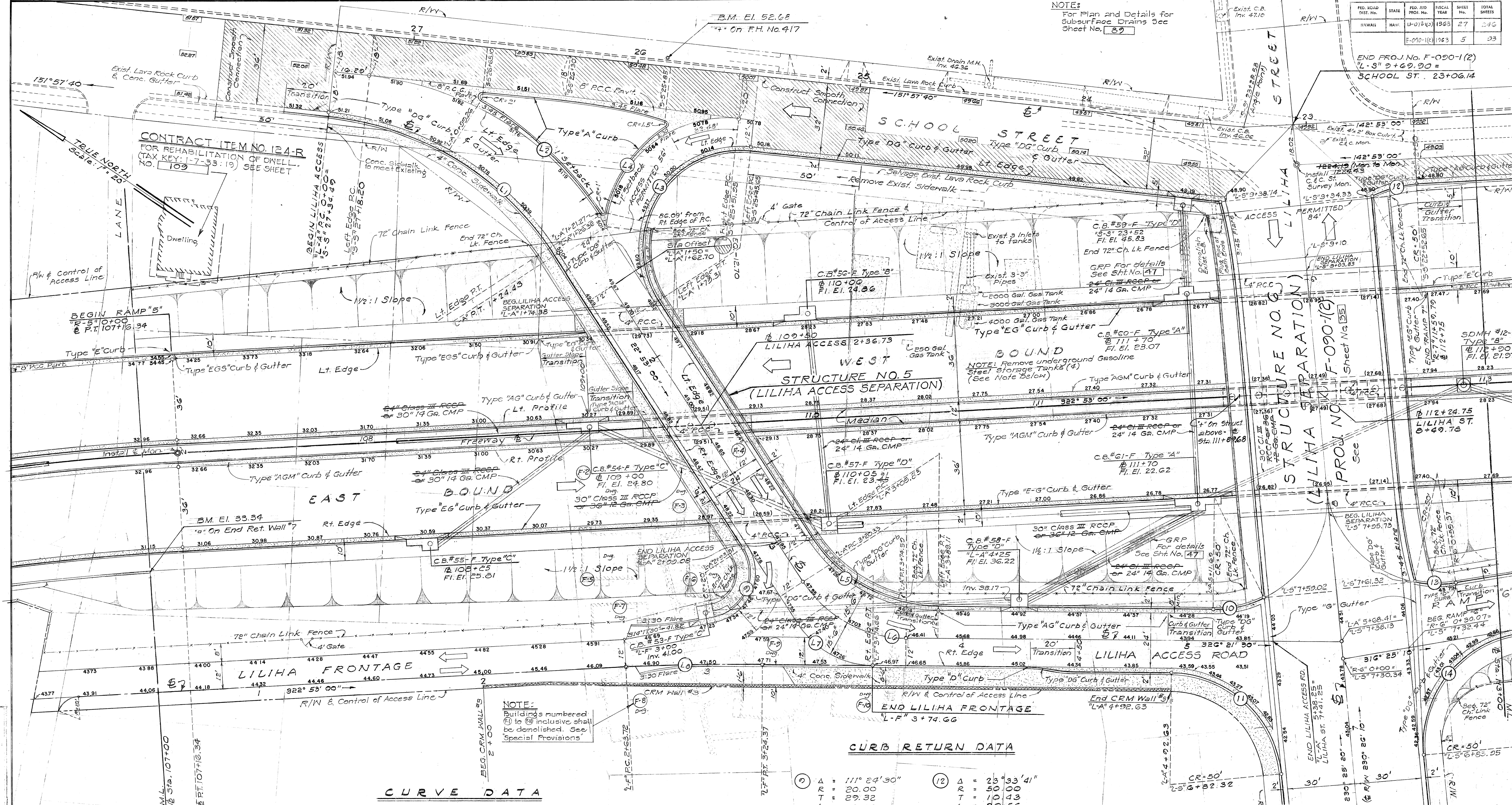


DATE: _____
 DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 NOTE BOOK: _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	U-072-1(3)	1963	27	146	
	F-090-1(2)	1963	5	93	

END PROJ. NO. F-090-1(2)
 L-S 9+60.00 = 30+06.14
 SCHOOL ST. 23+06.14



CURVE DATA

(L1) Δ = 50°55'20" R = 140.00 T = 66.66 Lc = 124.43	(L2) Δ = 50°55'20" R = 140.00 T = 66.66 Lc = 124.43	(L3) Δ = 129°04'40" R = 45.00 T = 94.51 Lc = 101.38	(L4) Δ = 90°07'43" R = 54.00 T = 54.12 Lc = 84.24
(L5) Δ = 56°31'30" R = 70.00 T = 37.63 Lc = 69.00	(L6) Δ = 56°31'30" R = 55.00 T = 29.57 Lc = 54.26	(L7) Δ = 56°31'30" R = 40.00 T = 21.50 Lc = 39.46	(L8) Δ = 3°28'30" R = 1000.00 T = 30.33 Lc = 60.65

CURB RETURN DATA

(9) Δ = 111°24'30" R = 20.00 T = 29.32 Lc = 38.89	(12) Δ = 28°33'41" R = 50.00 T = 10.43 Lc = 20.56
(10) Δ = 27°02'11" R = 50.00 T = 12.02 Lc = 23.59	(13) Δ = 21°27'37" R = 50.00 T = 0.48 Lc = 18.73
(11) Δ = 84°03'50" R = 50.00 T = 45.07 Lc = 73.36	(14) Δ = 55°59'50" R = 50.00 T = 46.62 Lc = 75.05

NOTE:
 Four underground Gasoline Tanks located approximately at left of Sta. 110+75 shall be removed and disposed of by the contractor. Work involved in the removal and disposal of above tanks shall be considered incidental to "Roadway Excavation".

BELT, COLLINS & ASSOC., LTD.
 Civil and Structural Engineers

DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
 STATE OF HAWAII

DETAIL PLAN OF ROADWAY
 FREEWAY 107+00 TO 113+00

LUNALILO FREEWAY U-072-1(3)
 LILIHA STREET F-090-1(2)

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F-090-1(2)	1963	6	23

CURB CURVE DATA		
	(17)	(18)
Δ	93° 34' 40"	86° 35' 20"
R	50.00	50.00
T	55.07	47.11
L	81.52	75.56

ITEM 124 G
NOTE: For Rehabilitation of Certain Improvements at American Security Bank, 1420 Liliha St., Tax Key 1-7-32:23, See Sheet 101

ITEM 124 N
NOTE: For Rehabilitation of Certain Improvements at 1428-1432 Liliha St., Tax Key 1-7-32:22, See Sheet 106

ITEM 124 M
NOTE: For Rehabilitation of Certain Improvements at 1470-1474 Liliha St., Tax Key 1-7-33:45, See Sheet 105

ITEM 124 F
NOTE: For Rehabilitation of Certain Improvements at 1466-1468 Liliha St., Tax Key 1-7-33:1, See Sheet 99 and 100

LILIHA STREET

BEG. PROJ. NO. F-090-1(2)
"L-S" 0+48.09

GENERAL NOTES FOR LILIHA STREET

- All existing roof or marquee down drain pipes which are emptying into the exist. gutters through exist. sidewalks shall be reconstructed to fit new curbs, gutters & sidewalks unless otherwise noted. (Incidental to Plain Conc. Sidewalk.)
- Locations of existing underground structures such as culverts, pipe lines, conduits, cables, etc. shown on the plans are approximate only. The Contractor shall check and verify the locations of same.
- Removal of existing sidewalks, curbs, gutters, catch basins, and storm drain manholes, shall be incidental to Roadway Excavation.
- All exist. Lava Rock Curbs shall be salvaged and neatly stockpiled within the project site as directed by the Engineer.
- Azimuths and Coordinates referred to "Punchbowl" "Trig." Station. Bench Marks referred to Mean Sea Level Datum.
- For locations of Bench Marks, see 50' Scale Roadway Plans. For removal of existing Parking Meters along Liliha Street, see "Special Provisions".
- Electric & Telephone Poles in way of Construction operation are to be moved by the respective owners.
- All manholes in the roadway prism including those which are to be reconstructed shall be adjusted to fit new finished grades. Top slab of catch basins shall be in line with the adjacent curbs and shall be sloped to the finished grade.
- All ends of abandoned drainage culverts shall be sealed with brick wall (set in Cement Mortar) of thickness equal to at least 1/2 the culvert diameter. Brickwall for sealing culvert will not be paid for separately, but shall be considered incidental to the various contract pay items of culverts.

"L-S" 0+35
Reconstructed C.B. Type "D", Inv. Outlet 15.89
Reconstruct Top Slab, Throat, & Gutter Apron to fit new grade. Reconstruct Northeast Wall & Construct new S.D. connection to C.B. See Details on Sht. 84

ITEM 124 Q
NOTE: For Rehabilitation of Certain Improvements at 1413 Liliha St., Tax Key: 1-7-23:9, See Sheet 105

- Existing Storm Drain Pipes under existing Southeast sidewalk of Liliha Street including existing C.B.'s from "L-S" 1+16 to "L-S" G+22 shall be removed. Excavation, backfill and removal of such storm drain pipes and C.B.'s shall be considered as incidental to the item of "Roadway Excavation."

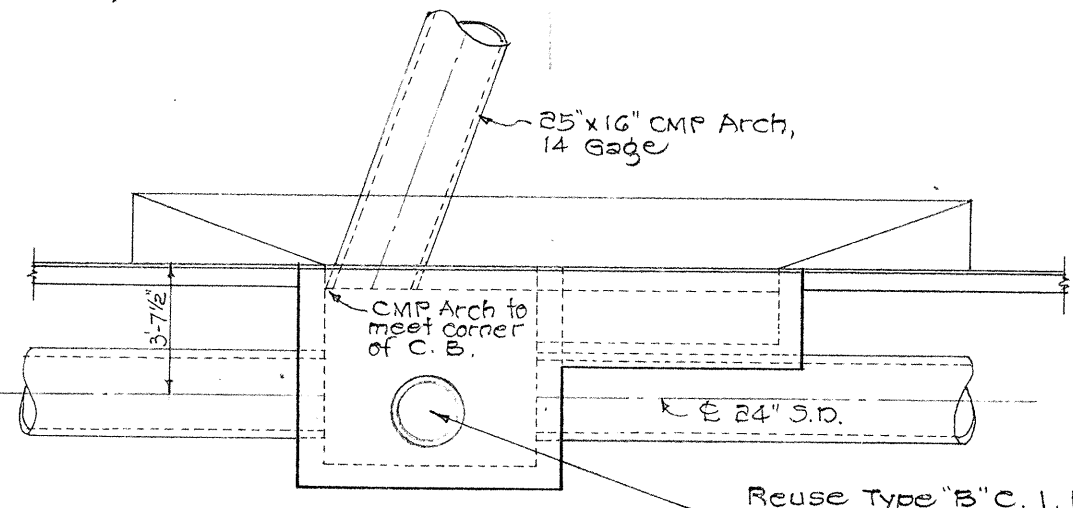
ITEM 124 K
NOTE: For Rehabilitation of Certain Improvements at 1431 Liliha St., Tax Key: 1-7-23:21, See Sheet 103

ITEM 124 H
NOTE: For Rehabilitation of Certain Improvements at 1439 Liliha St., Tax Key: 1-7-23:22, See Sheet 102

ITEM 124 P
NOTE: For Rehabilitation of Certain Improvements at 1503 Liliha St., Tax Key: 1-7-23:25, See Sheet 107

ITEM 124 L
NOTE: For Rehabilitation of Certain Improvements at 1453 Liliha St., Tax Key: 1-7-23:24, See Sheet 104

ITEM 124 J
NOTE: For Rehabilitation of Certain Improvements at 1449 Liliha St., Tax Key: 1-7-23:23, See Sheet 104



DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STATE OF HAWAII

DETAIL PLAN OF ROADWAY
LILIHA ST. 0+00 to 5+25

LILIHA STREET
F-090-1(2)

BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

F09010200.6

