

Estimate PIK79096

Estimated Cost: \$1,881,675.48

Contingency: 10.00%

Estimated Total: \$2,069,843.03

Abandoned SR220 - Alternative A - New CR66

Letting Date: 03/15/05

Spec Year: 02

Unit System: E

Work Type: ASPHALT

Highway Type: 448 ON 301

Urban/Rural Type: RURAL CLASS

Season: SPRING

County: PIKE

Prepared by System Administrator

Line #	Item Number	Description	Quantity	Units	Unit Price	Extension
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Group 0001: Roadway

0001	201E11000	CLEARING AND GRUBBING	1.000	LS	\$10,000.00000	\$10,000.00
0002	202E23010	PAVEMENT REMOVED, ASPHALT	3,213.000	SY	\$0.17139	\$550.68
0003	203E10000	EXCAVATION	450.000	CY	\$15.79897	\$7,109.54
0004	203E20000	EMBANKMENT	155,000.000	CY	\$3.07645	\$476,849.75
0005	204E10000	SUBGRADE COMPACTION	8,790.000	SY	\$0.86919	\$7,640.18
0006	204E45000	PROOF ROLLING	3.000	HOUR	\$105.42371	\$316.27
0007	606E13000	GUARDRAIL, TYPE 5	3,187.500	FT	\$10.13747	\$32,313.19
0008	606E22010	ANCHOR ASSEMBLY, TYPE E-98	4.000	EACH	\$1,661.17188	\$6,644.69
0009	606E26500	ANCHOR ASSEMBLY, TYPE T	2.000	EACH	\$530.69219	\$1,061.38
0010	606E35000	BRIDGE TERMINAL ASSEMBLY, TYPE 1	4.000	EACH	\$1,026.76984	\$4,107.08
0011	690E50000	SPECIAL - MAILBOX SUPPORT	3.000	EACH	\$126.72620	\$380.18

Total for Group 0001: \$546,972.94

Group 0002: Erosion Control

0012	659E00100	SOIL ANALYSIS TEST	3.000	EACH	\$70.28033	\$210.84
0013	659E00300	TOPSOIL	3,219.000	CY	\$6.24748	\$20,110.64
0014	659E10000	SEEDING AND MULCHING	29,000.000	SY	\$0.38523	\$11,171.67
0015	659E14000	REPAIR SEEDING AND MULCHING	1,450.000	SY	\$0.29275	\$424.49
0016	659E15000	INTER-SEEDING	1,450.000	SY	\$0.18015	\$261.22
0017	659E20000	COMMERCIAL FERTILIZER	4.000	TON	\$463.00251	\$1,852.01
0018	659E31000	LIME	6.000	ACRE	\$97.96477	\$587.79
0019	659E35000	WATER	157.000	MGAL	\$3.84335	\$603.41
0020	832E10000	STORM WATER POLLUTION PREVENTION PLAN	1.000	EACH	\$2,326.31667	\$2,326.32
0021	832E30000	EROSION CONTROL	15,000.000	EACH	\$1.00000	\$15,000.00

Total for Group 0002: \$52,548.39

Group 0003: Drainage

0022	605E31100	AGGREGATE DRAINS	1,460.000	FT	\$7.91552	\$11,556.66
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Total for Group 0003: \$11,556.66

Group 0004: Pavement

Line #	Item Number	Quantity	Units	Unit Price	Extension
Description					
Supplemental Description					
0023	301E46000	1,115.000	CY	\$70.21723	\$78,292.21
ASPHALT CONCRETE BASE, PG64-22					
0024	301E48000	36.000	CY	\$115.39145	\$4,154.09
ASPHALT CONCRETE BASE, PG64-22 (DRIVEWAYS)					
0025	304E20000	1,740.000	CY	\$29.86377	\$51,962.96
AGGREGATE BASE					
0026	407E14000	313.000	GAL	\$1.33234	\$417.02
TACK COAT FOR INTERMEDIATE COURSE					
0027	408E10000	3,343.000	GAL	\$1.52561	\$5,100.11
PRIME COAT					
0028	422E10000	2,748.000	SY	\$16.30642	\$44,810.04
SINGLE CHIP SEAL WITH POLYMER BINDER					
0029	448E46050	380.000	CY	\$78.70585	\$29,908.22
ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-22					
0030	448E47020	271.000	CY	\$95.76158	\$25,951.39
ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22					
0031	448E48020	12.000	CY	\$203.89679	\$2,446.76
ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22 (DRIVEWAYS)					

Total for Group 0004: \$243,042.80

Group 0005: Traffic Control

0032	621E00100	45.000	EACH	\$36.73105	\$1,652.90
RPM					
0033	626E00100	46.000	EACH	\$5.34520	\$245.88
BARRIER REFLECTOR, TYPE A					
0034	626E00200	8.000	EACH	\$5.06409	\$40.51
BARRIER REFLECTOR, TYPE B					
0035	630E84900	6.000	EACH	\$10.08083	\$60.48
REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL					
0036	630E86002	5.000	EACH	\$12.18807	\$60.94
REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL					
0037	644E00100	1.200	MILE	\$1,694.30833	\$2,033.17
EDGE LINE					
0038	644E00300	0.610	MILE	\$3,396.19527	\$2,071.68
CENTER LINE					
0039	644E00500	40.000	FT	\$5.59346	\$223.74
STOP LINE					

Total for Group 0005: \$6,389.30

Group 0006: Structure over 20'

0040	513E10151	1.000	LS	\$325,000.00000	\$325,000.00
STRUCTURAL STEEL MEMBERS, HYBRID GIRDER, LEVEL 6, AS PER PLAN					
0041	898E98000	650,000.000	CY	\$1.00000	\$650,000.00
QC/QA CONCRETE, MISC.:					

Total for Group 0006: \$975,000.00

Group 0008: Miscellaneous

0042	614E11000	1.000	LS	\$10,000.00000	\$10,000.00
MAINTAINING TRAFFIC					
0043	619E16010	6.000	MNTH	\$1,027.56563	\$6,165.39
FIELD OFFICE, TYPE B					
0044	623E10000	1.000	LS	\$10,000.00000	\$10,000.00
CONSTRUCTION LAYOUT STAKES					
0045	624E10000	1.000	LS	\$20,000.00000	\$20,000.00
MOBILIZATION					

Line # Item Number

Quantity Units

Unit Price

Extension

Description

Supplemental Description

Total for Group 0008: \$46,165.39

Job Name: PIK-CR 51 Location: Dis 0 Job No: _____
Subject: Const Cost Estimate - Alt. F By: FJR Date: 2.23.05

Item 202 - Pavement Removed, Asphalt

$$\begin{array}{r} \text{CAD Measured areas: } 10265.61 \text{ SF} \\ 5382.02 \\ \hline 13266.43 \\ 23914.06 \text{ SF.} = 3213 \text{ SY} \end{array}$$

Item 204 - Subgrade Compaction

width = 2-12' lanes

$$\frac{18' \text{ beyond pavement}}{27'}$$

Length = Sta. 16+00 to Sta. 29+80 = 1380 Ft.

Sta. 32+50 to Sta. 48+00 = 1550 Ft.

Total = 2930 Ft.

$$(27')(2930) / 9 = 8790 \text{ SY.}$$

Item 204 - 2mm² Rolling

$$8790 / 3000 = 3.$$



Contract: _____ Location: _____ Job No: _____

Subject: _____ By: _____ Date: _____

Item 605 - Aggregate Drains

Assume 12' long/each

$$\text{Sta. } 29+50 - \text{Sta. } 10+00 \Rightarrow (1350/25) + 1 = 55$$

$$\text{Sta. } 43+00 - \text{Sta. } 32+50 \Rightarrow (1550/25) + 1 = 63$$

1400'

Item 448 - AC Surface Course, Type 1, PG 64-22

$$(2930')(24')(1.25/12)/27 = 271 \text{ CY}$$

Item 448 - AC Intermediate Course, Type 2, PG 64-22

$$(2930')(24')(1.75/12)/27 = 380 \text{ CY}$$

Item 407 - Top Coat For Intermediate Course

$$(2930')(24')(0.04)/9 = 313 \text{ Gal}$$

Item 301 - AC Base, PG 64-22

$$(2930')(24.67')(5/12)/27 = 1115 \text{ CY}$$

Item 408 - Prime Coat

$$(2930')(25.67')(0.4)/9 = 3343 \text{ Gal}$$

Job name: _____ Location: _____ Job No.: _____
 Subject: _____ Est: _____ Date: _____

Item 448- AC Surface Course, Type 1, PG 04-22 (Driveways)

CAD measured area = 3091 SF

$$(3091)(1.25/12)/27 = 12 \text{ CY}$$

Item 301- AC Base, PG 04-22 (Driveways)

$$(3091)(3.75/12)/27 = 36 \text{ CY}$$

Item 304- Aggregate Base

$$\text{Pavement} = (2930)(25.67)(5/12)/27 = 1161 \text{ CY}$$

$$\text{Shoulder} = (2930)(2)(4)/(3/12)/27 = 579 \text{ CY}$$

$$\text{Total} = 1740 \text{ CY}$$

Item 422- Single Chip Seal w/ Polymer Binder

$$(3091)(2)(4)/9 = 2748 \text{ CY}$$

No. Name: _____ Location: _____ Job No.: _____

Subject: _____ Date: _____

Item 021 - RDM

 Sta. 16+00 to Sta. 26+49.84 (Tangent/curve < 5°)
 $(10 \times 9.84) / 80 = 13 \text{ eo.}$

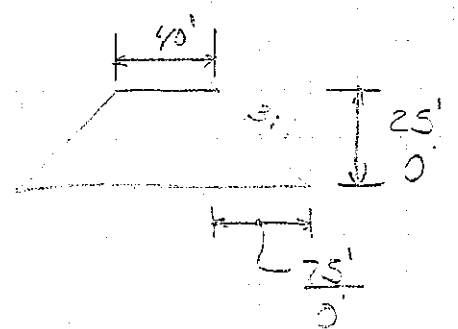
 Sta. 26+49.84 to Sta. 29+67.21 (Curve > 5°)
 $(317.37) / 40 = 8 \text{ eo.}$

 Sta. 29+67.21 to Sta. 48+00 (Tangent/curve < 5°)
 $(1832.79) / 80 = 23 \text{ eo.}$

Total = 13 + 8 + 23 = 44 = 45 eo.

Item 021 - Edge Line
 $(3200 \text{ Ft.})^2 / 5230 = 1.2 \text{ mile}$
Item 021 - Centerline
 $(3200 \text{ Ft.}) / 5230 = 0.61 \text{ mile}$
Item 203 - Embankment
 $(1380)(2375/2) / 27 = 73,472 \text{ CY}$
 $(1550)(2375/2) / 27 = 82,523 \text{ CY}$

Total = 155,000

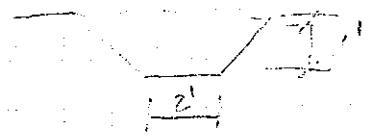

 $\text{area} = (40)(25) + (75)(25) = 2875$

Job Name: _____ Location: _____ Job No: _____
 Subject: _____ Est: _____ Date: _____

Item 203 - Excavation

$$(1380 - 550) \cdot (4) / 27 = 434 \text{ CY}$$

say 450 CY

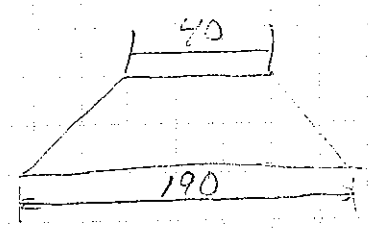


$$\text{area} = (2)(1) + (2)(1) = 4$$

Item 659 - Seeding & Mulching

$$[(1380) \cdot (158 + 20) / 2] / 9 = 13,647$$

$$[(1550) \cdot (158 + 20) / 2] / 9 = 15,323$$



$$190 - 32 = 158'$$

or 20'

$$\text{Total} = 29,000 \text{ SY}$$

Item 659 - Topsoil

$$29,000 / 10,000 = 2.9 \text{ tests}$$

$$(29,000 / 1,000) / 111 = 3219 \text{ CY}$$

Item 659 - Repair Seeding & Mulching

$$(0.05) \cdot (29,000) = 1450 \text{ SY}$$

No. _____ Location: _____ Job No.: _____

Title: _____ By: _____ Date: _____

Item 659 - Commercial Fertilizer

$$(29,000) / 7410 + \frac{(1450)(9)(20) / 1000}{2,000} = 4 \text{ tons}$$

Item 659 - Lime

$$(29,000 \text{ SY})(9) / 43,560 = 6 \text{ AC}$$

Item 659 - Water

$$(2)(0.0027)(29,000) = 157 \text{ MGal}$$

Item 606 - Guardrail Type S

Sta. 21+84 to Sta. 29+50 Lt. + Rt.
 Length: 766' - 50' (Type E-93) = 716'
 716' / 0.25 = 114.50 S27 115'
 Total length = (115')(0.25)(2 sides) = 1437.5'

Sta. 32+50 to Sta. 41+75 Lt. + Rt.
 Length: 925' - 50' = 875'
 875' / 0.25 = 140 OK
 Total length = (875')(2 sides) = 1750'

Total 3187.5'



Job Name: _____ Location: _____ Job No.: _____

Subject: _____ By: _____ Date: _____

Item 626- Barrier Reflector, Type A

Length $3187.5 + 4(50) = 3387.5$

Amount = $3387.5/100 + 2 = 36$

add more at 6° curve (Sta. 41+74 to Sta. 46+46.75)
 $2(472.75/100) = 10$

Total 46 Each

Item 626- Barrier Reflector, Type B

Sta. 32+50 to Sta. 29+50

$[300/100 + 1] \times 2 = 8$ each

Right-of-Way Acquisition Summary

Alternative #A

Residential Land Acquisition = (4.887 Acre)(\$15,000/Acre) = \$30,714.80

Billy & Betty Fuller Relocation = \$7,500.00

Building Acquisition = *\$46,180

Jean Humble Relocation = \$7,500

Building Acquisition = *\$54,000.00

Ronald & Pamela Crabtree Relocation = \$22,500.00

Total Right-of-Way Acquisition = \$168,394.80

USE \$168,500

* As per Pike County Auditor appraised value.