

**County of Kauai
Department of Public Works
Lihue, Hawaii**

ENGINEER'S PRELIMINARY DETAIL ESTIMATE

for

**POIPU ROAD SAFETY AND MOBILITY PROJECT
KOLOA ROAD TO EAST OF KELEKA ROAD**

USDOT RAISE Grant Application

District of Koloa

Island of Kauai

April 5, 2022

COST ESTIMATE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
201.1000	Clearing and Grubbing (Approx. 15 Acres)	15	ACRES	\$ 5,000.00	\$ 75,000.00
202.1000	Removal of Structures and Obstruction	L.S.	L.S.	L.S.	\$ 536,460.00
203.1000	Excavation and Embankment (Roadway and Sidewalk)	8,106	C.Y.	\$ 135.00	\$ 1,094,300.00
203.2000	Select Material for Planting Soil (4")	6,730	C.Y.	\$ 85.00	\$ 572,050.00
206.1000	Excavation and Backfill for Drainage Facilities	1,482	C.Y.	\$ 160.00	\$ 237,120.00
209.1000	Installation, Maintenance, Monitoring, and Removal of BMPs	L.S.	L.S.	L.S.	\$ 991,300.00
209.2000	Additional Water Pollution, Dust, and Erosion Control	F.A.	F.A.	F.A.	\$ 60,000.00
301.1000	6" Hot Mix Asphalt Base Course (Roadway)	13,631	T.N.	\$ 175.00	\$ 2,385,440.00
304.1000	6" Aggregate Base Course (Roadway)	1,733	C.Y.	\$ 200.00	\$ 346,550.00
304.2000	4" Aggregate Base Course (Sidewalk)	1,776	C.Y.	\$ 200.00	\$ 355,120.00
304.3000	6" Aggregate Base Course (Pull-in Bus Stop Pad and Roundabout Apron)	269	C.Y.	\$ 200.00	\$ 53,800.00
401.2000	2" HMA Pavement, State Mix No. V (Roadway)	12,505	T.N.	\$ 200.00	\$ 2,501,080.00
411.1000	Concrete Pavement (Pull-in Bus Stop Pad and Roundabout Apron)	426	C.Y.	\$ 650.00	\$ 276,850.00
413.1000	Stamped Concrete (Fully Mountable Center Apron for Mini Roundabout Only)	133	S.Y.	\$ 250.00	\$ 33,250.00
415.0100	Coldplaning of Existing Pavement	94,782	S.Y.	\$ 10.00	\$ 947,820.00

COST ESTIMATE

ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
501.0100	Metal Bus Shelter	7	EA.	\$ 15,000.00	\$ 105,000.00
503.0100	Concrete Drainage Headwall	17	EA.	\$ 20,000.00	\$ 340,000.00
507.1000	Railing	201	L.F.	\$ 150.00	\$ 30,150.00
603.1000	42" Culvert	175	L.F.	\$ 450.00	\$ 78,750.00
603.2000	Sidewalk Culvert	6	EA.	\$ 1,000.00	\$ 6,000.00
603.3000	12" Pipe (RCP)	110	L.F.	\$ 250.00	\$ 27,500.00
603.4000	18" Pipe (RCP)	1,820	L.F.	\$ 300.00	\$ 546,000.00
603.5000	30" Pipe (RCP)	140	L.F.	\$ 400.00	\$ 56,000.00
604.1000	Type A Catch Basin, 5 Feet to 10 Feet	13	EA.	\$ 30,000.00	\$ 390,000.00
604.2000	Type B Catch Basin, 5 Feet to 10 Feet	7	EA.	\$ 30,000.00	\$ 210,000.00
604.3000	Type C Catch Basin, 5 Feet to 10 Feet	1	EA.	\$ 30,000.00	\$ 30,000.00
604.4000	48" Drainage Manhole	4	EA.	\$ 15,000.00	\$ 60,000.00
604.5000	4x4 Drainage Manhole	4	EA.	\$ 15,000.00	\$ 60,000.00
604.6000	Adjusting Drainage Manhole	3	EA.	\$ 2,000.00	\$ 6,000.00
604.7000	Drainage Inlet, Assume 4 Feet Deep (DPW Std, Det. D-38)	24	EA.	\$ 15,000.00	\$ 360,000.00
604.8000	Standard Frame and Grate (DPW Std. Det. D-39)	48	EA.	\$ 2,000.00	\$ 96,000.00

COST ESTIMATE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
606.1000	New Guardrail	L.S.	L.S.	L.S.	\$ 277,000.00
610.1000	Reinforced Concrete Driveway, 4-Inches	124	C.Y.	\$ 650.00	\$ 80,600.00
613.1000	Adjusting Centerline and Reference Survey Monuments	L.S.	L.S.	L.S.	\$ 15,000.00
619.1000	Medium Canopy Tree (25 Gal.)	620	EA.	\$ 300.00	\$ 186,000.00
619.2000	Root Barrier (24" Depth)	14,880	L.F.	\$ 15.00	\$ 223,200.00
619.3000	Mulch Topdress (2" Depth)	545,680	S.F.	\$ 0.50	\$ 272,840.00
624.1000	Water Systems (FH relocations/Adjustments)	L.S.	L.S.	L.S.	\$ 105,000.00
625.1000	Sewer Systems (Adjusting Sewer Manhole Frame and Cover)	L.S.	L.S.	L.S.	\$ 80,000.00
626.1000	Adjusting Standard Valve Boxes	L.S.	L.S.	L.S.	\$ 140,000.00
626.2000	Adjusting Utility Box Frame and Cover	L.S.	L.S.	L.S.	\$ 100,000.00
626.3000	New Handholes	L.S.	L.S.	L.S.	\$ 104,000.00
626.4000	Light Pole Relocation	L.S.	L.S.	L.S.	\$ 160,000.00
626.5000	Utility Pole Relocation	L.S.	L.S.	L.S.	\$ 23,100.00
626.6000	Misc. Utility Work	L.S.	L.S.	L.S.	\$ 427,800.00
626.7000	New Light Poles at Roundabout	L.S.	L.S.	L.S.	\$ 220,000.00
629.0100	12-Inch Pavement Striping (Thermoplastic Extrusion), White	821	L.F.	\$ 8.00	\$ 6,570.00

COST ESTIMATE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
629.0200	12-Inch Pavement Striping (Thermoplastic Extrusion), Yellow	85	L.F.	\$ 8.00	\$ 680.00
629.0300	8-Inch Pavement Striping (Thermoplastic Extrusion), White	19,794	L.F.	\$ 4.00	\$ 79,180.00
629.0400	4-Inch Pavement Striping (Thermoplastic Extrusion), Double Yellow	8,143	L.F.	\$ 8.00	\$ 65,150.00
629.5000	4-Inch Pavement Striping (Thermoplastic Extrusion), White	54,586	L.F.	\$ 4.00	\$ 218,350.00
629.6000	Type C Pavement Marker	1,055	E.A.	\$ 8.00	\$ 8,440.00
629.7000	Type D Pavement Marker	408	E.A.	\$ 8.00	\$ 3,270.00
629.8000	Type H Pavement Marker	658	E.A.	\$ 8.00	\$ 5,270.00
629.9000	Pavement Symbol (Thermoplastic Extrusion), Bike Lane Marking	39	E.A.	\$ 200.00	\$ 7,800.00
629.1000	Pavement Arrow (Thermoplastic Extrusion)	35	E.A.	\$ 250.00	\$ 8,750.00
629.1100	Pavement Word (Thermoplastic Extrusion)	17	E.A.	\$ 250.00	\$ 4,250.00
629.1200	Crosswalk Marking (Thermoplastic Extrusion), 24-Inch Stripe, 10-Ft. Wide	2,655	L.F.	\$ 40.00	\$ 106,200.00
630.1000	New Signs	L.S.	L.S.	L.S.	\$ 50,000.00
634.1000	Portland Cement Concrete Sidewalk	15,980	S.Y.	\$ 150.00	\$ 2,397,000.00
638.1000	Portland Cement Concrete Curb (DPW Std. Det. R-1)	16,736	L.F.	\$ 50.00	\$ 836,800.00
638.2000	Portland Cement Concrete Curb and Gutter (DPW Std. Det. R-4)	6,311	L.F.	\$ 70.00	\$ 441,770.00
638.3000	Concrete Thru Gutter	30	L.F.	\$ 100.00	\$ 3,000.00

COST ESTIMATE					
ITEM NO.	ITEM	APPROX. QUANTITY	UNIT	UNIT PRICE	AMOUNT
638.4000	Concrete Curb (Mountable for Roundabout)	126	L.F.	\$ 100.00	\$ 12,600.00
641.1000	Hydro-mulch Seeding, Landscape and Swale (Grassing)	L.S.	L.S.	L.S.	\$ 2,563,782.00
643.1000	Maintenance of Existing Landscape Areas	F.A.	F.A.	F.A.	\$ 81,900.00
645.1000	Traffic Control	L.S.	L.S.	L.S.	\$ 1,221,000.00
645.2000	Additional Police Officers, Additonal Traffic Control Devices, and Advertisement	F.A.	F.A.	F.A.	\$ 100,000.00
648.1000	Field-Posted Drawings	L.S.	L.S.	L.S.	\$ 10,000.00
650.1000	Concrete Curb Ramp	86	EA.	\$ 8,000.00	\$ 688,000.00
696.1000	Field Office Trailer (Not to Exceed \$32,000.00)	F.A.	F.A.	F.A.	\$ 32,000.00
696.2000	Project Site Laboratory Trailer (Not to Exceed \$22,000.00)	F.A.	F.A.	F.A.	\$ 22,000.00
699.1000	Mobilization (Not to exceed 6% of the sum of all items excluding the bid price of this item)	L.S.	L.S.	L.S.	\$ 1,455,350.00
Sum of All Items					\$ 25,711,192.00
Contingency (5%)					\$ 1,285,560.00
Subtotal					\$ 26,996,752.00
Construction Engineering (15%)					\$ 4,049,510.00
Total					\$ 31,046,270.00

SUMMARY

Category	Contract Items	Contingencies	Construction Engineering	Total Project Cost	Participating Cost	Federal Share	County Share
Reconstruction Type Code 04	\$ 25,711,192.00	\$ 1,285,560.00	(\$4,049,512.80)	\$26,996,752.00	\$26,996,752.00	\$24,297,076.80	\$2,699,675.20
KIUC - MOU Type Code 43							
Construction Eng. Type Code 17							
Consult. (CM/CSS)			\$3,239,610.24		\$3,239,610.24	\$2,915,649.22	\$323,961.02
Consult. (Post Des.)			\$92,780.00		\$92,780.00	\$83,502.00	\$9,278.00
Staff Non-Labor			\$393,161.54		\$393,161.54	\$353,845.38	\$39,316.15
Subtotal			\$3,725,551.78		\$3,725,551.78	\$3,352,996.60	\$372,555.18
Staff Labor			\$323,961.02		\$323,961.02	\$291,564.92	\$32,396.10
Total	\$0.00	\$0.00	\$4,049,512.80	\$4,049,512.80	\$4,049,512.80	\$3,644,561.52	\$404,951.28
Total Construction Cost	\$25,711,192.00	\$1,285,560.00	\$4,049,512.80	\$31,046,270.00	\$31,046,270.00	\$27,941,638.32	\$3,104,626.48

Federal Funds Requested (90%) - \$27,941,638
 County Funds Requested (10%) - \$3,104,626