



KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF PROFESSIONAL SERVICES

ENGINEERING AND RELATED SERVICES FEE PROPOSAL

TC 40-2

Rev. 03/2017

Page 1 of 1

SECTION 1: PROJECT INFORMATION

DATE:	September 6, 2017	COUNTY:	Fayette	ITEM #:	N/A
PROJECT:	Old Todds Road				

SECTION 2: BUDGET INFORMATION

FEE CONSIDERATIONS	PROPOSED MAN HOURS	NEGOTIATED MAN HOURS	AVERAGE RATE	ESTIMATED COST
A. SURVEY	97	97	\$44.40	\$ 4,307
B. PRELIMINARY LINE AND GRADE	92	92	\$46.08	\$ 4,239
C. UTILITY RELOCATION COORDINATION	4	4	\$46.08	\$ 184
D. RIGHT OF WAY PLANS	47	47	\$46.08	\$ 2,166
E. FINAL PLANS	350	350	\$46.08	\$ 16,128
F. MEETINGS	34	34	\$55.20	\$ 1,877
G. PUBLIC INVOLVEMENT	10	10	\$55.20	\$ 552
				\$ -
				\$ -
				\$ -
<b>TOTAL PRODUCTION HOURS</b>	634	634	\$ 46.46	
			<b>TOTAL DIRECT PAYROLL</b>	\$ 29,453
			<b>OVERHEAD ( 175.76% )</b>	\$ 51,767
			<b>PROFIT ( 15.00% )</b>	\$ 12,183
			<b>COST OF MONEY ( 0.52% )</b>	\$ 153

DIRECT COSTS	AMOUNT
See Attached	\$6,163
<b>TOTAL DIRECT COSTS</b>	\$ 6,163

SUBCONSULTANTS	AMOUNT
<b>TOTAL SUBCONSULTANTS</b>	\$ -
<b>TOTAL PROPOSED FEE</b>	\$ 99,719

SECTION 3: SIGNATURE

FIRM NAME: <u>Palmer Engineering</u>	SIGNED BY: <u>Stephen Sewell</u>	
<u>[Signature]</u>	<u>Vice President</u>	<u>9-7-17</u>
CONSULTANT SIGNATURE	TITLE	DATE
PROFESSIONAL SERVICES SIGNATURE	TITLE	DATE

<h2 style="text-align: center;">PRODUCTION-HOUR WORKSHEET</h2> <span style="float: right;">(revised 7/14)</span>						
COUNTY	Fayette		PROJECT TYPE			
ROUTE	Old Todds Road		CONSULTANT			PALMER
DESC	Old Todds Road Sidewalks		REVIEWED BY			
			PREPARED BY			SDS
ITEM NO.			DATE			
<b>SURVEY</b>						
No.	ITEM	CREW	UNIT		HRS/UNIT	
<b>RECONNAISSANCE</b>						
1	Control - (existing)	1	Mile	0.4	4	2
2	Utilities - (data gathering, identification & contact)	1	No.	6	1	6
3	Drainage - (sink holes, streams, pipes, etc.)	1	Mile	0.4	4	2
<b>CONTROL</b>						
4	Horizontal	2	Mile	0.4	8	6
5	Vertical	2	Mile	0.4	8	6
6	Process data	1	Mile	0.4	8	3
<b>PLANIMETRIC SURVEY</b>						
7	Planimetric location <i>(complete)</i>	2	Mile	0.4	8	6
8	Subsurface Utility Engineering, Quality Levels C & D	1	Mile	0.4	8	3
9	Subsurface Utility Engineering, Quality Level B	1	LS			0
10	Subsurface Utility Engineering, Quality Level A	1	LS			0
11	Process data	1	Mile			0
<b>TERRAIN SURVEY</b>						
12	DTM data collection <i>(Items 11-18 not required if used)</i>	2	Acre	5	4	40
13	Verify terrain model accuracy	2	Mile			0
14	Tie-ins	2	No.			0
15	Drainage situations survey (Bridge)	2	No.			0
16	Drainage situations survey (Culvert)	2	No.			0
17	Drainage pipe section (non-situation size)	2	No.			0
18	Flood plain data	2	No.			0
19	Railroad Surveys	2	No.			0
20	Additional necessary DTM data <i>(specify pickup or update)</i>	2	Acre			0
21	Process data	1	Mile	0.4	20	8
<b>ESTABLISH PROPERTY LINES &amp; OWNERSHIP</b>						
22	Contact & Interview Property Owners	1	Parcel			0
23	Field tie property lines/corners	1	Parcel	15	1	15
<b>STAKING</b>						
24	Stake centerlines, approaches, detours	2	Mile			0
25	Stake core holes - structures <i>(unit is per structure)</i>	2	No.			0
26	Stake core holes - roadway <i>(unit is per core hole)</i>	2	No.			0
<b>SURVEY MISCELLANEOUS</b>						
27	Determine roadway elevations (Crown and EP)	2	Mile			0
28	Environmental areas	2	No.			0
29						0
<b>SURVEY TOTAL</b>						<b>97</b>

<b>PRODUCTION-HOUR WORKSHEET</b> (revised 7/14)						
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			PREPARED BY	SDS		
ITEM NO.			DATE			
<b>PRELIMINARY LINE AND GRADE</b>						
No.	ITEM		UNIT		HRS/UNIT	
30	Computer setup		LS	1	4	4
31	Prepare existing manuscripts		Mile			0
32	Establish approximate property lines and ownership		Parcel	15	0.5	8
33	Study and develop typical sections		No.	2	2	4
34	Study and develop horizontal alignments		Mile	0.4	20	8
35	Study and develop vertical alignments		Mile	0.4	20	8
36	Create and evaluate proposed roadway models		Mile	0.4	40	16
37	Design entrances/Tie-ins		No.	3	4	12
38	Pre-size pipes (all alternates)		No.	10	2	20
39	Pre-size culverts (all alternates)		No.			0
40	Pre-size bridges (all alternates)		No.			0
41a	Conduct Traffic Engineering Analysis (Basic; HCM Procedures)		Int			0
41b	Conduct Traffic Engineering Analysis (Advanced; Micro-simulation)		Int			0
42	Study and development of interchange		No.			0
43	Study and development of intersection		No.			0
44	Study and develop maintenance of traffic plan		LS			0
45	Plot/print copies of plans for team meeting and inspections		LS	1	4	4
46	Calculate preliminary quantities and develop cost estimates		Alt.	1	8	8
47	Revise plans and estimates		LS			0
48	Preliminary Right of Way with taking areas		Parcel			0
49	Prepare Design Executive Summary		LS			0
50	Develop/document "Avoidance Alternatives to Water Related Impacts"		LS			0
<b>PRELIMINARY LINE &amp; GRADE MISCELLANEOUS</b>						
51						0
52						0
53						0
54						0
55						0
<b>PRELIMINARY LINE AND GRADE TOTAL</b>						<b>92</b>

<b>PRODUCTION-HOUR WORKSHEET</b> (revised 7/14)						
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DESC	Old Todds Road Sidewalks		REVIEWED BY			
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ITEM NO.			DATE			
<b>UTILITY COORDINATION</b>						
No.	ITEM	PERSONS	UNIT		HRS/UNIT	
56	Utility Coordination Meeting	1	No.	2	2	4
57	Develop Utility Relocation Layout Sheets (1"=200')		Mile			0
58	Develop Utility Relocation Plans (1"=50')		Mile			0
<b>UTILITY COORDINATION MISCELLANEOUS</b>						
59						
<b>UTILITY COORDINATION TOTAL</b>						<b>4</b>
<b>RIGHT OF WAY PLANS</b>						
No.	ITEM		UNIT		HRS/UNIT	
60	Deed research		Parcel	15	1	15
61	Establish property and ownership		Parcel	15	1	15
62	Calculate Right of Way		Parcel	3	1	3
63	Prepare legal descriptions		Parcel	3	1	3
64	Complete Right of Way summary sheet		Parcel	3	1	3
65	Generate Right of Way strip map (scale 1" = 200')		Sheet	1	4	4
66	Prepare Right of Way Plans Submittal		LS	1	4	4
67	Right of Way revisions after Right of Way submittal		LS			0
68	Deed Research for Existing Alignments		LS			0
69	Deed Research for Existing Parcels		Parcel			0
70	Prepare Legal Descriptions for Right of Way transfer		Parcel			0
<b>R/W PLANS MISCELLANEOUS</b>						
71	Plat Development				8	0
72						0
<b>RIGHT OF WAY PLANS TOTAL</b>						<b>47</b>

<p align="center"><b>PRODUCTION-HOUR WORKSHEET</b> (revised 7/14)</p>						
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DESC	Old Todds Road Sidewalks		REVIEWED BY			
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ITEM NO.			DATE			
<b>FINAL PLAN PREPARATION</b>						
No.	ITEM		UNIT		HRS/UNIT	
80	Computer setup		LS	1	2	2
81	Update existing topography and terrain model		Mile			0
82	Refine alignments (horizontal & vertical)		Mile	0.4	8	3
83	Develop pavement design		No.			0
84	Finalize templates & transitions		No.			0
85	Develop final roadway model		Mile	0.4	40	16
86	Develop proposed design		Mile	0.4	40	16
87	Generate plan sheets (scale 1" = 20')		Sheet	4	8	32
88	Generate profile sheets (scale 1" = 20')		Sheet	4	8	32
89	Detail cross sections (scale 1" = 5')		No.	35	0.5	18
90	Design entrances		No.	3	1	3
91	Revise roadway plans from soils report		Mile			0
<b>DRAINAGE</b>						
92	Develop pipe sections (< 54")		No.	10	5	50
93	Develop drainage system map		Mile	0.4	8	3
94	Develop drainage situation (bridge)		No.			0
95	Develop drainage situation (culvert)		No.			0
96	Develop blue line stream channel change ( => 200')		No.			0
97	Drainage analysis (entrance pipes)		No.			0
98	Drainage analysis (A <= 200 acres)		No.	10	5	50
99	Drainage analysis (200 acres < A < 1.0 sq. mile)		No.			0
100	Drainage analysis (A => 1.0 sq. mile) level 1 analysis		No.			0
101	Drainage analysis (A => 1.0 sq. mile) level 2 analysis		No.			0
102	Drainage analysis (A => 1.0 sq. mile) level 3 analysis		No.			0
103	Special drainage studies		No.			0
104	Roadway ditches and channels		Mile			0
105	Develop Erosion Control Plan		Mile	0.4	8	3
106	Inlet spacing calculations		No.	6	4	24
107	Storm sewers calculations		No.	6	4	24
108	Perform scour analysis		No.			0
109	Assemble preliminary and final drainage folders		LS			0
110	Prepare advanced situation folder - bridge		No.			0
111	Prepare advanced situation folder - culvert		No.			0
<b>DRAINAGE MISCELLANEOUS</b>						
112						0
113						0
114						0
115						0

<b>PRODUCTION-HOUR WORKSHEET</b> (revised 7/14)						
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ITEM NO.			DATE			
<b>FINAL PLAN PREPARATION (Continued)</b>						
No.	ITEM		UNIT		HRS/UNIT	
116	Prepare layout sheet		LS	1	2	2
117	Prepare typical sections		No.	1	2	2
118	Prepare Interchange geometric approval		No.			0
119	Prepare intersection geometric approval		No.			0
120	Prepare coordinate control sheet		Mile	0.4	4	2
121	Prepare elevation developments		No.			0
122	Prepare striping plan		Sheet			0
123	Calculate final quantities		Mile	0.4	16	6
124	Complete general summary		LS	1	4	4
125	Complete paving summary		LS			0
126	Complete drainage summary		LS	1	8	8
127	Complete pavement under-drain summary		LS			0
128	Prepare cost estimate		LS	1	4	4
129	Plot/print copies of plans		LS	1	4	4
130	Plan revisions		Mile	0.4	16	6
131	Prepare final construction plans submittal		LS	1	4	4
<b>MAINTENANCE OF TRAFFIC</b>						
132	Write maintenance of traffic notes (TCP)		LS	1	16	16
133	Prepare construction phasing plans ( <i>traffic control detail sheets</i> )		Sheet			0
134	Develop diversion plan sheets		Sheet			0
135	Develop diversion profile sheets		Sheet			0
136	Develop diversion cross sections		No.			0
137	Develop temporary drainage		No.			0
<b>FINAL PLANS MISCELLANEOUS</b>						
138	Prepare bid submittal documents (LDRC, PDC, Specs)		LS	1	16	16
139						0
140						0
141						0
142						0
143						0
<b>FINAL PLANS TOTAL</b>						<b>350</b>

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<b>MEETINGS</b>						
No.	ITEM	PERSONS	UNIT		HRS/UNIT	
150	Prelim. line and grade inspection	2	No.	1	4	8
151	Drainage inspection	2	No.			0
152	Final inspection	2	No.	2	4	16
153	Misc. project coordination meetings	1	No.	5	2	10
154	Project team meetings	2	No.			0
<b>MEETINGS MISCELLANEOUS</b>						
155	Value Engineering Study		LS			0
156	Constructability Review		LS			0
<b>MEETINGS TOTAL</b>						<b>34</b>
<b>PUBLIC INVOLVEMENT</b>						
No.	ITEM	PERSONS	UNIT		HRS/UNIT	
160	Develop and Maintain Mailing List		LS			0
161	Prepare for Advisory Committee/Officials Meeting	1	No.			0
162	Attend Advisory Committee/Officials Meeting	3	No.			0
163	Prepare for Public Meetings/Hearings		No.			0
164	Attend Public Meetings/Hearings	4	No.			0
165	Prepare and Distribute Newsletter		No.			0
166	Property owner coordination		No.			0
<b>PUBLIC INVOLVEMENT MISCELLANEOUS</b>						
167	Individual meetings with stakeholders (schools, businesses, etc.)			5	2	10
168						0
169						0
<b>PUBLIC INVOLVEMENT TOTAL</b>						<b>10</b>
<b>QA/QC</b>						
No.	ITEM		UNIT		HRS/UNIT	
180	Plan review		sheet			0
181	Structure review		sheet			0
<b>QA/QC TOTAL</b>						<b>0</b>

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ITEM NO.			DATE		
<b>PRODUCTION-HOUR SUMMARY</b>					
<b>SURVEY TOTAL</b>					<b>97</b>
<b>LINE AND GRADE TOTAL</b>					<b>92</b>
<b>UTILITY COORDINATION TOTAL</b>					<b>4</b>
<b>RIGHT OF WAY PLANS TOTAL</b>					<b>47</b>
<b>FINAL PLANS TOTAL</b>					<b>350</b>
<b>MEETINGS TOTAL</b>					<b>34</b>
<b>PUBLIC INVOLVEMENT TOTAL</b>					<b>10</b>
<b>QA/QC TOTAL</b>					<b>0</b>
<b>GRAND TOTAL</b>					<b>634</b>





**Direct Cost Summary**  
**Palmer Engineering Company**

Item	Amount	Unit	Unit Cost	Cost	Totals
<b>SURVEY</b>					<b>\$373</b>
Mileage - 4 wheel drive					
3 round trips @ 40 miles	120	mi	\$0.53	\$64	
meals		days	\$30.00	\$0	
lodging		nights	\$85.00	\$0	
computer time @ 10%	10	hours	\$15.00	\$150	
travel time (3 trips @ x1 hours each)	3	hours	\$53.02	\$159	
(Ave. Rate \$40.79 x 1.3 = \$53.02 / hour)					
<b>UTILITY COORDINATION</b>					<b>\$45</b>
Mileage 0 round trips @ 20 miles		mi	\$0.47	\$0	
Printing / Copies					
printing		prints	\$1.00	\$0	
computer time @ 75%	3	hours	\$15.00	\$45	
<b>PRELIMINARY LINE AND GRADE</b>					<b>\$1,085</b>
Mileage 0 round trips @ 20 miles		mi	\$0.47	\$0	
Printing / Copies					
printing	50	prints	\$1.00	\$50	
computer time @ 75%	69	hours	\$15.00	\$1,035	
<b>RIGHT OF WAY PLANS</b>					<b>\$575</b>
Mileage 0 round trips @ 20 miles		mi	\$0.47	\$0	
Copies / Printing					
printing	50	prints	\$1.00	\$50	
computer time @ 75%	35	hours	\$15.00	\$525	
<b>FINAL PLANS</b>					<b>\$3,995</b>
Mileage 0 round trips @ 60 miles		mi	\$0.47	\$0	
Printing / Copies					
printing	50	prints	\$1.00	\$50	
computer time @ 75%	263	hours	\$15.00	\$3,945	
<b>MEETINGS</b>					<b>\$45</b>
Mileage 0 round trips @ 20 miles		mi	\$0.47	\$0	
computer time @ 10%	3	hours	\$15.00	\$45	
<b>PUBLIC INVOLVEMENT</b>					<b>\$45</b>
Mileage 0 round trips @ 20 miles		mi	\$0.47	\$0	
computer time @ 25%	3	hours	\$15.00	\$45	
					<b>\$6,163</b>