

EAST GOSHEN TOWNSHIP
CHESTER COUNTY, PENNSYLVANIA

RESOLUTION NO. 2016- 155

Be it RESOLVED, that East Goshen Township of Chester County hereby requests a Multimodal Transportation Fund grant of \$1,538,600 from the Commonwealth Financing Authority to be used for The Paoli Pike Trail Project, Segments D-E.

Be it FURTHER RESOLVED, that the Applicant does hereby designate Mr. Louis F. Smith Jr.; Township Manager as the official(s) to execute all documents and agreements between East Goshen Township and the Commonwealth Financing Authority to facilitate and assist in obtaining the requested grant.

I, Mr. Louis F. Smith Jr., duly qualified Secretary of the East Goshen Township Chester County PA, hereby certify that the forgoing is a true and correct copy of a Resolution duly adopted by a majority vote of the East Goshen Township Board of Supervisors at a regular meeting held July 19th, 2016 and said Resolution has been recorded in the Minutes of East Goshen Township and remains in effect as of this date.

IN WITNESS THEREOF, I affix my hand and attach the seal of the East Goshen Township this 19th day of July 19th, 2016.

East Goshen Township
Name of Applicant

Chester
County


Secretary

Exhibit 2 - Engineer's Conceptual Opinion of Cost

Project: Paoli Pike Trail - Segments D&E (Boot Road to North Chester Road)

6/20/2016

Applicant: East Goshen Township

Web Application ID: 8076751

Item No.	Description	Description	Unit	Quantity	Unit Cost	Cost
<i>Standard Items</i>						
1	Clearing and Grubbing		LS	1	\$15,000.00	\$15,000.00
2	Class 1 Excavation		CY	630	\$65.00	\$40,950.00
3	Foreign Borrow		CY	60	\$50.00	\$3,000.00
4	Saw cut existing pavement		LF	2,100	\$8.00	\$16,800.00
5	Grading (includes topsoil and seeding)	see below	SY	1,740	\$15.00	\$26,100.00
6	Full Depth Bituminous Pavement + Wearing Course (8" Bituminous Base Course & 8" Subbase)		SY	540	\$90.00	\$48,600.00
7	Driveway Adjustments		SY	900	\$60.00	\$54,000.00
8	Milling and Bituminous Overlay (including Tack Coat)		SY	9,080	\$25.00	\$227,000.00
9	Variable depth milling of bituminous pavement	see below	SY	500	\$10.00	\$5,000.00
10	Leveling Course		TN	530	\$85.00	\$45,050.00
11	Plain Cement Concrete Curb		LF	1,900	\$30.00	\$57,000.00
12	Plain Cement Mountable Curb		LF	390	\$40.00	\$15,600.00
13	Drainage Upgrades	New Drainage Structures/Pipe	LS	1	\$120,000.00	\$120,000.00
14	6" Base Drain		LF	1,900	\$13.00	\$24,700.00
15	Gabion Wall		CY	190	\$300.00	\$57,000.00
16	Guide Rail		LS	440	\$25.00	\$11,000.00
17	Construction Surveying, Schedule, Equipment Package		LS	1	\$17,500.00	\$17,500.00
18	4" Yellow Pavement Markings, Hot Thermoplastic Paint		LF	1,490	\$1.50	\$2,235.00
19	4" White Pavement Markings, Hot Thermoplastic Paint		LF	1,540	\$1.50	\$2,310.00
20	6" White Pavement Markings, Hot Thermoplastic Paint		LF	640	\$2.00	\$1,280.00
21	24" White Pavement Markings, Hot Thermoplastic Paint		LF	350	\$8.00	\$2,800.00
22	Marking Legend, "ONLY", Hot Thermoplastic Paint		LF	10	\$16.00	\$160.00
23	Marking Legend, "ARROW", Hot Thermoplastic Paint		LF	10	\$16.00	\$160.00
24	Signage		EA	25	\$150.00	\$3,750.00
25	ADA Accessible Curb Ramp at signalized Intersection	at a signalized intersection	EA	6	\$6,500.00	\$39,000.00
26	Detectable Warning Surface	at a driveway	EA	14	\$2,500.00	\$35,000.00
27	Traffic Signal Upgrades	Push Button upgrades	LS	1	\$40,000.00	\$40,000.00
<i>Special Items</i>						
28	Porous Bituminous Pavement Trail		SY	1,850	\$83.00	\$153,550.00
29	Post Construction Stormwater Management	Approx. 5% of Total	LS	1	\$67,000.00	\$67,000.00
30	Plastic Ribbon Fence		LF	390	\$25.00	\$9,750.00
31	Miscellaneous Relocations (Signs, etc.)		LS	1	\$55,000.00	\$55,000.00
<i>Streetscaping Items</i>						
32	Bicycle Parking		EA	1	\$3,600.00	\$3,600.00
33	Bench/Trash Receptacle		EA	1	\$3,250.00	\$3,250.00
34	Stamped Asphalt Median		SY	1,380	\$160.00	\$220,800.00
35	Kiosk		EA	1	\$2,250.00	\$2,250.00
36	Subtotal Trail Construction Cost	Items 1 - 35				\$1,427,000.00
37	Maintenance and Protection of Traffic	Approx. 12% of Item 36				\$172,000.00
38	Erosion and Sediment Control	Approx. 2.5% of Item 36				\$36,000.00
39	Mobilization	5% of Item 36				\$72,000.00
40	Contingency	5% of Items 36 - 39				\$85,000.00
41	Total Trail Construction Cost	Items 36 - 40				\$1,792,000.00
42	Construction Inspection	8.5% of Item 41				\$152,000.00
43	Total Trail Construction + Inspection	Items 41 - 42				\$1,944,000.00
44	Engineering and Permitting					\$430,000.00
45	Utilities		LS	1	\$45,000.00	\$45,000.00
46	Right-of-Way		LS	1	\$209,000.00	\$209,000.00
47	Total Trail Project Cost (2016 Dollars)	Items 43 - 46				\$2,628,000.00

MTF Request \$1,538,600.00

30% Match plus \$430,000 for Engineering and Permitting \$1,089,400.00

Assumptions & Notes:

-Variable depth milling assumes the milled material will remain property of the project to be used as subgrade, in lieu of complete excavation of existing pavement.

-Assumes 2' of ground restoration (grading) on each side of proposed trail alignment and new grass areas.

Exhibit 2 - Engineer's Conceptual Opinion of Cost

Project: Paoli Pike Trail - Segments D&E (Boot Road to North Chester Road)

Applicant: East Goshen Township

Web Application ID: 8076751

	Total	Matching Funds	MTF Request
Preliminary Engineering	\$ 174,000	\$ 174,000	
Final Design	\$ 256,000	\$ 256,000	
Right-of-Way	\$ 209,000	\$ 62,700	\$ 146,300
Utilities	\$ 45,000	\$ 13,500	\$ 31,500
Construction plus Inspection	\$ 1,944,000	\$ 583,200	\$ 1,360,800
Total	\$ 2,628,000	\$ 1,089,400	\$ 1,538,600

Notes and Assumptions:

Construction estimates are based on quantities derived from the trail conceptual plan included in the Paoli Pike Trail - Feasibility Study and Master Plan and unit prices from recently bid local projects with PennDOT oversight.

The following costs are rough estimates for budgeting purposes only: Engineering and Permitting, Utility Relocations, and Right of Way. The costs associated with these items will need to be determined through the development of the project.

Estimates of existing and required right of way were developed during the conceptual design work based on GIS data obtained from Chester County. Since the concept exhibit was prepared, the existing legal right-of-way lines and property lines have been independently verified through field survey and deed research. The final size and location of the required rights-of-way (temporary or permanent), will need to be determined during the preliminary engineering of the project.

Right-of-way estimates include rough approximations for temporary and permanent easements, but do not include the cost of legal fees associated with right-of-way acquisition process.

The Engineer's Conceptual Opinion of Cost does not include relocating or resetting existing underground utilities within the limits of the project or the provision of any future utilities. Impacts to existing underground utilities will need to be determined during the preliminary engineering of the project through subsurface utility engineering. Due to visible evidence of subsurface utilities within the project area (underground electric, water, sewer, gas and telecommunication) it is recommended (and likely required by law) that utility test pits be performed during the preliminary engineering of the project.

Further evaluation of the existing signalized intersections within the project limits is required during the preliminary engineering of the project. This evaluation may result in the identification of other improvements and costs not identified within this Engineer's Conceptual Opinion of Cost.

The estimate includes a contingency of 5% of infrastructure cost.

The Engineer's Conceptual Opinion of Cost does not include any environmental remediation (including but not limited to removal and replacement of contaminated soils) or environmental impact mitigation. Post-construction stormwater management is included in the estimate for each segment. However, these estimates do not consider credits or deductions from other Township capital projects.

Disclaimer: McMahon Associates, Inc. has provided this opinion of cost as requested by the client, East Goshen Township, for the purpose of the Multimodal Transportation Fund (MTF) grant application. This opinion of cost is based on the Paoli Pike Trail - Feasibility Study and Master Plan. Please note that opinions of cost are subject to change based on plan/design revisions, fluctuations in unit costs, field conditions, and differences in locale. Opinions of cost are provided for use in budgeting, but in no way intended to be construed as a final cost for the project. Final costs are contingent only on actual bids from contractors. McMahon Associates, Inc. will not be held responsible for differences between this opinion of cost and contractor bid costs.

Cost estimate prepared under the direction of:
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