

As no system of triangulation had been previously carried out, it was found more economical and practicable to institute a standard coastal traverse, which would not only link up all isolated surveys but also form the groundwork of the Native village and land surveys. The standard coastal traverse was commenced in 1922, and up to date a distance of 55·5 miles has been completed. All bearings were checked by stellar observations, and all distances chained twice with link and metre steel tapes in order to provide an independent check. The degree of accuracy of the survey aimed at is 1 in 26,500.

During the year good progress was made on the field-work, but owing to the action of Natives in Mau villages a number of marks were destroyed. It was found advisable to discontinue further work until the present trouble is settled, and in consequence the services of one staff surveyor will be dispensed with.

In conjunction with the standard coastal traverse, Court grants, leases, Crown grants, Native surveys, and topographical features were fixed by compass and theodolite traverse.

The number of outside surveys for the year has been small, and with the standard coastal traverse and Native-land surveys held in abeyance the staff has been able to cope with the extra work for the public.

HYDRO-ELECTRIC SCHEME.

A considerable amount of time was devoted to engineering surveys of the pipe-line, power-house site, headworks, and dam-site. In addition, the locations of poles and transmission-lines were fixed, and also estimates and quantities taken out on various parts of the scheme.

PUBLIC WORKS.

Engineering surveys for the Public Works Department were carried out as follows: Vailina Drive; Moata'a water-supply, sea-wall; Vaisigano River; Solaua light railway, Solaua Road; Mulifanua water-supply, and Mulifanua light railway.

NEW ZEALAND REPARATION ESTATES.

Lines were run for planting of coconuts on the new clearing at Mulifanua.

GENERAL.

Thirty applications to lease Native land for trading sites were investigated, and reported on as to rental and whether the sites would affect the remodelling of villages or interfere with food-supplies. One application for the sale of Native land in Apia was dealt with, and plans prepared. Plans of the standard coastal traverse are now nearing completion, and further additions were made to the block sheets. A considerable amount of work remains to be done in the compilation of block-sheets, and with the information now available it is proposed to expedite this work in order that lithographs may be prepared.

SCHEDULE OF FIELD AND OFFICE WORK.

Class of Work (Surveys).	Field-work.			Office-work.											
	Acres.	Miles.	Total Cost.	Plans on Instruments of Title.				Plans examined and approved.	Plans made and under Examination.	Plans made or re- ceived.	Tradings made.	Searches made.	Miscellaneous 'Draw- ings and Graphs.	Blue-prints made.	Maps and Lithos mounted.
				Crown Grants.	Leases.	Freehold.	Miscellaneous.								
Standard coastal traverse	..	26·50	£ 232·27	..	..	..	..	..	..	..	1	..	..	..	..
Administration lands	..	1·35	13·60	..	3	..	..	1	..	1	1	10	..	..	..
New Zealand Reparation Estates	31·50	..	31·00	18	1	..	..	8	2	5	10	18	..	1	..
European surveys, Apia district	4·75	..	30·25	3	..	40	..	9	6	1	7	20	1	..	..
European rural surveys	5·50	1·64	27·68	..	..	..	1	9	2	6	7	79	3	1	..
Native-land surveys	..	3·75	45·60	..	..	..	..	..	..	2	2	..	..	..	..
Native surveys, Apia district	..	..	..	3	..	..	..	1	2	1	9	12	1	..	..
Native rural surveys	135·50	..	73·50	3	2	..	..	15	1	11	37	35	..	1	..
Road surveys	..	0·75	21·70	..	..	..	..	3	..	2	2	3	..	..	..
Village surveys, Native	..	21·65	76·42	..	..	..	..	..	..	..	1	..	..	3	..
Engineering surveys	..	11·29	213·55	..	..	..	..	..	..	5	12	..	..	55	..
Miscellaneous surveys	300·00	18·50	64·50	..	..	..	..	..	..	..	73	12	28	82	2
Totals	477·25	85·43	830·07	27	6	40	1	46	13	34	162	189	33	143	2

PUBLIC WORKS DEPARTMENT.

The programme of public works for the year under review has been fairly large and varied. In addition, engineering works and reports for the New Zealand Reparation Estates have been undertaken.

Material for water-supplies and for the new export shed were lost through the sinking of the "Clan McWilliam" in Vavau Harbour, and consequently progress on these undertakings has been delayed.