

DRAFT
INTERIM SURVEY REPORT
FOR
FLOOD CONTROL AND ALLIED PURPOSES
WAILUPE STREAM, ISLAND OF OAHU, HAWAII

PERTINENT DATA

HYDROLOGIC AND HYDRAULIC DATA

Drainage Area	3.25 square miles
Standard Project Flood Discharge	10,700 cfs at Kalaniana'ole Highway (existing conditions)
Design Data	
Discharge at Kalaniana'ole Highway	11,700 cfs (project conditions)
Velocities	28 to 57 fps
Minimum Freeboard	2 feet
Total Length of Channelization	6,835 feet on Wailupe Stream 100 feet on Kului Tributary

TYPICAL CHANNEL SECTIONS

Rectangular Section	
Bottom Width	Varies from 20 to 45 feet (12 feet on Kului Tributary)
Type of Lining	Concrete
Trapezoidal Section	
Bottom Width	50 feet
Side Slope	1V on 3H
Type of Lining	Unlined and riprap

PROJECT BENEFITS

Total Average Annual Benefits Based on a 6-5/8 Percent Interest Rate and a 100-Year Project Life	\$962,000
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PROJECT COSTS

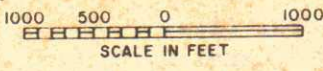
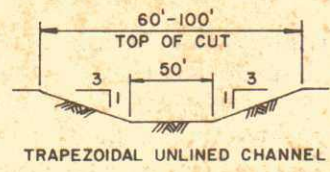
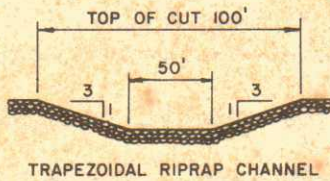
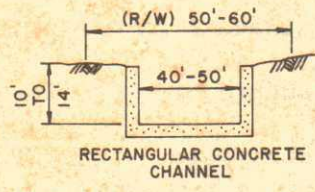
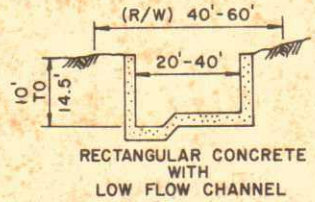
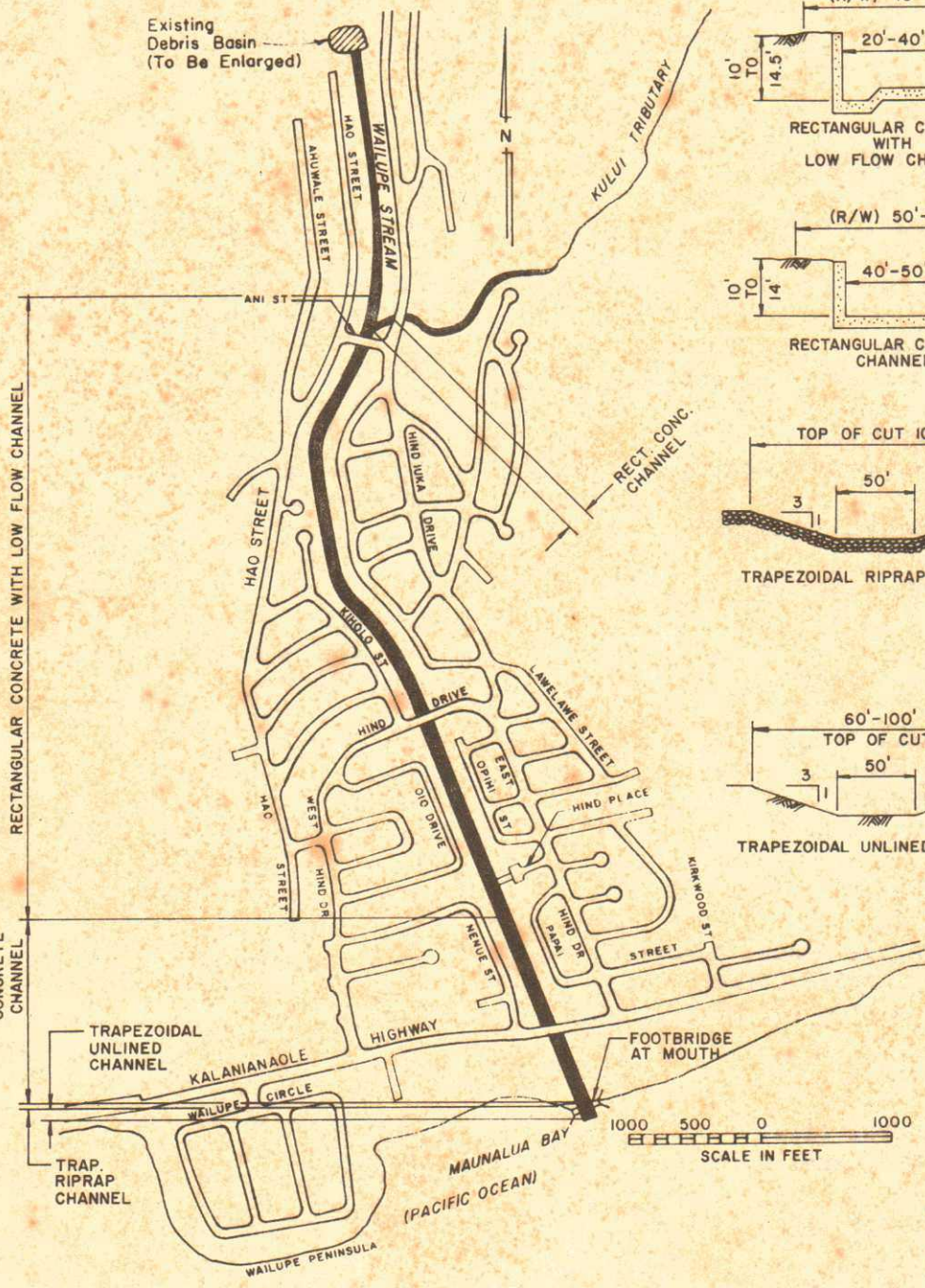
Total Federal First Cost	\$9,820,000
Total Non-Federal First Cost	<u>880,000</u>
Total Project First Cost	\$10,700,000

AVERAGE ANNUAL CHARGES

Interest and Amortization	\$710,000
Average Annual Maintenance	<u>25,000</u>
Total Average Annual Charges	\$735,000

BENEFIT-COST RATIO

1.3



WAILUPE STREAM OAHU, HAWAII

SELECTED PLAN

U. S. ARMY ENGINEER DISTRICT, HONOLULU