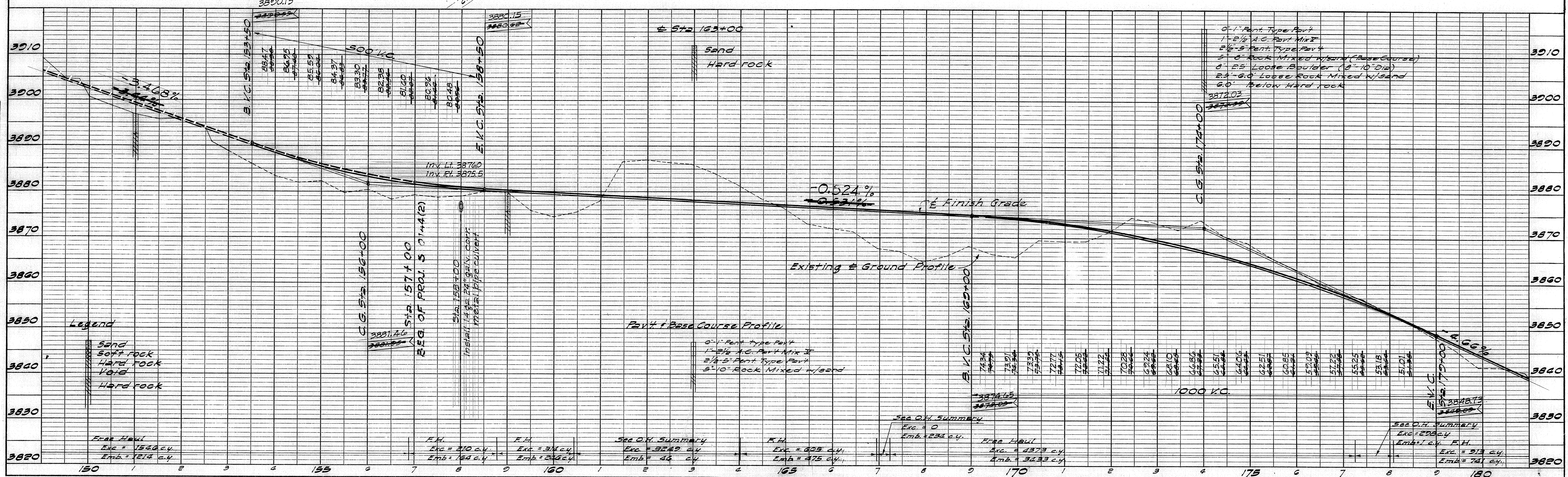


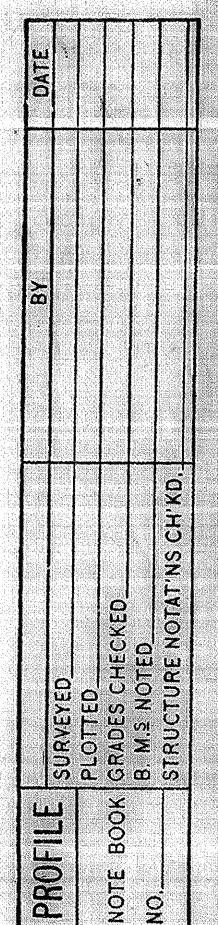
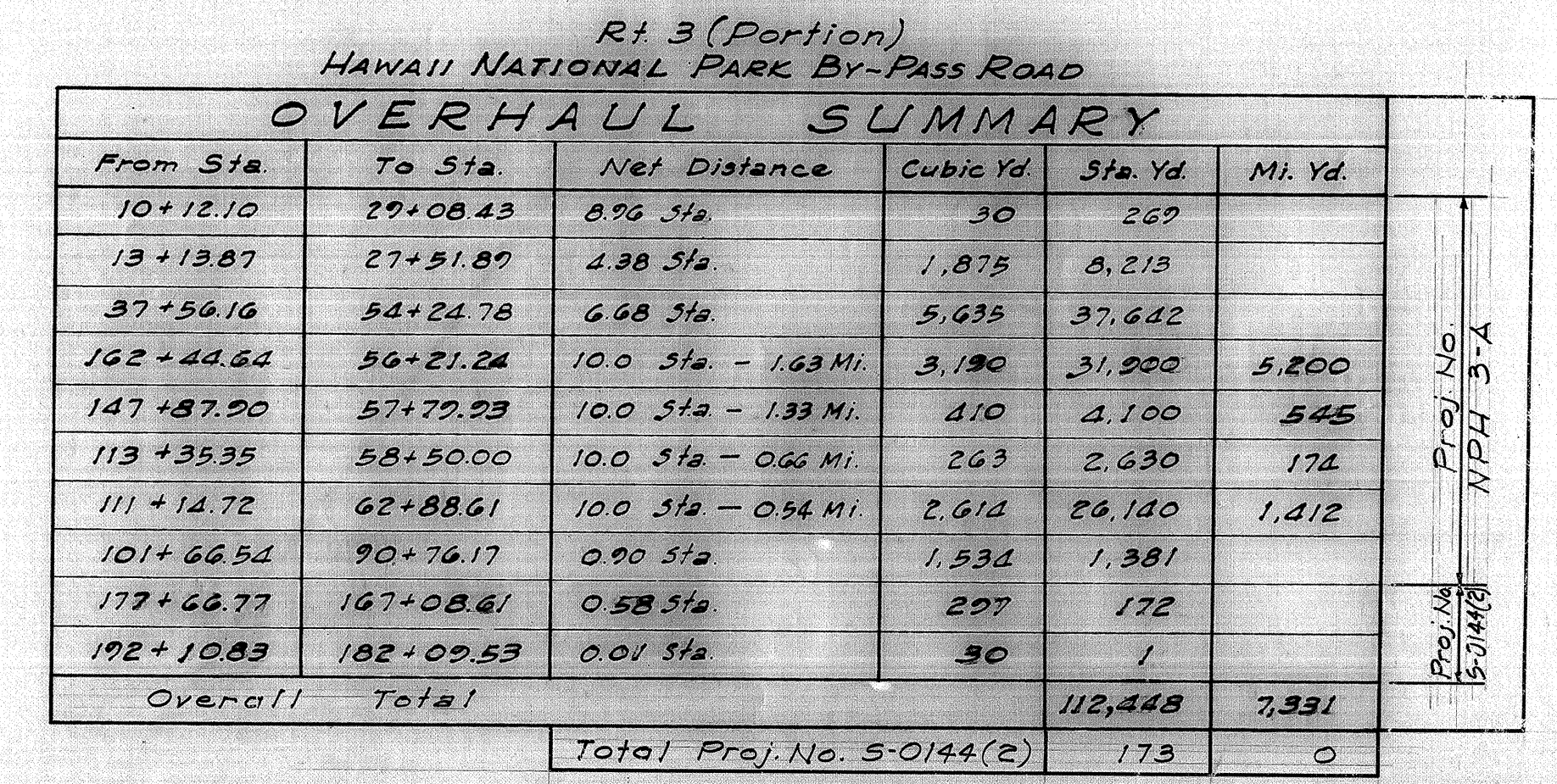
Sta 157+00

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	B. M.'S. NOTED		
	STRUCTURE NOTATIONS CH'D.		



PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S-0144(2)	1961	3	11



<u>ESTIMATE OF QUANTITIES</u>		<u>QUANTITIES</u>	
<u>ITEMS</u>		<u>PROJECT</u> HAWAII N.P.M. 3-A HDOTRS BYPASS AND CONNECTIONS (B.P.R.)	<u>PROJECT</u> HAWAII 3-0144(2) (STATE)
Extra and miscellaneous work		\$15,000 00	
Clearing and grubbing (Route 3 Bypass, Chain of Crater, and Park Entrance Roads)		19.5 Acres	
Clearing and grubbing (Umekshuna Connection, Bird Park Access Road, and Route 3 to 1 Connection)		7.35 Acres	
Selective removal of trees and snags		55 Sq. Ft.	5 Sq. Ft.
Unclassified excavation		65,450 Cu.Yds	12,400 Cu.Yds
Excavation for structures		148 Cu.Yds	
Special subbase, grading A		72,590 Cu.Yds	12,700 Cu.Yds
Overhaul		158,420 Sta.Yds	200 Sta.Yds
Overhaul		9,800 Yd. Mi.	
Water		1,720 M. Gal.	250 M. Gal.
Obliteration of old roadways		\$ 3,290 00	
Roadside cleanup		\$ 3,050 00	\$ 300.00
Crushed aggregate base, grading C, (Revised)		19,180 Cu.Yds	2,490 Cu.Yds.
Asphalt, grade 9C-1, prime coat		23,920 Gals.	3,330 Gal.
Hot Bituminous Conc. Pav't (including Asp. Cement)		6,931 Tons	1,165 Tons
Cement rubble masonry		7 Cu.Yds	
24 inch galvanized corrugated metal pipe		628 Lin.Ft.	
Removing, cleaning, and re-laying salvaged culvert pipe		34 Lin.Ft.	
Metal end sections (for 24 inch pipe culvert)		20 Each	
Centerline monuments		18 Each	7 Each
Metal guardrail (with concrete posts)		1,200 Lin.Ft.	
Placing topsoil		1,000 Cu.Yds	50 Cu.Yds.
Delineators			41 Each
Warning and regulatory signs			7 Each
Move quonset hut		Lump Sum	
Clearing and Grubbing			2.7 Acres
Federal-Aid Markers			2 Each
Maintaining Detours			\$ 1,500 00
Additional number plate for Federal-Aid Markers			1 Each