TO BRIDGE	24.00 END TY A	EACH	\$2,447.17	\$58,732.08
0011 02367 GUARDRAIL END TREATMENT TYPE 1	100.00	EACH	\$2,004.54	\$200,454.00
0012 02369 GUARDRAIL END TREATMENT TYPE 24		EACH	\$598.94	\$6,588.34
0013 02387 GUARDRAIL CONNECTOR TO BRIDGE	20.00 END TY A-1	EACH	\$317.03	\$6,340.60
0014 02391 GUARDRAIL END TREATMENT TYPE 44		EACH	\$1,953.21	\$3,906.42
0015 02545 CLEARING AND GRUBBING Approximately 371 Acres	1.00	LS	\$580,000.00	\$580,000.00
0016 02650 MAINTAIN & CONTROL TRAFFIC	1.00	LS	\$950,000.00	\$950,000.00
1:59:13PM				

Line # Item Number Description	Quantity	<u>Units</u>	Unit Price	Extension
Supplemental Description				
0017 21415ND EROSION CONTROL	1.00	LS	\$1,039,000.00	\$1,039,000.00
0018 02726 STAKING	1.00	LS	\$880,000.00	\$880,000.00
0019 02731 REMOVE STRUCTURE	1.00	LS	\$100,000.00	\$100,000.00
Exist. KY 191 Bridge 0020 02731 REMOVE STRUCTURE	1.00	LS	\$80,000.00	\$80,000.00
Exist. KY 2491 Bridge 0021 02731 REMOVE STRUCTURE	1.00	LS	\$90,000.00	\$90,000.00
Exist. KY 1812 Bridge 0022 02731 REMOVE STRUCTURE	1.00	LS	\$15,000.00	\$15,000.00
Exist. KY 3034 Wagon Box 0023 02731 REMOVE STRUCTURE	1.00	LS	\$100,000.00	\$100,000.00
Exist. KY 1010 Bridge 0025 02731 REMOVE STRUCTURE	1.00	LS	\$80,000.00	\$80,000.00
Exist. KY 1419 Bridge 0027 02262 FENCE-WOVEN WIRE TYPE 1	90,000.00	LF	\$6.50	\$585,000.00
0028 02555 CONCRETE-CLASS B	100.00	CUYD	\$397.23	\$39,723.00
For Retaining Walls			Total for Group 0002:\$	35,205,884.60
Group 0003: drainage				
0029 00461 CULVERT PIPE-15 IN	40.00	LF	\$80.05	\$3,202.00
0030 00462 CULVERT PIPE-18 IN	21,500.00	LF	\$48.46	\$1,041,890.00
0031 00464 CULVERT PIPE-24 IN	1,600.00	LF	\$55.99	\$89,584.00
0032 00466 CULVERT PIPE-30 IN	295.00	LF	\$66.07	\$19,490.65
0033 00468 CULVERT PIPE-36 IN	1,260.00	LF	\$81.77	\$103,030.20
0034 00469 CUI VERT PIPE-42 IN	280.00	LF	\$112.39	\$31,469.20

CULVERT PIPE-42 IN

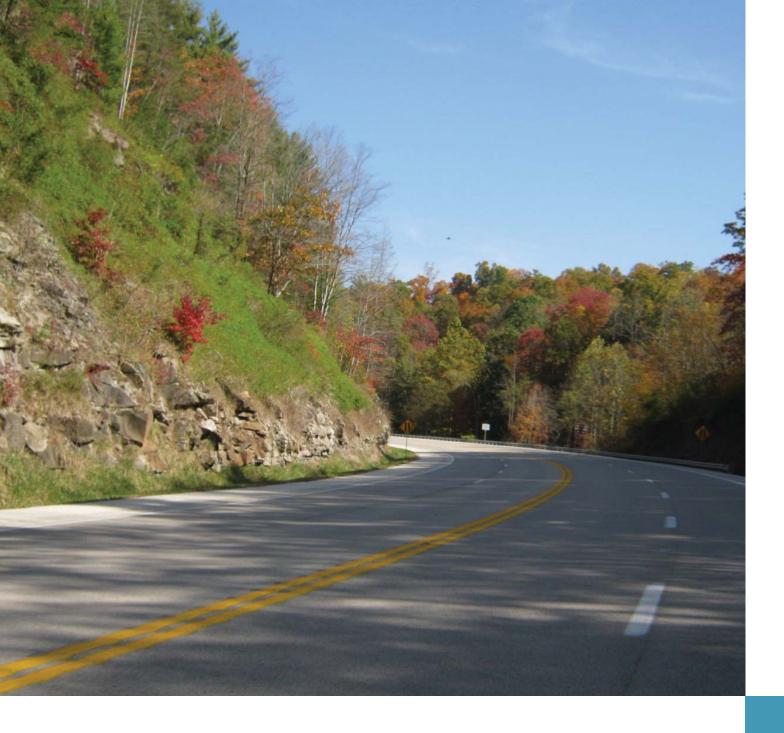
Estimate: 10-168.00

Estimate: 10-168.00				
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0035 00470 CULVERT PIPE-48 IN	460.00	LF	\$103.40	\$47,564.00
0036 00471 CULVERT PIPE-54 IN	490.00	LF	\$139.34	\$68,276.60
0037 00472 CULVERT PIPE-60 IN	725.00	LF	\$163.57	\$118,588.25
0038 00474 CULVERT PIPE-72 IN	60.00	LF	\$370.84	\$22,250.40
0039 01202 PIPE CULVERT HEADWALL-15 IN	2.00	EACH	\$1,166.76	\$2,333.52
0040 01204 PIPE CULVERT HEADWALL-18 IN	250.00	EACH	\$1,082.81	\$270,702.50
0041 01208 PIPE CULVERT HEADWALL-24 IN	25.00	EACH	\$1,161.92	\$29,048.00
0042 01210 PIPE CULVERT HEADWALL-30 IN	5.00	EACH	\$1,817.66	\$9,088.30
0043 01212 PIPE CULVERT HEADWALL-36 IN	20.00	EACH	\$1,988.79	\$39,775.80
0044 01214 PIPE CULVERT HEADWALL-42 IN	5.00	EACH	\$2,366.46	\$11,832.30
0045 01216 PIPE CULVERT HEADWALL-48 IN	7.00	EACH	\$2,975.92	\$20,831.44
0046 24026EC PIPE CULVERT HEADWALL-54 IN	4.00	EACH	\$7,920.00	\$31,680.00
0047 01220 PIPE CULVERT HEADWALL-60 IN	8.00	EACH	\$4,950.00	\$39,600.00
0048 24025EC PIPE CULVERT HEADWALL-72 IN	2.00	EACH	\$10,499.93	\$20,999.86
0049 01000 PERFORATED PIPE-4 IN	196,000.00	LF	\$6.86	\$1,344,560.00
0050 01010 NON-PERFORATED PIPE-4 IN	5,650.00	LF	\$8.67	\$48,985.50
0051 01020 PERF PIPE HEADWALL TY 1-4 IN	335.00	EACH	\$387.79	\$129,909.65
1:59:13PM Monday, January 12, 2015				Page 4 of 6

Monday, January 12, 2015

Estimate: 10-168.00				
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
0052 01480 CURB BOX INLET TYPE B	18.00	EACH	\$3,902.69	\$70,248.42
0053 01505 DROP BOX INLET TYPE 5B	205.00	EACH	\$4,555.86	\$933,951.30
0054 08100 CONCRETE-CLASS A	5,950.00	CUYD	\$379.06	\$2,255,407.00
0055 08150 STEEL REINFORCEMENT	1,120,000.00	LB	\$0.79	\$884,800.00
			Total for Group 0003:\$7,68	39,098.89
Group 0004: BRIDGE				
0056 99999 KY 191 BRIDGE	1.00	LS	\$2,500,000.00	\$2,500,000.00
0057 99999 KY 2491 BRIDGE	1.00	LS	\$2,340,000.00	\$2,340,000.00
0058 99999 KY 1812 BRIDGE	1.00	LS	\$2,405,000.00	\$2,405,000.00
0059 99999 KY 3034 BRIDGE	1.00	LS	\$1,470,000.00	\$1,470,000.00
0060 99999 KY 1010 BRIDGE	1.00	LS	\$1,260,000.00	\$1,260,000.00
0061 99999 KY 1419 BRIDGE	1.00	LS	\$2,240,000.00	\$2,240,000.00
			Total for Group 0004:\$12,27	15,000.00
Group 0007: signing				
0062 06515 PAVE STRIPING-PERM PAINT-6 IN	357,500.00	LF	\$0.15	\$53,625.00
0063 06592 PAVEMENT MARKER TYPE V-B W/R	1,425.00	EACH	\$21.43	\$30,537.75
			Total for Group 0007:\$8	34,162.75
Group 0017: MISCELLANEOUS				
0064 10020NS	2,120,000.00	DOLL	\$1.00	\$2,120,000.00

Estimate: 10-168.00				
Line # Item Number Description Supplemental Description	<u>Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Extension</u>
FUEL ADJUSTMENT				
0065 10030NS ASPHALT ADJUSTMENT	1,310,000.00	DOLL	\$1.00	\$1,310,000.00
0066 99999 MISCELLANEOUS 20%	1.00	LS	\$16,750,000.00	\$16,750,000.00
			Total for Group 0017:\$20,1	80,000.00



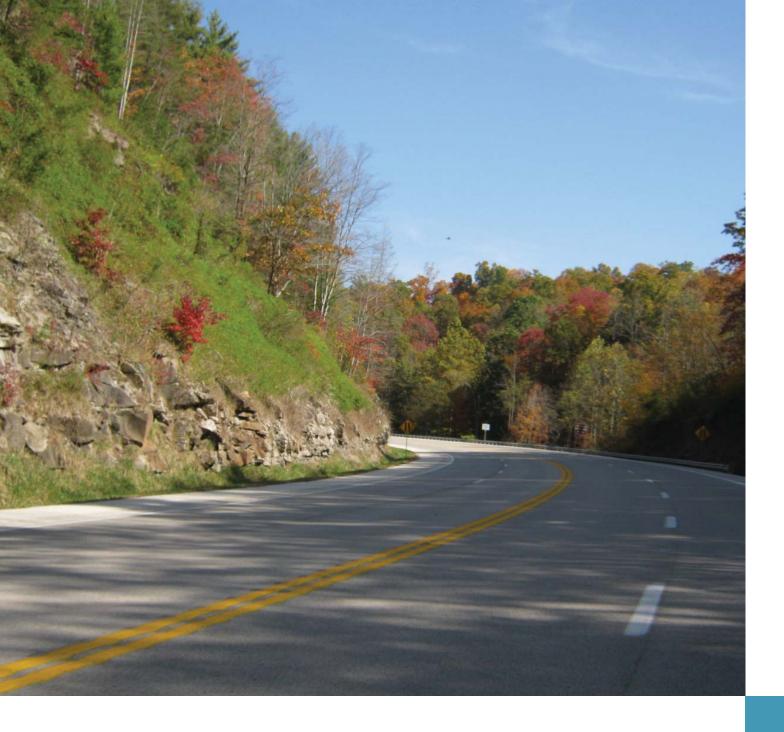
# **04** Utility Estimates

UTILITY ITEM	UNIT	UNIT COST	QUANTITY	СОЅТ				
Waterline	LIN FT	\$30	9,500	\$285,000				
Telephone Pole Relocation	EA	\$3,500	75	\$262,500				
Electric Pole Relocation	EA	\$5,000	50	\$250,000				
Underground Fiber Optic	LIN FT	\$6.50	25,000	\$162,500				
Transmission Line	EA	\$10,000	4	\$40,000				
Subtotal				\$1,000,000				
10% Engineering and Conti	10% Engineering and Contingency							
TOTAL COST ALTERNATE 1				\$1,100,000				

#### **ALTERNATE 1**

#### ALTERNATE 2

UTILITY ITEM	UNIT	UNIT COST	QUANTITY	СОЅТ				
Waterline	LIN FT	\$30	8,000	\$240,000				
Telephone Pole Relocation	EA	\$3,500	25	\$87,500				
Electric Pole Relocation	EA	\$5,000	40	\$200,000				
Underground Fiber Optic	LIN FT	\$6.50	17,000	\$110,500				
Transmission Line	EA	\$10,000	2	\$20,000				
Subtotal				\$658,000				
10% Engineering and Conti	10% Engineering and Contingency							
TOTAL COST ALTERNATE 2				\$723,800				



# **05** Right-of-Way Summaries

#### ALTERNATE 1 PRELIMINARY RIGHT OF WAY TAKINGS

#### ITEM NO. 10-168.00 NOVEMBER 2014

PARCEL NO.	NAME			MENTS	PORTION REMAINING		-	DING JIRE	_	
NO.		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	s
2	SHIRLEY SPAULDING	0.77	0.20	0	13950	0.57				3
3	SAVANNAH LAND	0.75	0.19	0	1200	0.56				1
5	DAVID L DRAKE	10.55	1.66	0	0	8.89				
8	LEVA HALCOMB KIDD	2.22	0.06	0	0	2.16				
9	DAVID M ALLEN	123.85	6.15	0	0	117.70				
10	THOMAS & YETTA B COX	4.71	2.06	0	2098	2.65		1		1
11	JOHN T GRAHAM	1.07	1.07	0	0	0.00		1		1
12	DONNIE HARRIS TRUST VERA HARRIS	128.03	5.88	0	0	122.15				
13	BELL SOUTH TELECOMMUNICATION C/O AT&T PROPERTY TAX GROUP	0.44	0.17	0	0	0.27				
14	STEPHEN & SHIRLEY TUTT	27.21	0.39	0	2095	26.82				
15	STEPHEN L TUTT	0.80	0	0	0	0.80				1
16	TROUBLESOME CREEK GAS CORP	6.68	0.06	0	0	6.62				
17	DONNIE HARRIS TRUST VERA HARRIS	42.78	1.49	0	0	41.29				
18	ROGER L & JUDY HALCOMB POTTS	2.24	0.90	0	0	1.34				

BUILDINGS ACQUIRED CODE C-COMMERCIAL R-RESIDENTIAL F-FARM S-STORAGE

#### ALTERNATE 1 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASEI	MENTS	PORTION REMAINING				
NO.		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	S
21	GLENDA WHITE	2.29	1.25	0	0	1.04				1
22	VANCE & EUGENE HOWARD	12.93	0.91	0	0	12.02				
23	ROGER CECIL	0.63	0.36	0	0	0.27				2
24	CHARLES L & VIRGINIA S SWIFT	0.98	0.52	0	5861	0.46		1		2
27	JESSE MARK WHITE	1.35	0.74	0	7117	0.61		1		2
28	RONNIE & CATHY CRABTREE	10.33	3.06	0	0	7.27				
29	SARAH ELLEN COLEMAN	50.40	6.04	0	0	44.36				
32	WILLIAM & NELLIE FUGATE	2.09	1.40	0	0	0.69				
33	SCOTT & KIMBERLY GRAHAM	61.02	4.59	0	0	56.43				
34	ANDY GRAHAM	21.29	3.4	0	0	17.89				
35	LESTER & HELEN DUNN	16.78	2.13	0	0	14.65				
36	JAMES & EDWINA STAAB	141.39	1.02	0	0	140.37				
37	DONNIE HARRIS TRUST VERA HARRIS	3.30	3.38	0	0	-0.08				
39	WILLIAM & LINDA STILLWELL	54.02	0.83	0	0	53.19				

#### ALTERNATE 1 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASE	MENTS	PORTION REMAINING		BUILI		
NO.		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	s
43	CHARLES & BETTY JO BURTON	2.99	0.87	0	0	2.12				
44	RUSSEL PENCE TRUST JEANNIE PENCE TRUST	16.04	2.71	0	0	13.33				
46	CARL & OPAL STONE	2.28	0.63	0	0	1.65				
47	DONALD & VICKIE LAWSON	91.34	0.27	0	0	91.07				
48	MICHAEL HURT	103.36	13.47	0	0	89.89				
50	RILEY E HARRIS	27.41	2.39	0	0	25.02				
52	RILEY E HARRIS JUDY CALDWELL	73.85	3.98	0	1543	69.87				
53	RILEY E HARRIS JUDY CALDWELL	194.80	5.06	0	9474	189.74		1	1	1
54	RILEY E HARRIS JUDY CALDWELL	0.23	0.23	0	0	0.00				
55	GLEN BUSH HAROLD & PAMELA BUSH	15.28	3.81	0	1343	11.47				
57	GLEN BUSH HAROLD & PAMELA BUSH	37.09	0.61	0	0	36.48				
58	GLADYS STAMPER	100.31	9.07	0	12138	91.24		2	1	1
59	KAREN S PERRY	1.74	0.58	0	0	1.16		1		
60	JERRY WAYNE CRISP	1.31	0.86	0	0	0.45		1		1

#### ALTERNATE 1 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASE	MENTS	PORTION REMAINING	BUILI ACQU			
NO.		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	s
61	PLUMMER & CHRISTINE BREWER	7.50	2.32	3339	0	5.18				
62	TROY & AMBER PERRY	44.45	4.63	0	0	39.82				
63	JAMES & MARY ALICE DALTON	151.08	0.25	0	0	150.83				
69	THURMAN ALLEN	2.43	1.26	0	0	1.17				
70	GLEN BUSH HAROLD & PAMELA BUSH	34.44	1.21	0	0	33.23				
74	BENEFICIAL MORTAGE	1.14	0.49	0	9434	0.65		1		1
75	TIMOTHY WAYNE & JACQUELINE SUE ROBINSON	7.87	2.40	0	0	5.47				
77	NANCY JOSEPH	5.44	0.47	0	0	4.97		1		1
78	RICHARD CAUDILL	1.14	0.68	0	5486	0.46		1		2
79	MARK ROBERTS	25.90	0.42	0	0	25.48				
80	TYLER HEMSATH C/O KAREN PENCE HEMSATH	56.94	0.57	0	0	56.37				
82	WILLIAM HOLLON	2.50	0.94	0	1001	1.56				
83	MARY JANE CHANEY	29.31	10.50	0	2946	18.81		1		2
84	GLADYS HARRISON CLARK	1.65	0.97	0	0	0.68				

#### ALTERNATE 1 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASE	MENTS	PORTION REMAINING		BUILE		
NO.		(acre)	(acre)	PERMANENT (square feet) (square feet)		(acre)	с	R	F	s
86	BETTER RENTALS INC GARY C JOHNSON	32.62	3.07	0	0	29.55				
87	INEZ MAY FERGUSON	56.76	0.53	0	0	56.23				
88	VERNON & EDDIE NICKELL	73.12	9.43	0	0	63.69				
90	ROBERT LOVEJOY	6.28	0.47	0	0	5.81				
91	LESTER H JR & EULA NICKELL BURNS	125.69	0.7	0	0	124.99				
92	MANUEL & SHARLON WHITLEY	14.64	1.82	0	0	12.82				
93	EDDIE NICKELL	7.45	0.18	0	1160	7.27				
94	VERNON NICKELL	32.95	2.38	0	0	30.57				
95	EAST KY NETWORK LLC DBA APPALACHIAN WIRELESS	5.62	2.5	0	720	3.12				
96	JUNIOR & SUE BANKS	47.45	1.1	0	2703	46.35				
98	ANDY GRAHAM	172.06	20.32	0	0	151.74				
101	JACK TAULBEE	84.74	12.22	0	0	72.52			1	
102	JACK TAULBEE	76.04	6.85	0	0	69.19				
103	TIMOTHY WAYNE FERGUSON	83.43	12.72	0	0	70.71				

#### ALTERNATE 1 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASEI	PORTION REMAINING					
		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	s
105	NAOMI KASH LINDON	47.15	9.14	0	9010	38.01			1	
106	TIMOTHY WAYNE FERGUSON	46.55	0.87	0	0	45.68				
107	UNKNOWN	10.99	4.35	0	0	6.64				
109	WADE GIBBS	100.49	1.5	0	0	98.99				
110	DOUGLAS MULLINS	106.66	4.43	0	0	102.23				
111	ELMER WHITAKER TRUST	71.30	1.59	0	0	69.71				
		TOTALS:	217.730	3,339	89,279		0	13	4	23

#### ALTERNATE 2 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASE	MENTS	PORTION REMAINING		BUILDING ACQUIRE		
		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	s
2	SHIRLEY SPAULDING	0.77	0.20	0	13950	0.57				3
3	SAVANNAH LAND	0.75	0.28	0	1200	0.47				1
5	DAVID L DRAKE	10.55	1.82	0	0	8.73				
8	LEVA HALCOMB KIDD	2.22	0.06	0	0	2.16				
9	DAVID M ALLEN	123.85	5.89	0	0	117.96				
10	THOMAS & YETTA B COX	4.71	2.10	0	0	2.61		1		1
11	JOHN T GRAHAM	1.07	1.07	0	0	0.00		1		1
12	DONNIE HARRIS TRUST VERA HARRIS	128.03	18.58	0	0	109.45				
13	BELL SOUTH TELECOMMUNICATION C/O AT&T PROPERTY TAX GROUP	0.44	0.14	0	735	0.30				
14	STEPHEN & SHIRLEY TUTT	27.21	0.37	0	5425	26.84				
15	STEPHEN L TUTT	0.80	0	0	0	0.80				1
16	TROUBLESOME CREEK GAS CORP	6.68	0.03	0	1354	6.65				
17	DONNIE HARRIS TRUST VERA HARRIS	42.78	0.68	0	0	42.10				
22	VANCE & EUGENE HOWARD	12.93	3.54	0	0	9.39				

#### ALTERNATE 2 PRELIMINARY RIGHT OF WAY TAKINGS

ITEM NO. 10-168.00 NOVEMBER 2014

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASEI	MENTS	PORTION REMAINING	BUILDI ACQUI			
NO.		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	s
28	RONNIE & CATHY CRABTREE	10.33	3.53	0	0	6.80				
29	SARAH ELLEN COLEMAN	50.40	11.03	0	0	39.37				
34	ANDY GRAHAM	21.29	3.32	0	0	17.97				
35	LESTER & HELEN DUNN	16.78	1.54	0	0	15.24				
36	JAMES & EDWINA STAAB	141.39	1.68	0	0	139.71				
39	WILLIAM & LINDA STILLWELL	54.02	4.76	0	14942	49.26				
40	ELIZA ROSE ISON	53.75	1.11	0	7759	52.64				
41	KELLY ROSE	26.31	0.83	0	2505	25.48				
42	JUDY DIANE TAPLEY	4.28	1.51	0	2444	2.77				
43	CHARLES & BETTY JO BURTON	2.99	0	0	0	2.99				
44	RUSSEL PENCE TRUST JEANIE PENCE TRUST	16.04	0	0	0	16.04				
45	UNKNOWN	0.39	0	0	0	0.39				
46	CARL & OPAL STONE	2.28	0.12	0	0	2.16				
47	DONALD & VICKIE LAWSON	91.34	0.78	0	0	90.56				

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#### ALTERNATE 2 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASEI	MENTS	PORTION REMAINING		BUILDIN ACQUIR		
		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	s
48	MICHAEL HURT	103.36	12.27	0	0	91.09				
50	RILEY E HARRIS	27.41	0.11	0	0	27.30				
51	JIMMY RUDD	46.80	0.05	0	0	46.75				
52	RILEY E HARRIS JUDY CALDWELL	73.85	6.82	0	0	67.03				
53	RILEY E HARRIS JUDY CALDWELL	194.80	7.42	0	0	187.38				
55	GLEN BUSH HAROLD & PAMELA BUSH	15.28	1.2	0	0	14.08				
58	GLADYS STAMPER	100.31	4.71	0	0	95.60				
61	PLUMMER & CHRISTINE BREWER	7.50	0	1780	0	7.50				
62	TROY & AMBER PERRY	44.45	7.61	0	0	36.84				
69	THURMAN ALLEN	2.43	0.07	362	0	2.36				
71	WILLIAM RATLIFF HESTER RATLIFF	1.80	1.27	0	4158	0.53		1		11
72	TIMOTHY WAYNE ROBINSON	63.55	1.42	0	0	62.13				
73	HOMER BURTON MARILYN E PARKS	31.65	1.03	0	0	30.62				
75	TIMOTHY WAYNE & JACQUELINE SUE ROBINSON	7.87	5.72	0	0	2.15		1		1

#### ALTERNATE 2 PRELIMINARY RIGHT OF WAY TAKINGS

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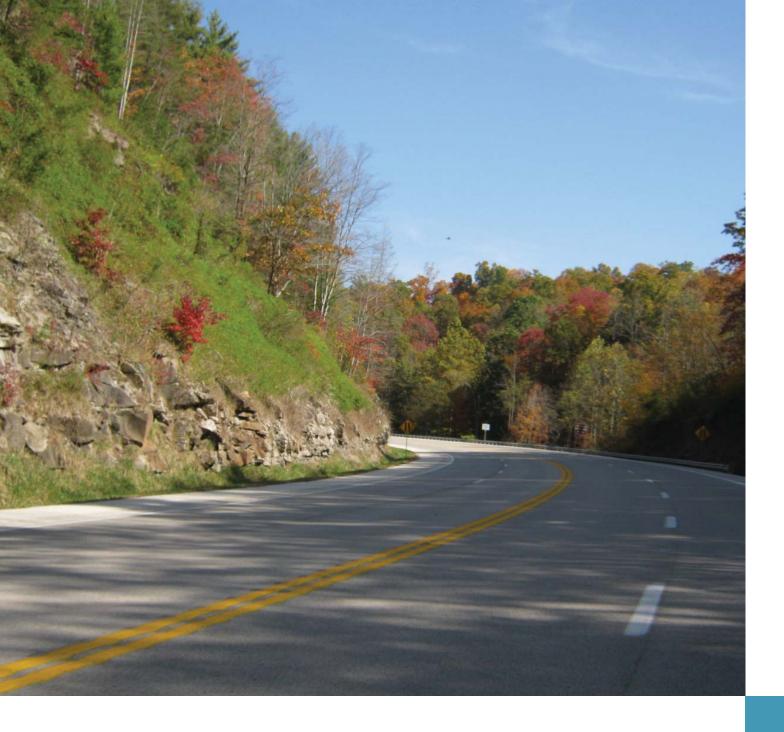
PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASEI	MENTS	PORTION REMAINING		BUILDIN		
		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	R	F	S
76	EUGENE ROBINSON	6.03	0.37	0	0	5.66				
77	NANCY JOSEPH	5.44	1.82	0	0	3.62				
80	TYLER HEMSATH C/O KAREN PENCE HEMSATH	56.94	3.22	0	0	53.72				
83	MARY JANE CHANEY	29.31	10.12	0	0	19.19				
86	BETTER RENTALS INC GARY C JOHNSON	32.62	6.66	0	0	25.96				
88	VERNON & EDDIE NICKELL	73.12	4.85	0	0	68.27				
89	THELMA JO MCATEE KIMBERLY K BREWER	307.24	0.34	0	0	306.90				
90	ROBERT LOVEJOY	6.28	0.16	0	0	6.12				
91	LESTER H JR & EULA NICKELL BURNS	125.69	4.64	0	4990	121.05				
92	MANUEL & SHARLON WHITLEY	14.64	0.71	0	0	13.93				
93	EDDIE NICKELL	7.45	1.26	0	0	6.19		1		1
94	VERNON NICKELL	32.95	3.87	0	0	29.08				
95	EAST KY NETWORK LLC DBA APPALACHIAN WIRELESS	5.62	1.38	0	147	4.24				
96	JUNIOR & SUE BANKS	47.45	1.05	0	860	46.40				

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#### ALTERNATE 2 PRELIMINARY RIGHT OF WAY TAKINGS

PARCEL NO.	NAME	TOTAL AREA OF TRACT	PERMANENT R/W ACQUIRED	EASE	MENTS	PORTION REMAINING		BUILDINGS ACQUIREE		
NO.		(acre)	(acre)	PERMANENT (square feet)	TEMPORARY (square feet)	(acre)	с	CR	F	s
97	DEWEESE WILSON	0.48	0.12	0	0	0.36				
98	ANDY GRAHAM	172.06	24.97	0	0	147.09				
99	GENE NEFF SHIRLEY HOLLAND	182.68	0.14	0	0	182.54				
101	JACK TAULBEE	84.74	13.89	0	0	70.85				
103	TIMOTHY WAYNE FERGUSON	83.43	8.06	0	0	75.37				
105	NAOMI KASH LINDON	47.15	13.27	0	0	33.88			1	
106	TIMOTHY WAYNE FERGUSON	46.55	0.45	0	0	46.10			1	
107	UNKNOWN	10.99	3.16	0	0	7.83				
109	WADE GIBBS	100.49	0.81	0	0	99.68				
110	DOUGLAS MULLINS	106.66	3.2	0	23693	103.46				
111	ELMER WHITAKER TRUST	71.30	1.17	0	0	70.13				
		TOTALS:	224.360	2,142	84,162		0	5	2	20



# Maintenance of Traffic



# Maintenance of Traffic

## Mountain Parkway Alternate #1

## Phase I

Maintain traffic on existing Mountain Parkway, KY 2491, KY 1812 and KY 3034 while constructing the following:

- 1. Construct the new westbound bridges over KY 2491, KY 1812 and KY 3034.
- 2. Construct the proposed KY 3033 utilizing part-width construction and maintaining traffic around the construction using temporary one-lane closures.
- 3. Route traffic to the newly constructed KY 3033.
- 4. Close KY 1419. Construct KY 1419 and Lacy Creek Gilmore Rd.
- 5. Leave a gap in the construction for the existing westbound entrance and exit ramps and KY 1010.
- 6. Construct KY 1010 interchange as detailed in interchange maintenance of traffic notes.
- 7. Construct the proposed westbound Mountain Parkway roadway.

## Phase II

- 1. Route traffic to the newly constructed westbound portion of Mountain Parkway.
- 2. Construct the new eastbound bridges over KY 2491, KY 1812 and KY 3034.
- 3. Construct the proposed eastbound Mountain Parkway roadway.
- 4. Construct KY 2491, KY 1812 and KY 3034 utilizing part-width construction and maintaining traffic around the construction using temporary one-lane closures.
- 5. Utilize temporary crossover from westbound Mountain Parkway to Ramps A and B as detailed in interchange maintenance of traffic notes.
- 6. Remove existing bridge over KY 1419. Construct proposed eastbound Mountain Parkway roadway and bridge over KY 1419.

## Phase III

1. Route traffic to the newly constructed westbound and eastbound Mountain Parkway roadway and newly constructed KY 2491, KY 1812 and KY 3034. All lanes shall be open during non-working hours.

## Phase IV

1. Place final surface course over Mountain Parkway, side-roads and the ramps under traffic.

## Mountain Parkway - KY 191 Interchange Alternate #1

#### Phase I

Maintain traffic on existing Mountain Parkway, KY 191 and the ramps while constructing the following:

- 1. Construct the new westbound bridge over KY 191.
- 2. Construct the proposed westbound Mountain Parkway roadway. Leave a gap in the construction for the existing westbound exit ramp.
- 3. Construct Ramp E and tie into westbound Mountain Parkway construction and KY 191 construction.
- 4. Construct Ramp D and tie into westbound Mountain Parkway construction and KY 191 construction. Leave gap in construction for the existing westbound exit ramp.
- 5. Construct temporary pavement inside existing Ramp B and tie into KY 191 and eastbound Mountain Parkway.
- 6. Construct a temporary crossover for existing westbound exit ramp. Finish construction along Ramp D and proposed westbound Mountain Parkway.
- 7. Construct a temporary crossover for existing eastbound entrance ramp.

#### Phase II

- 1. Route traffic to the newly constructed westbound portion of Mountain Parkway.
- 2. Construct the new eastbound bridge over KY 191.
- 3. Construct the proposed eastbound Mountain Parkway roadway. Leave a gap in the construction for the existing eastbound entrance ramp.
- 4. Construct KY 191 utilizing part-width construction and maintaining traffic around the construction using temporary one-lane closures.
- 5. Route Ramp B traffic to the temporary pavement and the temporary crossover and construct Ramp B and Ramp C and tie into KY 191. Leave gap in construction for the existing eastbound entrance ramp.
- 6. Construct Ramp A and tie into eastbound Mountain Parkway construction and KY 191.

#### Phase III

- 1. Route Ramp B traffic to the newly constructed portions of the ramp and complete the construction of eastbound Mountain Parkway and Ramp B in the areas gapped out in Phase II.
- 2. Route traffic to the newly constructed westbound and eastbound Mountain Parkway roadway and newly constructed ramps. All lanes shall be open during non-working hours.

### **Phase IV**

1. Place final surface course over Mountain Parkway and the ramps under traffic.

## Mountain Parkway - KY 1010 Interchange Alternate #1

## Phase I

Maintain traffic on existing Mountain Parkway while constructing the following:

- 1. Construct the proposed westbound Mountain Parkway roadway. Leave a gap in the construction for the existing westbound entrance and exit ramps and KY 1010.
- 2. Construct the portions of Ramps A, B, C, D, E, and F that do not conflict with the existing ramps.
- 3. Close KY 1010. Construct KY 1010 and the remainder of Ramps A, B, C, D, E and F. Construct temporary crossover from existing Mountain Parkway to Ramps D and E.
- 4. Open KY 1010 to traffic. Utilize temporary crossover from existing Mountain Parkway to Ramps D and E. Construct remainder of westbound Mountain Parkway. Construct temporary crossover from westbound Mountain Parkway to Ramps A and B.

## Phase II

- 1. Route traffic over the newly constructed westbound portion of Mountain Parkway. Utilize temporary crossover from westbound Mountain Parkway to Ramps A and B.
- 2. Construct proposed eastbound Mountain Parkway roadway.

## Phase III

1. Place final surface course over Mountain Parkway and the ramps under traffic.

## Mountain Parkway Alternate #2

## Phase I

Maintain traffic on existing Mountain Parkway, KY 2491, KY 1812 and KY 3034 while constructing the following:

- 1. Construct the new eastbound bridges over KY 2491, KY 1812 and KY 3034.
- 2. Construct Service Road and tie to existing KY 2491.
- 3. Construct Bedwell Road and tie to existing KY 3034.
- 4. Close KY 1419. Construct KY 1419 and Lacy Creek Gilmore Rd.
- 5. Construct temporary pavement to the north of the existing Parkway from Sta. 526+00 to Sta. 550+00 (approximate).
- Utilize temporary pavement to the north of the existing Parkway. Construct the proposed eastbound Mountain Parkway roadway and bridge over KY 1419. Leave a gap in the construction for the existing eastbound entrance and exit ramps and KY 1010.
- 7. Construct KY 1010 interchange as detailed in interchange maintenance of trafc notes
- 8. Construct remainder of the proposed eastbound Mountain Parkway roadway.

#### Phase II

- 1. Route traffic to the newly constructed eastbound portion of Mountain Parkway.
- 2. Construct the new westbound bridges over KY 2491, KY 1812 and KY 3034.
- 3. Utilize temporary crossover from eastbound Mountain Parkway to Ramps D and E as detailed in interchange maintenance of traffic notes.
- 4. Remove existing bridge over KY 1419. Construct proposed westbound Mountain Parkway roadway and bridge over KY 1419.
- 5. Construct remainder of the proposed westbound Mountain Parkway roadway.
- 6. Construct KY 2491, KY 1812 and KY 3034 utilizing part-width construction and maintaining traffic around the construction using temporary one-lane closures.

## Phase III

1. Route traffic to the newly constructed westbound and eastbound Mountain Parkway roadway and newly constructed KY 2491, KY 1812 and KY 3034. All lanes shall be open during non-working hours.

### **Phase IV**

1. Place final surface course over Mountain Parkway, side-roads and the ramps under traffic.

## Mountain Parkway - KY 191 Interchange Alternate #2

## Phase I

Maintain traffic on existing Mountain Parkway, KY 191 and the ramps while constructing the following:

- 1. Construct the new eastbound bridge over KY 191.
- 2. Construct the proposed eastbound Mountain Parkway roadway. Leave a gap in the construction for the existing eastbound entrance ramp.
- 3. Construct Ramp A and tie into eastbound Mountain Parkway construction and KY 191 construction. Leave gap in construction for the existing KY 191 roadway.
- 4. Construct Ramp B and tie into eastbound Mountain Parkway construction and KY 191 construction.
- 5. Construct Ramp C and tie into KY 191 construction.
- 6. Construct KY 191 utilizing part-width construction and maintaining trafc around the construction using temporary one-lane closures.
- 7. Route trafc to the newly constructed eastbound Ramp B and Ramp C portion of Mountain Parkway and construct the remaining gap in eastbound Mountain Parkway construction.
- 8. Construct a temporary cross over west of newly constructed eastbound bridge to carry trafc from existing Mountain Parkway to newly constructed eastbound Mountain Parkway.
- 9. Construct a temporary cross over to connect newly constructed eastbound Mountain Parkway to the existing westbound exit ramp to maintain trafc in Phase III.

## Phase II

- 1. Route traffic to the newly constructed eastbound portion of Mountain Parkway.
- 2. Construct the new proposed westbound bridge over KY 191. Maintain traffic on the eastbound Mountain Parkway and cross overs constructed west and east of the newly constructed bridge.
- 3. Construct the proposed westbound Mountain Parkway roadway. Leave a gap in the construction for the existing westbound exit ramp.
- 4. Construct Ramp D and tie into westbound Mountain Parkway construction and KY 191. Leave a gap in construction for the existing westbound KY 191 exit ramp.
- 5. Construct Ramp E and tie into westbound Mountain Parkway construction and KY 191.
- 6. Temporarily close the existing westbound exit ramp and cross over to finish construction along Ramp D and proposed westbound Mountain Parkway.

## Phase III

- 1. Route traffic to the newly constructed westbound and eastbound Mountain Parkway roadway and newly constructed ramps. All lanes shall be open during non-working hours.
- 2. Construct the proposed Mountain Parkway west of the bridges using part-width construction and shifting traffic onto outside lanes.

## Phase IV

1. Place final surface course over Mountain Parkway and the ramps under traffic.

## Mountain Parkway - KY 1010 Interchange Alternate #2

## Phase I

Maintain traffic on existing Mountain Parkway while constructing the following:

- 1. Construct the proposed eastbound Mountain Parkway roadway. Leave a gap in the construction for the existing eastbound entrance and exit ramps and KY 1010.
- 2. Construct KY 1010 bridge over Mountain Parkway.
- 3. Construct Ramps A, B, and C while maintaining traffic on existing ramps and KY 1010. Construct temporary crossover from existing Mountain Parkway to Ramps A and B.
- 4. Construct KY 1010, maintaining at least one direction of traffic at all times. Construct Ramps D, E, and F. Utilize temporary pavement as necessary to maintain traffic on existing ramps.
- Utilize temporary crossover from westbound Mountain Parkway to Ramps A and B. Construct remainder of eastbound Mountain Parkway. Construct temporary crossover from eastbound Mountain Parkway to Ramps D and E.

## Phase II

- 1. Route traffic over the newly constructed eastbound portion of Mountain Parkway. Utilize temporary crossover from eastbound Mountain Parkway to Ramps D and E.
- 2. Construct proposed westbound Mountain Parkway roadway.

## Phase III

1. Place final surface course over Mountain Parkway and the ramps under traffic.



# FC

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