

Liberty Way

12/22/2016

Limits: Iron Horse Blvd to Hoiliday Lane

1480 lf

Existing Conditions: The roadway is not structurally sound. There are numerous base failures, large scale surface patching, severe cracking and moderate to severe distortion of the roadway. The ride quality is poor. Asphalt is oxidized and failing. Existing paved width is 24.5 ft (+/-). Appears very thin base material over unstab soil. Recommend core to determine proposed rehabilitation.

Scope of Work: City would remove approx 8 inches of existing materials, County would stabilize the exposed subgrade (eight inches deep) with 36#/sy stabilization agent (Cemlime slurry). Regrade and place 6 inches of HMAC base course and a 2 inch HMAC "D" surface, backfill the shoulders and clean the jobsite.

Project Size:	Roadway Length (lf):	1,480 lf										
	Stabilization Width (ft) :	27 ft						Stab Area :	4,805 sy			
	Binder Width (ft):	26 ft						Binder Area:	4,641 sy			
	Surface Width (ft):	25 ft						Surface Area:	4,476 sy			
	Additional Areas (sy):	365 sy	(Turn Lane)									

Estimate:												
Roadway Materials:												
	Sq Yds	Rate/SY		Cost		Estimate		Final		\$ Estimate	\$ Final	
Cemlime Slurry	4,805	36 lb/sy		\$ 165.00 \$/tn		86.50 tn		tn		\$ 14,271.84		
Prime (60/40 AEP)	4,805	0.20 gal/sy		\$ 1.86 \$/gal		961 gal		gal		\$ 1,787.58		
Tack Coat (Binder)	4,641	0.10 gal/sy		\$ 1.66 \$/gal		464 gal		gal		\$ 770.39		
HMAC Binder (6")	4,641	0.33 tn/sy		\$ 52.23 \$/tn		1531 tn		tn		\$ 79,989.90		
Tack Coat (Surface)	4,476	0.10 gal/sy		\$ 1.66 \$/gal		448 gal		gal		\$ 743.09		
HMAC (2")	4,476	0.110 tn/sy		\$ 58.23 \$/tn		492 tn		tn		\$ 28,672.97		
HMAC (Inter & Drwy)				\$ 58.23 \$/tn		50 tn		tn		\$ 2,911.50		
						Subtotal				\$ 129,147		
Misc Cost												
Fuel Cost Estimate		50%				\$ 3,825				\$ 1,912.50		
Milling (City Sub-contract)										City		
Striping	1			0.033 \$/ft		\$ 6,320				\$ 208.56		
			Materials + Misc Cost							\$ 131,268		
			10% Contingency							\$ 13,126.83		
			Total:							\$144,395.16		

Material cost based on Sept 2016 pricing.

Construction Time Estimate: 15 days

Comments:

City will pay for all traffic control cost associated with this project.
City will adjust all utilities and manholes/valves for this project.
City will provide a nearby disposal area for spoils .
City will provide a hydrant meter and all water for this project.
City will provide material for backfilling edges.

Estimated Cost to Mill the project (4,805*\$3.75 /sy + \$200 = \$18,218)

Liberty Way

(City of Fort Worth)

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Activity	Quantity	Rate		Days	\$ Fuel / Day	Fuel Cost
Locate Utilities				1	\$ 100	\$ 100
Mix Cement	86	30	tn/day	3	\$ 325	\$ 975
Tight Blade	4,805	3,500	sy/day	2	\$ 200	\$ 400
Lay Binder	1,531	500	tn/day	4	\$ 300	\$ 1,200
Lay Surface	448	500	tn/day	2	\$ 300	\$ 600
Backfill Edges	2,960	2,500	lf/day	2	\$ 200	\$ 400
Clean Up				1	\$150	\$ 150
				15		\$ 3,825