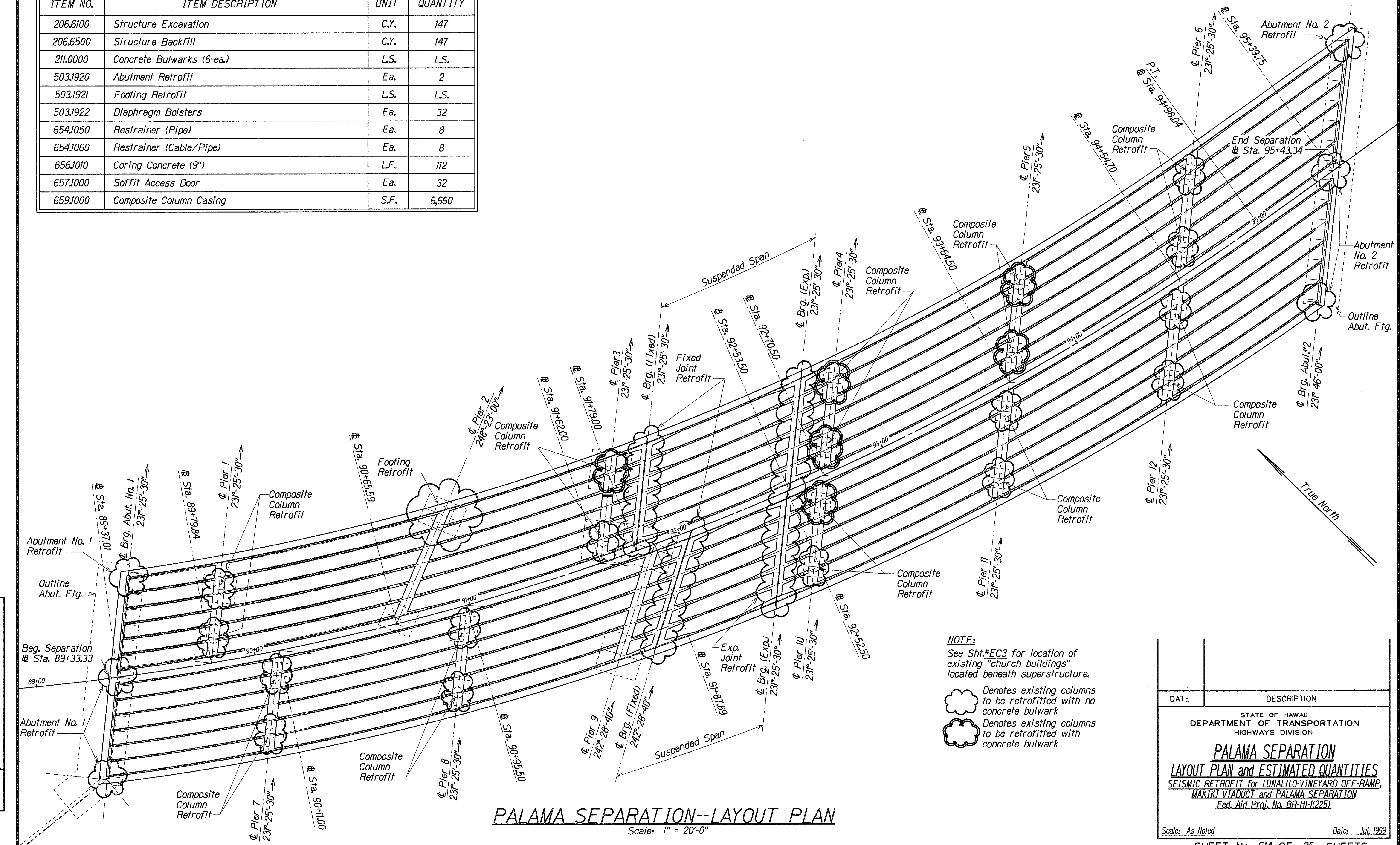


ESTIMATED QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
206.6100	Structure Excavation	C.Y.	147
206.6500	Structure Backfill	C.Y.	147
211.0000	Concrete Bulwarks (6-ea.)	L.S.	L.S.
503.1920	Abutment Retrofit	Ea.	2
503.1921	Footing Retrofit	L.S.	L.S.
503.1922	Diaphragm Bolsters	Ea.	32
654.1050	Restrainer (Pipe)	Ea.	8
654.1060	Restrainer (Cable/Pipe)	Ea.	8
656.1010	Coring Concrete (9")	L.F.	112
657.1000	Soffit Access Door	Ea.	32
659.1000	Composite Column Casing	S.F.	6,660

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-HI-11(225)	2000	20	37



ORIGINAL PLAN	DATE	DEC 1999
DRAWN BY	SA	DEC 1999
DESIGNED BY	SA	DEC 1999
QUANTITIES BY	SA	DEC 1999
CHECKED BY	SA	DEC 1999

NOTE:
See Sht. #EC3 for location of existing "church buildings" located beneath superstructure.

Cloud symbol denotes existing columns to be retrofitted with no concrete bulwark.
Cloud symbol with cross denotes existing columns to be retrofitted with concrete bulwark.

DATE	DESCRIPTION
	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
PALAMA SEPARATION LAYOUT PLAN and ESTIMATED QUANTITIES SEISMIC RETROFIT for LUNALILO-VINEYARD OFF-RAMP, MAKIKI VIADUCT and PALAMA SEPARATION Fed. Aid Proj. No. BR-HI-11(225)	
Scale: As Noted	Date: Jul, 1999
SHEET No. 514 OF 25 SHEETS	