

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-H1-1(226)	1999	2	38

ESTIMATED QUANTITIES

LIST OF ABBREVIATIONS AND SYMBOLS

ITEM NO.	ITEM	APPROX. QUANTITY
206.0100	STRUCTURE EXCAVATION OTHER THAN Ø PIER 21	2,070 CY
206.0150	STRUCTURE EXCAVATION Ø PIER 21	260 CY
206.0200	STRUCTURE BACKFILL OTHER THAN Ø PIER 21	1,580 CY
206.0250	STRUCTURE BACKFILL Ø PIER 21	190 CY
503.1090	CONCRETE CREEP BLOCKS	16 CY
503.1091	CONCRETE IN FOOTING RETROFITS OTHER THAN Ø PIER 21	518 CY
503.1092	CONCRETE IN FOOTING RETROFITS Ø PIER 21	102 CY
503.1093	CONCRETE JACKET FOR OUTRIGGER BENT CAP RETROFITS	65 CY
505.0010	PILE DYNAMIC LOAD TESTS	12 EA.
505.0500	16" OD STEEL PIPE PILES, FURNISHED	8,500 LF
505.0510	24" OD STEEL PIPE PILES, FURNISHED	1,320 LF
505.5000	16" OD STEEL PIPE PILES, DRIVEN AND FILLED W/ CONCRETE, OTHER THAN Ø PIER 21	6,860 LF
505.5001	16" OD STEEL PIPE PILES, DRIVEN AND FILLED W/ CONCRETE, Ø PIER 21	570 LF
505.5100	24" OD STEEL PIPE PILES, DRIVEN AND FILLED W/ CONCRETE	1,150 LF
505.6000	PRE-DRILLING, 16" OD STEEL PIPE PILES OTHER THAN Ø PIER 21	720 LF
505.6001	PRE-DRILLING, 16" OD STEEL PIPE PILES Ø PIER 21	120 LF
505.6100	PRE-DRILLING, 24" OD STEEL PIPE PILES	375 LF
505.7000	OVER-REAMING, 16" OD STEEL PIPE PILES OTHER THAN Ø PIER 21	300 LF
505.7001	OVER-REAMING, 16" OD STEEL PIPE PILES Ø PIER 21	120 LF
505.7100	OVER-REAMING, 24" OD STEEL PIPE PILES	150 LF
602.0090	REINFORCING IN BRIDGE STRUCTURE, INCLUDING FOOTING RETROFITS, CREEP BLOCKS, OUTRIGGERS AND CURTAIN WALLS	92,000 LB
653.0100	ACCESS OPENINGS, SOFFIT	292 EA.
654.0100	DIAPHRAGM BOLSTERS, TYPE 1	2
654.0200	DIAPHRAGM BOLSTERS, TYPE 2	97
654.0300	DIAPHRAGM BOLSTERS, TYPE 3	3
654.0400	DIAPHRAGM BOLSTERS, TYPE 4	7
654.0500	DIAPHRAGM BOLSTERS, TYPE 5	20
655.0100	DRILLING HOLES AND INSTALLING DOWEL REINFORCING BARS IN FOOTING RETROFITS	4,200 EA.
655.0101	DRILLING HOLES AND INSTALLING DOWEL REINFORCING BARS IN OUTRIGGER RETROFITS	3,500 EA.
656.0100	CORE CONCRETE (6") Ø DIAPHRAGM	40 EA.
656.0110	CORE CONCRETE (6") Ø PIER CAP	20 EA.
656.0200	CORE CONCRETE (9")	111 EA.
657.0100	ABUTMENT CONCRETE BLOCKING	55 C.Y.
658.0100	PIPE SEAT EXTENDERS	91 EA.
659.0100	TYPE 1 RESTRAINERS	20 EA.
659.0200	TYPE 2 RESTRAINERS	20 EA.

B	Baseline	f'c	Specified Compressive Strength of Concrete	R	Radius
CL	Centerline	Ft.	Feet	RCP	Reinforced Concrete Pipe
SL	Stationline	ftg(s)	footing(s)	Ref.	Reference
Ø	Diameter	fy, Fy	Specified Minimum Yield Stress of Steel	Reinf	Reinforcing
(E)	Existing	gr.	Grade	Ret.	Retaining
(N)	New	Horiz	Horizontal	R/W	Right Of Way
Abt.	About	I.B.	In Bound	Shf	Sheet
Abut.	Abutment	I.D.	Inside Diameter	SF	Square Feet
A.C.	Asphaltic Concrete	Inv	Invert	Sim.	Similar
Approx.	Approximate	Jt.	Joint	SDMH	Storm Drain Manhole
Ave.	Avenue	lbs	Pounds	SP	Space
AZ.	Azimuth	LF	Linear Feet	SL	Slope
Beg.	Beginning	Lg	Long	Specs	Specifications
Blvd.	Boulevard	LS	Lump Sum	Sta.	Station
Bot, Bolt	Bottom	M.L.	Match Line	Stiff.	Stiffener
Brg	Bearing	Max.	Maximum	Stl.	Steel
CB	Catch Basin	Min	Minimum	Str.	Strong
CL	Class	M.P.H.	Miles Per Hour	struct.	Structural
clr	Clear	O.B.	Out Bound	Symm.	Symmetrical
col.	Column	o.c.	On Center	Sy	Square Yard
C.P.	Complete Penetration	O.D.	Outside Diameter	T & B	Top and Bottom
conc	Concrete	O.H.	Opposite Hand	Temp	Temperature
cont.	Continuous	Pav't, Pavm't	Pavement	Thk	Thick
Cy	Cubic yard	pen	Penetration	TMK	Tax Map Key
Det.	Detail	P.C.	Point Of Curve	TOT	Total
D, Dia	Diameter	P.C.C.	Point Of Compound Curve	Typ.	Typical
Ea	Each	PL	Plate	U.N.O.	Unless Noted Otherwise
EF	Each Face	psi	Pounds Per Square Inch	Vert.	Vertical
El, Elev	Elevation	PT	Point of Tangent	w/	With
Emb	Embedment	PVC	Polyvinyl Chloride		
EQ	Equal				
Exp.	Expansion				
EW	Each Way				
EXC.	Excavation				
Exist.	Existing				

SURVEY PLOTTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

DRAWN BY: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_

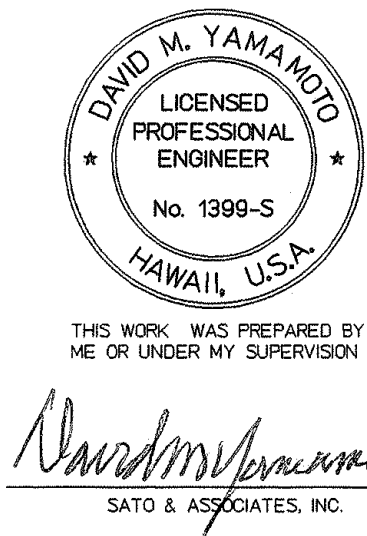
QUANTITIES BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

ORIGINAL PLAN

NOTE BOOK

NO.



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

LIST OF ABBREVIATIONS AND SYMBOLS  
ESTIMATED QUANTITIES

INTERSTATE ROUTE H-1, SEISMIC RETROFIT  
KAPIOLANI INTERCHANGE  
FEDERAL AID PROJECT NO. BR-H1-1(226)

DATE: DECEMBER 1998

SHEET No. 1 OF 1 SHEETS