BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1896} Madras.

PUBLIC WORKS.

Dated January, 23rd.

Recd. *Encl.*

G.O. No. 278 W., 23rd Jan. 1896.

JANUARY.

Quarters

Ordered that the sanction of the Government of India to the construction of — for the Assistant Superintendent of Police at Narasapatnam in the Vizagapatam district, at an estimated cost of Rs. 6,500, be applied for.

---

351 & 15/1/96

Govt. of 18 96. Madras.

PUBLIC WORKS.

Dated Print as usual

Recd. *Encl.*

G.O. 23/1/1896. No. 280 W

Pier at Tuticorin

—

[illegible] estimate of Rs.
6,000 for constructing
— and for the re-
[illegible]ation of the fore-
[illegible]re, sanctioned with
[illegible]arks & the excess provision
Rs. 15,615 for the work
[illegible]laced at the disposal
the Financial Dept.

—

Total Rs.	24,041
Charge~~s~~ for Establishment, at 23%--------	5,529
-Do- Tools & Plant at 1½ %	361
Total	29,931
Estimated cost of the Pier and other works.	1,61,959
Establishment at 5% on above	8,098
Total	1,70,057
Grand Total Rs.	1,99,988

Estimate for the ... the reclamation of the foreshore at Tuticorin.

Print urgent

3. The expenditure on the work to the end of 1894-95 was Rs.97,631 or Rs.1,02,512 inclusive of the percentage for Establishment, and the current years allotment is Rs. 1,13,091.x The expenditure and the allotment amount to Rs.2,15,603 against the estimated cost of the project, viz, Rs.1,99,988. There is thus an excess provision of Rs. 15,615 which will be withdrawn and replaced at the disposal of the Financial Dept., as shown below:-

x Works----------	106000
Establishment	6866
Tools & Plant.	225
	113091

Surrender from Works ---	17,631
Deduct balance of the charge for Establishment still due.------------------	-1,880
-Do- Tools & Plant -do-	-136
	15,615

4. Attention is drawn to para 2 of the Chief Engineer's note recorded above.

5. The sanction accorded in para 1 has been registered as Excluded Local No. 17 W. of 1895-96 and classified as Miscellaneous Public Improvements, Original Works.

18/1/96

The Suptg. Engineer VI Circle, with ~~a~~ enclosures (9)
,, Examiner, P.W. Accounts.
,, Marine Department.
,, Financial Department.

PUBLIC WORKS DEPARTMENT.

No 280 W. 23d January 1896.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

From the Suptg. Engineer, VI Circle, No. 288 T.N., dated 7th July 1895.

-Do- 588 Executive Engineer, Tinnevelly Dn., No. 57, dated 9th January 1896.

Note by the Chief Engineer, P.W. Department, dated 18th January 1896.

6 P

The revised estimate, amounting to Rs. 1,86,000, for constructing a new pier at Tuticorin and for the reclamation of the foreshore, is sanctioned.

2. In the case of the pier, the charge for Establishment and Tools and Plant was fixed at 5%, vide ~~G.O.~~ para 4 of G.O. No. 552 W. dated 28th February 1894. For the reclamation of the foreshore, the usual percentage of 23 for Establishment and 1½ for Tools and Plant was reckoned on those items only on which such percentages were leviable vide para 4 of G.O. No. 2327 W. dated 13th September 1894. The total cost of the project calculated accordingly will be Rs. 1,99,988 as shown below:-

W
20 Jan

	Rs.
Reclamation of foreshore.	22,778
Forming a new bank from the new pier to shore. ------	1,263
Total	24,041

(40—4,000—2-11-95.)

No. 280 W of 23rd January 1896.

P.W.Department.

C.Nos.5221 of 95,
& 351 of 1896.

Note by the
Chief Engineer, P.W.D:-

It is impossible to check certain items of work for want of details; but as the pier has been constructed, the estimate may be sanctioned.

2. The 15 ton crane should be placed on one of the girders 12"X5" instead of a girder 8" X 4", as shown on plan, which would not be strong enough to support it.

E.W.

18/1/96

Cons 7/2 96

Cu

P. W. CURRENT No. 3

Encls 3

Recd: 15-1-96

Recd by B 18/1/96

From

The Executive Engineer
Tinnevelly Division

To

The Chief Engineer
P. W. D.

No 57

Dated 9 }
Despd 9 } of January 1896

Encls: 1

Original Estimate for Reclaiming the foreshore at Tuticorin forwarding the ——

No. 211 of 21-7-90 marine ✓
No. 29 of 23-1-73 marine ✓
" 219 " 21-8-73 " ✓
" 1092 " 9-4-73 " ✓
" 2926 " 5-12-73 RW. ✓
" 1550W " 19-6-86 ✓
" 1301W " 12-5-87 ✓
" 2040W " 29-7-87 ✓
" 2406-7C " 7-5-92 ✓
" 3671C " 28-7-92 ✓
" 2622W " 21-9-92 ✓
" 4375C " 5-10-92 ✓
" 4784C " 16-11-92 ✓
" 2557W " 10-10-93 ✓
" 568D " 15-7-93 ✓
" 1013D " 9-10-93 ✓
" 1047D " 14-10-93 ✓
" 3113C " 16-9-93 ✓
" 3246C " 2-10-93 ✓
" 2794W " 2-11-93 ✓
" 2796W " 2-11-93 ✓
" 2794W " 2-11-93 ✓
" 4019C " 29-11-93 ✓
" 552W " 28-2-94 ✓
" 4176C " 6-12-93 ✓
" 165W " 18-1-94 ✓
" 552W " 28-2-94 ✓
" 14W " 8-1-94 ✓
" 840W " 29-3-94 ✓
" 922-3W " 5-4-94 ✓
" 2327W " 13-9-94 ✓
" 1645C " 24-4-95 ✓
" 3874C " 3-12-94 ✓
" 57C " 10-1-95 ✓
" 648C " 18-2-95 ✓
" 70[illegible] " 25-2-95 ✓
" 1662C " 25-4-95 ✓
" 1520W " 21-6-95 ✓
" 1946W " 6-8-95 ✓
" 3984C " 13-12-95 ✓

Tinnevelly Division Office
No: 57 9 January 1896.
379

From

G B Lambert Esquire
Executive Engineer Tinnevelly Dn

To

The Chief Engineer
Public Works Department
Madras.

Encl: 1

Sir,

With reference to your No 3984 C dated 13th December 1895 to the Superintending Engineer 6th Circle I have the honor to forward the original estimate of Rs 37500 for reclaiming the foreshore at Tuticorin called for therein.

I have the honor to be
Sir,
Your most obedient Servant

Executive Engr

P. W. CURRENT No. 5227

Encls 6 (3 plans)
Recd 9.7.95

From
The Supg Engineer
VI Circle
To The Chief Engineer
PWD

No: 288 W.
D/ 7 July 1895

Enclos: 4
No. 1520 W d/ 21-6-95
2327 W d/ 13-9-94
552 W d/ 28-2-94

New Pier at Tuticorin — Submitting for sanction an Este of Rs 186,000 for constructing a —— & reclaiming the foreshore.

O.L.S. 225

foot of the coral bund.

W. Hughes

Superintending Engineer
W. Circle

D/. 7 July 1895
D/8.

Enclosures.

1. General Plan.
1. Detailed plan of Pier
1. Plan of Fender
1. Estimate with Ex. Eo report
& sketch plans &c.

/4/

4/7

4th item provides for 8 trucks to replace the old and worn-out ones now in use. The 5th & 6th items are prices quoted by Mess. Burn & Co. The 9th and 10th are perhaps 3 Rs more than will be required but it is not safe to reduce them. The 9th item will not be required if Messrs Ralli Brothers' offer to take in exchange a portion of the foreshore is accepted. The cost of the turn-table and laying permanent siding (items 12 & 17) are estimates by the Railway officers. It seems doubtful whether the cost of removing the old pier should be debited to this estimate. If it is so debited then it would seem reasonable that the proceeds from the sale of the timber should be credited to the work. A considerable sum is allowed for contingencies as it is probable that extra sidings will be required and not impossible that some more heavy stone will be needed for protecting the

Not allowed

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intended to bring the sand by rail along the line marked on the survey as permanent line but there has been a difficulty in getting possession of some land which has to be taken up; and it has now been decided, if there is likely to be much further delay, to put in a temporary 330 feet curve and use this line until a flatter curve can be put in. Meantime as the new pier was completed and the old pier in a dangerous state it had to be arranged to bring the former into use by filling in sand supported by coral walls between it and the shore. As the sand for this has to be brought by sea the work involves an extra expense of nearly Rs 600.

3. Some of the items of the estimate require explanation. The 1st is the amount of Messrs. Burn & Co's tender accepted by Govt and the 3rd, 7th & 8th are for extra work done by them. The

4th item provides for 8 trucks to replace the old and worn-out ones now in use. The 5th & 6th items are prices quoted by Mess. Burn & Co. The 9th and 10th are perhaps more than will be required but it is not safe to reduce them. 3 Rev The 9th item will not be required if Messrs Ralli Brothers' offer to take in exchange a portion of the foreshore is accepted. The cost of the turn-table and laying permanent siding (items 12 & 17) are estimated by the Railway officers. It seems doubtful whether the cost of removing the old pier should be debited to this estimate. If it is so debited then it would seem reasonable that the proceeds from the sale of the timber should be credited to the work. A considerable sum is allowed for contingencies as it is probable that extra sidings will be required and not impossible that some more heavy stone will be needed for protecting the

Report

No: 288 TW

to accompany the revised estimate for constructing an Iron Screw Pile Pier and reclaiming Foreshore at Tuticorin.

1 Rev

In G.O. No: 552 W dated 28th February 1894, the acceptance of Messrs: Burn & Co's tender for the construction of the pier was accepted and a complete estimate called for. One was accordingly prepared in September 1894 for Rs 1,78,700 but returned by the Chief Engineer for certain revision and submission through the Presidency Port officer. There was some delay in making the revision as questions had arisen regarding the method of connecting the railway lines on the pier with those on shore, provision of a fender round the pier and some other matters and it was not until February 189[illegible] that the estimate was resubmitted. This was returned by the Chief Engineer with memo No: 1645 C dated

[illegible] to go with the Administ. Report

4th item provides for 8 trucks to replace the old and worn-out ones now in use. The 5th & 6th items are prices quoted by Mess. Burn & Co. The 9th and 10th are perhaps more than will be required but it is not safe to reduce them. The 9th item will not be required if Messrs Ralli Brothers' offer to take in exchange a portion of the foreshore is accepted. The cost of the turn-table and laying permanent siding (items 12 & 17) are estimated by the Railway officers. It seems doubtful whether the cost of removing the old pier should be debited to this estimate. If it is so debited then it would seem reasonable that the proceeds from the sale of the timber should be credited to the work. A considerable sum is allowed for contingencies as it is probable that extra sidings will be required and not impossible that some more heavy stone will be needed for protecting the foreshore

3 Pres

[illegible] allowed

Report

No: 288 TW

to accompany the revised estimate for constructing an Iron Screw Pile Pier and reclaiming Foreshore at Tuticorin.

1 Pres

In G.O. No: 552 W dated 28th February 1894, the acceptance of Messrs: Burn & Co's tender for the construction of the pier was accepted and a complete estimate called for. One was accordingly prepared in September 1894 for Rs 1,78,700 but returned by the Chief Engineer for certain revision and submission thro' the Presidency Port officer. There was some delay in making the revision as questions had arisen regarding the method of connecting the railway lines on the pier with those on shore, provision of a fender round the pier and some other matters, and it was not until February 1895 that the estimate was resubmitted. This was returned by the Chief Engineer with memo No: 1645 C dated

[illegible] the Administration Report

April 1895 with final instructions to estimate for a turn-table at the end of the pier. As now revised the estimate amounts to Rs 186,000. It provides for a pier 480 feet long with its shore end 140 feet from the present shore line. The width of the pier is 24 feet for 165 feet length, 38 feet for 270, 58 feet for the head which is 30 feet long and an intermediate width for the 15 feet length connecting the two last portions. The pier is of iron except the deck and the fender, which is fixed round all but the narrow portion. This work is completed and the rails laid but the proposals regarding cranes await sanction. The cranes most suitable for the goods usually landed or shipped are one ton cranes of which it is proposed to provide six - a 5 ton hand crane now in use on the old pier will be fitted up one side of the tee-head and it is proposed to supply a 15 ton hand crane for the other. This latter crane will be so seldom used that it is considered inadvisable to provide steam power for working it.

2 R

2. The estimate also provides for reclaiming the foreshore for a length along the shore line of 1254 feet and an average width of about 120 feet. The sea edge of the reclamation will consist of a coral stone bund faced or protected at foot with such heavy stone as is available from the old foreshore slope. Between the coral bund and the present shore sand will be filled in to a height of 4 feet above high tide level. A line of rails will be laid near the sea edge of the reclamation from the Railway station to the pier at the end of which a turn table will be fixed. The coral bund has been for the most part completed but there has been great delay in getting the sand filling done as it was

intended to bring the sand by rail along the line marked on the survey as permanent line but there has been a difficulty in getting possession of some land which has to be taken up; and it has now been decided, if there is likely to be much further delay, to put in a temporary 330 feet curve and use this line until a flatter curve can be put in. Meantime as the new pier was completed and the old pier in a dangerous state it had to be arranged to bring the former into use by filling in sand supported by coral walls between it and the shore. As the sand for this has to be brought by sea the work involves an extra expense of nearly Rs 600.

3. Some of the items of the estimate require explanation. The 1st is the amount of Messrs. Burn & Co's tender accepted by Govt and the 3rd, 7th & 8th are for extra work done by them. The

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BUILDINGS AND ROADS.
CIVIL WORKS.

Govt. of {1896} Madras.

PUBLIC WORKS.

Dated January, 23rd.

Recd. *Encl.*

G.O. No. 280 W., 23rd Jan. 1896.

JANUARY.

Pier at Tuticorin

Revised estimate of Rs. 1,86,000 for constructing a new — and for the reclamation of the foreshore, sanctioned, with remarks; and the excess provision of Rs. 15,615 for the work, replaced at the disposal of the Financial Department.

		RS.
* Works	... ...	1,06,600
Establishment	... ...	6,866
Tools and plant	... ...	225
Total	...	1,13,091

3. The expenditure on the work to the end of 1894–95 was Rs. 97,631, or Rs. 1,02,512 inclusive of the percentage for establishment, and the current year's allotment is Rs. 1,13,091.* The expenditure and the allotment amount to Rs. 2,15,603 against the estimated cost of the project, viz., Rs. 1,99,988. There is thus an excess provision of Rs. 15,615 which will be withdrawn and replaced at the disposal of the Financial Department as shown below:—

		RS.
Surrender from works	... ...	17,631
Deduct balance of the charge for establishment still due	...	— 1,880
Do. tools and plant do.	... ...	— 136
Total	...	15,615

4. Attention is drawn to paragraph 2 of the Chief Engineer's note recorded above.

5. The sanction accorded in paragraph 1 has been registered as Excluded Local No. 17 W. of 1895–96, and classified as Miscellaneous Public Improvements—Original Works.

(True Extract.)

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

To the Superintending Engineer, VI Circle, with ~~eight~~ 9 enclosures.
„ Examiner, Public Works Accounts.
„ Marine Department.
„ Financial Department.

Exd. T. K. Narayana Aiyangar.
Spare Copies

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3. Some of the items of the estimate require explanation. The first is the amount of Messrs. Burn and Co.'s tender accepted by Government, and the 3rd, 7th and 8th are for extra work done by them. The 4th item provides for eight trucks to replace the old and worn-out ones now in use. The 5th and 6th items are prices quoted by Messrs. Burn and Co. The 9th and 10th are perhaps more than will be required, but it is not safe to reduce them. The 9th item will not be required if Messrs. Ralli Brothers' offer to take in exchange a portion of the foreshore is accepted. The cost of the turn-table and laying permanent siding (items 12 and 17) are estimates by the railway officers. It seems doubtful whether the cost of removing the old pier should be debited to this estimate. If it is so debited, then it would seem reasonable that the proceeds from the sale of the timber should be credited to the work. A considerable sum is allowed for contingencies as it is probable that extra sidings will be required and not impossible that some more heavy stone will be needed for protecting the foot of the coral bund.

(Signed) W. HUGHES,
Suptg. Engr., VI Circle.

7th July 1895.

From the Executive Engineer, Tinnevelly Division, dated 9th January 1896, No. 57.

Note by the Chief Engineer, Public Works Department.

It is impossible to check certain items of work for want of details; but as the pier has been constructed, the estimate may be sanctioned.

2. The 15-ton crane should be placed on one of the girders 12″ × 5″ instead of a girder 8″ × 4″ as shown on plan, which would not be strong enough to support it.

(Signed) D. McNEIL CAMPBELL, Lt.-Col., R.E.,
Chief Engineer, P.W.D.

18th January 1896.

Order—No. 280 W., dated 23rd January 1896.

The revised estimate, amounting to Rs. 1,86,000, for constructing a new pier at Tuticorin and for the reclamation of the foreshore, is sanctioned.

2. In the case of the pier, the charge for establishment and tools and plant was fixed at 5 per cent. (*vide* paragraph 4 of G.O. No. 552 W., dated 28th February 1894). For the reclamation of the foreshore, the usual percentage of 23 for establishment and $1\frac{1}{2}$ for tools and plant was reckoned on those items only on which such percentages were leviable (*vide* paragraph 4 of G.O. No. 2327 W., dated 13th September 1894). The total cost of the project calculated accordingly will be Rs. 1,99,988 as shown below:—

		RS.
Reclamation of foreshore	... ...	22,778
Forming a new bank from the new pier to shore	... ...	1,263
Total	...	24,041
Charge for establishment at 23 per cent.	... ...	5,529
„ for tools and plant at $1\frac{1}{2}$ per cent.	... ...	361
Total	...	29,931
Estimated cost of the pier and other works ...	... ...	1,61,959
Establishment at 5 per cent. on above	... ...	8,098
Total	...	1,70,057
Grand total	...	1,99,988

No. 280 W., 23rd January 1896.

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

Buildings and Roads.
Civil Works.

Read—the following papers:—

No. 288 T.N.

Report to accompany the revised estimate for constructing an iron screw pile pier and reclaiming foreshore at Tuticorin.

In G.O. No. 552 W., dated 28th February 1894, the acceptance of Messrs. Burn and Co.'s tender for the construction of the pier was accepted and a complete estimate called for. One was accordingly prepared in September 1894 for Rupees 1,78,700, but returned by the Chief Engineer for certain revision and submission through the Presidency Port Officer. There was some delay in making the revision, as questions had arisen regarding the method of connecting the railway lines on the pier with those on shore, provision of a fender round the pier and some other matters, and it was not until February 1895 that the estimate was resubmitted. This was returned by the Chief Engineer with memo. No. 1645 C., dated 24th April 1895, with final instructions to estimate for a turn-table at the end of the pier. As now revised, the estimate amounts to Rs. 1,86,000. It provides for a pier 480 feet long with its shore end 140 feet from the present shore line. The width of the pier is 24 feet for 165 feet length, 38 feet for 270, 58 feet for the head which is 30 feet long, and an intermediate width for the 15 feet length connecting the two last portions. The pier is of iron except the deck and the fender, which is fixed round all but the narrow portion. This work is completed and the rails laid, but the proposals regarding cranes await sanction. The cranes most suitable for the goods usually landed or shipped are one-ton cranes, of which it is proposed to provide six; a 5-ton hand crane now in use on the old pier will be fitted up one side of the tee-head and it is proposed to supply a 15-ton hand crane for the other. This latter crane will be so seldom used that it is considered inadvisable to provide steam power for working it.

2. The estimate also provides for reclaiming the foreshore for a length along the shore line of 1,254 feet and an average width of about 120 feet. The sea edge of the reclamation will consist of a coral stone bund faced or protected at foot with such heavy stone as is available from the old foreshore slope. Between the coral bund and the present shore sand will be filled in to a height of 4 feet above high tide level. A line of rails will be laid near the sea edge of the reclamation from the railway station to the pier at the end of which a turn-table will be fixed. The coral bund has been for the most part completed, but there has been great delay in getting the sand filling done as it was intended to bring the sand by rail along the line marked on the survey as permanent line, but there has been a difficulty in getting possession of some land which has to be taken up; and it has now been decided, if there is likely to be much further delay, to put in a temporary 330 feet curve and use this line until a flatter curve can be put in. Meantime, as the new pier was completed and the old pier in a dangerous state, it had to be arranged to bring the former into use by filling in sand supported by coral walls between it and the shore. As the sand for this has to be brought by sea, the work involves an extra expense of nearly Rs. 600.

F/21 1,000 6-12-95.

Govt. of {1896} Madras.

REVENUE.

5 Rev: 17.1.9

284

No. 284 W of 23rd janua

To

The Public Works Dept

Dated }
Recd. } Encl.

Mis. R. G.O., 15th Jany. 1896, No. 146.

Subject.

Stating that plans and timates for constructing a new luk Cutcherry at Koilkuntla should be prepared.

30. 12. 95 No. 4190 c
24. 7. 94 - 1849 W
7. 7. 94 - 1707 W
2. 5. 93 - 1186 W
20. 12. 92 - 3482 W
1. 11. 92 - 3003 W
18. 10. 92 - 2906 W
17. 5. 78 - 2115 W

Communicate with reference to letter No. 2834 d 6th December 1895, to Sup. Engr. IV C who will arr to have plans estimates prep for a new talu at Koilkuntla site being selected in communication the Collector

18/1/96

~~with plans~~

Rev Dept.

Revenue Department.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read the following Endorsement of the P. W. Department No. 4190, (C) dated 30th December 1895on letter from the Superintending Engineer, III Circle, Bellary forwarding a report on the condition of Koilkuntla Taluk Cutcherry:---

Referred to the Revenue Department for orders whether plans and estimates for a new taluk office shall be called for. If so, the Superintending Engineer will be directed to select a site in communication with the Collector.

Order thereon, 15th January 1896, No. 146 Misc.

Plans and estimates for a new Cutcherry should be prepared.

(True Extract)

Lionel Davidson

Ag. Under Secretary to Gov

To the Public Works Department, with Enclosures.
Copy " Board of Revenue, Land Revenue.

---

and it certainly is not so now.

Some of the cracks that were plastered

ey

ffected by atmospheric changes, there ill be no danger and my belief will be orroborated if it is found that the lower as stood intact owing to having deep foundations. As a further safeguard, the new building might be made one-toried with a Mangalore tiled roof. If this course is adopted a site can be found within 1/2 mile. The great depth of the foundations will cost a considerable sum, but there will be a saving on the carriage of old materials from the present Cutcherry.

I have the honour to be,
Sir,
Your most obdt. Servt.

8WE1
478/8

J. McL. Campbell Lt. Col. R.E.
Superintending Engineer,
III Circle.

H.
5/12/95.

intended to bring the sand by—

about 1 1/2 miles from the present Cutch on the road to Bheemanipad.

2nd Field No: 457 in Joladarasi vill which is on the Nandyal side of the Koundair river. I have inspected both sites and from an Engineering point of view, I consider No: 1 to be the better as good rock can be got to build on and though there is rock at No: 2, it is doubt if it is continuous and seems a good mixed with rubbish; as regards facilities for carrying on work, it is a matter for the Revenue authorities to decide which is the best site.

14. Both sites seem to me to be very in-convenienlly situated, and I am inclined to think that it would be safe to build the new Cutchery on soil similar to that on which the present one stands, the foundations being taken down much deeper, 5' on 5' of concrete, in all 10' instead ow 1' concrete as at present. The

The foundations are b

Copy

and it certainly is not so now.

Some of the cracks that were plastered up years ago, have got no worse while some have opened out considerably and numerous fresh ones have appeared — varying from $\frac{1}{16}$" to 3" in width

12. In Mr. Pereira's report he states that the walls are out of the perpendicular and I tested them and found the deflec-tion hardly perceptible. In all previous reports it is stated that the walls have sunk vertically so that this splaying out can only have occurred since the Mangalore tiled roof was put on, and this should theoretically not have had that effect.

Sites for new cutchery

13. All the soil for 1 1/2 miles distant is either similar to that on which the present building is standing or else black cotton so that if a solid foundation is required only two sites are available for the new building.

1st In a field No: 31 of Koilkuntla.

about

posed to

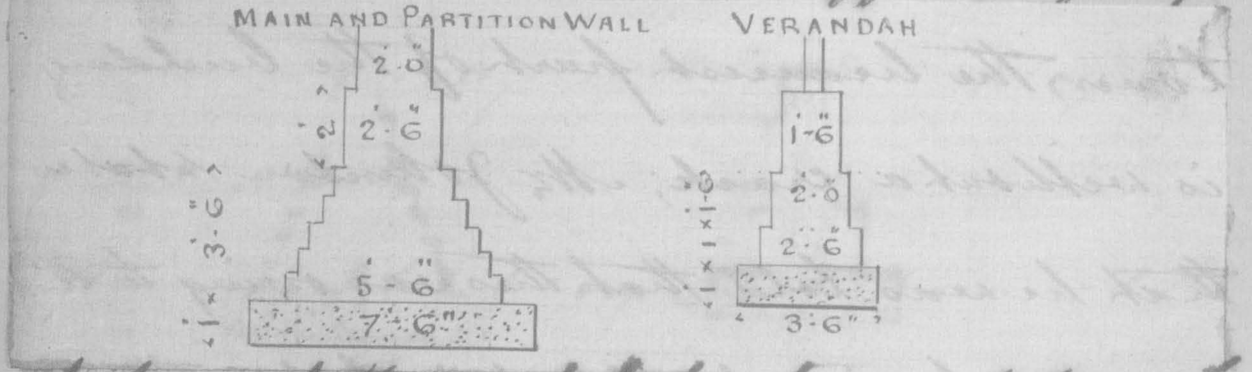
effect

that

21

alled sandy, but is not really so bad. Mr Johnston describes it as soft and loamy 0 per cent of fine sand with 50 per cent of silt. Col. Fraser describes it as a peculiar manganese earth used locally in the roofing of houses. The soil is of that nature that expands and shrinks with wet and heat and this I believe to be the cause of the failure of the building.

7. The foundations which are as shown below were not sufficiently deep



to prevent the soil below being acted on by damp and heat and consequently the walls cracked where the soil shrank, that this is the case is pretty clearly proved by the fact that the cracks get better during the rains and worse in the dry weather.

8. Mr Johnston seems to have inspected the foundations very carefully and he found that the concrete had been very

irregularly

masonry had to be set out it was found necessary to make additions to the concrete which however seemed to be of a fair description and varied in depth from 12" to 15". In the superstructure the join are not so thin as they should be but the mortar seems good and the building is altogether fairly well constructed and I certainly do not think that the failure can be put down to bad work.

9. It is a remarkable fact that the tower, the heaviest part of the building is without a crack; Mr Johnston states that he was told that this was owing to 2' of sand having been put in below the foundations, my belief is that probably the foundations of the tower were made deeper and reached a level of permanent dampness so that there was no shrinkage I am having this enquired into.

10. It is also curious to note how the cracks have got better and worse & so on, for instan as long ago as Aug/92, the treasury was

reporte

[illegible] gerous state

and it certainly is not so now.

11. Some of the cracks that were plastered up years ago, have got no worse while some have opened out considerably and numerous fresh ones have appeared — varying from 1/16" to 3" in width

12. In Mr. Pereira's report he states that the walls are out of the perpendicular and I tested them and found the deflection hardly perceptible. In all previous reports it is stated that the walls have sunk vertically so that this splaying out can only have occurred since the Mangalore tiled roof was put on, and this should theoretically not have had that effect.

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13. All the soil for 1 1/2 miles distant is either similar to that on which the present building is standing or else black cotton so that if a solid foundation is required only two sites are available for the new building.

1st. In a field No: 31 of Koilkuntla

about

danger and stated that at a small

ay the building could soon be rendered

r occupation and in fact as sound as

The estimate according to Col: Frasers

roposal was prepared and amounted to

5.80 and was sanctioned in G. O. No: 1186 W.

d 2nd May/93. In May 1894, the Cutcherry

inspected by Mr. Pereira, the Exe: Engineer

reported that after reading up all that

been said and comparing the recorded

te of the building in 1892 with the state

then found it in, he formed the opinion

the building was in no danger —

ever; at the same time he suggested

airs to certain cracks and promised

estim ; On this the Suptg: Engineer Col:

remarked that the building was not

to get worse. Shortly after this, the

ector of Kurnool having brought to the

of the Board of Revenue that the Cutcherry

in a dangerous state, the Suptg: Engr.

called on in G. O. No: 1707 dated 7th July/94

port why this was the case and in

Col: F ser replied to effect

that

[illegible] the said bu-

-ing quite double what it should have
cost and it apparently took about 7 years
to construct. Mr Rundall's report which
cp not be traced in this Office would afford
such valuable information, and it could
been ascertained what was the nature of the
vary work done and whether the cracks
12. appeared during construction.
the re As far as can be ascertained the first
estimate for repairing cracks was prepared
-tion 1886 and in the beginning of 1891, it seems
rep building demanded serious attention and
[illegible] was some correspondence between the
out Supdg. Engineer and Mr Johnston, the
Marine Engineer as to the best way of repairing
who the latter officer inspected the Cutchery
that 17th & 18th April/91, and reported that
13. cracks had got much ~~wider~~ worse since the
is Supdg: Engineer's inspection (date not known),
but he objected to buttresses and underpinning
cost suggested by the Supdg: Engineer, and that
rep recommended the building being vacated.
the result of this correspondence was that (under
1st s of the Supdg: Engineer) Mr Johnston
submitted

Co

submitted an estimate on 24th March/92
amounting to Rs: 10,990 for repairs; this
returned by the Supdg Engineer Mr Mar
for more information and Mr John
then submitted a report on 3rd Aug/92
which he again repeated his recomm
-tion that the building should be aba
and a few days after, he reported that
Tahsildar stated the treasury buildi
really dangerous but that nothing could
done till after the rains and in this the
Supdg: Engineer Col: Fraser R.E. agreed.
x Re G. O. No 2,906 W of 18th October/92, the S
Engineer was called on to explain the de
in dealing with the estimate submitte
to him by the Collector on 24th March/92
answering this, Col: Fraser proposed t
the treacherous soil both from the in
and a few feet round the exterior of t
building and lay down concrete as a re
In his letter dated 7th December/92, Col: Fr
stated that he had inspected the bu
and he made certain proposals fo
repairing it; he evidently did not thi

any danger and stated that at a small
ay the building could soon be rendered
for occupation and in fact as sound as
The estimate according to Col: Fraser's
proposal was prepared and amounted to
=680 and was sanctioned in G. O. No: 1186W.
ed 2nd May/93. In May 1894, the Cutcherry
inspected by Mr. Pereira, the Exe: Engineer
reported that after reading up all that
been said and comparing the recorded
te of the building in 1892 with the state
then found it in, he formed the opinion
the building was in no danger
gineer; at the same time he suggested
pairs to certain cracks and promised
estimate; On this the Supdg: Engineer Col:
remarked that the building was not
to get worse. Shortly after this, the
ector of Kurnool having brought to the
of the Board of Revenue that the Cutcherry
in a dangerous state, the Supdg: Engr
called on in G. O. No: 1707 dated 7th July/94
port why this was the case and in
Col: Fraser replied to effect
that

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ms are in no immediate danger of
collapse—Court room, Tahsildar's room,
Lost property Office, Post Office, Treasury,
Cashier's room, and Police room, but they
are all cracked and as the cracks are
increasing they will certainly have to be
vacated soon. The detached buildings
are in good order and the town is perfect.

2. I have ordered the roof over the dangerous
part of the building, viz; the clerk's and
Sheristadar's rooms to be removed as
soon as possible, that no one is to be
allowed to enter those rooms, a notice to
that effect being posted up and the
entrances to the rooms to be closed with
bamboos; this part of the building is so
bad that it may collapse at any moment,
& by dismantling it now, the wood
and Mangalore tiles in the roof
be saved from destruction.

The building is so badly cracked that
ordinary remedies such as the rods
& buttresses, would be useless and I
ngly recommend that it be abandoned

and

Superintending Engineer's
3rd Circle.

No. 2834

Bellary 6th December 1895.

From Lt. Col. D. McNeil Campbell R.E.
SUPERINTENDING ENGINEER,
IIIrd CIRCLE,

To
THE Chief Engineer,
P. W. D.
Madras

Sir,

Enclosures.
1 Plan showing cracks.
1 letter from the Exe: Engineer.

In forwarding herewith a letter
No: 2744 dated 24th Septr/95 from the Execu.
Engineer, Kurnool Dn, I have the honour to
inform you that I inspected the Koil-
-kuntla Taluq Cutcherry on 30th November/9
and found that the condition of the
building has been, by no means, exaggerat
by the Executive Engineer; in fact sin
his inspection several fresh cracks ha
appeared; the accompanying plan sho
the position of the cracks at the time
Mr. Pereira's inspection in September a
it will be seen that the greater portio
of the building is simply a network
of cracks, some of these being over 2" in wi
The Subjail is only slightly cracked
may last for some years; the follow

present state of building.

" foundations are

---

an estimate for a new building at
fresh site be sanctioned, the present
materials being used as far as possible.

8 Koilkuntla is a most unsatisfactory
place to get at owing to the difficulty
in getting across the River Kundair
which is impossible when there is
any rain about. As the Local funds
are not likely to be able to spare
money to bridge this river, I would
suggest that some other site on the
left bank of the Kundair be selected
as the Taluq Head Quarters it would
greatly facilitate public business
and inspection.

I have the honor to be
Sir
Your most Obdt Servant.
(signed) A C Pereira.
Executive Engineer

PWE+2
[illegible]/95
478/96

(True copy)

T. Sivakamiah. Head Clerk,

REVENUE DEPARTMENT

Superintending Engineer's Office
3 Circle

and I consider it very probable that bad work was allowed in the foundations In Mr Johnston's Section of the walls, ascertained from pits dug, one foot of concrete is only shown which I consider insufficient for a building in good hard soil, much more so in soil which was known at the time to be treacherous and unrealiable.

7. Taking all these things into consideration I am of opinion that it is useless to patch up the building any more, nothing which can be done now, can make it a satisfactory building with all anxiety about it set at rest. It is useless to pull down and rebuild walls at a site which all are agreed is not suitable owing to the nature of the soil. It is no doubt deeply to be regretted that such a fine building should have to be condemned, but it is better to face the matter boldly, acknowledge oneself beaten for once, I recommend therefore that the building be condemned and that the preparation

foundations [illegible]

The Court room as well as private, property, and Post office rooms are fit for use for the present. Many of the lintel stones over the doors and ventilators are cracked right through proving the great strain they have been put to. The cracks which have now appeared in the Treasury room over which is the record room and where the weight on the foundation must be very much greater is a serious matter for consideration Much money is not kept in the treasury, but Koilkuntla is a lawless place and perhaps advantage would be taken of any Collapse of the Building or a portion of it

The Jail is up to date perfectly safe, the walls are not so high, and they have not yet shown signs of any serious cracks there is no telling however what another year may produce.

6 Much has been written about the building, the work seems to have progressed in an unsatisfactory way from the very commencement, more than one Subordinate has been punished over it,

Acton 4

the building on the 10th Instant.

4. I was astonished to find the cracks were quite as bad if not worse than they had been represented, and it occurred to me that the best way to represent the matter was by the graphic method and I have had the accompanying plan prepared from careful notes taken by me of all the most important cracks in the walls, and you will be able to see at a glance the cracks on the ground and those on the walls.

5. The cracks are not only far more numerous since my last inspection but they have extended to other parts of the building viz Sub Registrar's and record rooms were they were not noticed before. These rooms are upstairs. The most serious cracks of all are those in the Clerks rooms. These are new cracks since my last inspection and they are clear gaps in the wall 2½" wide. The entire angle of this building is moving outwards and is now much out of the vertical, and consider it not safe to use these ro

foundations are

had developed in the walls were of a serious ature and an estimate was prepared under my orders for completing the substitution of a tiled for a terrace roof and the removal of certain arches and substitution of rolled beams, this work is now nearly completed and the total expenditure incurred against this building up to date is given below.

Year	Amount of Estimate	Amount Spent	
1872 to 1880	Not traceable.	68.921	
1887 – 88	1,485	1,352	
1893 – 94	5,680	2,382	
1895 – 96	1,220	939	
	Grand Total.	74,304	

Most of the work provided in the subsequent estimates was for repairs to cracks and the result of cracks and in substituting a tiled for a terrace roof. So the whole is added together.

3. Since my inspection in 1894 the Assistant Engineer Mr. Sreenivasa Iyengar has sent several reports to the effect that new cracks have developed and old ones are extending, and in consequence of these reports I inspected