

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs

1. Northpark Drive & Woodridge Parkway/Hidden Pines Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$14,099.46	\$14,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$127,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	1	\$200,000.00	\$200,000.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$239,361.39
Total BASE UNIT PRICE						\$366,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00

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1. Northpark Drive & Woodridge Parkway/Hidden Pines Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$413,590.84
CONTINGENCIES					25%	\$103,397.71
TOTAL PROJECT CONSTRUCTION COST						\$516,988.55

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
2. Northpark Drive & West Lake Houston Parkway

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
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2. Northpark Drive & West Lake Houston Parkway

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
3. Kingwood Drive & Chestnut Ridge Road

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$8,398.91	\$8,398.91
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	500	\$53.00	\$26,500.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	500	\$5.25	\$2,625.00
6	01555	(Remove) Low Profile Concrete Barriers	LF	500	\$8.25	\$4,125.00
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	4	\$750.00	\$3,000.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$139,648.91
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	611	\$4.00	\$2,444.44
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	102	\$5.00	\$509.26
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	833	\$3.00	\$2,500.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	17	\$120.00	\$1,989.90
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	833	\$80.00	\$66,666.67
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	206	\$6.00	\$1,237.50
17	02752	Horizontal 24" Dowels	EA	250	\$3.50	\$875.00
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	500	\$5.00	\$2,500.00
Sub-Total PAVING ITEMS						\$78,722.77
Total BASE UNIT PRICE						\$218,371.68
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00

**Lake Houston/Kingwood Area Mobility Study
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Engineer's Opinion of Probable Construction Costs**

3. Kingwood Drive & Chestnut Ridge Road

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$265,376.68
CONTINGENCIES					25%	\$66,344.17
TOTAL PROJECT CONSTRUCTION COST						\$331,720.85

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
4. West Lake Houston Parkway & Kings Crossing Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00

**Lake Houston/Kingwood Area Mobility Study
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4. West Lake Houston Parkway & Kings Crossing Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
5. Kingwood Drive & Sorters Road

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
5. Kingwood Drive & Sorters Road

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs

6. Kingwood Drive & Loop 494

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$8,398.91	\$8,398.91
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	500	\$53.00	\$26,500.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	500	\$5.25	\$2,625.00
6	01555	(Remove) Low Profile Concrete Barriers	LF	500	\$8.25	\$4,125.00
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	4	\$750.00	\$3,000.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$139,648.91
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	611	\$4.00	\$2,444.44
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	102	\$5.00	\$509.26
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	833	\$3.00	\$2,500.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	17	\$120.00	\$1,989.90
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	833	\$80.00	\$66,666.67
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	206	\$6.00	\$1,237.50
17	02752	Horizontal 24" Dowels	EA	250	\$3.50	\$875.00
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	500	\$5.00	\$2,500.00
Sub-Total PAVING ITEMS						\$78,722.77
Total BASE UNIT PRICE						\$218,371.68
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

6. Kingwood Drive & Loop 494

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$265,376.68
CONTINGENCIES					25%	\$66,344.17
TOTAL PROJECT CONSTRUCTION COST						\$331,720.85

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs

7. Kingwood Drive & Royal Forest Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

7. Kingwood Drive & Royal Forest Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
8. Kingwood Drive & Green Oak Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
8. Kingwood Drive & Green Oak Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
9. Kingwood Drive & Trailwood Village

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

9. Kingwood Drive & Trailwood Village

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

10. Kingwood Drive & Woodland Hills Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$12,877.82	\$12,877.82
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	1,000	\$53.00	\$53,000.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	1,000	\$5.25	\$5,250.00
6	01555	(Remove) Low Profile Concrete Barriers	LF	1,000	\$8.25	\$8,250.00
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	4	\$750.00	\$3,000.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$177,377.82
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	1,222	\$4.00	\$4,888.89
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	204	\$5.00	\$1,018.52
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	1,667	\$3.00	\$5,000.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	33	\$120.00	\$3,979.80
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	1,667	\$80.00	\$133,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	413	\$6.00	\$2,475.00
17	02752	Horizontal 24" Dowels	EA	500	\$3.50	\$1,750.00
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	1,000	\$5.00	\$5,000.00
Sub-Total PAVING ITEMS						\$157,445.54
Total BASE UNIT PRICE						\$334,823.36

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

10. Kingwood Drive & Woodland Hills Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$381,828.36
CONTINGENCIES					25%	\$95,457.09

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

10. Kingwood Drive & Woodland Hills Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
TOTAL PROJECT CONSTRUCTION COST						\$477,285.45

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

11. Kingwood Drive & Willow Terrace

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
					Sub-Total GENERAL CONSTRUCTION ITEMS	\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

11. Kingwood Drive & Willow Terrace

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

11. Kingwood Drive & Willow Terrace

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

12. Hamblen Road & Forest Cove Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$6,099.46	\$6,099.46
2	01555	Traffic Control and Regulation	LS	1	\$60,000.00	\$60,000.00
3	01555	Flagmen	LS	1	\$30,000.00	\$30,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	250	\$53.00	\$13,250.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	250	\$5.25	\$1,312.50
6	01555	(Remove) Low Profile Concrete Barriers	LF	250	\$8.25	\$2,062.50
7	01575	Stabilized Construction Entrance/Exit	EA	2	\$2,500.00	\$5,000.00
8	02893	Project Identification Signs	EA	2	\$750.00	\$1,500.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$119,224.46
PAVING ITEMS						
9	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	306	\$4.00	\$1,222.22
10	02752S	Saw Cutting	LF	0	\$6.00	\$0.00
11	02315	Roadway Excavation with or without subgrade	CY	51	\$5.00	\$254.63
12	02336	Lime Stabilized Subgrade 8-inch thick	SY	417	\$3.00	\$1,250.00
13	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	8	\$120.00	\$994.95
14	02751	Reinforced Concrete Pavement 10-inch thick	SY	417	\$80.00	\$33,333.33
15	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 13-inch thick	SY	0	\$110.00	\$0.00
16	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	103	\$6.00	\$618.75
17	02752	Horizontal 24" Dowels	EA	125	\$3.50	\$437.50
18	02771	Concrete Rail Road Header	LF	0	\$20.00	\$0.00
19	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
20	02771	6-Inch Concrete Curb	LF	250	\$5.00	\$1,250.00
Sub-Total PAVING ITEMS						\$39,361.39
Total BASE UNIT PRICE						\$158,585.84

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

12. Hamblen Road & Forest Cove Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
EXTRA WORK ITEMS						
21	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
22	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
23	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
24	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
25	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
26	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
27	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
28	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
29	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
30	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
31	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
32	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
33	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
34	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$205,590.84
CONTINGENCIES					25%	\$51,397.71

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs**

12. Hamblen Road & Forest Cove Drive

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
TOTAL PROJECT CONSTRUCTION COST						\$256,988.55

**Lake Houston/Kingwood Area Mobility Study
Priority 1: Intersection Improvements
Engineer's Opinion of Probable Construction Costs
13. Mills Branch Drive & Northpark Drive**

Item No.	Spec. Ref.	Item Description	Unit Measure	Unit Quantity	Unit Price (\$)	Total Amount (\$)
GENERAL CONSTRUCTION ITEMS						
1	01502	Mobilization	LS	1	\$331,601.94	\$331,601.94
2	01555	Traffic Control and Regulation	LS	1	\$400,000.00	\$400,000.00
3	01555	Flagmen	LS	1	\$150,000.00	\$150,000.00
4	01555	(Install) Low Profile Concrete Barriers	LF	1,500	\$53.00	\$79,500.00
5	01555	(Relocate) Low Profile Concrete Barriers	LF	1,500	\$5.25	\$7,875.00
6	01555	(Remove) Low Profile Concrete Barriers	LF	1,500	\$8.25	\$12,375.00
7	01570	Implementation and Maintenance of Stormwater Pollution Prevention Plan	LS	1	\$80,000.00	\$80,000.00
8	01570	Inlet Protection Barrier	EA	8	\$5.00	\$40.00
9	01575	Stabilized Construction Entrance/Exit	EA	4	\$2,500.00	\$10,000.00
10	01578	Ground Water Control for Open Cut Construction	LF	860	\$20.00	\$17,200.00
11	02221	Remove and Relocate traffic signs, roadway signs	EA	40	\$130.00	\$5,200.00
12	02260	Trench Safety System for trench excavations	LF	4,499	\$0.50	\$2,249.50
13	02893	Project Identification Signs	EA	4	\$750.00	\$3,000.00
Sub-Total GENERAL CONSTRUCTION ITEMS						\$1,099,041.44
PAVING ITEMS						
14	02221	Remove/Dispose Reinforced Concrete Surface/ with or without Base	SY	26,889	\$4.00	\$107,555.56
15	02752S	Saw Cutting	LF	1,825	\$6.00	\$10,950.00
16	02315	Roadway Excavation with or without subgrade	CY	4,481	\$5.00	\$22,407.41
17	02336	Lime Stabilized Subgrade 8-inch thick	SY	36,667	\$3.00	\$110,000.00
18	02336	6% Lime Treatment for Stabilized Subgrade (Dry weight) (36-lbs/SY/per 8-inch depth)	TON	730	\$120.00	\$87,555.60
19	02751	Reinforced Concrete Pavement 10-inch thick	SY	36,667	\$80.00	\$2,933,333.33
20	TxDOT SS3230	Fast Track Reinforced Concrete Pavement 10-inch thick	SY	5,861	\$110.00	\$644,722.22
21	02752	Street Pavment Expansion Joint with Load Transfer Device	LF	9,075	\$6.00	\$54,450.00
22	02752	Horizontal 24" Dowels	EA	11,000	\$3.50	\$38,500.00
23	-	Bridge Replacement (Replace 2-1-lane bridges with 2-2-lane bridges)	SF	8,800	\$200.00	\$1,760,000.00
24	02931	Traffic Signals (per intersection)	EA	0	\$200,000.00	\$0.00
25	02771	6-Inch Concrete Curb	LF	22,000	\$5.00	\$110,000.00
Sub-Total PAVING ITEMS						\$5,879,474.12
STORM SEWER ITEMS						
26	02222	Remove/Dispose Storm Pipe 24-inch dia	LF	450	\$9.00	\$4,050.00
27	02222	Remove/Dispose Storm Pipe 30-inch dia	LF	270	\$9.00	\$2,430.00
28	02222	Remove/Dispose Storm Pipe 36-inch dia	LF	60	\$9.00	\$540.00
29	02222	Remove/Dispose Storm Pipe 54-inch dia	LF	80	\$20.00	\$1,600.00
30	02222	Remove/Dispose Manholes all sizes/depth	EA	2	\$400.00	\$800.00
31	02222	Remove/Dispose Inlets all sizes/depth	EA	8	\$300.00	\$2,400.00
32	02631	24-Inch RCP Storm Sewers by Open-Cut, All Depths, Complete in Place	LF	450	\$118.00	\$53,100.00
33	02631	30-Inch RCP Storm Sewers by Open-Cut, All Depths, Complete in Place	LF	270	\$145.00	\$39,150.00
34	02631	36-Inch RCP Storm Sewers by Open-Cut, All Depths, Complete in Place	LF	60	\$155.00	\$9,300.00
35	02631	54-Inch RCP Storm Sewers by Open-Cut, All Depths, Complete in Place	LF	80	\$280.00	\$22,400.00
36	081/02082/020	Type C manhole for 42-inch diameter and smaller sewers	EA	2	\$3,400.00	\$6,800.00
37	081/02082/020	Type C manhole for 48-inch to 72-inch diameter sewers	EA	0	\$6,000.00	\$0.00
38	02632 / 02633	Type H-2 Inlet	EA	5	\$2,700.00	\$13,500.00
39	02632 / 02633	Type C-1 Inlet	EA	2	\$2,700.00	\$5,400.00
40	02632 / 02633	Type E Inlet	EA	1	\$2,700.00	\$2,700.00
Sub-Total STORM SEWER ITEMS						\$164,170.00
WATER ITEMS						
41	02221	Remove and Dispose 8-inch Diameter Water Line	LF	150	\$9.00	\$1,350.00
42	02221	Remove and Dispose 12-inch Diameter Water Line	LF	345	\$9.00	\$3,105.00

43	02221	Remove and Dispose 20-inch Diameter Water Line	LF	2,234	\$15.00	\$33,510.00
44	02511	8-inch water line w/ Restrained joints by Open-Cut	LF	150	\$140.00	\$21,000.00
45	02511	12-inch water line w/ Restrained joints by Open-Cut	LF	345	\$210.00	\$72,450.00
46	02511	20-inch water line w/ Restrained joints by Open-Cut	LF	2,234	\$250.00	\$558,500.00
47	02520	Remove and salvage existing fire hydrant	EA	18	\$700.00	\$12,600.00
48	02520	Fire hydrant assembly, all depths, including 6-inch diameter gate valve and box	EA	18	\$5,000.00	\$90,000.00
Sub-Total WATER ITEMS						\$792,515.00
SANITARY SEWER ITEMS						
49	02221	Remove Existing Sanitary Sewer Pipe (All Types)	LF	910	\$40.00	\$36,400.00
50	02532	8-Inch PVC Sanitary Sewers by Open-Cut, All Depths, Complete in Place	LF	375	\$110.00	\$41,250.00
51	02531	10-Inch PVC Sanitary Sewers by Open-Cut, All Depths, Complete in Place	LF	110	\$130.00	\$14,300.00
51	02532	15-Inch PVC Sanitary Sewers by Open-Cut, All Depths, Complete in Place	LF	425	\$140.00	\$59,500.00
Sub-Total SANITARY SEWER ITEMS						\$151,450.00
STREETScape ITEMS						
52	02035	Tree Protection Fencing	LS	1	\$100,000.00	\$100,000.00
53	02110	Tree removal	LS	1	\$50,000.00	\$50,000.00
54	02110	Tree Mitigation	LS	1	\$375,000.00	\$375,000.00
55	02810	Irrigation Repairs	LS	1	\$10,000.00	\$10,000.00
Sub-Total STREETScape ITEMS						\$535,000.00
Total BASE UNIT PRICE						\$8,621,650.56
EXTRA WORK ITEMS						
56	02318	Excavate Around Obstructions	CY	100	\$10.00	\$1,000.00
57	02318	Extra Hand Excavation	CY	100	\$15.00	\$1,500.00
58	02318	Extra Machine Excavation	CY	100	\$10.00	\$1,000.00
59	02318	Extra Placement of Backfill Material	CY	100	\$15.00	\$1,500.00
60	02318	Extra Placement of Granular Fill	CY	100	\$15.00	\$1,500.00
61	02318	Extra Placement of Select Backfill	CY	100	\$10.00	\$1,000.00
62	02318/ 02321	Extra Cement Stabilized Sand	CY	100	\$25.00	\$2,500.00
63	02501	Extra Water Line Fittings	TON	1	\$1,000.00	\$1,000.00
Sub-Total EXTRA WORK ITEMS						\$11,000.00
CASH ALLOWANCE ITEMS						
64	01110	Street Cut Permit	CA	1	\$7,500.00	\$7,500.00
65	01110	Lane Closure Permit	CA	1	\$6,000.00	\$6,000.00
66	01111	Sidewalk Closure Permit	CA	1	\$1,080.00	\$1,080.00
67	01410/ 01570	TPDES NOI/NOT	CA	1	\$375.00	\$375.00
68	02775	TDLR TAS Permit - Inspection	CA	1	\$1,050.00	\$1,050.00
69	01110/ TxDOT SS6834	PCMS: Full LED Matrix, 3 Line (8 character per line)	CA	1	\$20,000.00	\$20,000.00
Sub-Total CASH ALLOWANCE ITEMS						\$36,005.00
Total ITEMS						\$8,668,655.56
CONTINGENCIES					25%	\$2,167,163.89
TOTAL PROJECT CONSTRUCTION COST						\$10,835,819.45

Intersection Improvements	
1	\$516,988.55
2	\$256,988.55
3	\$331,720.85
4	\$256,988.55
5	\$256,988.55
6	\$331,720.85
7	\$256,988.55
8	\$256,988.55
9	\$256,988.55
10	\$477,285.45
11	\$256,988.55
12	\$256,988.55
13	\$10,835,819.45
Total	\$14,549,443.57