

HONGKONG.

## REPORT ON THE PROGRESS OF THE PUBLIC WORKS DURING THE FIRST HALF-YEAR 1893.

*Laid before the Legislative Council by Command of His Excellency  
the Governor, on the 29th August, 1893.*

No. 715.

PUBLIC WORKS OFFICE,  
HONGKONG, 15th July, 1893.

SIR,—In accordance with instructions contained in C.S.O.  $\frac{2796}{1891}$ , I have the honour to forward you a brief report on the progress of Public Works during the first half of this year, viz., from January 1st to June 30th.

## ANNUAL RECURRENT EXPENDITURE.

2. *Maintenance of Buildings.*—All Government Buildings at present in occupation have been maintained in a satisfactory state of repair without incurring any exceptional expenditure.

3. The Superintendent's Quarters and outbuildings at the Gaol have been redrained and the drainage of these premises is now in a satisfactory condition, C.S.O.  $\frac{215}{1893}$ .

4. The building known as Crosby Store now used as a store for this Department and offices for the Educational Department is fast approaching a condition that, unless it is to be abandoned altogether, extensive repairs will have shortly to be carried out.

5. The old Police Station and Harbour Office at Aberdeen is being re-roofed and other minor repairs carried out. It has been decided, C.S.O.  $\frac{923}{1893}$ , to utilize a portion of this building as a Government School.

6. The roof of the Stanley Police Station has been a constant source of trouble specially during the rainy season; and it will be expedient during the coming winter to replace the present flat roof by a ridged one.

7. *Maintenance of Telegraphs.*—As stated in my last annual report, provision has been made in this year's estimate for partly meeting the expenditure to be incurred in the more general introduction of telephones in the place of telegraph instruments, as a means of communication between the several Police Stations, and other Government buildings throughout the Colony, and effecting other minor improvements set out in my report, C.S.O.  $\frac{810}{1892}$ .

This work has proceeded very satisfactorily, the lines in Kowloon have been constructed throughout as has also the line from Causeway Bay to Shaukiwan, and the whole of the telegraph instruments with the exception of the ones at the Post Office and Gap Rock, in connection with the Gap Rock cable, have been replaced by telephones.

8. *Public Cemetery.*—The Public Cemetery has been maintained without any exceptional expenditure. The number of interments have been 37.

9. *Maintenance of Praya Wall and Piers.*—The usual repairs have been carried out and no exceptional expenditure incurred.

10. *Maintenance of Lighthouses.*—The Lighthouses have been maintained in a satisfactory state of repair.

11. *Maintenance of Disinfecter.*—The building and apparatus is in a satisfactory state of repair and no expenditure has been incurred on them during the current year.

12. *Dredging Foreshores.*—The dredger has been mainly employed at Causeway Bay from which 21,458 cubic yards of materials have been removed and deposited in the Praya Reclamation Works. The Dredger and Machinery is in a satisfactory state of repair.

13. *Miscellaneous Works.*—The principal works carried out under this heading have been:—Providing and fixing anemometer at the signal-man's hut at the Victoria Peak including alterations to the hut. The provision of drying rooms at the Government Civil Hospital. The erection of iron railings at the Lunatic Asylums, and the construction of two wells at Yau Ma Ti and Hung Hom.

Contracts have been entered into, C.S.O.  $\frac{1002}{1893}$ , for the reconstruction of the Magazine Gap Road Bridge, and for the construction of a Telescope House at the Observatory, C.S.O.  $\frac{1352}{1893}$ .

14. *Maintenance of Roads and Bridges in Victoria.*—During the period under review the following roads have been re-macadamized and the side channels and kerbs straightened and improved, viz.: Queen's Road West to New Street, Wing Lok Street, Jervois Street, Queen's Street, Bonham Strand West, Mercer Street and Cross Street. Minor repairs have been effected in various parts of the city.

15. *Maintenance of Roads out of Victoria.*—The surfaces of Mount Kellet Road from the Aberdeen Road to Des Vœux Villas and the Peak Road from Mount Austin Hotel to Rural Building Lot No. 59, the lower portion of the Bowen Road and a portion of the Aberdeen New Road have been concreted with lime and cement concrete.

The Main Street of Aberdeen has been macadamized, kerbs and channels fixed where required, and surface drainage improved. Minor repairs have been effected in various parts throughout the island.

16. *Maintenance of Roads and Bridges, Kowloon.*—Bulkeley Street Hung Hom has been macadamized, kerbed and channelled as has also a portion of Station Street Yau Ma Ti. Minor repairs have been effected in various parts of the Peninsula.

17. *Maintenance of Water Works.*—The water works have been maintained in a satisfactory manner without any extraordinary expenditure.

18. The scarcity of water that again prevailed during the months of March and April however necessitated the introduction of the intermittent system of supply.

There is not the slightest doubt that the scarcity experienced during that period and during the months of February, March, April and May, 1891, was mainly due to the waste and misuse of water by the inhabitants of the City of Victoria and Hill District generally, though at the same time the rainfall during these periods was considerably below the average.

19. Under section 5 of the Water Works Ordinance, "It shall be lawful for all persons occupying "or owning any tenement to construct services for the supply of water from the Water Works..... "and on the completion of the service to the satisfaction of the Water Authority it shall be connected "by the Water Authority to the water works."

The owners of 4,431 tenements have availed themselves of this privilege, and the consumption of water for domestic purposes averaged during 1892 for the whole population of the City and Hill Districts the high figure of 19 gallons a head per diem, clearly shewing that the privilege has been grossly abused.

20. In framing the above quoted section of the Ordinance the convenience of the public generally was evidently the first consideration, and it is with regret that I have to record that after 18 months experience the facilities for obtaining an ample supply of water thus offered have only resulted in its wholesale waste and misuse. The occupants of premises are the persons who clearly have it in their power to reduce this waste and misuse and they have failed to do so. Consequently it has been found necessary to enforce the provisions of Sections 10, 11, 12 and 13 of the Water Works Ordinance.

21. The City has been divided into 45 districts, and meters are being fixed for the purpose of ascertaining the consumption in every tenement or block of tenements in these districts, and the "Prescribed domestic quantity" is also being fixed in respect of such tenements. Owners and tenants of property will doubtless experience some inconvenience from the adoption of this course, but it must not be lost sight of that the Government have given them every opportunity to reduce the waste and misuse of water by ordinary means, they have failed to do so, and the Government have been forced to adopt exceptional measures for the protection of the Public Water Supply.

22. The following tabular statement respecting the consumption of water under the constant and intermittent system may be of interest.

Month.	Date.	Hours of Supply.	Total Consumption. Gallons.	Consumption per head per diem.
March, .....	1st to 8th	Constant	2,881,350	19
March, .....	9th to 13th	5 A.M. to 9 P.M.	2,460,360	16
March, .....	14th to 16th	{ 6 A.M. to 9 A.M. } { 6 P.M. to 8 P.M. }	1,537,725	10
March, .....	} 17th to 23rd	6 A.M. to 10 A.M.	1,466,464	9½
April, .....				
April, .....	24th to 30th	7 A.M. to 10 A.M.	1,431,048	9½

23. It will be seen from the foregoing that the minimum supply during the period of scarcity was an average of  $9\frac{1}{2}$  gallons per head per diem, more than ample to meet the ordinary domestic necessities of the population.

24. In appendices *A* and *B* will be found detailed information respecting the water supplied by the reservoirs and streams during the dry periods of 1892–1893 and 1890–1891. The particulars speak for themselves and are conclusive evidence of the absurdity of a story that has found some credence to the effect that there is a serious leakage through the Tytam Dam.

25. *Maintenance of Sewers.*—The sewers throughout the Colony have been maintained in a satisfactory condition without any exceptional expenditure being incurred.

26. *Lighting of City of Victoria and Kowloon.*—The lighting contracts have been satisfactorily carried out by the Gas and Electric Companies in their respective areas.

27.—*Maintenance of Public Recreation Ground.*—The Public Recreation Ground has been maintained at a small cost.

28.—*Land Survey Branch.*—During the year, five land sales have taken place, the area leased being 14,880 square feet, and 45 lease plans have been forwarded to the Land Office. In addition to the above, plans and particulars of leases have been sent to the Land Office for the preparation of the leases recommended by the Squatters Board in respect of the village of Aberdeen.

29. Surveys of the Villages of Ah-kung-ngam, Shaukiwan (East and West), Fuk Tsun Heung and Mongkok, have been completed.

30. *Inspection of Buildings.*—During the current year, plans for 9 European houses, 15 Chinese houses, 20 miscellaneous structures, and 78 for alterations to existing buildings have been deposited.

One hundred and fifteen buildings have been certified under Section 53 of Ordinance 15 of 1889.

Permission has been granted to erect seven verandahs and two Piers over Crown Land.

Notices have been issued to remove or repair dangerous structures in 39 instances and to remove verandah enclosures in one.

Three hundred and ninety-five miscellaneous notices and permits have been issued.

#### EXTRAORDINARY PUBLIC WORKS.

31. *The Central Market.*—Considerable progress has been made with this building during the last six months. The walls have been carried up to an average height of 8 feet above the first floor level, and all the girders and flooring plates fixed.

32. *Contribution to Reclamation in front of Marine Lots 95–8 and 105.*—This work was completed last year and the expenditure incurred during the present year is the balance due under the contract. All liabilities on account of the construction of this work have now been discharged.

33. *Training Albany Nullah and Branches.*—The extension named in my last annual report has been completed.

34. *Slaughter House, Pig and Sheep Depôts, Kennedy Town.*—Detail plans and estimates were laid before and approved by the Public Works Committee on the 8th March last and adopted by the Council. A contract has been entered into, C.S.O.  $\frac{2220}{1892}$ , with Messrs. CHAN A TONG & Co.; the whole of the foundations have been completed and the walls of the several blocks carried up to an average height of about two feet.

35. *Kowloon New Roads.*—The construction of this work was unfortunately delayed during the early part of this year but was recommenced in April last and satisfactory progress has since been made towards its completion.

36. *New Water Mains.*—A small expenditure has been incurred under this heading in relaying the pipes from the North East corner of Happy Valley to the East Point Refinery.

37. *Sewerage of the City of Victoria.*—The sewerage works in Districts Nos. 1 W., 2 W. and 3 W. have been completed with the exception of a short length which is awaiting the completion of the Storm Water Drain in Eastern Street.

38. *Water Supply Kowloon.*—Details, Drawings and Estimates have been prepared for the carrying out of this scheme and subject to the recommendation of the Public Works Committee and the approval of Council it is proposed to commence the work very shortly.

39. *Extension of MacDonnell and Austin Roads, Kowloon.*—Detail plans and estimates of this work including the lowering of a portion of Station Street, Yau Ma Ti, were laid before and approved by the Public Works Committee at a meeting held on the 25th of May last, and adopted by Council. The contract is now being prepared and the work will shortly be proceeded with.

40. *Cattle Dépôt, Kowloon Peninsula.*—Plans have been prepared for the construction of a Cattle Dépôt in Kowloon Peninsula in close proximity to the existing Slaughter House as recommended by the Sanitary Board. These plans were approved by the Public Works Committee at a meeting held on the 5th of April last and adopted by Council. It is proposed to proceed with this work early next year.

41. *Proposed Works.*—Plans and Contracts are being prepared for an extension to the Volunteer Quarters, for the extension and improvement of the Victoria Gaol, and for the reconstruction of the Government Piers interfered with by the Praya Reclamation.

#### PRAYA RECLAMATION WORKS.

42. *Section 1 Eastern Portion.*—A contract  $\frac{18}{1893}$  has been entered into with Mr. CHAN A TONG to level and concrete the rubble foundations on a length of 930 feet, ready for the reception of the concrete blocks. This work is proceeding fairly satisfactorily.

43. *Section No 2.*—13,630 Cubic yards of filling have been deposited under contract  $\frac{18}{1892}$ , 764 lineal feet of the rubble foundations levelled and concreted ready to receive the concrete blocks, 736 lineal feet of the first course and 589 lineal feet of the second course of concrete blocks set.

The reconstruction of the storm water drain in Queen's Road, Eastern and Centre Streets, Contract No.  $\frac{18}{1892}$ , has proceeded very slowly, and some difficulty has been experienced with the contractor. Satisfactory progress has been made with the removal of the old Praya Wall.

44. *Section No. 3.*—82,201 Cubic yards of filling has been deposited in this section. A contract No.  $\frac{17}{1893}$  has been entered into with Mr. TSANG KENG for levelling and concreting the rubble foundations of the eastern portion (720 lineal feet); and this work is proceeding satisfactorily.

45. *Section No. 7, Eastern Portion.*—A contract P.W.D. No.  $\frac{18}{1893}$  has been entered into with Mr. CHAN A TONG, for the construction of the necessary sewers, and arrangements are being made to lay the necessary water and gas pipes; after which, concreting, kerbing and channelling the roads will be proceeded with, and this portion completed.

The widening of the street east of the City Hall, and the construction of the boundary wall to the Cricket Ground have been practically completed.

The pier at the end of Ice House Lane has not yet been commenced owing to the loss of the timber at sea on its way from Manila.

#### STAFF.

46. During the year Mr. A. M. QUILL, on the expiration of his agreement in February last, resigned and his duties have since been discharged by Mr. CROOK with the assistance of Mr. BAMSEY, who was appointed draftsman on Mr. QUILL's retirement, C.S.O.  $\frac{297}{1893}$ , C.O.D.  $\frac{268}{1892}$ , and C.O.D.  $\frac{27}{1893}$ .

47. Mr. A. H. RENNIE returned from leave on the 3rd of March, C.S.O.  $\frac{1912}{1893}$ .

Mr. MALSCH left on the 20th of February on nine months leave of absence, C.S.O.  $\frac{30}{1893}$ , and his duties have been performed by Mr. PROSSER.

Mr. MUDIE left on the 3rd April on six months leave and his duties have been performed by Mr. BOULTON, C.S.O.  $\frac{2572}{1893}$ .

Mr. THOMPSON, Overseer of Cemetery, was granted two months leave from March the 6th, C.S.O.  $\frac{450}{1893}$ , and Mr. CARROL six months leave from the 1st of April, C.S.O.  $\frac{548}{1893}$ , their duties being undertaken by Mr. ALMEIDA and Mr. MASON.

Mr. SING QUA was granted one month's leave from June the 5th, C.S.O.  $\frac{1160}{1893}$ .

48. I regret to have to report that Mr. KING, C.S.O.  $\frac{219}{1893}$ , was absent for ten weeks from the 22nd of December last on account of sickness, and that the Chinese foreman FU LUNG died in January last.

#### EXPENDITURE.

49. I attach Statements shewing expenditure to the 30th of June on account of Annually Recurrent and Extraordinary Public Works and also on account of the Praya Reclamation.

I have the honour to be,

Sir,

Your most obedient Servant,

FRANCIS A. COOPER,  
*Director of Public Works.*

The Honourable

THE COLONIAL SECRETARY.

## Appendix A.

## HONGKONG WATER WORKS, 1892-1893.

DATE.	POKFULAM.			DATE.	TYTAM.			RAINFALL.	
	Quantity in Reservoir.	Discharged into Tunnel.	Collected from Streams.		Quantity in Reservoir.	Discharge into Tunnel.	Collected from Streams.	During Period.	Average of last 30 Years.
October 5th, 1892,...	<i>gallons.</i> 66,380,000	<i>gallons.</i> 15,336,000	<i>gallons.</i> 4,600,000	October 6th, 1892,...	<i>gallons.</i> 312,000,000	<i>gallons.</i> 45,650,000	<i>gallons.</i> 13,000,000	<i>inches.</i> 0.02	<i>inches.</i> 5.36
November 1st, 1892,...	60,550,000	16,088,000	2,089,600	November 1st, 1892,...	281,000,000	59,454,000	12,276,832	0.34	1.17
December 1st, 1892,...	52,800,000	17,336,000	693,000	December 1st, 1892,...	236,000,000	59,999,400	13,227,165	0.51	1.00
January 1st, 1893,...	39,800,000	16,143,000	454,000	January 1st, 1893,...	164,000,000	60,175,000	10,382,000	1.53	0.98
February 1st, 1893,...	29,400,000	15,904,000	Included in Tytam	February 1st, 1893,...	102,000,000	54,008,000	9,418,000	0.46	1.32
March 1st, 1893,...	16,300,000	12,970,000	1,393,000	March 1st, 1893,...	46,000,000	39,976,000	6,520,000	3.39	3.24
April 1st, 1893,...	8,700,000	10,941,000	3,031,000	April 1st, 1893,...	14,000,000	24,125,000	7,175,000	3.03	5.27
April 28th, 1893,...	5,000,000			April 28th, 1893,...	5,000,000				
Total,.....		104,718,000	12,260,600			343,387,400	71,998,997	9.28	18.34

Period—206 days.

Period—205 days.

## Appendix B.

## HONGKONG WATER WORKS, 1890-1891.

DATE.	POKFULAM.			DATE.	TYTAM.			RAINFALL.	
	Quantity in Reservoir.	Discharged into Tunnel.	Collected from Streams.		Quantity in Reservoir.	Discharged into Tunnel.	Collected from Streams.	During Period.	Average of last 30 Years.
September 9th, 1890,...	<i>gallons.</i> 66,330,000	<i>gallons.</i> 12,078,000	<i>gallons.</i> .....	August 22nd, 1890,...	<i>gallons.</i> 312,000,000	<i>gallons.</i> 19,048,000	<i>gallons.</i> .....	<i>inches.</i> .....	<i>inches.</i> .....
October 1st, 1890,...	61,123,000	17,064,000	.....	September 1st, 1890,...	308,750,000	55,667,000	.....	1.94	12.65
November 1st, 1890,...	50,549,000	12,960,000	.....	October 1st, 1890,...	281,933,000	50,322,000	.....	0.02	5.36
December 1st, 1890,...	39,949,000	12,323,000	.....	November 1st, 1890,...	235,730,000	50,280,000	9,160,000	0.01	1.17
January 1st, 1891,...	31,906,000	9,709,000	893,000	December 1st, 1890,...	187,100,000	51,792,000	10,838,000	1.37	1.00
February 1st, 1891,...	22,331,000	8,770,000	806,000	January 1st, 1891,...	130,000,000	49,988,000	14,658,000	0.04	0.98
March 1st, 1891,...	14,910,000	10,303,000	299,000	February 1st, 1891,...	77,237,000	37,301,000	6,272,000	0.24	1.32
April 1st, 1891,...	12,000,000	9,396,000	864,000	March 1st, 1891,...	37,900,000	29,177,000	4,524,000	2.67	3.24
May 1st, 1891,...	4,085,000	626,000	6,000	April 1st, 1891,...	14,625,000	21,189,000	7,793,000	3.24	5.27
May 3rd, 1891,...	3,000,000			May 1st, 1891,...	4,250,000	1,028,000	1,000,000	.....	.....
Total,.....		98,229,000	2,868,000	May 3rd, 1891,...	4,250,000				
					365,792,000		54,245,000	9.53	30.99

Period—237 days.

Period—255 days.

## HONGKONG, PUBLIC WORKS DEPARTMENT.

*Statement of Expenditure to 30th June, 1893.*

## ANNUALLY RECURRENT.

WORK.	EXPENDITURE DURING 1893 TO 30TH JUNE.	
	\$	c.
Personal Emoluments, .....	30,366.06	
Other Charges, .....	4,227.76	
	<b>\$</b>	<b>34,593.82</b>
Repairs to Buildings, .....	13,170.69	
Maintenance of Telegraphs, .....	3,173.74	
"    Public Cemetery, .....	208.87	
"    Praya Wall and Piers, .....	466.25	
"    Lighthouses, .....	212.77	
"    Disinfecter, .....	.....	
Dredging Foreshores, .....	1,206.79	
Miscellaneous Works, .....	2,711.96	
Maintenance of Roads and Bridges in Victoria, .....	10,278.21	
"    "    "    out of Victoria, .....	4,669.85	
"    "    "    in Kowloon, .....	5,716.57	
Maintenance of Water Works, .....	2,906.61	
"    Sewers, .....	1,123.07	
Miscellaneous Services, .....	635.75	
Gas Lighting, City of Victoria, .....	11,398.00	
Electric Lighting, City of Victoria, .....	11,231.14	
Gas Lighting, Kowloon, .....	1,353.60	
Maintenance of Public Recreation Ground, .....	167.55	
	<b>\$</b>	<b>70,631.42</b>

## HONGKONG, PUBLIC WORKS DEPARTMENT.

*Statement of Expenditure to 30th June, 1893.*

## EXTRAORDINARY PUBLIC WORKS.

WORK.	EXPENDITURE.		TOTAL.
	Prior to 1893.	During 1893.	
	\$	\$	\$
	c.	c.	c.
Central Market, .....	97,905.52	47,276.59	145,182.11
Contribution to Reclamation in front of Marine Lots 95-8 and 105, .....	5,525.00	6,000.00	11,525.00
Training Albany Nullah and Branches, .....	29,353.46	1,777.65	31,131.11
Improvements, Recreation Ground, Happy Valley, .....	15,979.16	.....	15,979.16
Slaughter House, Pig and Sheep Depôts, .....	28,867.61	3,337.95	32,205.56
Kowloon New Roads, .....	5,680.52	8,903.73	14,584.25
* Reconstruction of Governor's Peak Residence, .....	1,975.52	.....	1,975.52
New Water Mains, .....	164,023.66	1,415.75	165,439.41
Sewerage, City of Victoria, .....	140,449.09	27,624.84	168,073.93
Water Supply, Kowloon, .....	8,869.18	114.15	8,983.33
	<b>498,628.72</b>	<b>96,450.66</b>	<b>595,079.38</b>

\* This expenditure was on account of rent for "Craigieburn."

## HONGKONG, PUBLIC WORKS DEPARTMENT.

Statement of Expenditure to 30th June, 1893.

## PRAYA RECLAMATION WORKS.

WORK.	EXPENDITURE.		TOTAL.
	Prior to 1893.	During 1893 to 30th June.	
	\$ c.	\$ c.	\$ c.
<i>Lotholders,—</i>			
Section No. 1, .....	92,939.62	12,472.13	105,411.75
Section No. 2, .....	140,080.70	14,864.55	154,945.25
Section No. 3, .....	184,286.88	17,039.22	201,326.10
Section No. 4, .....	16,686.28	803.40	17,489.68
Section No. 5, .....	28,407.25	1,398.11	29,805.36
Section No. 6, .....	50,176.69	2,187.03	52,363.72
Section No. 7, .....	131,531.32	4,939.61	136,470.93
<i>Government,—</i>			
Section No. 4, .....	2,518.17	123.92	2,642.09
Section No. 5, .....	8,152.01	403.02	8,555.03
Section No. 6, .....	4,275.29	210.02	4,485.31
Section No. 7, .....	191,862.51	6,842.46	198,704.97
Total,.....\$	850,916.72	61,283.47	912,200.19