

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis New Start Project (East Kapolei to Ala Moana Center)				East Kapolei to Ala Moana Center			
				Preliminary - Not Final (2007\$ with Contingency)		Preliminary - Not Final (2007\$ with Contingency)	
				Sections & Alignments		Sections & Alignments	
				Section 1		Section 2	
Description				Saratoga Ave/North-South Rd from UHWO- Makai Station Alt 5		Fort Weaver Rd to Aloha Stadium	
				5		1	
				At-grade/elevated		At-grade/elevated	
10.00	GUIDEWAY & TRACK ELEMENTS						
10.01	Guideway: At-grade Exclusive Right-of-way			\$2,345,832			
10.04	Guideway: Aerial structure			\$100,350,471		\$270,085,058	
10.06	Guideway: Underground cut & cover			\$0		\$25,540,500	
10.08	Guideway: Retained cut or fill			\$9,196,200		\$12,261,600	
10.09	Track: Direct fixation			\$10,837,068		\$28,485,864	
10.11	Track: Ballasted			\$3,354,792		\$798,000	
10.12	Track: Special (switches, turnouts)			\$3,147,939		\$4,911,913	
	SUBTOTAL GUIDEWAY & TRACK			\$129,232,302		\$342,082,935	
20.00	STATIONS, STOPS, TERMINALS, INTERMODAL						
20.01	At-grade station, stop, shelter, mall, terminal, platform			\$3,575,347		\$3,575,347	
20.02	Aerial station, stop, shelter, mall, terminal, platform			\$13,689,526		\$27,379,052	
20.07	Elevators, escalators			\$7,132,972		\$14,265,944	
	SUBTOTAL COST STATIONS, STOPS, TERMINALS, INTERMODAL			\$24,397,845		\$45,220,343	
30.00	YARDS, SHOPS, ADMIN/SUPPORT FACILITIES						
30.01	Administration Building: Office, sales, storage, revenue counting			\$0		\$0	
30.03	Heavy Maintenance Facility			\$0		\$0	
30.04	Storage Building & Yard			"IN 30.03"		"IN 30.03"	
	SUBTOTAL COST YARDS, SHOPS, ADMIN/SUPPORT FACILITIES			\$0		\$0	
40.00	SITWORK & SPECIAL CONDITIONS						
40.01	Demolition, Clearing, Earthwork ¹			\$2,562,736		\$7,821,958	
40.02	Site Utilities, Utility Relocation			\$13,198,759		\$18,991,640	
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments			\$351,542		\$4,814,454	
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks			\$750,000		\$2,500,000	
40.06	Site Development: Roads, walks, plazas, parking lots, landscape work			\$33,993,392		\$102,462,039	
	SUBTOTAL COST SITWORK & SPECIAL CONDITIONS			\$50,856,429		\$136,590,091	
50.00	SYSTEMS						
50.01	Train control and signals			\$7,230,778		\$9,462,684	
50.02	Traffic signals and crossing protection			\$0		\$9,024,439	
50.03	Traction power supply: substations			\$7,338,140		\$12,841,745	
50.04	Traction power distribution: catenary and third rail			\$5,332,980		\$9,184,508	
50.05	Communications			\$6,435,846		\$11,881,716	
50.06	Fare collection system and equipment			\$1,056,084		\$1,760,140	
50.07	Central Control			\$0		\$0	
	SUBTOTAL COST SYSTEMS			\$27,393,828		\$54,155,232	
	SUBTOTAL CONSTRUCTION COSTS			\$231,880,404		\$578,048,601	
	CONTINGENCY (WEIGHTED AVERAGE)			\$59,656,405		\$150,479,005	
	SUBTOTAL CONSTRUCTION COSTS WITH CONTINGENCY			\$291,536,809		\$728,527,606	
	FEE/RISK				in items above	in items above	
	ADJUSTMENT FOR CASUAL OVERTIME (2.5% OF DIRECT LABOR)			\$1,913,210		\$4,780,962	
	SUBTOTAL CONSTRUCTION COSTS			\$293,450,020		\$733,308,569	
	HAWAII STATE EXCISE 4.712%			\$13,827,365		\$34,553,500	
	TOTAL CONSTRUCTION COSTS (2 nd qtr 2007\$)			\$307,277,385		\$767,862,069	

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis New Start Project (East Kapolei to Ala Moana Center)				East Kapolei to Ala Moana Center			
				Preliminary - Not Final (2007\$ with Contingency)		Preliminary - Not Final (2007\$ with Contingency)	
				Sections & Alignments Section 1		Sections & Alignments Section 2	
Description		Saratoga Ave/North-South Rd from UHWO- Makai Station		Fort Weaver Rd to Aloha Stadium			
60.00	ROW, LAND, EXISTING IMPROVEMENTS						
60.01	Purchase or lease of real property		\$0	\$3,640,000			
60.02	Relocation of existing households and businesses		\$0	\$400,000			
	SUBTOTAL COST ROW, LAND, EXISTING IMPROVEMENTS		\$0	\$4,040,000			
	CONTINGENCY & ENGINEERING (40%+10%)	50%	\$0	\$2,020,000			
	TOTAL ROW COSTS		\$0	\$6,060,000			
70.00	VEHICLES						
70.01	Light Rail		IN SECTION 6	IN SECTION 6			
70.06	Non-revenue vehicles		IN SECTION 6	IN SECTION 6			
70.07	Spare parts (10% of LRV's)		IN SECTION 6	IN SECTION 6			
	SUBTOTAL VEHICLE COST		\$0	\$0			
	CONTINGENCY & ENGINEERING STAFF(10%+14%)	24%	\$0	\$0			
	TOTAL VEHICLE COSTS		\$0	\$0			
80.00	SOFT COSTS						
80.01	Preliminary Engineering	3.0%	\$9,218,322	\$23,035,862			
80.02	Final Design	4.5%	\$13,827,482	\$34,553,793			
80.03	Project Management for Design and Construction	5.5%	\$16,900,256	\$42,232,414			
80.04	Construction Administration & Management	10.0%	\$30,727,738	\$76,786,207			
80.05	Insurance-Professional liability	1.50%	\$4,609,161	\$11,517,931			
80.06	Legal, Permits, Review Fees by other agencies, cities, etc	1.50%	\$4,609,161	\$11,517,931			
80.07	Survey, Testing, Investigation, Inspection	0.50%	\$1,536,387	\$3,839,310			
80.08	Agency: Force Account Work (2% ^{3,4})	3.5%	\$10,754,708	\$26,875,172			
	SUBTOTAL SOFT COSTS		30%	\$92,183,215	\$230,358,621		
90.00	CONTINGENCY (Project Reserve) (10 thru 80)		6.0%	\$23,967,636	\$60,256,841		
100.00	FINANCE CHARGES			\$0	\$0		
110.00	Total Construction (10+20+30+40+50) (2 nd qtr 2007\$)			\$307,277,385	\$767,862,069		
	OTHER PROJECT COST (60+70+80+90+100) (2 nd qtr 2007\$)			\$116,150,851	\$296,675,462		
	TOTAL PROJECT COST (10+20+30+40+50+60+70+80+90+100) (2 nd qtr 2007\$)			\$423,428,236	\$1,064,537,531		
	Route foot length			19,269'	35,574'		
	Construction Cost per Route Foot (2 nd qtr 2007\$)			\$15,900	\$21,600		
	Construction Cost per Route Mile (2 nd qtr 2007\$)			\$83,952,000	\$114,048,000		

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis New Start Project (East Kapolei to Ala Moana Center)				East Kapolei to Ala Moana Center			
				Preliminary - Not Final (2007\$ with Contingency)		Preliminary - Not Final (2007\$ with Contingency)	
				Sections & Alignments Section 3		Sections & Alignments Section 4	
Description				Salt Lake Blvd/Dillingham Blvd			
				section 3 alt 2	Dillingham Blvd		
				15	18		
				Elevated	Elevated		
10.00	GUIDEWAY & TRACK ELEMENTS						
10.01	Guideway: At-grade Exclusive Right-of-way						
10.04	Guideway: Aerial structure			\$207,092,796	\$72,920,349		
10.06	Guideway: Underground cut & cover			\$0	\$0		
10.08	Guideway: Retained cut or fill			\$0	\$0		
10.09	Track: Direct fixation			\$20,876,592	\$7,350,948		
10.11	Track: Ballasted			\$0	\$0		
10.12	Track: Special (switches, turnouts)			\$2,029,832	\$3,044,748		
SUBTOTAL GUIDEWAY & TRACK				\$229,999,220	\$83,316,045		
20.00	STATIONS, STOPS, TERMINALS, INTERMODAL						
20.01	At-grade station, stop, shelter, mall, terminal, platform			\$0	\$0		
20.02	Aerial station, stop, shelter, mall, terminal, platform			\$13,518,880	\$20,534,289		
20.07	Elevators, escalators			\$7,132,972	\$10,699,458		
SUBTOTAL COST STATIONS, STOPS, TERMINALS, INTERMODAL				\$20,651,852	\$31,233,747		
30.00	YARDS, SHOPS, ADMIN/SUPPORT FACILITIES						
30.01	Administration Building: Office, sales, storage, revenue counting			\$0	\$0		
30.03	Heavy Maintenance Facility			\$0	\$0		
30.04	Storage Building & Yard			"IN 30.03"	"IN 30.03"		
SUBTOTAL COST YARDS, SHOPS, ADMIN/SUPPORT FACILITIES				\$0	\$0		
40.00	SITWORK & SPECIAL CONDITIONS						
40.01	Demolition, Clearing, Earthwork ¹			\$5,418,924	\$1,908,081		
40.02	Site Utilities, Utility Relocation			\$19,825,068	\$74,445,278		
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments			\$228,516	\$3,426,096		
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks			\$2,500,000	\$2,500,000		
40.06	Site Development: Roads, walks, plazas, parking lots, landscape work			\$18,653,226	\$6,835,549		
SUBTOTAL COST SITWORK & SPECIAL CONDITIONS				\$46,625,734	\$89,115,004		
50.00	SYSTEMS						
50.01	Train control and signals			\$6,642,552	\$2,338,938		
50.02	Traffic signals and crossing protection			\$5,758,386	\$3,169,338		
50.03	Traction power supply: substations			\$9,172,675	\$3,669,070		
50.04	Traction power distribution: catenary and third rail			\$6,043,224	\$2,127,906		
50.05	Communications			\$8,340,648	\$2,936,862		
50.06	Fare collection system and equipment			\$704,056	\$1,056,084		
50.07	Central Control			\$0	\$0		
SUBTOTAL COST SYSTEMS				\$36,661,541	\$15,298,198		
SUBTOTAL CONSTRUCTION COSTS				\$333,938,347	\$218,962,994		
CONTINGENCY (WEIGHTED AVERAGE)				\$86,281,837	\$62,968,694		
SUBTOTAL CONSTRUCTION COSTS WITH CONTINGENCY				\$420,220,184	\$281,931,688		
FEE/RISK				in items above	in items above		
ADJUSTMENT FOR CASUAL OVERTIME (2.5% OF DIRECT LABOR)				\$2,757,695	\$1,850,177		
SUBTOTAL CONSTRUCTION COSTS				\$422,977,879	\$283,781,864		
HAWAII STATE EXCISE 4.712%				\$19,930,718	\$13,371,801		
TOTAL CONSTRUCTION COSTS (2 nd qtr 2007\$)				\$442,908,597	\$297,153,666		

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis New Start Project (East Kapolei to Ala Moana Center)				East Kapolei to Ala Moana Center			
				Preliminary - Not Final (2007\$ with Contingency)		Preliminary - Not Final (2007\$ with Contingency)	
				Sections & Alignments Section 3		Sections & Alignments Section 4	
date: 05/04/07							
Description				Salt Lake Blvd/Dillingham Blvd			
				Dillingham Blvd			
60.00	ROW, LAND, EXISTING IMPROVEMENTS						
60.01	Purchase or lease of real property			\$5,000,000	\$6,540,000		
60.02	Relocation of existing households and businesses			\$0	\$0		
	SUBTOTAL COST ROW, LAND, EXISTING IMPROVEMENTS			\$5,000,000	\$6,540,000		
	CONTINGENCY & ENGINEERING (40%+10%)						
		50%		\$2,500,000	\$3,270,000		
	TOTAL ROW COSTS			\$7,500,000	\$9,810,000		
70.00	VEHICLES						
70.01	Light Rail			IN SECTION 6	IN SECTION 6		
70.06	Non-revenue vehicles			IN SECTION 6	IN SECTION 6		
70.07	Spare parts (10% of LRV's)			IN SECTION 6	IN SECTION 6		
	SUBTOTAL VEHICLE COST			\$0	\$0		
	CONTINGENCY & ENGINEERING STAFF(10%+14%)						
		24%		\$0	\$0		
	TOTAL VEHICLE COSTS			\$0	\$0		
80.00	SOFT COSTS						
80.01	Preliminary Engineering	3.0%		\$13,287,258	\$8,914,610		
80.02	Final Design	4.5%		\$19,930,887	\$13,371,915		
80.03	Project Management for Design and Construction	5.5%		\$24,359,973	\$16,343,452		
80.04	Construction Administration & Management	10.0%		\$44,290,860	\$29,715,367		
80.05	Insurance-Professional liability	1.50%		\$6,643,629	\$4,457,305		
80.06	Legal, Permits, Review Fees by other agencies, cities, etc	1.50%		\$6,643,629	\$4,457,305		
80.07	Survey, Testing, Investigation, Inspection	0.50%		\$2,214,543	\$1,485,768		
80.08	Agency: Force Account Work (2% ^{3,4})	3.5%		\$15,501,801	\$10,400,378		
	SUBTOTAL SOFT COSTS			\$132,872,579	\$89,146,100		
90.00	CONTINGENCY (Project Reserve) (10 thru 80)						
		6.0%		\$34,996,871	\$23,766,586		
100.00	FINANCE CHARGES			\$0	\$0		
110.00	Total Construction (10+20+30+40+50) (2 nd qtr 2007\$)			\$442,908,597	\$297,153,666		
	OTHER PROJECT COST (60+70+80+90+100) (2 nd qtr 2007\$)			\$175,369,450	\$122,722,686		
	TOTAL PROJECT COST (10+20+30+40+50+60+70+80+90+100) (2 nd qtr 2007\$)			\$618,278,046	\$419,876,352		
	Route foot length			24,972'	8,793'		
	Construction Cost per Route Foot (2 nd qtr 2007\$)			\$17,700	\$33,800		
	Construction Cost per Route Mile (2 nd qtr 2007\$)			\$93,456,000	\$178,464,000		

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis New Start Project (East Kapolei to Ala Moana Center)				East Kapolei to Ala Moana Center	
				Preliminary - Not Final (2007\$ with Contingency)	Preliminary - Not Final (2007\$ with Contingency)
				Sections & Alignments	Sections & Alignments
				Section 5	Section 6
Description				Dillingham/Nimitz Hwy/Halekauwila St/Kapiolani Blvd to Ala Moana Sta	Systemwide
				25	26
				Elevated	Elevated
10.00	GUIDEWAY & TRACK ELEMENTS				
10.01	Guideway: At-grade Exclusive Right-of-way				
10.04	Guideway: Aerial structure			\$124,182,587	\$0
10.06	Guideway: Underground cut & cover			\$0	\$0
10.08	Guideway: Retained cut or fill			\$0	\$0
10.09	Track: Direct fixation			\$12,142,064	\$0
10.11	Track: Ballasted			\$0	\$0
10.12	Track: Special (switches, turnouts)			\$6,141,454	\$0
SUBTOTAL GUIDEWAY & TRACK				\$142,466,105	\$0
20.00	STATIONS, STOPS, TERMINALS, INTERMODAL				
20.01	At-grade station, stop, shelter, mall, terminal, platform			\$0	\$0
20.02	Aerial station, stop, shelter, mall, terminal, platform			\$42,267,831	\$0
20.07	Elevators, escalators			\$19,679,831	\$0
SUBTOTAL COST STATIONS, STOPS, TERMINALS, INTERMODAL				\$61,947,662	\$0
30.00	YARDS, SHOPS, ADMIN/SUPPORT FACILITIES				
30.01	Administration Building: Office, sales, storage, revenue counting			\$0	\$16,243,157
30.03	Heavy Maintenance Facility			\$0	\$71,689,859
30.04	Storage Building & Yard			"IN 30.03"	"IN 30.03"
SUBTOTAL COST YARDS, SHOPS, ADMIN/SUPPORT FACILITIES				\$0	\$87,933,016
40.00	SITWORK & SPECIAL CONDITIONS				
40.01	Demolition, Clearing, Earthwork ¹			\$3,151,708	\$0
40.02	Site Utilities, Utility Relocation			\$130,822,353	\$0
40.03	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments			\$0	\$0
40.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks			\$750,000	\$0
40.06	Site Development: Roads, walks, plazas, parking lots, landscape work			\$6,131,073	\$0
SUBTOTAL COST SITWORK & SPECIAL CONDITIONS				\$140,855,134	\$0
50.00	SYSTEMS				
50.01	Train control and signals			\$3,863,384	\$0
50.02	Traffic signals and crossing protection			\$7,082,653	\$0
50.03	Traction power supply: substations			\$5,503,605	\$0
50.04	Traction power distribution: catenary and third rail			\$3,514,808	\$0
50.05	Communications			\$4,851,016	\$0
50.06	Fare collection system and equipment			\$2,112,168	\$0
50.07	Central Control			\$0	\$8,693,757
SUBTOTAL COST SYSTEMS				\$26,927,634	\$8,693,757
SUBTOTAL CONSTRUCTION COSTS				\$372,196,535	\$96,626,773
CONTINGENCY (WEIGHTED AVERAGE)				\$106,521,540	\$24,156,693
SUBTOTAL CONSTRUCTION COSTS WITH CONTINGENCY				\$478,718,075	\$120,783,466
FEE/RISK				in items above	in items above
ADJUSTMENT FOR CASUAL OVERTIME (2.5% OF DIRECT LABOR)				\$3,141,587	\$792,641
SUBTOTAL CONSTRUCTION COSTS				\$481,859,662	\$121,576,108
HAWAII STATE EXCISE 4.712%				\$22,705,227	\$5,728,666
TOTAL CONSTRUCTION COSTS (2 nd qtr 2007\$)				\$504,564,889	\$127,304,774

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis New Start Project (East Kapolei to Ala Moana Center)				East Kapolei to Ala Moana Center			
				Preliminary - Not Final (2007\$ with Contingency)		Preliminary - Not Final (2007\$ with Contingency)	
				Sections & Alignments Section 5		Sections & Alignments Section 6	
Description				Dillingham/Nimitz Hwy/Halekauwila St/Kapiolani Blvd to Ala Moana Sta	Systemwide		
60.00	ROW, LAND, EXISTING IMPROVEMENTS						
60.01	Purchase or lease of real property			\$39,960,000	\$0		
60.02	Relocation of existing households and businesses			\$700,000	\$0		
	SUBTOTAL COST ROW, LAND, EXISTING IMPROVEMENTS			\$40,660,000	\$0		
	CONTINGENCY & ENGINEERING (40%+10%)		50%	\$20,330,000	\$0		
	TOTAL ROW COSTS			\$60,990,000	\$0		
70.00	VEHICLES						
70.01	Light Rail			IN SECTION 6	\$179,491,752		
70.06	Non-revenue vehicles			IN SECTION 6	\$4,203,149		
70.07	Spare parts (10% of LRV's)			IN SECTION 6	\$17,949,162		
	SUBTOTAL VEHICLE COST			\$0	\$201,644,063		
	CONTINGENCY & ENGINEERING STAFF(10%+14%)		24%	\$0	\$48,394,575		
	TOTAL VEHICLE COSTS			\$0	\$250,038,638		
80.00	SOFT COSTS						
80.01	Preliminary Engineering	3.0%		\$15,136,947	\$3,819,143		
80.02	Final Design	4.5%		\$22,705,420	\$5,728,715		
80.03	Project Management for Design and Construction	5.5%		\$27,751,069	\$7,001,763		
80.04	Construction Administration & Management	10.0%		\$50,456,489	\$12,730,477		
80.05	Insurance-Professional liability	1.50%		\$7,568,473	\$1,909,572		
80.06	Legal, Permits, Review Fees by other agencies, cities, etc	1.50%		\$7,568,473	\$1,909,572		
80.07	Survey, Testing, Investigation, Inspection	0.50%		\$2,522,824	\$636,524		
80.08	Agency: Force Account Work (2% ^{3,4})	3.5%		\$17,659,771	\$4,455,667		
	SUBTOTAL SOFT COSTS		30%	\$151,369,467	\$38,191,432		
90.00	CONTINGENCY (Project Reserve) (10 thru 80)		6.0%	\$43,015,461	\$24,932,091		
100.00	FINANCE CHARGES			\$0	\$0		
110.00	Total Construction (10+20+30+40+50) (2 nd qtr 2007\$)			\$504,564,889	\$127,304,774		
	OTHER PROJECT COST (60+70+80+90+100) (2 nd qtr 2007\$)			\$255,374,928	\$313,162,161		
	TOTAL PROJECT COST (10+20+30+40+50+60+70+80+90+100) (2 nd qtr 2007\$)			\$759,939,817	\$440,466,935		
	Route foot length			14,524'			
	Construction Cost per Route Foot (2 nd qtr 2007\$)			\$34,700			
	Construction Cost per Route Mile (2 nd qtr 2007\$)			\$183,216,000			

Honolulu High-Capacity Transit Corridor Project									
Fixed Guideway Alternatives									
Summary Cost Comparison of Alternative Analysis									
Pricing Sheet									
Guideway & Trackwork									
New Start Project (East Kapolei to Ala Moana Center)									
					Saratoga Ave/North-South Rd from UHWO-Makai Station		Fort Weaver Rd to Aloha Stadium		
					Section 1 Alt 5a		Section 2 Alt 1		
1	2	3	4	5	64	65	22	23	
DESCRIPTION		COST	QTY	UNIT					
10.00 GUIDEWAY & TRACK ELEMENTS (route miles)									
Guideway: At-grade Exclusive									
csc10.01-1	Single At-Grade Ballasted Trackbed - Open		1	RF	\$300	-	\$0	-	\$0
csc10.01-2	Double At-Grade Ballasted Trackbed - Open		1	RF	\$372	6,306	\$2,345,832	-	\$0
csc10.01-5	Single At-Grade Guideway for Paved Track		1	RF	**NOT USED	-	-	-	-
csc10.01-6	Double At-Grade Guideway for Paved Track		1	RF	**NOT USED	-	-	-	-
10.01	Guideway: At-grade Exclusive			RF			\$2,345,832		\$0
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic) NOT USED*****					**NOT USED**		**NOT USED**	
Guideway: At-grade in mixed traffic									
csc10.01-4	Double At-Grade Guideway for Paved Track		1	RF	\$365	0	\$0	-	\$0
10.03	Guideway: At-grade in mixed traffic			RF			\$0		\$0
Guideway: Aerial structure									
csc10.04-1	Segmental Aerial Structure (T/R +25 Ft.) Column (6 ft Dia)		1	RF	\$8,117	12,363	\$100,350,471	33,274	\$270,085,058
csc10.04-2a	Standard Aerial Dual Structure (T/R +30 Ft.) CIP		1	RF	\$6,300	-	\$0	-	\$0
csc10.04-2	Segmental Aerial Structure (T/R +30 Ft.) Column (6 ft Dia)		1	RF	\$8,218	-	\$0	-	\$0
csc10.04-3	Segmental Aerial Structure (T/R +40 Ft.) Column (6 ft Dia)		1	RF	\$8,293	-	\$0	-	\$0
csc10.04-4	Segmental Aerial Structure (T/R +50 Ft.) Column (8 ft Dia)		1	RF	\$8,601	-	\$0	-	\$0
csc10.04-5	Segmental Aerial Structure (T/R +60 Ft.) Column (8 ft dia)		1	RF	\$8,864	-	\$0	-	\$0
csc10.04-6	Standard Aerial Dual Structure (T/R +30 Ft.) Cast - in Place		1	RF	\$6,086	-	\$0	-	\$0
csc10.04-6X	FACTOR FOR DOWNTOWN AERIAL STRUCTURE		1	%	30%	-	\$0	-	\$0
10.04	Guideway: Aerial structure			RF		12,363	\$100,350,471	\$33,274	\$270,085,058
10.05	Guideway: Built-up fill not used*****								
Guideway: Underground cut & cover									
csc10.06-1	Cut & Cover, Tunnel (TBM) , Portal, U Wall (Hotel St / Kawaiano / K		1	RF	\$35,886	-	\$0	-	\$0
csc10.06-2	U-Wall Retained Cut Dual Track Portal (Avg. Depth 25 ft)		1	RF	\$17,027	-	\$0	1,500	\$25,540,500
10.06	Guideway: Underground cut & cover			RF			\$0		\$25,540,500
Guideway: Underground tunnel									
csc10.07-1	Tunnel, Portal and U-Wall (Hotel Waimanu / Kapiolani Blvd)		1	RF	\$33,024	-	\$0	-	\$0
csc10.07-2	Tunnel, Portal and U-Wall (North King \ Bertania St \ S King St)		1	RF	\$26,520	-	\$0	-	\$0
csc10.07-3	Tunnel, Portal and U-Wall (Dillingham \ Bertania St \ S King St)		1	RF	\$26,520	-	\$0	-	\$0
csc10.07-4	Tunnel, Portal and U-Wall (King St Option 1 sta 1315+55 to 1408+91)		1	RF	\$27,483	-	\$0	-	\$0
csc10.07-5	Tunnel, Portal and U-Wall (King St Option 2 sta 1348+50 to 1408+91)		1	RF	\$29,417	-	\$0	-	\$0
10.07	Guideway: Underground tunnel						\$0		\$0
Guideway: Retained cut or fill									
csc10.08-1	Abutment Double At-Grade (Avg. D. T/R +10 Ft.) 100 ft length		1	RF	\$15,327	600	\$9,196,200	800	\$12,261,600
csc10.08-2	Abutment Single At-Grade (Avg. D. T/R +10 Ft.)		1	RF	\$7,744	-	\$0	-	\$0
10.08	Guideway: Retained cut or fill			RF			\$9,196,200		\$12,261,600
Track: Direct fixation									
csc10.09-1	Direct Fixation Track - Single		1	RF	\$520	-	\$0	-	\$0
csc10.09-2	Direct Fixation Dual Track		1	RF	\$836	12,963	\$10,837,068	34,074	\$28,485,864
10.09	Track: Direct fixation			RF			\$10,837,068		\$28,485,864
Track: Embedded/Paved									
csc10.10-1	Paved Track (In Street) - Single		1	RF	\$876	-	\$0	-	\$0
csc10.10-2	Paved Track (In Street) - DUAL		1	RF	\$1,640	-	\$0	-	\$0
10.10	Track: Embedded/Paved			RF			\$0		\$0
Track: Ballasted									
csc10.11-1	Ballasted Track (Open) - Single		1	RF	\$262	-	\$0	-	\$0
csc10.11-2	Ballasted Track (Open) - Double		1	RF	\$532	6,306	\$3,354,792	1,500	\$798,000
10.11	Track: Ballasted			RF			\$3,354,792		\$798,000
Track: Special (switches, turnouts)									
csc10.12-1	Double Crossover DF (No. 10)		1	EA	\$1,014,916	2	\$2,029,832	4	\$4,059,664
csc10.12-2	Double Crossover Ballasted (No. 10)		1	EA	\$852,249	1	\$852,249	1	\$852,249
csc10.12-3	No. 6 Turnout - DF		1	EA	\$299,299	-	\$0	-	\$0
csc10.12-4	No. 5 Turnout - DF		1	EA	\$143,481	-	\$0	-	\$0
csc10.12-5	Permanent Terminal, Direct Fixation		1	EA	\$25,979	2	\$51,958	-	\$0
csc10.12-6	Grade Crossing Panels (Dual Track)		1	EA	\$690	310	\$213,900	0	\$0
10.12	Track: Special (switches, turnouts)			LS			\$3,147,939		\$4,911,913
Track: Vibration and noise dampening									
csc10.13-1	Track Vibration and Noise Dampening		1	RF	\$1,138	-	\$0	-	\$0
10.13	Vibration and noise dampening			RF			\$0		\$0
Total Guideways							\$129,232,302		\$342,082,935

Honolulu High-Capacity Transit Corridor Project								
Fixed Guideway Alternatives								
Summary Cost Comparison of Alternative Analysis								
Pricing Sheet								
Guideway & Trackwork								
New Start Project (East Kapolei to Ala Moana Center)								
					Salt Lake Blvd/Dillingham Blvd		Dillingham Blvd	
					Section 3 Alt 2		Section 4 Alt 3	
1	2	3	4	5	26	27	40	41
DESCRIPTION		COST	QTY	UNIT				
10.00 GUIDEWAY & TRACK ELEMENTS (route miles)								
Guideway: At-grade Exclusive								
csc10.01-1	Single At-Grade Ballasted Trackbed - Open		1	RF	\$300	-	\$0	\$0
csc10.01-2	Double At-Grade Ballasted Trackbed - Open		1	RF	\$372	-	\$0	\$0
csc10.01-5	Single At-Grade Guideway for Paved Track		1	RF	**NOT USED	-	-	-
csc10.01-6	Double At-Grade Guideway for Paved Track		1	RF	**NOT USED	-	-	-
10.01	Guideway: At-grade Exclusive			RF			\$0	\$0
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic) NOT USED*****					**NOT USED**		**NOT USED**
Guideway: At-grade in mixed traffic								
csc10.01-4	Double At-Grade Guideway for Paved Track		1	RF	\$365	-	\$0	\$0
10.03	Guideway: At-grade in mixed traffic			RF			\$0	\$0
Guideway: Aerial structure								
csc10.04-1	Segmental Aerial Structure (T/R +25 Ft.) Column (6 ft Dia)		1	RF	\$8,117	-	\$0	\$0
csc10.04-2a	Standard Aerial Dual Structure (T/R +30 Ft.) CIP		1	RF	\$6,300	-	\$0	\$0
csc10.04-2	Segmental Aerial Structure (T/R +30 Ft.) Column (6 ft Dia)		1	RF	\$8,218	-	\$0	\$0
csc10.04-3	Segmental Aerial Structure (T/R +40 Ft.) Column (6 ft Dia)		1	RF	\$8,293	24,972	\$207,092,796	\$8,793
csc10.04-4	Segmental Aerial Structure (T/R +50 Ft.) Column (8 ft Dia)		1	RF	\$8,601	-	\$0	\$0
csc10.04-5	Segmental Aerial Structure (T/R +60 Ft.) Column (8 ft dia)		1	RF	\$8,864	-	\$0	\$0
csc10.04-6	Standard Aerial Dual Structure (T/R +30 Ft.) Cast - in Place		1	RF	\$6,086	-	\$0	\$0
csc10.04-6X	FACTOR FOR DOWNTOWN AERIAL STRUCTURE		1	%	30%	-	\$0	\$0
10.04	Guideway: Aerial structure			RF		\$24,972	\$207,092,796	\$8,793
10.05	Guideway: Built-up fill not used*****							
Guideway: Underground cut & cover								
csc10.06-1	Cut & Cover, Tunnel (TBM) , Portal, U Wall (Hotel St / Kawaiano / K		1	RF	\$35,886	-	\$0	\$0
csc10.06-2	U-Wall Retained Cut Dual Track Portal (Avg. Depth 25 ft)		1	RF	\$17,027	-	\$0	\$0
10.06	Guideway: Underground cut & cover			RF			\$0	\$0
Guideway: Underground tunnel								
csc10.07-1	Tunnel, Portal and U-Wall (Hotel Waimanu / Kapiolani Blvd)		1	RF	\$33,024	-	\$0	\$0
csc10.07-2	Tunnel, Portal and U-Wall (North King \ Bertania St \ S King St)		1	RF	\$26,520	-	\$0	\$0
csc10.07-3	Tunnel, Portal and U-Wall (Dillingham \ Bertania St \ S King St)		1	RF	\$26,520	-	\$0	\$0
csc10.07-4	Tunnel, Portal and U-Wall (King St Option 1 sta 1315+55 to 1408+91		1	RF	\$27,483	-	\$0	\$0
csc10.07-5	Tunnel, Portal and U-Wall (King St Option 2 sta 1348+50 to 1408+91		1	RF	\$29,417	-	\$0	\$0
10.07	Guideway: Underground tunnel						\$0	\$0
Guideway: Retained cut or fill								
csc10.08-1	Abutment Double At-Grade (Avg. D. T/R +10 Ft.) 100 ft length		1	RF	\$15,327	-	\$0	\$0
csc10.08-2	Abutment Single At-Grade (Avg. D. T/R +10 Ft.)		1	RF	\$7,744	-	\$0	\$0
10.08	Guideway: Retained cut or fill			RF			\$0	\$0
Track: Direct fixation								
csc10.09-1	Direct Fixation Track - Single		1	RF	\$520	-	\$0	\$0
csc10.09-2	Direct Fixation Dual Track		1	RF	\$836	24,972	\$20,876,592	\$8,793
10.09	Track: Direct fixation			RF			\$20,876,592	\$7,350,948
Track: Embedded/Paved								
csc10.10-1	Paved Track (In Street) - Single		1	RF	\$876	-	\$0	\$0
csc10.10-2	Paved Track (In Street) - DUAL		1	RF	\$1,640	-	\$0	\$0
10.10	Track: Embedded/Paved			RF			\$0	\$0
Track: Ballasted								
csc10.11-1	Ballasted Track (Open) - Single		1	RF	\$262	-	\$0	\$0
csc10.11-2	Ballasted Track (Open) - Double		1	RF	\$532	-	\$0	\$0
10.11	Track: Ballasted			RF			\$0	\$0
Track: Special (switches, turnouts)								
csc10.12-1	Double Crossover DF (No. 10)		1	EA	\$1,014,916	2	\$2,029,832	3
csc10.12-2	Double Crossover Ballasted (No. 10)		1	EA	\$852,249	-	\$0	\$0
csc10.12-3	No. 6 Turnout - DF		1	EA	\$299,299	-	\$0	\$0
csc10.12-4	No. 5 Turnout - DF		1	EA	\$143,481	-	\$0	\$0
csc10.12-5	Permanent Terminal, Direct Fixation		1	EA	\$25,979	-	\$0	\$0
csc10.12-6	Grade Crossing Panels (Dual Track)		1	EA	\$690	0	\$0	0
10.12	Track: Special (switches, turnouts)			LS			\$2,029,832	\$3,044,748
Track: Vibration and noise dampening								
csc10.13-1	Track Vibration and Noise Dampening		1	RF	\$1,138	-	\$0	\$0
10.13	Vibration and noise dampening			RF			\$0	\$0
Total Guideways						\$229,999,220		\$83,316,045

Honolulu High-Capacity Transit Corridor Project
Fixed Guideway Alternatives
Summary Cost Comparison of Alternative Analysis
Pricing Sheet
Guideway & Trackwork
New Start Project (East Kapolei to Ala Moana Center)

					Dillingham/Nimitz Hwy/Halekauwila St/Kapiolani Blvd to Ala Moana Sta	
					Section 1 Alt 5a	
		COST				
1	2	3	4	5	78	79
DESCRIPTION	ID	QTY	UNIT	UNIT		
10.00 GUIDEWAY & TRACK ELEMENTS (route miles)						
Guideway: At-grade Exclusive						
csc10.01-1	Single At-Grade Ballasted Trackbed - Open	1	RF	\$300	-	\$0
csc10.01-2	Double At-Grade Ballasted Trackbed - Open	1	RF	\$372	-	\$0
csc10.01-5	Single At-Grade Guideway for Paved Track	1	RF	**NOT USED	-	
csc10.01-6	Double At-Grade Guideway for Paved Track	1	RF	**NOT USED	-	
10.01	Guideway: At-grade Exclusive		RF			\$0
10.02	Guideway: At-grade semi-exclusive (allows cross-traffic) NOT USED*****					**NOT USED**
Guideway: At-grade in mixed traffic						
csc10.01-4	Double At-Grade Guideway for Paved Track	1	RF	\$365	-	\$0
10.03	Guideway: At-grade in mixed traffic		RF			\$0
Guideway: Aerial structure						
csc10.04-1	Segmental Aerial Structure (T/R +25 Ft.) Column (6 ft Dia)	1	RF	\$8,117	-	\$0
csc10.04-2a	Standard Aerial Dual Structure (T/R +30 Ft.) CIP	1	RF	\$6,300	12,505	\$78,781,500
csc10.04-2	Segmental Aerial Structure (T/R +30 Ft.) Column (6 ft Dia)	1	RF	\$8,218	-	\$0
csc10.04-3	Segmental Aerial Structure (T/R +40 Ft.) Column (6 ft Dia)	1	RF	\$8,293	2,019	\$16,743,567
csc10.04-4	Segmental Aerial Structure (T/R +50 Ft.) Column (8 ft Dia)	1	RF	\$8,601	-	\$0
csc10.04-5	Segmental Aerial Structure (T/R +60 Ft.) Column (8 ft dia)	1	RF	\$8,864	-	\$0
csc10.04-6	Standard Aerial Dual Structure (T/R +30 Ft.) Cast - in Place	1	RF	\$6,086	-	\$0
csc10.04-6X	FACTOR FOR DOWNTOWN AERIAL STRUCTURE	1	%	30%	1	\$28,657,520
10.04	Guideway: Aerial structure		RF		14,524	\$124,182,587
10.05	Guideway: Built-up fill not used*****					
Guideway: Underground cut & cover						
csc10.06-1	Cut & Cover, Tunnel (TBM) , Portal, U Wall (Hotel St / Kawaiano / K	1	RF	\$35,886	-	\$0
csc10.06-2	U-Wall Retained Cut Dual Track Portal (Avg. Depth 25 ft)	1	RF	\$17,027	-	\$0
10.06	Guideway: Underground cut & cover		RF			\$0
Guideway: Underground tunnel						
csc10.07-1	Tunnel, Portal and U-Wall (Hotel Waimanu / Kapiolani Blvd)	1	RF	\$33,024	-	\$0
csc10.07-2	Tunnel, Portal and U-Wall (North King \ Bertania St \ S King St)	1	RF	\$26,520	-	\$0
csc10.07-3	Tunnel, Portal and U-Wall (Dillingham \ Bertania St \ S King St)	1	RF	\$26,520	-	\$0
csc10.07-4	Tunnel, Portal and U-Wall (King St Option 1 sta 1315+55 to 1408+91)	1	RF	\$27,483	-	\$0
csc10.07-5	Tunnel, Portal and U-Wall (King St Option 2 sta 1348+50 to 1408+91)	1	RF	\$29,417	-	\$0
10.07	Guideway: Underground tunnel					\$0
Guideway: Retained cut or fill						
csc10.08-1	Abutment Double At-Grade (Avg. D. T/R +10 Ft.) 100 ft length	1	RF	\$15,327	-	\$0
csc10.08-2	Abutment Single At-Grade (Avg. D. T/R +10 Ft.)	1	RF	\$7,744	-	\$0
10.08	Guideway: Retained cut or fill		RF			\$0
Track: Direct fixation						
csc10.09-1	Direct Fixation Track - Single	1	RF	\$520	-	\$0
csc10.09-2	Direct Fixation Dual Track	1	RF	\$836	14,524	\$12,142,064
10.09	Track: Direct fixation		RF			\$12,142,064
Track: Embedded/Paved						
csc10.10-1	Paved Track (In Street) - Single	1	RF	\$876	-	\$0
csc10.10-2	Paved Track (In Street) - DUAL	1	RF	\$1,640	-	\$0
10.10	Track: Embedded/Paved		RF			\$0
Track: Ballasted						
csc10.11-1	Ballasted Track (Open) - Single	1	RF	\$262	-	\$0
csc10.11-2	Ballasted Track (Open) - Double	1	RF	\$532	-	\$0
10.11	Track: Ballasted		RF			\$0
Track: Special (switches, turnouts)						
csc10.12-1	Double Crossover DF (No. 10)	1	EA	\$1,014,916	6	\$6,089,496
csc10.12-2	Double Crossover Ballasted (No. 10)	1	EA	\$852,249	-	\$0
csc10.12-3	No. 6 Turnout - DF	1	EA	\$299,299	-	\$0
csc10.12-4	No. 5 Turnout - DF	1	EA	\$143,481	-	\$0
csc10.12-5	Permanent Terminal, Direct Fixation	1	EA	\$25,979	2	\$51,958
csc10.12-6	Grade Crossing Panels (Dual Track)	1	EA	\$690	0	\$0
10.12	Track: Special (switches, turnouts)		LS			\$6,141,454
Track: Vibration and noise dampening						
csc10.13-1	Track Vibration and Noise Dampening	1	RF	\$1,138	-	\$0
10.13	Vibration and noise dampening		RF			\$0
Total Guideways						\$142,466,105

**Honolulu High-Capacity Transit Corridor Project
Fixed Guideway Alternatives
Summary Cost Comparison of Alternative Analysis**
Pricing Sheet
YARDS, SHOPS, ADMIN/SUPPORT FACILITIES

DESCRIPTION	ID	QTY	UNIT	COST
30.00 YARDS, SHOPS, ADMIN/SUPPORT FACILITIES (20 ACRES)	2	3		
ADMINISTRATION BUILDING: OFFICE, SALES, STORAGE, REVENUE COUNTING		4		
Administration Building & Site Facilities	1	1	LS	\$16,243,157
30.01 ADMINISTRATION BUILDING: OFFICE, SALES, STORAGE, REVENUE COUNTING		5		
HEAVY MAINTENANCE FACILITY		4		
Storage Track & Running Repair Maintenance Bldg	1	1	LS	\$0
Heavy Maintenance Facility and Yard	1	1	LS	\$71,689,859
30.02-2		5		
30.03 HEAVY MAINTENANCE FACILITY		6		
RF				\$71,689,859
30.02 LIGHT MAINTENANCE FACILITY NOT USED*****		7		
NOT USED				
30.04 STORAGE BUILDING & YARD		8		
"IN 30.02"				
30.05 MAINTENANCE OF WAY BUILDING & YARD NOT USED*****		9		
NOT USED				
Total YARDS, SHOPS ADMINISTRATION SUPPORT FACILITIES		81		\$87,933,016

Honolulu High-Capacity Transit Corridor Project
Fixed Guideway Alternatives
Summary Cost Comparison of Alternative Analysis

Pricing Sheet
 Sitework & Special Conditions

COST ID	FTA Code	DESCRIPTION	QTY	UNIT	UNIT COST	Saratoga Ave/North-South Rd from UHWO-Makai Station		Fort Weaver Rd to Aloha Stadium	
						Section 1 Alt 5		Section 2 Alt 1	
40.00		Sitework & Special Conditions	40.A 40.AG		AERIAL ALIGNMENT AT GRADE ALIGNMENT	12,363 6,906		33,274 2,300	
CSC40.01-1		Demolition: Urban	1	RF	\$217		\$0	35,574	\$7,719,558
CSC40.01-2		Demolition: Rural	1	RF	\$23		\$0		\$0
CSC40.01-3		Demolition: Residential	1	RF	\$56	6,906	\$386,736		\$0
CSC40.01-8		Clear and Grubbing	1	RF	\$64	34,000	\$2,176,000	1,600	\$102,400
CSC40.01-5		Earthwork	1	RF	in guideway				
CSC40.01-6		Building Mitigation (Underpinning, etc)	1	RF	\$4,672,938		\$0		\$0
CSC40.01-7		Building Mitigation (Parking Structure Demolition & Reconstruction)	1	SF	\$532		\$0		\$0
40.01 Demo Clearing & Sitework							\$2,562,736	\$35,574	\$7,821,958
CSC40.02-1		UTILITIES BASED ON 1992 INFORMATION	1	RF	\$96	19,269	\$1,849,824	35,574	\$3,415,104
CSC40.02-7		Utility: REMOVALS	1	RF	\$59	19,269	\$1,136,871	35,574	\$2,098,866
CSC40.02-8		SECTION 1: ELECTRICAL & COMMUNICATION- KAMOKILA BLVD	1	LS	\$12,011,139	-	\$0	-	\$0
CSC40.02-9		SECTION 1: ELECTRICAL & COMMUNICATION- KAPOLEI BLVD	1	LS	\$10,445,060	-	\$0	-	\$0
CSC40.02-10		SECTION 1: ELECTRICAL & COMMUNICATION- SARATOGA BLVD	1	LS	\$15,366,773	-	\$0	-	\$0
CSC40.02-10a		SECTION 1: ELECTRICAL & COMMUNICATION- MOS 1 SARATOGA BLVD	1	LS	\$10,212,064	1	\$10,212,064	-	\$0
CSC40.02-11		SECTION 1: ELECTRICAL & COMMUNICATION- GEIGER/FT WEAVER BLVD	1	LS	\$8,843,392	-	\$0	-	\$0
CSC40.02-12		SECTION 2: ELECTRICAL & COMMUNICATION- FARRINGTON BLVD	1	LS	\$13,477,670	-	\$0	1	\$13,477,670
CSC40.02-13		SECTION 3: ELECTRICAL & COMMUNICATION- SALT LAKE/NORTH KING BLVD	1	LS	\$16,551,905	-	\$0	-	\$0
CSC40.02-14		SECTION 3: ELECTRICAL & COMMUNICATION- SALT LAKE/DILLINGHAM BLVD	1	LS	\$15,954,408	-	\$0	-	\$0
CSC40.02-15		SECTION 3: ELECTRICAL & COMMUNICATION- MAUKA SIDE OF AIRPORT VIADUCT	1	LS	\$113,953,266	-	\$0	-	\$0
CSC40.02-16		SECTION 3: ELECTRICAL & COMMUNICATION- MAKAI SIDE OF AIRPORT VIADUCT ELEVATED	1	LS	\$93,675,141	-	\$0	-	\$0
CSC40.02-17		SECTION 3: ELECTRICAL & COMMUNICATION- MAUKA SIDE OF AIRPORT VIADUCT	1	LS	\$23,060,302	-	\$0	-	\$0
CSC40.02-18		SECTION 3: ELECTRICAL & COMMUNICATION- AOLELE ST	1	LS	\$22,254,236	-	\$0	-	\$0
CSC40.02-19		SECTION 4: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD	1	LS	\$73,082,363	-	\$0	-	\$0
CSC40.02-20		SECTION 4: ELECTRICAL & COMMUNICATION- KING ST	1	LS	\$50,289,750	-	\$0	-	\$0
CSC40.02-21		SECTION 4: ELECTRICAL & COMMUNICATION- MIDDLE ST	1	LS	\$308,228	-	\$0	-	\$0
CSC40.02-22		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/HOTEL ST/KAWAIAHAO ST/KAPIOLANI BLVD	1	LS	\$137,618,480	-	\$0	-	\$0
CSC40.02-23		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/KAWAIAHAO ST/KAPIOLANI	1	LS	\$139,331,993	-	\$0	-	\$0
CSC40.02-24		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD	1	LS	\$123,194,157	-	\$0	-	\$0
CSC40.02-24a		SECTION 5: ELECTRICAL & COMMUNICATION- MOS 1 NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD	1	LS	\$9,782,903	-	\$0	-	\$0
CSC40.02-25		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/WAIMANU ST/KAPIOLANI	1	LS	\$124,907,669	-	\$0	-	\$0
CSC40.02-26		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/NIMITZ HWY/QUEEN ST/KAPIOLANI BLVD	1	LS	\$123,933,900	-	\$0	-	\$0
CSC40.02-62		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM/NIMITZ/QUEENST/KAPIOLANI BLVD	1	LS	\$124,679,816	-	\$0	-	\$0
CSC40.02-63		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$156,727,361	-	\$0	-	\$0
CSC40.02-63a		SECTION 5:MOS 2a: NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$34,558,581	-	\$0	-	\$0
CSC40.02-63a1		SECTION 5:MOS 2a: DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$35,319,415	-	\$0	-	\$0
CSC40.02-63b		SECTION 5: MOS 2b NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$54,079,323	-	\$0	-	\$0
CSC40.02-63b1		SECTION 5: MOS 2b Dillingham / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$54,840,156	-	\$0	-	\$0
CSC40.02-64		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$157,572,731	-	\$0	-	\$0
CSC40.02-64a		SECTION 5: MOS 3 DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$128,571,133	-	\$0	-	\$0
CSC40.02-65		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING / BERETANIA ST / S KING ST	1	LS	\$63,034,942	-	\$0	-	\$0
CSC40.02-66		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM / BERETANIA ST / S KING ST	1	LS	\$64,698,334	-	\$0	-	\$0
CSC40.02-68		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD (short Tunnel King st)	1	LS	\$169,135,055	-	\$0	-	\$0
CSC40.02-69		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/WAIMANU ST/KAPIOLANI BLVD (long Tunnel King st	1	LS	\$170,848,566	-	\$0	-	\$0
CSC40.02-67		SECTION 5: ELECTRICAL & COMMUNICATION- WAIKIKI SPUR	1	LS	\$62,444,501	\$0	\$0	\$0	\$0
40.02 UTILITIES BASED ON 1992 INFORMATION							\$13,198,759		\$18,991,640
CSC40.03-1		Hazardous Material Mitigation: Petrochemical Contaminated Excavation	1	TON	\$274.00	1,283	\$351,542	17,571	\$4,814,454
CSC40.03-2		Hazardous Material Mitigation: Groundwater treatment	1	GAL	\$1	\$0	\$0	\$0	\$0
40.03 Hazardous Material Mitigation: Petrochemical Contaminated Excavation							\$351,542		\$4,814,454
CSC40.04-1		Environmental Mitigation: Allowance for Biological and Archeological/Historical Monitoring	1	ALLOW			\$750,000		\$2,500,000
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks							\$750,000		\$2,500,000
Site Development: Roads, Walkways, Landscaping									
CSC40.06-1		Street Construction Adj. to LRT - One Lane	1	RF	\$349	0	\$0	33,974	\$11,856,926
CSC40.06-1a		Turn Pocket (100 ft)	1	RF	\$241	0	\$0	6,440	\$1,552,040
CSC40.06-17		Intersection Modification Type 1	1	LS	\$172,517	0	\$0	4	\$690,068
CSC40.06-18		Intersection Modification Type 2	1	LS	\$128,651	0	\$0	3	\$385,953
CSC40.06-19		Intersection Modification Type 3	1	LS	\$95,388	0	\$0	4	\$381,552
CSC40.06-21		Intersection Modification Type 4	1	LS	\$38,709	0	\$0	0	\$0
CSC40.06-10		Landscaping & Urban Design: Urban	1	RF	\$195		\$0		\$0
CSC40.06-11		Landscaping & Urban Design: Rural	1	RF	\$98		\$0		\$0
CSC40.06-12		Landscaping & Urban Design Based on 1992 Study	1	RF	\$137	19,269	\$2,639,853	35,574	\$4,873,638
CSC40.06-13		Hotel Street Mall Reconstruction	1	SF	\$160	0	\$0	0	\$0
CSC40.06-14		PARK & RIDE AT GRADE	1	STALL	\$4,770	2,800	\$13,356,000	0	\$0
CSC40.06-15		PARK & RIDE STRUCTURED	1	STALL	\$25,682	0	\$0	1,600	\$41,091,200
CSC40.06-15A		ACCESS RAMP TO P&R STRUCTURE	1	SOFT	\$440	40,000	\$17,600,000	92,377	\$40,645,880
CSC40.06-16		BUS BAYS	1	STALL	\$26,121	2	\$52,242	14	\$365,694
		Public Art (2% of Section 20.00 Stations)	1	%	2%	\$17,264,873	\$345,297	\$30,954,399	\$619,088
40.06 Site Development: Roads, Walkways, Landscaping							\$33,993,392		\$102,462,039
Temporary Facilities									
40.08 Temporary Facilities							\$0		
Total Sitework & Special Conditions			1	LS		50,856,429		136,590,091	

Honolulu High-Capacity Transit Corridor Project
Fixed Guideway Alternatives
Summary Cost Comparison of Alternative Analysis

Pricing Sheet
 Sitework & Special Conditions

COST ID	FTA Code	DESCRIPTION	QTY	UNIT	UNIT COST	Salt Lake Blvd/Dillingham Blvd		Dillingham Blvd	
						Section 3 Alt 2		Section 4 Alt 3	
40.00		Sitework & Special Conditions	40.A 40.AG		AERIAL ALIGNMENT AT GRADE ALIGNMENT	24,972 0		8,793 0	
CSC40.01-1		Demolition: Urban	1	RF	\$217	24,972	\$5,418,924	8,793	\$1,908,081
CSC40.01-2		Demolition: Rural	1	RF	\$23		\$0		\$0
CSC40.01-3		Demolition: Residential	1	RF	\$56		\$0		\$0
CSC40.01-8		Clear and Grubbing	1	RF	\$64	0	\$0	0	\$0
CSC40.01-5		Earthwork	1	RF	in guideway				
CSC40.01-6		Building Mitigation (Underpinning, etc)	1	RF	\$4,672,938		\$0		\$0
CSC40.01-7		Building Mitigation (Parking Structure Demolition & Reconstruction)	1	SF	\$532		\$0		\$0
40.01 Demo Clearing & Sitework							\$5,418,924		\$1,908,081
CSC40.02-1		UTILITIES BASED ON 1992 INFORMATION	1	RF	\$96	24,972	\$2,397,312	8,793	\$844,128
CSC40.02-7		Utility: REMOVALS	1	RF	\$59	24,972	\$1,473,348	8,793	\$518,787
CSC40.02-8		SECTION 1: ELECTRICAL & COMMUNICATION- KAMOKILA BLVD	1	LS	\$12,011,139	-	\$0	-	\$0
CSC40.02-9		SECTION 1: ELECTRICAL & COMMUNICATION- KAPOLEI BLVD	1	LS	\$10,445,060	-	\$0	-	\$0
CSC40.02-10		SECTION 1: ELECTRICAL & COMMUNICATION- SARATOGA BLVD	1	LS	\$15,366,773	-	\$0	-	\$0
CSC40.02-10a		SECTION 1: ELECTRICAL & COMMUNICATION- MOS 1 SARATOGA BLVD	1	LS	\$10,212,064	-	\$0	-	\$0
CSC40.02-11		SECTION 1: ELECTRICAL & COMMUNICATION- GEIGER/FT WEAVER BLVD	1	LS	\$8,843,392	-	\$0	-	\$0
CSC40.02-12		SECTION 2: ELECTRICAL & COMMUNICATION- FARRINGTON BLVD	1	LS	\$13,477,670	-	\$0	-	\$0
CSC40.02-13		SECTION 3: ELECTRICAL & COMMUNICATION- SALT LAKE/NORTH KING BLVD	1	LS	\$16,551,905	-	\$0	-	\$0
CSC40.02-14		SECTION 3: ELECTRICAL & COMMUNICATION- SALT LAKE/DILLINGHAM BLVD	1	LS	\$15,954,408	1	\$15,954,408	-	\$0
CSC40.02-15		SECTION 3: ELECTRICAL & COMMUNICATION- MAUKA SIDE OF AIRPORT VIADUCT	1	LS	\$113,953,266	-	\$0	-	\$0
CSC40.02-16		SECTION 3: ELECTRICAL & COMMUNICATION- MAKAI SIDE OF AIRPORT VIADUCT ELEVATED	1	LS	\$93,675,141	-	\$0	-	\$0
CSC40.02-17		SECTION 3: ELECTRICAL & COMMUNICATION- MAUKA SIDE OF AIRPORT VIADUCT	1	LS	\$23,060,302	-	\$0	-	\$0
CSC40.02-18		SECTION 3: ELECTRICAL & COMMUNICATION- AOELELE ST	1	LS	\$22,254,236	-	\$0	-	\$0
CSC40.02-19		SECTION 4: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD	1	LS	\$73,082,363	-	\$0	1	\$73,082,363
CSC40.02-20		SECTION 4: ELECTRICAL & COMMUNICATION- KING ST	1	LS	\$50,289,750	-	\$0	-	\$0
CSC40.02-21		SECTION 4: ELECTRICAL & COMMUNICATION- MIDDLE ST	1	LS	\$308,228	-	\$0	-	\$0
CSC40.02-22		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/HOTEL ST/KAWAIAHAO ST/KAPIOLANI BLVD	1	LS	\$137,618,480	-	\$0	-	\$0
CSC40.02-23		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/KAWAIAHAO ST/KAPIOLANI	1	LS	\$139,331,993	-	\$0	-	\$0
CSC40.02-24		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD	1	LS	\$123,194,157	-	\$0	-	\$0
CSC40.02-24a		SECTION 5: ELECTRICAL & COMMUNICATION- MOS 1 NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD	1	LS	\$9,782,903	-	\$0	-	\$0
CSC40.02-25		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/WAIMANU ST/KAPIOLANI	1	LS	\$124,907,669	-	\$0	-	\$0
CSC40.02-26		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/NIMITZ HWY/QUEEN ST/KAPIOLANI BLVD	1	LS	\$123,933,900	-	\$0	-	\$0
CSC40.02-62		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM/NIMITZ/QUEENST/KAPIOLANI BLVD	1	LS	\$124,679,816	-	\$0	-	\$0
CSC40.02-63		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$156,727,361	-	\$0	-	\$0
CSC40.02-63a		SECTION 5:MOS 2a: NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$34,558,581	-	\$0	-	\$0
CSC40.02-63a1		SECTION 5:MOS 2a: DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$35,319,415	-	\$0	-	\$0
CSC40.02-63b		SECTION 5: MOS 2b NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$54,079,323	-	\$0	-	\$0
CSC40.02-63b1		SECTION 5: MOS 2b Dillingham / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$54,840,156	-	\$0	-	\$0
CSC40.02-64		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$157,572,731	-	\$0	-	\$0
CSC40.02-64a		SECTION 5: MOS 3 DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$128,571,133	-	\$0	-	\$0
CSC40.02-65		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING / BERETANIA ST / S KING ST	1	LS	\$63,034,942	-	\$0	-	\$0
CSC40.02-66		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM / BERETANIA ST / S KING ST	1	LS	\$64,698,334	-	\$0	-	\$0
CSC40.02-68		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD (short Tunnel King st)	1	LS	\$169,135,055	-	\$0	-	\$0
CSC40.02-69		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/WAIMANU ST/KAPIOLANI BLVD (long Tunnel King st)	1	LS	\$170,848,566	-	\$0	-	\$0
CSC40.02-67		SECTION 5: ELECTRICAL & COMMUNICATION- WAIKIKI SPUR	1	LS	\$62,444,501	\$0	\$0	\$0	\$0
40.02 UTILITIES BASED ON 1992 INFORMATION							\$19,825,068		\$74,445,278
CSC40.03-1		Hazardous Material Mitigation: Petrochemical Contaminated Excavation	1	TON	\$274.00	834	\$228,516	12,504	\$3,426,096
CSC40.03-2		Hazardous Material Mitigation: Groundwater treatment	1	GAL	\$1	\$0	\$0	\$0	\$0
40.03 Hazardous Material Mitigation: Petrochemical Contaminated Excavation							\$228,516		\$3,426,096
CSC40.04-1		Environmental Mitigation: Allowance for Biological and Archeological/Historical Monitoring	1	ALLOW			\$2,500,000		\$2,500,000
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks							\$2,500,000		\$2,500,000
Site Development: Roads, Walkways, Landscaping									
CSC40.06-1		Street Construction Adj. to LRT - One Lane	1	RF	\$349	18,500	\$6,456,500	9,702	\$3,385,998
CSC40.06-1a		Turn Pocket (100 ft)	1	RF	\$241	2,200	\$530,200	2,690	\$648,290
CSC40.06-17		Intersection Modification Type 1	1	LS	\$172,517	0	\$0	0	\$0
CSC40.06-18		Intersection Modification Type 2	1	LS	\$128,651	0	\$0	8	\$1,029,208
CSC40.06-19		Intersection Modification Type 3	1	LS	\$95,388	0	\$0	0	\$0
CSC40.06-21		Intersection Modification Type 4	1	LS	\$38,709	0	\$0	0	\$0
CSC40.06-10		Landscaping & Urban Design: Urban	1	RF	\$195		\$0		\$0
CSC40.06-11		Landscaping & Urban Design: Rural	1	RF	\$98		\$0		\$0
CSC40.06-12		Landscaping & Urban Design Based on 1992 Study	1	RF	\$137	24,972	\$3,421,164	8,793	\$1,204,641
CSC40.06-13		Hotel Street Mall Reconstruction	1	SF	\$160	0	\$0	0	\$0
CSC40.06-14		PARK & RIDE AT GRADE	1	STALL	\$4,770	1,650	\$7,870,500	0	\$0
CSC40.06-15		PARK & RIDE STRUCTURED	1	STALL	\$25,682	0	\$0	0	\$0
CSC40.06-15A		ACCESS RAMP TO P&R STRUCTURE	1	SOFT	\$440	0	\$0	0	\$0
CSC40.06-16		BUS BAYS	1	STALL	\$26,121	4	\$104,484	6	\$156,726
		Public Art (2% of Section 20.00 Stations)	1	%	2%	\$13,518,880	\$270,378	\$20,534,289	\$410,686
40.06 Site Development: Roads, Walkways, Landscaping							\$18,653,226		\$6,835,549
Temporary Facilities									
40.08 Temporary Facilities							\$0		
Total Sitework & Special Conditions			1	LS			46,625,734		89,115,004

Honolulu High-Capacity Transit Corridor Project
Fixed Guideway Alternatives
Summary Cost Comparison of Alternative Analysis

Pricing Sheet
 Sitework & Special Conditions

						Dillingham/Nimitz Hwy/Halekauwila St/Kapiolani Blvd to Ala Moana Sta	
COST ID	FTA Code	DESCRIPTION	QTY	UNIT	UNIT COST	Section 1 Alt 5	
40.00 Sitework & Special Conditions			40.A		AERIAL ALIGNMENT	14,524	
			40.AG		AT GRADE ALIGNMENT	0	
CSC40.01-1		Demolition: Urban	1	RF	\$217	14,524	\$3,151,708
CSC40.01-2		Demolition: Rural	1	RF	\$23		\$0
CSC40.01-3		Demolition: Residential	1	RF	\$56		\$0
CSC40.01-8		Clear and Grubbing	1	RF	\$64	0	\$0
CSC40.01-5		Earthwork	1	RF	in guideway		
CSC40.01-6		Building Mitigation (Underpinning, etc)	1	RF	\$4,672,938		\$0
CSC40.01-7		Building Mitigation (Parking Structure Demolition & Reconstruction)	1	SF	\$532		\$0
40.01 Demo Clearing & Sitework							\$3,151,708
CSC40.02-1		UTILITIES BASED ON 1992 INFORMATION	1	RF	\$96	14,524	\$1,394,304
CSC40.02-7		Utility: REMOVALS	1	RF	\$59	14,524	\$856,916
CSC40.02-8		SECTION 1: ELECTRICAL & COMMUNICATION- KAMOKILA BLVD	1	LS	\$12,011,139	-	\$0
CSC40.02-9		SECTION 1: ELECTRICAL & COMMUNICATION- KAPOLEI BLVD	1	LS	\$10,445,060	-	\$0
CSC40.02-10		SECTION 1: ELECTRICAL & COMMUNICATION- SARATOGA BLVD	1	LS	\$15,366,773	-	\$0
CSC40.02-10a		SECTION 1: ELECTRICAL & COMMUNICATION- MOS 1 SARATOGA BLVD	1	LS	\$10,212,064	-	\$0
CSC40.02-11		SECTION 1: ELECTRICAL & COMMUNICATION- GEIGER/FT WEAVER BLVD	1	LS	\$8,843,392	-	\$0
CSC40.02-12		SECTION 2: ELECTRICAL & COMMUNICATION- FARRINGTON BLVD	1	LS	\$13,477,670	-	\$0
CSC40.02-13		SECTION 3: ELECTRICAL & COMMUNICATION- SALT LAKE/NORTH KING BLVD	1	LS	\$16,551,905	-	\$0
CSC40.02-14		SECTION 3: ELECTRICAL & COMMUNICATION- SALT LAKE/DILLINGHAM BLVD	1	LS	\$15,954,408	-	\$0
CSC40.02-15		SECTION 3: ELECTRICAL & COMMUNICATION- MAUKA SIDE OF AIRPORT VIADUCT	1	LS	\$113,953,266	-	\$0
CSC40.02-16		SECTION 3: ELECTRICAL & COMMUNICATION- MAKAI SIDE OF AIRPORT VIADUCT ELEVATED	1	LS	\$93,675,141	-	\$0
CSC40.02-17		SECTION 3: ELECTRICAL & COMMUNICATION- MAUKA SIDE OF AIRPORT VIADUCT	1	LS	\$23,060,302	-	\$0
CSC40.02-18		SECTION 3: ELECTRICAL & COMMUNICATION- AOLELE ST	1	LS	\$22,254,236	-	\$0
CSC40.02-19		SECTION 4: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD	1	LS	\$73,082,363	-	\$0
CSC40.02-20		SECTION 4: ELECTRICAL & COMMUNICATION- KING ST	1	LS	\$50,289,750	-	\$0
CSC40.02-21		SECTION 4: ELECTRICAL & COMMUNICATION- MIDDLE ST	1	LS	\$308,228	-	\$0
CSC40.02-22		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/HOTEL ST/KAWAIAHAO ST/KAPIOLANI BLVD	1	LS	\$137,618,480	-	\$0
CSC40.02-23		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/KAWAIAHAO ST/KAPIOLANI	1	LS	\$139,331,993	-	\$0
CSC40.02-24		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD	1	LS	\$123,194,157	-	\$0
CSC40.02-24a		SECTION 5: ELECTRICAL & COMMUNICATION- MOS 1 NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD	1	LS	\$9,782,903	-	\$0
CSC40.02-25		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/WAIMANU ST/KAPIOLANI	1	LS	\$124,907,669	-	\$0
CSC40.02-26		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/NIMITZ HWY/QUEEN ST/KAPIOLANI BLVD	1	LS	\$123,933,900	-	\$0
CSC40.02-62		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM/NIMITZ/QUEENST/KAPIOLANI BLVD	1	LS	\$124,679,816	-	\$0
CSC40.02-63		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$156,727,361	-	\$0
CSC40.02-63a		SECTION 5: MOS 2a: NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$34,558,581	-	\$0
CSC40.02-63a1		SECTION 5: MOS 2a: DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$35,319,415	-	\$0
CSC40.02-63b		SECTION 5: MOS 2b NORTH KING / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$54,079,323	-	\$0
CSC40.02-63b1		SECTION 5: MOS 2b Dillingham / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$54,840,156	-	\$0
CSC40.02-64		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$157,572,731	-	\$0
CSC40.02-64a		SECTION 5: MOS 3 DILLINGHAM / NIMITZ / HALEKAUWILA ST / KAPIOLANI	1	LS	\$128,571,133	1	\$128,571,133
CSC40.02-65		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING / BERETANIA ST / S KING ST	1	LS	\$63,034,942	-	\$0
CSC40.02-66		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM / BERETANIA ST / S KING ST	1	LS	\$64,698,334	-	\$0
CSC40.02-68		SECTION 5: ELECTRICAL & COMMUNICATION- NORTH KING ST/WAIMANU ST/KAPIOLANI BLVD (short Tunnel King st)	1	LS	\$169,135,055	-	\$0
CSC40.02-69		SECTION 5: ELECTRICAL & COMMUNICATION- DILLINGHAM BLVD/HOTEL ST/WAIMANU ST/KAPIOLANI BLVD (long Tunnel King st	1	LS	\$170,848,566	-	\$0
CSC40.02-67		SECTION 5: ELECTRICAL & COMMUNICATION- WAIKIKI SPUR	1	LS	\$62,444,501	\$0	\$0
40.02 UTILITIES BASED ON 1992 INFORMATION			1	RF			\$130,822,353
CSC40.03-1		Hazardous Material Mitigation: Petrochemical Contaminated Excavation	1	TON	\$274.00	-	\$0
CSC40.03-2		Hazardous Material Mitigation: Groundwater treatment	1	GAL	\$1	\$0	\$0
40.03 Excavation							\$0
CSC40.04-1		Environmental Mitigation: Allowance for Biological and Archeological/Historical Monitoring	1	ALLOW			\$750,000
40.04 Environmental mitigation, e.g. wetlands, historic/archeologic, parks							\$750,000
Site Development: Roads, Walkways, Landscaping							
CSC40.06-1		Street Construction Adj. to LRT - One Lane	1	RF	\$349	6,919	\$2,414,731
CSC40.06-1a		Turn Pocket (100 ft)	1	RF	\$241	3,100	\$747,100
CSC40.06-17		Intersection Modification Type 1	1	LS	\$172,517	0	\$0
CSC40.06-18		Intersection Modification Type 2	1	LS	\$128,651	0	\$0
CSC40.06-19		Intersection Modification Type 3	1	LS	\$95,388	1	\$95,388
CSC40.06-21		Intersection Modification Type 4	1	LS	\$38,709	1	\$38,709
CSC40.06-10		Landscaping & Urban Design: Urban	1	RF	\$195		\$0
CSC40.06-11		Landscaping & Urban Design: Rural	1	RF	\$98		\$0
CSC40.06-12		Landscaping & Urban Design Based on 1992 Study	1	RF	\$137	14,524	\$1,989,788
CSC40.06-13		Hotel Street Mall Reconstruction	1	sf	\$160	0	\$0
CSC40.06-14		PARK & RIDE AT GRADE	1	STALL	\$4,770	0	\$0
CSC40.06-15		PARK & RIDE STRUCTURED	1	STALL	\$25,682	0	\$0
CSC40.06-15a		ACCESS RAMP TO P&R STRUCTURE	1	SOFT	\$440	0	\$0
CSC40.06-16		BUS BAYS	1	STALL	\$26,121	-	\$0
		Public Art (2% of Section 20.00 Stations)	1	%	2%	\$42,267,831	\$845,357
40.06 Site Development: Roads, Walkways, Landscaping							\$6,131,073
Temporary Facilities							
40.08 Temporary Facilities			1		\$0		
Total Sitework & Special Conditions			1	LS			140,855,134

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis Pricing Sheet Systems								
					Saratoga Ave/North-South Rd from UHWO-Makai Station		Fort Weaver Rd to Aloha Stadium	
					Section 1 Alt 5		Section 2 Alt 1	
DESCRIPTION	COST ID	QTY	UNIT					
50.00 Systems			ALIGNMENT	19,269	30	35,574	9	
Train Control & Signals								
csc50.01-1	ATC, Signal System Line Stations	1	RF	\$266	19,269	\$5,125,554	\$35,574	\$9,462,684
csc50.01-2	Highway Crossing Warning Devices (Preemptive)	1	EA	\$263,153	8	\$2,105,224	\$0	\$0
50.01	Train Control & Signals		RF			\$7,230,778		\$9,462,684
Guideway: At-grade semi-exclusive (allows cross-traffic) NOT USED*****								
Traffic Signals and Crossing Protection								
csc50.02-1	Traffic Signal Modifications (4 directions)	1	EA	\$420,346	0	\$0	\$13	\$5,464,498
csc50.02-2	Traffic Signal Modifications (3 directions)	1	EA	\$323,631	0	\$0	\$11	\$3,559,941
50.02	Traffic Signals and Crossing Protection		RF			\$0		\$9,024,439
Traction Power Supply: Substations								
csc50.03-1	Traction Power Substations (2 MW)	1	EA	\$1,834,535	4	7,338,140	7	12,841,745
50.03	Traction Power Supply: Substations		RF			\$7,338,140		\$12,841,745
Traction Power Distribution: Catenary and Third Rail								
csc50.04-1	Traction Power Supply - At-Grade OCS, Dual Track	1	RF	\$339	6,906	\$2,341,134	\$2,300	\$779,700
csc50.04-2	Traction Power Supply - Subway OCS, Double Track	1	RF	\$235	-	\$0	\$1,500	\$352,500
csc50.04-3	Traction Power Supply - Aerial OCS, Dual Track	1	RF	\$242	12,363	\$2,991,846	\$33,274	\$8,052,308
csc50.04-4	Traction Power Supply - Aerial OCS, Single Track	1	RF	\$183	-	\$0	\$0	\$0
50.04	Traction Power Distribution: Catenary and Third Rail		RF			\$5,332,980		\$9,184,508
Communication								
csc50.05-1	Communications System - Dual Track	1	LS	\$334	19,269	\$6,435,846	\$35,574	\$11,881,716
50.05	Communication		-			\$6,435,846		\$11,881,716
Fare Collection System and Equipment								
csc50.06-1	Fare Vending Equipment Underground Stations	1	LS	\$686,460	-	\$0	-	\$0
csc50.06-2	Fare Vending Equipment Aerial & At Grade Stations	1	LS	\$352,028	3	\$1,056,084	5	\$1,760,140
50.06	Fare Collection System and Equipment		RF			\$1,056,084		\$1,760,140
Central Control								
csc50.07	Central Control Facility	1	LS	\$8,693,757	-	\$0	-	\$0
50.07	Central Control		RF			\$0		\$0
Total Systems						\$27,393,828		\$54,155,232

Honolulu High-Capacity Transit Corridor Project								
Fixed Guideway Alternatives								
Summary Cost Comparison of Alternative Analysis								
Pricing Sheet								
Systems								
					Salt Lake Blvd/Dillingham Blvd		Dillingham Blvd	
					section 3		section 4	
DESCRIPTION	COST ID	QTY	UNIT	ALIGNMENT	11	18		
50.00 Systems					24,972	8,793		
Train Control & Signals								
csc50.01-1	ATC, Signal System Line Stations	1	RF	\$266	\$24,972	\$6,642,552	\$8,793	\$2,338,938
csc50.01-2	Highway Crossing Warning Devices (Preemptive)	1	EA	\$263,153	\$0	\$0	\$0	\$0
50.01	Train Control & Signals		RF		\$6,642,552		\$2,338,938	
Guideway: At-grade semi-exclusive (allows cross-traffic) NOT USED*****					**NOT USED**		**NOT USED**	
Traffic Signals and Crossing Protection								
csc50.02-1	Traffic Signal Modifications (4 directions)	1	EA	\$420,346	\$6	\$2,522,076	\$6	\$2,522,076
csc50.02-2	Traffic Signal Modifications (3 directions)	1	EA	\$323,631	\$10	\$3,236,310	\$2	\$647,262
50.02	Traffic Signals and Crossing Protection		RF		\$5,758,386		\$3,169,338	
Traction Power Supply: Substations								
csc50.03-1	Traction Power Substations (2 MW)	1	EA	\$1,834,535	5	9,172,675	2	3,669,070
50.03	Traction Power Supply: Substations		RF		\$9,172,675		\$3,669,070	
Traction Power Distribution: Catenary and Third Rail								
csc50.04-1	Traction Power Supply - At-Grade OCS, Dual Track	1	RF	\$339	\$0	\$0	\$0	\$0
csc50.04-2	Traction Power Supply - Subway OCS, Double Track	1	RF	\$235	\$0	\$0	\$0	\$0
csc50.04-3	Traction Power Supply - Aerial OCS, Dual Track	1	RF	\$242	\$24,972	\$6,043,224	\$8,793	\$2,127,906
csc50.04-4	Traction Power Supply - Aerial OCS, Single Track	1	RF	\$183	\$0	\$0	\$0	\$0
50.04	Traction Power Distribution: Catenary and Third Rail		RF		\$6,043,224		\$2,127,906	
Communication								
csc50.05-1	Communications System - Dual Track	1	LS	\$334	\$24,972	\$8,340,648	\$8,793	\$2,936,862
50.05	Communication		-		\$8,340,648		\$2,936,862	
Fare Collection System and Equipment								
csc50.06-1	Fare Vending Equipment Underground Stations	1	LS	\$686,460	-	\$0	-	\$0
csc50.06-2	Fare Vending Equipment Aerial & At Grade Stations	1	LS	\$352,028	2	\$704,056	3	\$1,056,084
50.06	Fare Collection System and Equipment		RF		\$704,056		\$1,056,084	
Central Control								
csc50.07	Central Control Facility	1	LS	\$8,693,757	-	\$0	-	\$0
50.07	Central Control		RF		\$0		\$0	
Total Systems					\$36,661,541		\$15,298,198	

Honolulu High-Capacity Transit Corridor Project								
Fixed Guideway Alternatives								
Summary Cost Comparison of Alternative Analysis								
Pricing Sheet								
Systems								
					Dillingham/Nimitz Hwy/Halekauwila St/Kapiolani Blvd to Ala Moana Sta		Systemwide	
					Section 1 Alt 5		Section 6	
DESCRIPTION					COST		COST	
					ID	QTY	UNIT	
					ALIGNMENT			
50.00 Systems					14,524	37		0 38
Train Control & Signals								
csc50.01-1	ATC, Signal System Line Stations				1	RF	\$266	\$14,524 \$3,863,384 - \$0
csc50.01-2	Highway Crossing Warning Devices (Preemptive)				1	EA	\$263,153	\$0 \$0 0 \$0
50.01	Train Control & Signals					RF		\$3,863,384 \$0
Guideway: At-grade semi-exclusive (allows cross-traffic) NOT USED*****					**NOT USED**		**NOT USED**	
Traffic Signals and Crossing Protection								
csc50.02-1	Traffic Signal Modifications (4 directions)				1	EA	\$420,346	\$13 \$5,464,498 0 \$0
csc50.02-2	Traffic Signal Modifications (3 directions)				1	EA	\$323,631	\$5 \$1,618,155 0 \$0
50.02	Traffic Signals and Crossing Protection					RF		\$7,082,653 \$0
Traction Power Supply: Substations								
csc50.03-1	Traction Power Substations (2 MW)				1	EA	\$1,834,535	3 5,503,605 - 0
50.03	Traction Power Supply: Substations					RF		\$5,503,605 \$0
Traction Power Distribution: Catenary and Third Rail								
csc50.04-1	Traction Power Supply - At-Grade OCS, Dual Track				1	RF	\$339	\$0 \$0 - \$0
csc50.04-2	Traction Power Supply - Subway OCS, Double Track				1	RF	\$235	\$0 \$0 - \$0
csc50.04-3	Traction Power Supply - Aerial OCS, Dual Track				1	RF	\$242	\$14,524 \$3,514,808 - \$0
csc50.04-4	Traction Power Supply - Aerial OCS, Single Track				1	RF	\$183	\$0 \$0 - \$0
50.04	Traction Power Distribution: Catenary and Third Rail					RF		\$3,514,808 \$0
Communication								
csc50.05-1	Communications System - Dual Track				1	LS	\$334	\$14,524 \$4,851,016 - \$0
50.05	Communication					-		\$4,851,016 \$0
Fare Collection System and Equipment								
csc50.06-1	Fare Vending Equipment Underground Stations				1	LS	\$686,460	- \$0 - \$0
csc50.06-2	Fare Vending Equipment Aerial & At Grade Stations				1	LS	\$352,028	6 \$2,112,168 - \$0
50.06	Fare Collection System and Equipment					RF		\$2,112,168 \$0
Central Control								
csc50.07	Central Control Facility				1	LS	\$8,693,757	- \$0 1 \$8,693,757
50.07	Central Control					RF		\$0 \$8,693,757
Total Systems							\$26,927,634	\$8,693,757

Honolulu High-Capacity Transit Corridor Project Fixed Guideway Alternatives Summary Cost Comparison of Alternative Analysis

Pricing Sheet Vehicles
Summary Cost Comparison of Alternative Analysis

Vehicles Cost Summary

COST ID	DESCRIPTION	20-mile Alignment QTY	UNIT	UNIT COST	20-mile Alignment COST
70.00 Vehicles					
CSC70.01	Articulated LRV	66	EA	\$2,719,572	\$179,491,752
70.01	TOTAL		EA		\$179,491,752
CSC70.06	Non Revenue Vehicles	1	LS	\$4,203,149	\$4,203,149
70.06	TOTAL		LS		\$4,203,149
CSC70.07	Spare Parts	66	EA	\$271,957	\$17,949,162
70.07	TOTAL		EA		\$17,949,162
Total Vehicles					\$201,644,063