

- (1) பக்கங்களின் எண்ணிக்கை 52
 (2) புதுக்கித் திருப்பிய நாள் 190
 (3) ஆதாரங்குறிப்பவர் கருக்கொப்பம் 10/6

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

பெருந்திணைத் துறை

அரசாணை எண். மு. கோப்புத் தாள் எண்.	1677(w)	அச்சகம் பலவகை
நாள் :	17-6-1890.	198 .

26

மடிக்கலோ கண்டபடி கையாளலோ கூடாது

சே. 6

1677
1
17TH JUNE 1890, No. 1677 W., PUBLIC WORKS.

GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

READ—the following paper :—

From G. McWATTERS, Esq., M.A., C.S., Chairman, Harbour Trust Board, to the Chief Secretary to Government, Marine Department, dated Madras, 29th May 1890, No. 2070.

I have the honor to submit, herewith, for the information of Government, copy of a letter from the Board's Engineer, together with a statement and plan (in duplicate), showing the progress made upon the Madras Harbour Works during the month of April 1890.

ENCLOSURES.

From A. L. POGSON, Esq., Engineer, Harbour Trust Board, to the Chairman, Harbour Trust Board, dated Madras, 12th May 1890, No. 143.

I have the honor to forward, herewith, a lithographed plan and the statement showing progress made during the month of April 1890.

(Signed) A. L. POGSON,
Engineer, Harbour Trust Board.

MADRAS,
8th May 1890.

Transferred to the Public Works Department.

(Signed) J. F. PRICE,
Chief Secretary

Ootacamund,
9th June 1890.

ORDER—dated 17th June 1890, No. 1677 W., Public Works.

Recorded.

(True Extract.)

Captain, R.E.,

Under-Secy. to Govt., P.W.D.

To the Chairman, Madras Harbour Trust Board.
Marine Department.

Exd. A. Aubert.
Spare Copies

BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1890} Madras.
PUBLIC WORKS.

Dated June, 17th.

Recd.

Encl.

G.O., 17th June 1890, No. 1677 W.

JUNE.

Madras Harbour Works

Progress report of the — for the month
of April 1890, recorded.

From The Engineer
Harbour Trust Board

To The Chairman
Harbour Trust Board
Madras

Madras 12th May 1890

Sir

I have the honour to forward
herewith a Lithographed Plan
and the statement showing progress
made during the month of April 1890.

I have the honour to be
Sir
Yours most obed^t. Serv^t.
(Signed) A. Lee Popson
Engineer H.M.B.

(True Copy)



Assistant

Secretary

Harbour Trust Board

620 503
Harbour Trust Board Office.

MADRAS, 29th May 1890.

No. 2070

FROM

Geo. W. Hatter Esq. M.A.

CHAIRMAN, HARBOUR TRUST BOARD,

MADRAS.

TO

The Honble J. F. Price C.S.

CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

Sir

I have the honour to submit
herewith for the information of
Government copy of a letter from
the Board's Engineer together
with a statement and plan
(in duplicate) showing the
progress made upon the Madras
Harbour Works during the
month of April 1890.

I have the honour to be

Sir

Your most obedient servant

G. W. Hatter

T.W. No 5601.

40-503

MARINE DEPARTMENT.

4

See 5th volume
(under 500)

FROM

THE CHAIRMAN,

HARBOUR TRUST BOARD,

MADRAS.

TO

THE CHIEF SECRETARY TO GOVERNMENT,

Marine Department.

DATED 29th

RECEIVED 31

May 1890

ENCLOSURE 5(4)

No.

2040

31 MAY 90

SUBJECT.

Submitting for the in-
formation of Government
copy of letter from Board
Enquirer together with
a statement of the ^{in duplicate} ~~same~~ ^{made} ~~made~~
showing progress upon
Madras Harbour Works
for the month of April 1890

Transferred to the Public

Works Department

Hedrickshire

Chief Secretary

Macamund
June 1890

Recd 10-6-90

14-6-90

16/6

BTR
civil works

No. 1677 w.d. 17 June 1890

Recorded.

Recd
10-6-90

Ch. In. A. T. B. D.

Marine Dept

S. O. No. 1525 w.d. 30-V-90
1047 w.d. 2-4-90

PROGRESS STATEMENT No.

MADRAS HARBOUR WORKS

RECEIVED
13 MAY 90

Statement showing Progress during

April 1890

shown on accompanying Lithographed Plan No. 4

No. of Item	Particulars and Quantity of Work, &c	Sub-heads of Work	North Pier—Rubble Base.	Do.—Superstructure.	Do.—Wavebreaker.	Do.—Concrete Capping.	Do.—Base Protection.	Palladium Quays (Return)	Concrete Blockwork.	Railway Lines at Works.	Do. at Quarries.	Do. Sand Lime.	Do. Beach Improvements.	Protective Works	Total Expenditure in April 1890
1	Rubble Stone deposited from boats	Tons	1166 1/2												
2	Do. from barges	"	203 1/2												
3	Total quantity Rubble Stone received on Works														
4	Do. Blasted Cliffs														
5	Do. Large Stones														
6	Concrete Blocks—Set by Divers	Number	4												
7	Do. Deposited in Way, checkered														
8	Do. made for Superstructure														
9	Do. do. War														
10	Wrought Iron cramp fixed in position														
11	Total out-turn of Concrete														
12	Advance or progress of work	Cubic yards.													
13	Rubble Base protected with	Sq. feet													
14	Netting Gauge, 40 lbs. per yard laid new														
15	Do. do. relaid or renewed														
16	Do. do. taken up														
17	Brass Gauge, 50 lbs. per yard laid new														
18	Do. do. relaid or renewed														
19	Do. do. taken up														
20	Titan Gauge, 75 lbs. per yard laid new														
21	Do. do. relaid or renewed														
22	Do. do. taken up														
23	Approximate Expenditure under Sub-heads of Work	Rupies	3 1/2 5551 1284												

Column	5	Casks of Cement received on Works during	April 1890	containing	Urea	Qrs.	lbs.	Quantity due of	Indents.	Tons	Cwts.	Qrs.	lbs.
A	155 1/2	Do. do. issued for	"	do.	17	3	12						
B	14540 1/2	Do. do. Balance in Store at end of	"	do.	30	3	1-10						
C	Rev. No 142	Do. do. Work during April consisted in protecting the walls of Superstructure with debris blocks, fixing all iron bramps and with drawing the bramps from the Piers by the Titan Gauge had completed the Wavebreaker protection and was hauled safely by the wining of the 27 of April.	"	do.	3002	11	2-19						

Dated 20th September 1889 = 2054 - 10 - 3 - 12.

The Rubble shipped from wagons was required to make the Rubble Base up to the required Section. Work during April consisted in protecting the walls of Superstructure with debris blocks, fixing all iron bramps and with drawing the bramps from the Piers by the Titan Gauge had completed the Wavebreaker protection and was hauled safely by the wining of the 27 of April.

2862 Tons of Rubble Stone was deposited at the South Pier to make up the Base and 10529 feet of the South Pier Sheet was built in oil. The Titan Gauge was hauled on dropped into the Wavebreaker to protect the pier as made to the Superstructure since the middle of February 1890. On the 27 of April the protection was complete and on the 28th morning both bramps were brought to the pier.

The protection to the Rubble Base made good progress during the month and with fine weather looks, but as a precautionary measure against by-lanes the 10 Tons of bramps were very moving.

MADRAS, 8th May 1890

Chief Engineer, Harbour Trust Board.

M.

Plan accompanying Project

N.

9 Fathoms

9

8 1/2

8

7 1/2

6 1/2

Site March 1890



H.W.

is Statement, April 1890.

4

82

31st March 1890

31st March 1890

G

8

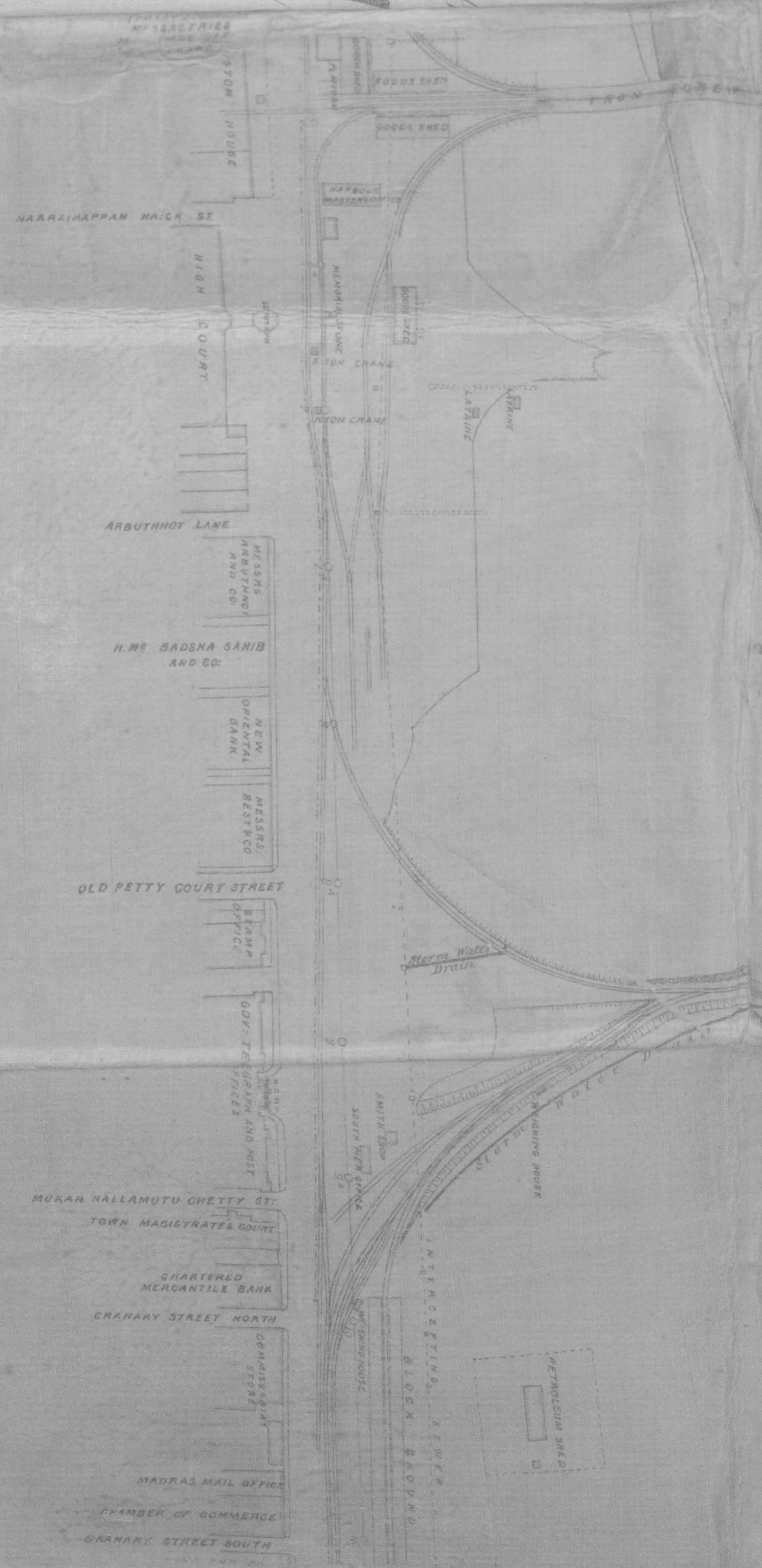
62

9 Pullman

Scale 200 feet - 1 inch.

0 500 1000 1500 2000 Feet

Depth in De Havilland's Mean Sea level in September 1889.



South Pier Tides
30 April 1890
High Water 30th September 1889.
H.W. 30th April 90

High Water 30th September 1889.
H.W. 30th April 90

Adelphi
Engineer,
Harbour Trust Board

H.W.

Statement, April 1890.

4

82

9 Fathoms

8 1/2

8

7 1/2

7

6 1/2

6



9 Fathoms

M.

Plan accompanying Progre.

8 1/2

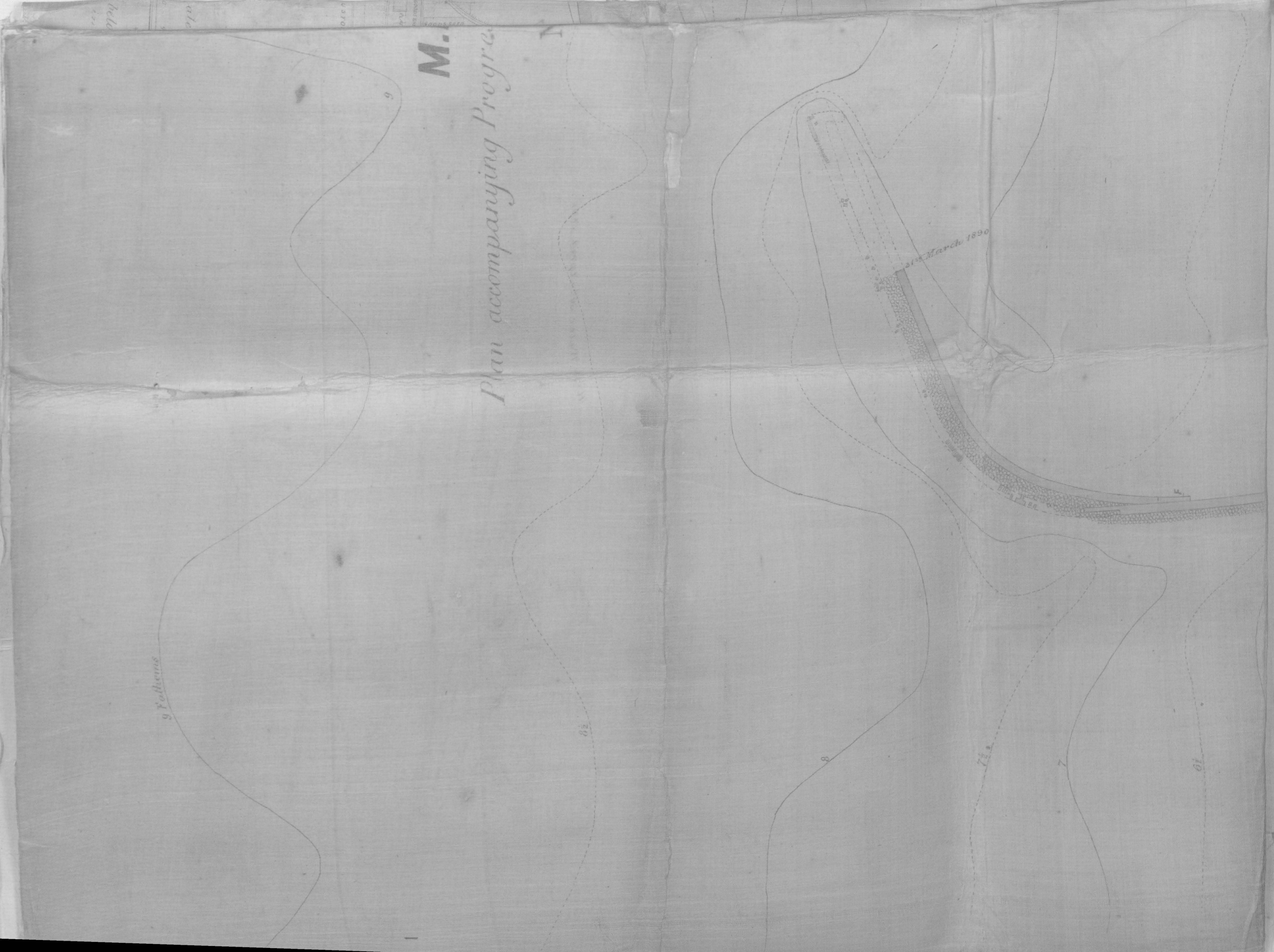
8

7 1/2

7

6 1/2

31st March 1890



5601.

Govt. of Madras.

PUBLIC WORKS.

19/6

to 17th June 1900

Madras Harbour Works

Progress Report
for the month of
April 1900, Records

70
4

2/7/01