

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-HI-1(226)	2003	2	36

ESTIMATED QUANTITIES

LIST OF ABBREVIATIONS AND SYMBOLS

ITEM NO.	ITEM	APPROX. QUANTITY
206.0100	STRUCTURE EXCAVATION @ PIER 18	590 CY
206.0110	STRUCTURE EXCAVATION @ PIER 19	590 CY
206.0120	STRUCTURE EXCAVATION @ PIER 21	185 CY
206.0200	STRUCTURE BACKFILL @ PIER 18	390 CY
206.0210	STRUCTURE BACKFILL @ PIER 19	360 CY
206.0220	STRUCTURE BACKFILL @ PIER 21	75 CY
503.1091	CONCRETE IN FOOTING RETROFITS @ PIER 18(200 CY) & PIER 19(135 CY)	335 CY
503.1092	CONCRETE IN FOOTING RETROFITS @ PIER 21	115 CY
505.0002	NUMBER OF PILE SET-UPS AT PIERS 18 & 19	46
505.0003	NUMBER OF PILE SET-UPS AT PIER 21	16
505.0010	DYNAMIC LOAD TESTS	6 EA.
	16" OD STEEL PIPE PILES, STATE-FURNISHED (SEE NOTE)	3,720 LF
	24" OD STEEL PIPE PILES, STATE-FURNISHED (SEE NOTE)	1,375 LF
505.5000	16" OD STEEL PIPE PILES, DRIVEN AND FILLED W/ CONCRETE, @ PIER 19	2,010 LF
505.5001	16" OD STEEL PIPE PILES, DRIVEN AND FILLED W/ CONCRETE, @ PIER 21	570 LF
505.5100	24" OD STEEL PIPE PILES, DRIVEN AND FILLED W/ CONCRETE @ PIER 18	1,150 LF
505.6000	PRE-DRILLING, 16" OD STEEL PIPE PILES @ PIER 19	780 LF
505.6001	PRE-DRILLING, 16" OD STEEL PIPE PILES @ PIER 21	186 LF
505.6100	PRE-DRILLING, 24" OD STEEL PIPE PILES @ PIER 18	490 LF
505.7000	OVER-REAMING, 16" OD STEEL PIPE PILES @ PIER 19	403 LF
505.7001	OVER-REAMING, 16" OD STEEL PIPE PILES @ PIER 21	160 LF
505.7100	OVER-REAMING, 24" OD STEEL PIPE PILES @ PIER 18	200 LF
512.0100	BRIDGE TOP DECK REPAIR	6 S.F.
602.0090	REINFORCING STEEL IN BRIDGE STRUCTURE,	48,000 LB
653.0100	ACCESS OPENINGS, SOFFIT	12 EA.
654.0500	DIAPHRAGM BOLSTER PAIRS, TYPE 5	4 Pairs
655.0100	DRILLING HOLES AND INSTALLING #8 DOWEL REINFORCING BARS IN FOOTING RETROFIT	330 EA.
655.0200	DRILLING HOLES AND INSTALLING #6 DOWEL REINFORCING BARS IN PIER 18, 19 & 21 FOOTING RETROFITS	1,230 EA.
655.0300	DRILLING HOLES AND INSTALLING #10 DOWEL REINFORCING BARS IN PIER 19 FOOTING RETROFIT	150 EA.
656.0110	CORE CONCRETE (6") @ PIER CAP	4 EA.
656.0200	CORE CONCRETE (9") OR (10" AT CONTRACTOR'S OPTION) @ DIAPHRAGM	4 EA.
659.0100	RESTRAINER UNIT TYPE 1	4 EA.

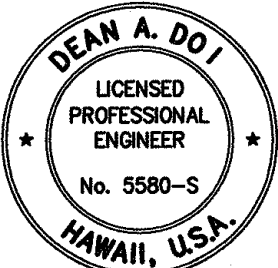
NOTE: STEEL PIPE PILES WILL BE AVAILABLE TO THE CONTRACTOR FREE OF CHARGE. REFER TO NOTE 2 OF SHEET S8.

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

RECORD DRAWING
The details, locations and other information shown are based on information provided by others. The design consultant cannot assure the accuracy and completeness of the information. The user of this drawing shall be responsible to verify its accuracy and completeness

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
	"X" for as-built deletion
Roadway	Text for as-built posting



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
SATO & ASSOCIATES, INC.

2-18-03	REVISED QUANTITIES, ITEMS 206.0120 TO 503.1092
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LIST OF ABBREVIATIONS AND SYMBOLS ESTIMATED QUANTITIES	
INTERSTATE ROUTE H-1, SEISMIC RETROFIT KAPIOLANI INTERCHANGE, PHASE 2 FEDERAL AID PROJECT NO. BR-HI-1(226)	
DATE: SEPT 2002	

SHEET No. 2 OF 2 SHEETS

AS-BUILT

ADD. 2