



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Northwest Boulevard	Control-Section	City of Corpus Christi
Limits From	County Road 77	DFO	
Limits To	Wildcat	DFO	
Length	5.0 miles	Current AADT	32,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$719,727
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$57,579
Safety (2-5%)	\$35,987
Inflation (≥ 10%)	\$71,973
<b>Total</b>	<b>\$885,266</b>

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2014 HSIP PROJECT - NORTHWEST

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (16 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	2		95,918.60	
					Subtotal	191,237.20	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*8/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 8/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit Includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,296.00	21,296.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMU/Leip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	7		75,498.50	
					Subtotal	528,489.50	
					total cost	719,726.70	
		Mobilization / Barricade	EA	1	5%	67,578.14	
		Safety Allowance	EA	1	5%	36,986.336	
		Inflation Cost	EA	1	10%	71,972.67	
					TOTAL	886,263.84	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Up River Road	Control-Section	City of Corpus Christi
Limits From	Navigation Blvd	DFO	
Limits To	Old Robstown	DFO	
Length	1.0 miles	Current AADT	3,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$417,733
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$33,419
Safety (2-5%)	\$20,887
Inflation (≥ 10%)	\$41,774
<b>Total</b>	<b>\$513,813</b>

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2014 HSIP PROJECT - UP RIVER

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grn-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDOWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	2		95,618.60	
					subtotal	191,237.20	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*8/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 8/C POWER (RADD, MATRIX)	EA	8			
		* RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADD AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMU/Eip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMU/Eip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	3		75,498.50	
					Subtotal	226,498.50	
					total cost	417,732.70	
		Mobilization / Barricade	EA	1	8%	33,418.62	
		Safety Allowance	EA	1	5%	20886.836	
		Inflation Cost	EA	1	10%	41,773.27	
					TOTAL	513,811.22	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Agnes Street	Control-Section	City of Corpus Christi
Limits From	McBride	DFO	
Limits To	19 <sup>th</sup> Street	DFO	
Length	1.25 miles	Current AADT	12,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$739,847
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$59,188
Safety (2-5%)	\$36,993
Inflation (≥ 10%)	\$73,985
<b>Total</b>	<b>\$910,013</b>

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2014 HSIP PROJECT - AGNES

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,800.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (16 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	3		95,818.80	
					subtotal	296,855.80	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(Kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	6		75,498.50	
					Subtotal	462,991.00	
					total cost	739,848.80	
		Mobilization / Barricade	EA	1	8%	59,187.74	
		Safety Allowance	EA	1	5%	36,992.34	
		Inflation Cost	EA	1	10%	73,984.88	
					TOTAL	910,011.66	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Tanacahua	Control-Section	City of Corpus Christi
Limits From	Lipan	DFO	
Limits To	Buffalo	DFO	
Length	0.75 miles	Current AADT	5,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$301,994
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$24,160
Safety (2-5%)	\$15,100
Inflation (≥ 10%)	\$30,200
Total	\$371,454

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2014 HSIP PROJECT - TANACAHUA

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (16 IN) LED (CTDWN)	EA	12	547.60	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	-		95,618.80	
					Subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADD AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMU/Leip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,296.00	21,296.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMU/Leip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	4		76,498.50	
					Subtotal	301,294.00	
					total cost	301,994.00	
		Mobilization / Barricade	EA	1	8%	24,189.52	
		Safety Allowance	EA	1	6%	15,099.7	
		Inflation Cost	EA	1	10%	30,199.40	
					TOTAL	371,462.82	





## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Carancahua	Control-Section	City of Corpus Christi
Limits From	Lipan	DFO	
Limits To	Buffalo	DFO	
Length	0.75 miles	Current AADT	5,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$301,994
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$24,160
Safety (2-5%)	\$15,100
Inflation (≥ 10%)	\$30,200
Total	\$371,454

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2014 HSIP PROJECT - CARANCAHUA

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.85	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (16 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Spen to Mast Arm</i>	EA	-		95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit Includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADD AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMU/Leip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	4		75,498.50	
					Subtotal	301,984.00	
					total cost	301,984.00	
		Mobilization / Barricade	EA	1	8%	24,159.52	
		Safety Allowance	EA	1	5%	15099.7	
		Inflation Cost	EA	1	10%	30,198.40	
					TOTAL	371,482.62	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Baldwin Boulevard	Control-Section	City of Corpus Christi
Limits From	Airport	DFO	
Limits To	Crosstown Expressway	DFO	
Length	3.0 miles	Current AADT	12,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate ROW (if required)	\$301,994
Mobilization and Barricades (≥ 8%)	\$24,160
Safety (2-5%)	\$15,100
Inflation (≥ 10%)	\$20,200
<b>Total</b>	<b>\$371,454</b>

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2014 HSIP PROJECT - BALDWIN

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(38 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grn-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	-		95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*8/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 8/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADD'S AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeIp	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,296.00	21,296.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeIp	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	4		75,498.50	
					Subtotal	301,994.00	
					total cost	301,994.00	
		Mobilization / Barricade	EA	1	8%	24,159.52	
		Safety Allowance	EA	1	5%	15,099.7	
		Inflation Cost	EA	1	10%	30,199.40	
					TOTAL	371,452.62	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Port Avenue	Control-Section	City of Corpus Christi
Limits From	Tarlton	DFO	
Limits To	Ruth	DFO	
Length	2.5 miles	Current AADT	14,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$322,115
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$25,770
Safety (2-5%)	\$16,106
Inflation (≥ 10%)	\$32,212
Total	\$396,203

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2014 HSIP PROJECT - PORT

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(38 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grn-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED Yellow, Green; Tunnel Visors	EA	6	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	1		95,618.80	
					subtotal	95,618.80	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD,MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD,MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,296.00	21,296.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	3		75,498.50	
					Subtotal	228,498.80	
					total cost	322,114.10	
		Mobilization / Barricade	EA	1	5%	25,799.13	
		Safety Allowance	EA	1	5%	16106.706	
		Inflation Cost	EA	1	10%	32,211.41	
					TOTAL	396,200.34	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Ocean Dr – Shoreline Dr	Control-Section	City of Corpus Christi
Limits From	People	DFO	
Limits To	Louisiana	DFO	
Length	1.75 miles	Current AADT	28,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate ROW (if required)	\$603,988
Mobilization and Barricades (≥ 8%)	\$48,320
Safety (2-5%)	\$30,200
Inflation (≥ 10%)	\$60,399
<b>Total</b>	<b>\$742,906</b>

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2014 HSIP PROJECT - OCEAN SHORELINE

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(18 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	-		95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 6E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADD AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	8		75,498.50	
					Subtotal	603,988.00	
					total cost	603,988.00	
		Mobilization / Barricade	EA	1	8%	48,318.04	
		Safety Allowance	EA	1	5%	30,199.4	
		Inflation Cost	EA	1	10%	60,398.80	
					TOTAL	742,905.24	





## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Louisiana Avenue	Control-Section	City of Corpus Christi
Limits From	Alameda	DFO	
Limits To	Santa Fe	DFO	
Length	0.25 miles	Current AADT	5,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate ROW (if required)	\$150,997
Mobilization and Barricades (≥ 8%)	\$12,080
Safety (2-5%)	\$7,550
Inflation (≥ 10%)	\$15,100
<b>Total</b>	<b>\$185,727</b>

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2014 HSIP PROJECT - LOUISIANA

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162822) W/APRON	EA	1	726.00	726.00	
		Upgrade Wire Span to Mast Arm	EA	-		95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD,MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD,MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,296.00	21,296.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		Upgrade Hardware & Interconnect Signals	EA	2		75,498.50	
					Subtotal	150,997.00	
					total cost	150,997.00	
		Mobilization / Barricade	EA	1	5%	12,079.78	
		Safety Allowance	EA	1	5%	7,549.88	
		Inflation Cost	EA	1	10%	15,099.70	
					TOTAL	186,726.31	



# 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Alameda Street	Control-Section	City of Corpus Christi
Limits From	Glaze Brook	DFO	
Limits To	Texan Trail	DFO	
Length	0.25 miles	Current AADT	15,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate ROW (if required)	\$226,496
Mobilization and Barricades (≥ 8%)	\$18,120
Safety (2-5%)	\$11,325
Inflation (≥ 10%)	\$22,650
<b>Total</b>	<b>\$278,591</b>

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2014 HSIP PROJECT - ALAMEDA

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gr-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		Upgrade Wire Span to Mast Arm	EA	-		95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADD AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		Upgrade Hardware & Interconnect Signals	EA	3		75,498.50	
					Subtotal	226,495.50	
					total cost	226,495.50	
		Mobilization / Barricade	EA	1	8%	18,119.84	
		Safety Allowance	EA	1	5%	11,324.775	
		Inflation Cost	EA	1	10%	22,649.55	
					TOTAL	278,589.47	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Doddridge Street	Control-Section	City of Corpus Christi
Limits From	Alameda	DFO	
Limits To	Ocean	DFO	
Length	0.5 miles	Current AADT	12,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, P.E., PTOE, PTP					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$150,997
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$12,080
Safety (2-5%)	\$7,550
Inflation (≥ 10%)	\$15,100
Total	\$185,727

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2014 HSIP PROJECT - DODDRIDGE

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (16 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Spen to Mast Arm</i>	EA	-		95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*8/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 8/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	2		75,498.50	
					Subtotal	150,997.00	
					total cost	150,997.00	
		Mobilization / Barricade	EA	1	8%	12,079.76	
		Safety Allowance	EA	1	5%	7,549.85	
		Inflation Cost	EA	1	10%	15,099.70	
					TOTAL	185,726.31	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Greenwood Drive	Control-Section	City of Corpus Christi
Limits From	South Padre Island Drive	DFO	
Limits To	Gollihar	DFO	
Length	0.75 miles	Current AADT	13,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate ROW (if required)	\$301,994
Mobilization and Barricades (≥ 8%)	\$24,160
Safety (2-5%)	\$15,100
Inflation (≥ 10%)	\$30,200
<b>Total</b>	<b>\$371,454</b>

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2014 HSIP PROJECT - GREENWOOD

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(38 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(18 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Gm-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	-		85,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*8/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 8/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(Kit Includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMU/Leip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMU/Leip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	4		75,498.50	
					Subtotal	301,994.00	
					total cost	301,994.00	
		Mobilization / Barricade	EA	1	8%	24,159.52	
		Safety Allowance	EA	1	5%	15,099.7	
		Inflation Cost	EA	1	10%	30,199.40	
					TOTAL	371,452.62	





## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Ayers Street	Control-Section	City of Corpus Christi
Limits From	McArdle	DFO	
Limits To	Port	DFO	
Length	0.75 miles	Current AADT	23,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate ROW (if required)	\$322,115
Mobilization and Barricades (≥ 8%)	\$25,770
Safety (2-5%)	\$16,106
Inflation (≥ 10%)	\$32,212
<b>Total</b>	<b>\$396,203</b>

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2014 HSIP PROJECT - AYERS

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,800.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	840	1.85	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grm-Arw, Yel-Arw, Flasi-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (16 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	1		95,618.60	
					subtotal	95,618.60	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,296.00	21,296.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	3		75,498.50	
					Subtotal	226,496.50	
					total cost	322,114.10	
		Mobilization / Barricade	EA	1	5%	25,789.13	
		Safety Allowance	EA	1	5%	16106.705	
		Inflation Cost	EA	1	10%	32,211.41	
					TOTAL	396,200.34	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Kostoryz Road	Control-Section	City of Corpus Christi
Limits From	McArdle	DFO	
Limits To	Norton	DFO	
Length	1.25 miles	Current AADT	13,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$377,493
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$30,200
Safety (2-5%)	\$18,875
Inflation (≥ 10%)	\$37,750
<b>Total</b>	<b>\$464,318</b>

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2014 HSIP PROJECT - KOSTORYZ

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.85	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grn-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	-		95,818.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV. (RADD)	EA	1			
		*4 SENSORS(kit Includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMU/Leip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMU/Leip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	5		75,498.50	
					Subtotal	377,492.50	
					total cost	377,492.50	
		Mobilization / Barricade	EA	1	8%	30,199.40	
		Safety Allowance	EA	1	5%	18,874.625	
		Inflation Cost	EA	1	10%	37,749.25	
					TOTAL	484,315.78	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Staples Street	Control-Section	City of Corpus Christi
Limits From	Mustang	DFO	
Limits To	Carmel Parkway	DFO	
Length	1.0 miles	Current AADT	22,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$452,991
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$36,240
Safety (2-5%)	\$22,650
Inflation (≥ 10%)	\$45,300
<b>Total</b>	<b>\$557,181</b>

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2014 HSIP PROJECT - STAPLES

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(38 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grn-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (16 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA			95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*8/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 8/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	6		75,498.50	
					Subtotal	482,991.00	
					total cost	452,991.00	
		Mobilization / Barricade	EA	1	8%	36,239.28	
		Safety Allowance	EA	1	8%	22,649.56	
		Inflation Cost	EA	1	10%	44,299.10	
					TOTAL	567,178.93	



## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Weber Road	Control-Section	City of Corpus Christi
Limits From	Yorktown Boulevard		DFO
Limits To	Aaron		DFO
Length	0.25 miles	Current AADT	12,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$150,997
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$12,080
Safety (2-5%)	\$7,550
Inflation (≥ 10%)	\$15,100
<b>Total</b>	<b>\$185,727</b>

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2014 HSIP PROJECT - WEBER 1

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(18 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.85	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grn-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTDWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) WIAPRON	EA	1	726.00	726.00	
		<i>Upgrade Wire Span to Mast Arm</i>	EA	-		95,618.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232 RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADD AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMU/Leip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,298.00	21,298.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMU/Leip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		<i>Upgrade Hardware &amp; Interconnect Signals</i>	EA	2		75,498.50	
					Subtotal	150,997.00	
					total cost	150,997.00	
		Mobilization / Barricade	EA	1	8%	12,079.76	
		Safety Allowance	EA	1	5%	7,549.88	
		Inflation Cost	EA	1	10%	15,099.70	
					TOTAL	185,726.31	





## 2014 HSIP Project Submission

Segment			
District	CRP	County	Nueces
Highway	Weber Road	Control-Section	City of Corpus Christi
Limits From	McArdle	DFO	
Limits To	Gollihar	DFO	
Length	0.5 miles	Current AADT	27,000 vpd
Comments	Improve Traffic Signals and Interconnect Signals on City arterials.		

Intersection			
Intersecting Road Name			
Beg DFO		End DFO	
Current AADT of Intersecting Road			

Project Information						
Work Code(s)	108, 111					
Reduction Factor	0.53					
Service Life	10 years					
Crashes	K		A		B	
SII						
Preferred Letting	FY 2016	X	FY 2017		FY 2018	
Submitted By	Raymond Douglas Chong, City Traffic Engineer					

Estimate	
Bid Items (not including 500 & 502) Attach Detailed Estimate	\$150,997
ROW (if required)	
Mobilization and Barricades (≥ 8%)	\$12,080
Safety (2-5%)	\$7,550
Inflation (≥ 10%)	\$15,100
<b>Total</b>	<b>\$185,727</b>

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2014 HSIP PROJECT - WEBER 2

ITEM NO.	DESC CODE	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST	FINAL
		DRILL SHFT (RDWY ILL POLE)(30 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(36 IN)	LF	4	214.50	858.00	
		DRILL SHAFT (TRF SIG POLE)(42 IN)	LF		-	-	
		DRILL SHAFT (TRF SIG POLE)(48 IN)	LF		-	-	
		INS TRF SIG PL AM (S) 1 ARM (40')	EA	2	6,600.00	13,200.00	
		INS TRF SIG PL AM (S) 1 ARM (40') LUM	EA	2	13,475.00	26,950.00	
		PED POLE ASSEMBLY	EA	4	2,750.00	11,000.00	
		REMOVE TRAFFIC SIGNAL	EA	1	2,475.00	2,475.00	
		INSTALL HWY TRF SIG (ISOLATED)	EA	1	24,750.00	24,750.00	
		TRF SIG CBL (TY A)(14 AWG)(16 CONDR)	LF	800	3.30	2,640.00	
		TRF SIG CBL (TY A)(14 AWG)(4 CONDR)	LF	640	1.65	1,056.00	
		TRF SIG CBL (TY A)(14 AWG)(7 CONDR)	LF	400	2.20	880.00	
		BACK PLATE (12 IN)(3 SEC)	EA	12	88.00	1,056.00	
		VEH SIG 4-SEC Poly (12 IN) LED, Grn-Arw, Yel-Arw, Flash-Yel-Arw, Red-Arw, Tunnel Visors	EA	4	242.00	968.00	
		VEH SIG 3-SEC Poly (12 IN) LED-RED, Yellow, Green; Tunnel Visors	EA	8	187.00	1,496.00	
		Horizontal Bracket Assy.	EA	12	82.50	990.00	
		PED SIG Poly (18 IN) LED (CTOWN)	EA	12	547.80	6,573.60	
		GROUND BOX TY D (162922) W/APRON	EA	1	728.00	728.00	
		Upgrade Wire Span to Mast Arm	EA	-		95,616.60	
					subtotal	-	
		* ATC CONTROLLER	EA	1			
		* CCTV CAMERA	EA	4			
		* ETHERNET SWITCH	EA	1			
		*6/C CONDUCTOR POWER/COM. (RADD, MATRIX)(1000 FT ROLLS)	EA	2			
		*2-SENSOR BACKPLATE (RADD)	EA	2			
		*2-CHANNEL CONTACT, 20' 6/C POWER (RADD, MATRIX)	EA	8			
		*RS232, RS485 CONV.(RADD)	EA	1			
		*4 SENSORS(kit includes sensor mount, backplate) (MATRIX)	EA	1			
		*TERMINAL STRIP FOR ADVANCE SENSORS (RADD, MATRIX)	EA	8			
		*SENSOR MOUNT FOR ADVANCE SENSOR (RADD)	EA	4			
		*RECEIVING RADIO (DUAL BAND) W/ ANTENNA	EA	1			
		*RADIO COMMUNICATION CABLE (CAT 5E) (1000 FT)	EA	1			
		*2-SENSOR CABINET (RADD)	EA	4			
		*JUNCTION BOX (FOR RADDs AND MATRIX TO CONNECT CABLES)	EA	8			
		*Smart Monitor MMULeip	EA	1			
		Two Direction Radar Advanced Detection Complete System Assy.	EA	1	12,320.00	12,320.00	
		Four Direction Radar Stop Bar Detection Matrix System Complete System Assy.	EA	1	21,296.00	21,296.00	
		NEMA Traffic Signal Cabinet & Assembly	EA	1	13,200.00	13,200.00	
		NEMA Traffic Signal Cabinet Foundation	EA	1	2,200.00	2,200.00	
		Ethernet Switch and Power Supply	EA	1	5,500.00	5,500.00	
		Smart Monitor MMULeip	EA	1	1,017.50	1,017.50	
		ATC Traffic Controller	EA	1	3,245.00	3,245.00	
		CCTV Camera	EA	1	3,300.00	3,300.00	
		Energy 300Mbps NT Dual	EA	1	2,970.00	2,970.00	
		Energy 300Mbps Dual (Master)	EA	1	3,850.00	3,850.00	
		BATTERY BACK UP	EA	1	6,600.00	6,600.00	
		Upgrade Hardware & Interconnect Signals	EA	2		75,496.50	
					Subtotal	150,997.00	
					total cost	150,997.00	
		Mobilization / Barricade	EA	1	5%	12,079.76	
		Safety Allowance	EA	1	5%	7,549.88	
		Inflation Cost	EA	1	10%	15,099.70	
					TOTAL	185,726.31	