

R/TRN/LAN/1#07



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GOVERNMENT OF THE
FALKLAND ISLANDS
REPAIR OF STREETS ETC
BY
CROWN AGENTS WORKS UNIT
PROGRESS REPORT NO 8 TO 30 SEPTEMBER 1983

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Project Management by the Crown Agents on
behalf of the Falkland Islands Government
Under British Technical Co-operation
arrangements.

October 1983
Ref: EC1/367/A223/3

Civil Engineering Division
Crown Agents for Oversea
Governments & Administrations
4 Millbank
LONDON SW1P 3JD

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1 GENERAL

1.1 Introduction

At the end of the month, the Unit strength stood at seventy-five, comprising the Crown Agents' Management Team of five, the Grandmet International Site Services Ltd contingent of thirteen and fifty-seven Fairclough International Construction Ltd personnel. Of these last, four are away in UK on leave.

The work on camp facilities has progressed slowly. All Phase II accommodation Units are now ready for occupation except for power connections. The concrete base of the Pakaway Store is 80 per cent complete and foundation works for the domestic water storage tank have been constructed.

A number of items have arrived and have been offloaded, including the JCB 807C excavator for the Airport Road. The Unit has terminated its management of the Uniflote and this item of equipment has been transferred to PWD control.

The rate of progress on the reconstruction of Stanley Streets has been maintained with significant headway on Davis Street and the damaged areas of Philomel Street and Crozier Place. Work has recommenced on Snake Hill which will now be completed to sub-base level pending further instruction. The routine maintenance on the Airport Road has continued throughout the month. The new Islander Taxiway and apron have been completed and are now in service.

1.2 Weather

There was a noticeable improvement in the weather during the month and there were only seven occasions when the temperature fell to zero or below. Towards the latter part of the month, the weather was mild and sunny, not to say warm, with moderate winds generally from the west and north-west. However, snow was experienced on two occasions, but the weather has not caused the Unit to lose any full working days, although on two occasions, the workforce finished early due to the onset and continuance of unsuitable weather for concreting.

Local weather data for August was as follows:-

Maximum temperature	14 ^o C	(22 & 23.9.83)
Minimum temperature	2.5 ^o C	(4.9.83)
Mean daily max temperature	8 ^o C	
Mean daily min temperature	1.3 ^o C	
Daily maximum humidity in range 83-100:		94.6
Daily minimum humidity in range 36-97 :		65.0
Maximum windspeed	44 knots	
Days of rain or snow	15	

All data has been obtained from the Meteorological Station at RAF Stanley with the exception of temperature statistics which are obtained from daily on-site thermometer readings.

2 PROGRESS

2.1 Camp and Accommodation

- a) Mess Hall and Recreation Room. Completed.
- b) Laundry. Completed.
- c) Accommodation Units. No change, electric wiring still to be completed.
- d) Offices. Completed.
- e) Powerhouse. Completed.
- f) Water and Sewerage. All connections to accommodation completed and repairs to septic tanks in progress.

- g) Stores. The foundations for the Pakaway Stores building are practically complete with only one section of the floor waiting to be concreted. Erection of the pre-fabricated building will commence immediately after the floor is completed.

2.2 Repairs to Stanley Streets

The policy of the Unit to carry out emergency repairs to existing streets has continued. There has been little activity on such works during September as with the advent of drier conditions, deterioration of the streets has been less marked.

2.3 Reconstruction of Stanley Streets

a) Snake Hill

On 22 September, the Director of Public Works instructed that this road be completed to the top of the sub-base layer but that no base be laid as yet. Work on the alignment recommenced on 26 September with stripping of top soil and unsuitable material at the North end of the alignment. Soft areas were covered with "Terram", subsequently filled over with a sand blanket, followed by crushed stone fill. The construction is well advanced and will be completed by early next month.

b) Davis Street

The concrete reconstruction, described in the August Report, has continued steadily. The final pour in the area of the junction with Philomel Street was completed on 22 September. The task of renewing footpaths and forming a kerb on the North side of the road continues.

The reconstruction of the road has proceeded along the section between Philomel Street and Dean Street and 125m of carriageway were converted by the end of the month.

The task of checking and replacing as necessary domestic water supply connections has continued ahead of the construction works and has not given rise to any serious problems.

c) Philomel Street and Crozier Place

The badly broken area of concrete road at the junction of Philomel Street and Crozier Place has been reconstructed. All the existing concrete pavement was removed from the broken area, the soft, unsuitable clay beneath excavated and replaced with crushed stone sub-base, then new concrete slabs to the present specification. The junction area was completed on 30 September.

Further replacement of broken concrete slabs was done in Crozier Place in front of the Falkland Islands Company offices. This work continue

2.4 Airport Road

The day-to-day maintenance of this road has continued throughout the month. This task is largely done by grader, but with the addition of crushed stone material to fill the major depressions.

Instructions to widen, improve and surface dress this alignment are awaited.

2.5 Pony's Pass Quarry

Supplies of crushed stone have been sufficient for the Unit's needs.

The Crown Agents Works Unit's Quarry Master has continued to direct the operation of the quarry and has continued to report on a weekly basis. The primary crusher has been fitted with extension plates to the feed hopper and since 7 September, the crusher has been served by two Haulmatic Dump Trucks which were transferred from the Roads Unit. This has entirely overcome the problem of carrying feed material to the crusher.

The problem of plant maintenance, particularly in respect of loading shovels, still gives cause for concern. The quarry is deprived of key items of plant for long periods for maintenance and repair with resulting disruption to steady production.

2.6 Additional Activities

a) Islander Taxiway

The work of completing the double seal and surface dressing to the taxiway and apron extension was completed on 9 September. The taxiway was being used by the Islander aircraft by the end of the month.

It is disturbing to note that damage has been caused to the taxiway by fuel spillage from vehicles parked upon it and also from tracked plant being allowed to run along it.

b) Callaghan and Racecourse Roads - Housing Site

The task of up-grading the site roads serving the sites for the new housing development has continued through the month.

Additionally, Project resources have been employed to transport and deliver sand and aggregates to the building contractor.

c) Minor Works

Unit plant and labour has been used in the following places:

the new Standard Chartered Bank site in Stanley, at Racecourse Road to operate PWD plant and assist with the installation of services, and on electrical repair and re-wiring work at the PATA workshops and elsewhere.

3 PLANT AND MAINTENANCE

3.1 Plant landed in the Falkland Islands

a) Ex "Anne Sif"

- 1 No SWB Soft-top Landrover
- 1 No LWB Safari Landrover
- 1 No Cormorant pump
- 2 No Pavement rollers and spares
- 1 No Grease trap
- 1 Case Crusher spares

Various Office equipment

b) Ex "Lincolnbrook"

- 1 No JCB 807C
- 1 No Landrover winch assembly
- 1 Case Bitumen Sprayer spares
- 1 Case Landrover spares

3.2 Plant Maintenance and Repair

No major plant or vehicle problems are reported this month. The replacement engine for the Terex loader is still awaited.

The Unit is maintaining a high serviceability rate on all its plant and vehicles.

3.3 Plant and Vehicle Stores

Work on the Pakaway Stores building is now in progress and preparation of the concrete foundation and floor is well advanced. Additional storage is being organised by the use of some empty containers which have become available.

The task of unpacking the stores and developing the stock records is now progressing.

3.4 Supplies of Fuels and Oils

The situation on supply of lubricants has not improved since last month.

3.5 Supplies of Industrial Gases

Nothing to report.

3.6 Uniflote

The Unit has been operating its Uniflote since March 1983 within the overall port operation as controlled by 73 Port Squadron RCT. The flote has been maintained and manned by Unit personnel with costs borne by the Project fund. The volume of freight consigned to the Unit in recent months has steadily declined, but nevertheless, the continued operation of the Uniflote has been seen as a contribution to the overall movement of cargo, both civil and military, within the port.

During September, the Uniflote operator's contract came to an end as the Unit's use for the flote is now very limited and it was arranged to transfer the craft and its operation to the Public Works Department. Arrangements were made to provide the PWD crew with several weeks' training and experience in the use of the Uniflote and handover was effected on 23 September 1983.

4 MATERIALS

4.1 Imported Materials

The following construction materials have been landed and received by the Unit during September:-

5 No cases Kerb Moulds

3 Containers Ammonium Nitrate

1 Case Welding Rods

10 No Telegraph poles (replacements for those borrowed from Power Station)

Other materials have been received, including hand tools, and spares and replacement parts for Unit accommodation.

4.2 Locally obtained materials

i) Concrete aggregates.

The supplies from Pony's Pass quarry have been adequate for the Unit's concrete works during the month.

ii) Sand.

No problems have been experienced with the supply of sand from the MOD source at Yorke Bay.

iii) Crusher run stone.

Other crushed stone products for filling and maintenance purposes on Airport road, for improvements to new housing estate roads and for filling to form sub-base to concrete work have been adequately supplied from the Pony's Pass Quarry. However, no material has been crushed or used for crusher run base course for which specific grading requirements would apply.

4.3 Materials Testing and Quality Control

The results of laboratory tests carried out in September are summarised in Appendix E to this Report.

5 LABOUR

5.1 Crown Agents Management Team

At the end of September, the Management Team was as follows:-

R G Whorlow,	Resident Project Manager	arrived 26.2.83
I A M Nunn,	Office Manager	arrived 2.3.83
A G Smith,	Construction Supervisor	arrived 2.3.83
J Donne,	Elec/Mech Supervisor	arrived 2.3.83
J Parry,	Quarry Master	arrived 2.3.83

R G Whorlow arrived back from leave on 17 September 1983
 J Donne arrived back from leave on 4 September 1983
 J R Cahoon departed to UK upon completion of his contract
 on 13 September 1983
 R Stansfeld departed to UK upon completion of his contract
 on 26 September 1983

5.2 Works Unit Labour (Fairclough International)

At the end of September, the labour strength totalled 58 as follows:-

P J Filipcayk, General Foreman	arrived 5.3.83
D Lynch, Plant Foreman	arrived 5.3.83
2 No Electricians	arrived 5.3.83
1 No Mechanic	arrived 6.4.83
1 No Mechanic	arrived 11.6.83
1 No Mechanic	arrived 12.8.83
1 No Carpenter	arrived 5.3.83
1 No Carpenter/Handyman	arrived 10.9.83
1 No Stores Clerk	arrived 21.9.83
5 No Plant Operators	arrived 5.3.83
1 No Plant Operator	arrived 9.6.83
1 No Plant Operator	arrived 11.6.83
1 No Plant Operator	arrived 21.9.83
1 No Panel Beater/Welder	arrived 4.6.83
1 No Welder	arrived 20.8.83
1 No Plumber	arrived 5.3.83
1 No Tyrefitter	arrived 20.8.83
2 No Drivers	arrived 5.3.83
1 No Driver	arrived 27.4.83
2 No Drivers	arrived 6.5.83
1 No Driver	arrived 7.5.83
4 No Drivers	arrived 4.6.83
2 No Drivers	arrived 9.6.83
1 No Driver	arrived 11.6.83
4 No Labourers	arrived 5.3.83
7 No Labourers	arrived 27.4.83

3 No Labourers	arrived 6.5.83
4 No Labourers	arrived 6.9.83
4 No Labourers	arrived 14.9.83

During September, a total of six personnel travelled to UK on leave.

5.3 Catering and Camp Management Team (Grandmet)

At the end of September, the Camp Management contingency was 13 strong as follows:-

A Smith
 K Donaldson
 G Brown
 A Lever
 A Inkster
 J Kirkness
 J Murphy
 D Walker
 G Jones
 D Hutchison
 S Majkut
 J Thorn
 G Davie

5.4 Local Labour

During the month of September, a total of four local people were employed by this Works Unit, although two of these were being trained on the Uniflote prior to the handover of this piece of equipment on 23 September 1983. The other two, one plant operator and a casual labourer, were still employed at the end of the month.

5.5 Property Services Agency (PSA)

The following PSA staff were accommodated during the month:-

G Lilley	28 nights
J Miles	16 nights
A Rushworth	7 nights
M Dingley	5 nights

6 FINANCE

6.1 Local Account

The arrangements for this account have returned to those described in the March 1983 Report. Arrangements have been made to increase the credit limit of the account to £18,000 per month. The working of the account has given no problems this month.

6.2 Local Expenditure

A complete record of all monies spent or committed in the Falkland Islands is maintained and a statement of this account is presented at Appendix D to this Report. The statement is analysed to show cost heads for expenditure for project purposes and also sums which have been disbursed on behalf of contractors but which will be recovered from their subsequent payment certificates. The statement is laid out to show the allocation of expenditure between Phase I and Phase II and total expenditure. The allocation shown against Phase I is separately split up into all the various tasks worked upon by the Unit which do not form part of the Stanley Roads brief.

The sums included in Appendix C under "Commitments" include items purchased in local month by account terms and also which will be repayable from UK. These include fuel requisitions and stores items obtained from Falkland Islands Government.

6.3 Offshore and Total Expenditure

Details of plant and materials on order off-shore and total expenditure together with cash flow requirements are prepared in the UK and will form Appendices A-D of the final report.

7 VISITORS

The following persons have made official visits to the works unit in September.

G Webster - Director of Public Works, F I Govt
D Robson - Deputy Director of Public Works, FIG
Col John Kitchen CRE, HQ BFFI
Lt Col Richard Meston - CRE (Works)

8 MISCELLANEOUS

Nothing to report.

This report prepared by

R G WHORLOW
CA Resident Project Manager

APPENDIX A

PLANT AND MATERIALS ORDERED TO 30 SEPTEMBER 1983

PHASE 1 ODA

Order No.	Description	Cost £	Ship	ETA
402827/17	Drainage & fittings	311	Leicester-	28 Oct
/18	Cutting wheels	460	brook	"
/20	Haulamatic spares	205	By hand	Gone
/21	Mini Mustang spares	1703	Benedict	15 Dec
/22	JCB Spares	402	Leicester-	28 Oct
/23	750 tonne cement	50625	brook (250T)	28 Oct.
/15	40 tonnes C385 Mesh.	10200	Benedict	15 Dec
/9	17 Elect.Poles	900	Leicester-	28 Oct
/24	Shower valves	6	Airpost by 12 Oct.	
/25	Bonding paste 20 Kg.	210		
/27	Benford Fuel Filter	-27	Hand	
/28	Tyres - 12 No Dunlop	2433	Benedict	15 Dec
/29	Bedford Housing	32	Post by 30 Sept.	
/30	Jackets - Functional	123	Being issued as required	
		<hr/> 67637 <hr/>		

PHASE 2

402835/48	A.B. Spares	1108	Leicesterbrook	28 Oct
/49	Dryer controller	200	Hand	Gone
/50	Petbow Spares	75	Hand	6 Nov
/51	Thwaites tyres 6 No.	919	Leicesterbrook	28 Oct
/52	Stenor Kits	95	Hand	Gone
/53	500m Cable	775	Benedict	15 Dec
/54	JCB Tyres 4 No.	406	"	"
/55	Haulamatic Radiators 2 No.	1870	Due 7/10	
/56	Bitumen 735 Drums	38376	San Shore	End Nov.
/57	Petter Refrigerator Parts	-	Posted	
/58	Cummins fan - Compair	110		

APPENDIX B

FALKLAND ISLANDS REPAIR TO STREETS

EXPENDITURE AND FORECAST AS AT 30 SEPTEMBER 1983

£'000

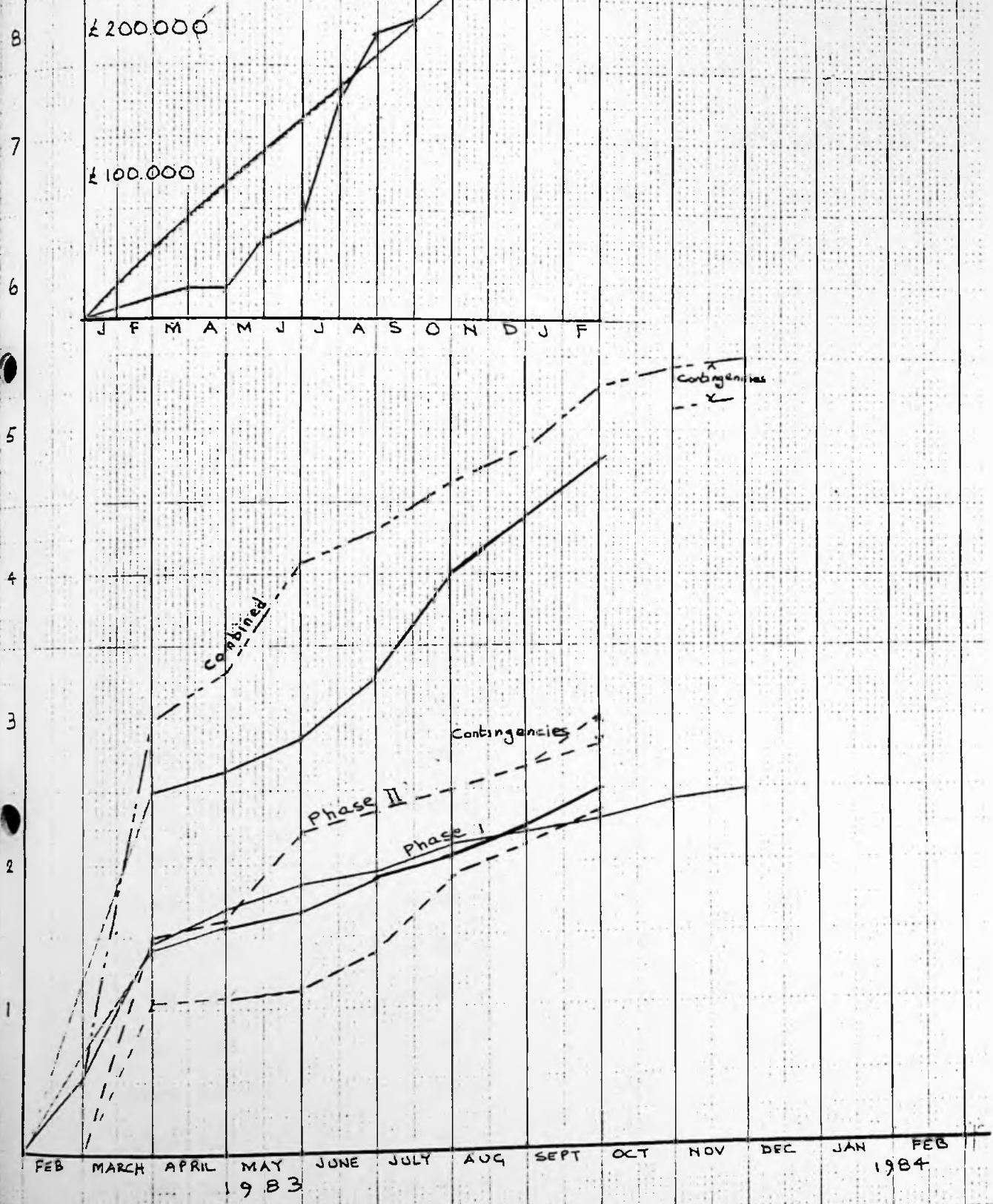
PHASE 1	ODA	COST TO DATE INCL KNOWN COMMITMENT	OCT	NOV	DEC	JAN	1984 FEB	MARCH	TOTAL	
1	Plant & Materials	1,065,000	10	5	5	5	5	5	1,100,000	
2	Freight	355,000	11	10	5	15	3	3	402,000	
3	Insurance	7,000	1	1	1	1	1	1	13,000	
4	Fees:- Procurement	80,000	4	2	2	2	2	1	93,000	
5	Fees:- Inspection	24,000	1	1	1	-	1	-	28,000	
6	Fuel ex F.I.G.	34,000	7	7	5	4	4	4	65,000	
7	C.A. Management Fee	165,000	17	17	17	18	18	15	267,000	
8	Fairclough/G.Met	749,000	100	100	100	120	100	80	1,349,000	
9	C.A. 2% on Labour	12,000	2	2	2	2	2	2	24,000	
10	Stone, ex PWD	-	-	-	-	-	-	57	57,000	
	TOTAL	2,491,000	153	145	138	167	136	168	3,398,000	NOTE:- Agreement to 21.10.83 Approved limit £2.5M. Approval of balance awaited.
	Cumulative Total	2,491,000	2644	2789	2927	3094	3230	3398		
<hr/>										
PHASE 2	MOD									
1	Plant & Material	1,485,000	10	10	10	10	5	5	1,535,000	
2	Freight	320,000	20	6	6	4	4	4	374,000	
3	Insurance	9,000	1	1	1	1	1	1	15,000	
4	Fees:- Procurement	70,000	15	7	7	2	2	2	105,000	
5	Fees:- Inspection	22,000	1	-	-	1	1	1	26,000	
6	Fuel ex F.I.G.	19,000	4	7	8	7	7	5	57,000	
7	C.A. Management Fee	46,000	10	13	13	12	12	10	116,000	
8	Fairclough/G.Met	349,000	56	65	70	90	60	50	735,000	
9	C.A. 2% on Labour	5,000	1	1	1	2	1	1	12,000	
10	Stone ex PWD	-	-	-	-	-	-	180	180,000	
	TOTAL	2,325,000	118	110	116	129	98	259	3,155,000	Amount approved to 31.8.83 £3M
	Cumulative Total	2,325,000	2443	2553	2669	2798	2896	3155		
<hr/>										
COMBINED TOTAL		4,816,000	271	255	254	296	234	427	6,553,000	
COMBINED CUMULATIVE TOTAL		4,816,000	5087	5342	5596	5892	6126	6553		Total approved funds £5.5M

COST HEAD	PHASE I			PHASE II			TOTAL EXP TO DATE	COMMITMENT	TOTAL INC COMMITMENT
	THIS MONTH	PREVIOUS	TOTAL	THIS MONTH	PREVIOUS	TOTAL			
CONTRACT LABOUR	6401	17783	24184	2367	8235	10602	34786		34786
CATERING LABOUR	792	2277	3069	293	1902	2195	5264		5264
CATERING MATERIALS	1756	4118	5874	650	4083	4733	10607	232	10839
UNIFLOTE		225	225				225		225
PLANT	67	799	866	25	392	417	1283	130	1413
MATERIALS	242	578	820	90	268	358	1178	646	1824
FUEL & OILS	434	2102	2536	160	1876	2036	4572	8910	13482
ACCOMMODATION	376	3299	3675	139	939	1078	4753	169	4922
SHIPPING		431	431	12	131	143	574		574
PROCUREMENT									
C A FEES									
2% ON 1 & 2									
CONTINGENCY									
OFFICE EXPENSES	115	935	1050	42	414	456	1506	69	1575
COMMUNICATIONS	549	741	1290	203	685	888	2178	450	2628
TOTALS	10732	33288	44020	3981	18925	22906	66926	10606	77532
CASH DRAWN FROM TREASURY							73450		
TOTAL EXPENDITURE							69277		
CASH IN HAND							4173		

FALKLAND ISLANDS REPAIRS TO STREETS

APPENDIX D

C.A. FEES



APPENDIX E

MATERIALS TEST RESULTS

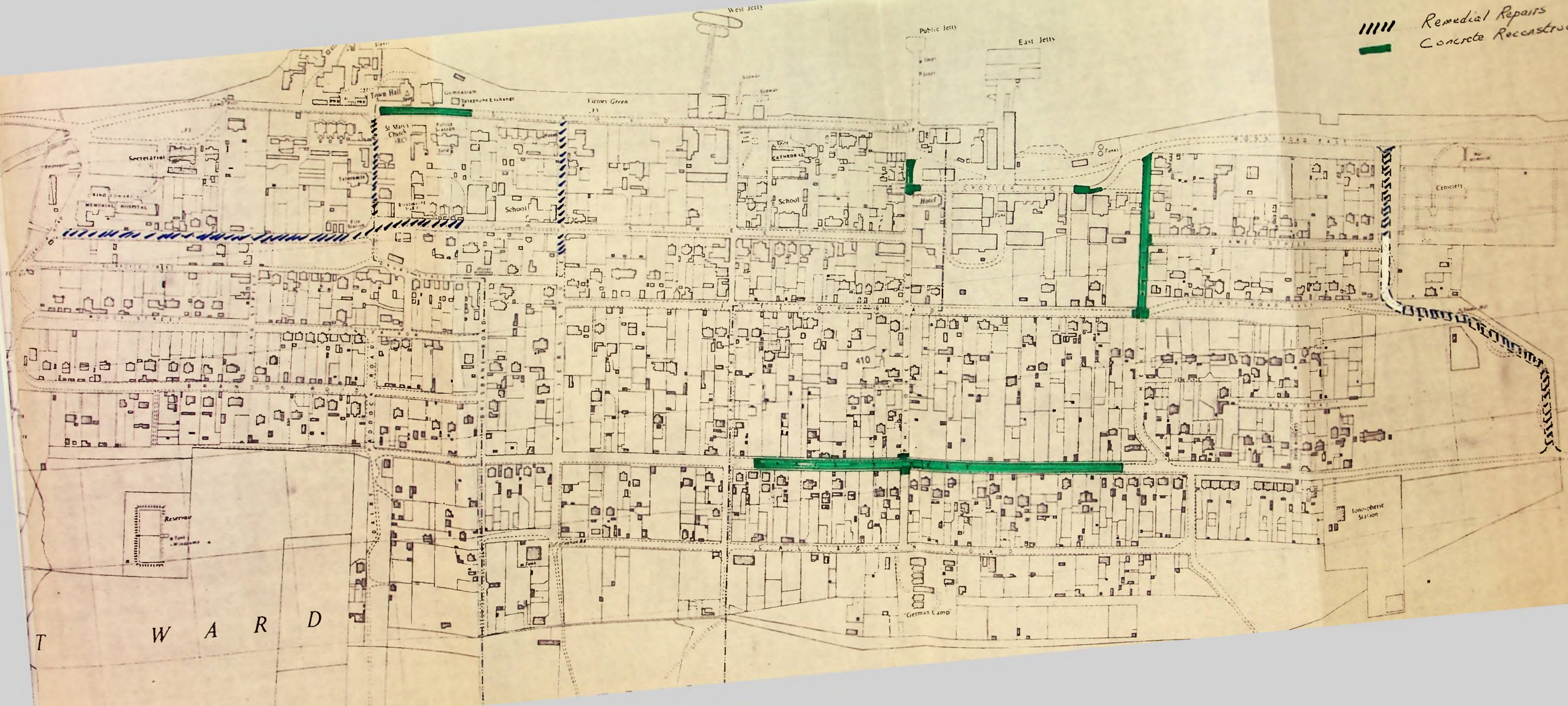
TABLE 1 - CONCRETE CUBE CRUSHING TEST RESULTS

CUBE MARKING	LOCATION	AGE	STRENGTH N/mm ²
PWD 105	Davis Street	28	45.8
PWD 108	- do -	28	45.4
PWD 111	- do -	28	29.4
PWD 114	- do -	28	40.3
PWD 117	- do -	28	47.6
PWD 146	- do -	8	24.5
PWD 147	- do -	8	23.9
PWD 148	Philomel St	7	28.9
PWD 149	- do -	7	28.5
PWD 151	Davis Street	7	19.1
PWD120	- do -	28	48.0
PWD 152	- do -	7	18.5
PWD 154	- do -	7	26.3
PWD 155	- do -	7	26.0
PWD 123	- do -	28	46.7
PWD 126	- do -	29	36.0
PWD 129	- do -	28	33.3
PWD 157	- do -	7	23.3
PWD 158	- do -	7	25.2
PWD 132	- do -	28	33.8
PWD 135	- do -	28	32.9
PWD 160	- do -	7	17.7
PWD 161	- do -	7	19.0

CUBE MARKING	LOCATION	AGE	STRENGTH N/mm ²
PWD 138	Davis Street	28	26.7
PWD 142	- do -	6	21.6
PWD 143	- do -	6	21.6
PWD 141	- do -	28	37.0
PWD 144	- do -	28	37.7
PWD 163	- do -	11	26.0
PWD 164	- do -	11	27.5
PWD 166	- do -	10	23.5
PWD 167	- do -	10	22.7
PWD 169	Philomel St	8	19.5
PWD 170	- do -	8	21.0
PWD 172	- do -	7	23.0
PWD 173	- do -	7	22.0
PWD 175	Davis Street	7	24.4
PWD 176	- do -	7	25.8
PWD 178	- do -	5	26.8
PWD 179	- do -	5	26.4
PWD 127	- do -	10	26.1
PWD 128	- do -	10	17.8
PWD 130	- do -	9	23.0
PWD 131	- do -	9	23.1
PWD 133	- do -	8	22.8
PWD 134	- do -	8	20.8
PWD 136	- do -	7	16.8
PWD 137	- do -	7	17.1
PWD 139	- do -	8	32.0
PWD 140	- do -	8	32.0

JOB DESCRIPTION	PHASE I		NON-BRIEF		PHASE II		TOTAL
	PLANT	LABOUR	PLANT	LABOUR	PLANT	LABOUR	
PWD/BREWSTER ROADS			1.81	7.06			8.1
BREWSTER/BANK SITE			0.07	0.42			0.5
C A SITE YARD					1.08	14.74	15.8
MIXER SITE (GERMAN CAMP)	0.66	4.00			0.28	1.71	6.7
ISLANDER TAXIWAY					0.21	4.29	4.5
DAVIS STREET	0.48	30.71					31.2
CROZIER PLACE/PHILOMEL ST	0.64	13.49					14.1
PWD PLUMBING			0.26	3.36			3.6
AIRPORT ROAD					0.70	3.90	4.6
STANLEY REMEDIAL REPAIRS	0.08	1.91					2.0
ELECTRICAL WORKS (PWD)				2.00			2.0
RACECOURSE ROAD (PWD)				0.80			0.8
STANLEY CLEAN-UP			0.04	0.30			0.3
SNAKE HILL	0.31	2.14					2.5
PORT OPS - REFUSE CLEARANCE					0.01	0.08	0.1
PONY'S PASS QUARRY			0.07	0.31			0.4
CALLAGHAN ROAD (PWD)			0.01	0.08			0.1
CALLAGHAN ROAD DRAINAGE			0.31	2.44			2.7
	2.17	52.25	1.81	16.77	2.28	24.72	100.0
		54.42		18.58		27.00	
				73.00		100.00	

||||| Remedial Repairs
— Concrete Reconstruction



T W A R D

