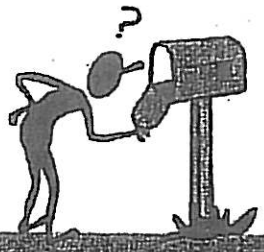


Cook County Highway Department
Design Bureau - 21st Floor
69 W. Washington Street
Chicago, Illinois 60602
312-603-1700/312-603-9957 (FAX)

To: HOWARD HALL Fax: 847-358-4056

From: TOM BANIEWICZ Date: 1/29/08

Re: 2008 MFT PROJECT

Pages 4

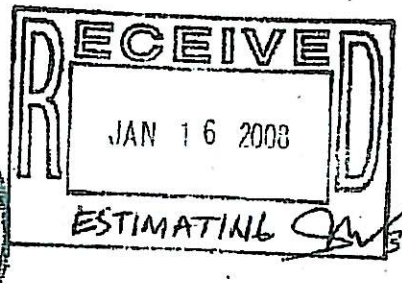
Notes:

HOWARD,
HERE IS A COPY OF THE ESTIMATES. PLEASE ADVISE US TO WHAT THE ROAD DISTRICT WANTS TO [redacted] DO. (ASAP)

TOM

cc: F. Williams
Struct. Div.
Maranan

HIGHWAY DEPARTMENT
MEMORANDUM



To: Mr. Mark Johnson
From: Structural Division
Date: January 16, 2008
Subject: Cost Estimate Request
Briarwood Lane at Salt Creek
Structure No. 016-1000

Attached for your use in preparing a cost estimate are two alternative preliminary summary of quantities for the subject improvements. A brief description of each improvement for the proposed bridge rehabilitation is mentioned below. Please provide the Structural Division with a cost estimate for this project for programming purposes.

Description of Improvement for Alternative # 1

The proposed improvement includes the removal and replacement of the stone parapet with a concrete bridge railing with rustication finish, the removal and reinstallation of the existing bridge lighting, removal and replacement of concrete headwall to accommodate the proposed concrete parapet wall and new twelve (12) foot lanes, the removal and replacement of the guardrail with traffic barrier terminal, type 6 and traffic barrier terminal, type 1 with bituminous shoulders. The removal and replacement of the bituminous surface with a sheet water proofing membrane system. Perform structural repair of concrete to the triple box culvert and wing walls. Perform deck slab repairs near deck drains, relocate deck drains, and perform epoxy crack sealing and all collateral work as necessary to complete the project.

Description of Improvement for Alternative # 2

The proposed improvement includes the removal and replacement of the guardrail with traffic barrier terminal, type 6 and traffic barrier terminal, type 1 with bituminous shoulders. The removal and replacement of the bituminous surface with a sheet water proofing membrane system. Perform structural repair of concrete to the triple box culvert and wing walls. Perform deck slab repairs near deck drains, replace deck drains, and perform epoxy crack sealing and all collateral work as necessary to complete the project.

If you have any questions, please contact Guillermo Ramos @ ext. 3-1741

Frank Williams, P.E., S.E.

FW: NS: GJR\31741
H:\Design\Structural\PROJECTS\Briarwood_Gen\costestimate\costestreq.doc

Briarwood Lane @ Salt Creek
Structure No. 016-4000
Preliminary Cost Estimate, Alternate # 1

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
1	Cutting Bituminous Surface	Foot	42	15.00	630.00
2	Bituminous Surface Removal (3 1/2 IN)	Sq. Yd.	94	35.00	3,290.00
3	Bituminous Material (Prime Coat)	Gal	47	2.00	94.00
4	Hot- Mix Asphalt Surface Course, MIX "D", IL-12.5 OR 9.5, N70	Ton	15	70.00	1,050.00
5	Guardrail Removal	Foot	131	10.00	1,310.00
6	Traffic Barrier Terminal, Type 6	Each	3	2,800.00	8,400.00
7	Traffic Barrier Terminal, Type 1	Each	3	2,200.00	6,600.00
8	Bituminous Shoulder, Superpave, 6 Inch	Sq. Yd.	12	150.00	1,800.00
9	Work Zone Pavement Marking Removal	Sq. Ft.	4628	1.00	4,628.00
10	Pavement Marking Tape, Type III, 4 Inch	Foot	800	1.30	1,040.00
11	Engineer's Field Office, Type A	Cal. Mo.	4	3,000.00	12,000.00
12	Traffic Protection	Lump Sum	1	17,000.00	17,000.00
13	Concrete Removal	Cu. Yd.	12.6	2,500.00	31,500.00
14	Formed Concrete Repair, Depth Equal to or Less Than 5 Inch	Sq. Ft.	340**	150.00	51,000.00
15	Formed Concrete Repair, Depth Greater Than 5 inch	Sq. Ft.	60**	200.00	12,000.00
16	Concrete Superstructures	Cu. Yd.	2.3	5,000.00	11,500.00
17	Removal and Reinstallation of Existing Lighting	Lump Sum	1	10,000.00	10,000.00
18	Deck Slab Repair, Partial Depth	Sq. Yd.	75***	500.00	37,500.00
19	Deck Slab Repair,(Full Depth, Type 1)	Sq. Yd.	50***	700.00	35,000.00
20	Deck Slab Repair,(Full Depth, Type 2)	Sq. Yd.	50***	750.00	37,500.00
21	Concrete Bridge Railing	Foot	96	125.00	12,000.00
22	Cleaning Existing Box Culvert, 12' X7'	Foot	83	35.00	2,905.00
23	Sheet Waterproofing Membrane System	Sq. Yd.	112	50.00	5,600.00
24	Deck Drains	Each	6	400.00	2,400.00
26	Reinforcement Bars, Epoxy Coated	Lb.	5150	5.00	25,750.00
26	Epoxy Crack Sealing	Foot	150	42.00	6,300.00
27	Seeding, Class 2	Acre	0.1	5,000.00	500.00
28	Nitrogen Fertilizer Nutrient	Lb.	9	4.50	40.50
29	Phosphorous Fertilizer Nutrient	Lb.	9	4.50	40.50
30	Potassium Fertilizer Nutrient	Lb.	9	4.50	40.50
31	Erosion Control Blanket	Sq. Yd.	484	3.20	1,548.80
32	Impact Attenuators, Temporary (NON-REDIRECTIVE)	Each	2	4,500.00	9,000.00
33	Impact Attenuators, Relocate (NON-REDIRECTIVE)	Each	2	650.00	1,300.00
34	Temporary Concrete Barrier	Foot	42	70.00	2,940.00
35	Relocate Temporary Concrete Barrier	Foot	42	55.00	2,310.00
36	Top Soil Furnish and Place	Sq. Yd.	484	6.00	2,904.00
37	Contract Extra Work Items	Lump Sum	1	10,000.00	10,000.00
				TOTAL	369,421.30

**It was estimated that the top and bottom slabs required 30% of Deck Slab Repair, Partial and 20% of Deck Slab Repair (Full Depth) Types 1 & 2.

***It was estimated that the 54 sq. ft. of wingwall need repairs,and 20% of the bottom of the top slab requires repair, and 10 % of the interior wall require repairs.

For pay item No. 25 an addition of 600 lbs. of reinforcement bars was added in the event that section loss is encounter during deck slab repairs.

COMMENT -

— IS PROTECTIVE SHIELD NECESSARY ?

— DETOUR ROUTING

Briarwood Lane @ Salt Creek
Structure No. 016-4000
Preliminary Cost Estimate, Alternate # 2 (No Stone Parapet Replacement)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
1	Cutting Bituminous Surface	Foot	42	15.00	630.00
2	Bituminous Surface Removal (3 1/2 IN)	Sq. Yd.	94	35.00	3,290.00
3	Bituminous Materiel (Prime Coat)	Gal	47	2.00	94.00
4	Hot- Mix Asphalt Surface Course, MIX "D", IL-12.5 OR 9.5, N70	Ton	15	70.00	1,050.00
5	Guardrail Removal	Foot	131	10.00	1,310.00
6	Traffic Barrier Terminal, Type 6	Each	3	2,800.00	8,400.00
7	Traffic Barrier Terminal, Type 1	Each	3	2,200.00	6,600.00
8	Bituminous Shoulder, Superpave, 6 Inch	Sq. Yd.	12	150.00	1,800.00
9	Engineer's Field Office, Type A	Cal. Mo.	3	3,000.00	9,000.00
10	Formed Concrete Repair, Depth Equal to or Less Than 5 Inch	Sq. Ft.	340**	150.00	51,000.00
11	Formed Concrete Repair, Depth Greater Than 5 Inch	Sq. Ft.	60**	200.00	12,000.00
12	Deck Slab Repair, Partial Depth	Sq. Yd.	75***	500.00	37,500.00
13	Deck Slab Repair,(Full Depth, Type 1)	Sq. Yd.	50***	700.00	35,000.00
14	Deck Slab Repair,(Full Depth, Type 2)	Sq. Yd.	50***	750.00	37,500.00
15	Deck Drains	Each	6	400.00	2,400.00
16	Cleaning Existing Box Culvert, 12' X7'	Foot	83	35.00	2,905.00
17	Sheet Waterproofing Membrane System	Sq. Yd.	112	50.00	5,600.00
18	Reinforcement Bars, Epoxy Coated	Lb.	600	5.00	3,000.00
19	Epoxy Crack Sealing	Foot	150	42.00	6,300.00
20	Seeding, Class 2	Acre	0.1	5,000.00	500.00
21	Nitrogen Fertilizer Nutrient	Lb.	9	4.50	40.50
22	Phosphorous Fertilizer Nutrient	Lb.	9	4.50	40.50
23	Potassium Fertilizer Nutrient	Lb.	9	4.50	40.50
24	Erosion Control Blanket	Sq. Yd.	484	3.20	1,548.80
25	Top Soil Furnish and Place	Sq. Yd.	484	6.00	2,904.00
26	Contract Extra Work Items	Lump Sum	1	5,000.00	5,000.00
				TOTAL	235,453.30

** It was estimated that the top and bottom slabs required 30% of Deck Slab Repair, Partial and 20% of Deck Slab Repair (Full Depth) Types
*** It was estimated that the 54 sq. ft. of wingwall need repairs,and 20% of the bottom of the top slab requires repair, and 10 % of the interior wall require repairs.
600 lbs. of reinforcement bars was added in the event that section loss is encounter during deck slab repairs.

COMMENT:

— TRAFFIC PROTECTION ?

— DETOUR ROUTING OR STAGING ?