M.R.O. 1—22,100—28-11-38.

MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.

G.O. No.	Press Mis.
Dated	18

Not to be folded or roughly handled

No. 32. Read the following Extract from the Proceedings of the Chief Engineer, dated 21st December 1857, No. 6101.

Read the following Extract from the Minutes of Consultation Public Works Department.

Observations on the reports regarding the encroachments of the Sea on the North Beach, and enquiries to what distance Northward DeHavillands wall was originally carried, whether any portion of it ever extended beyond the Custom House towards Clives Battery, and if so whether it was left in position when the road was widened states that a plan elucidating these points should accompany the report. } (Here enter 11th December 1857, No. 2309.)

Read also the following Memo. from Captain H. W. RAWLINS, Garrison Engineer ; to Colonel C. E. FABER, Chief Engineer, dated 13th December 1857.

With reference to the 5th para. of Extract Minutes Consultation No. 2309, of the 11th Instant, forwarded by the Chief Engineer for the immediate reply of the Garrison Engineer, Fort Saint George, Captain Rawlins has the honor to report, that "DeHavilland's Bulwark" extends from the north east angle of the Fort to 100 feet north of "Clives Battery."

2. The only stones taken from this Bulwark were a few at the commencement of the groynes, between the P. and O. Company office and Clives Battery. Most of these projected above the level of the plateau for the proposed new road, and which could not have been made without removing them. Some of the small coping stones on the top of the retaining wall were also taken away for a short distance near the Battery, and were appropriated for other works connected with the groynes. It was useless to let them remain buried under the road, and their removal in no way interfered with the stability of the Bulwark. From the date of the order prohibiting the displacement of any of the stones, to the best of Captain Rawlins' recollection, not one was removed.

3. In February last, Captain Rawlins' submitted by order, an estimate for an outer Bulwark, but at the same time he represented its probable danger to the boats. The Chief Engineer coincided in this view, and subsequently, Colonel Cotton and Major Lawford.

4. It is difficult to decide upon the best remedial measures to recommend. It will not do to multiply the groynes in this much frequented part of the beach, while the great desideratum of a wider roadway cannot well be obtained without.

5. Captain Rawlins lately suggested the adoption of a Tram way through one of the back streets to draw off the traffic between the Terminus and customs from the front sea road, which will always be an inconvenient thoroughfare, because there is so much traffic across it from the boats to the grain stores. Besides which, since the construction of the North Beach groynes and road, the arrangements of the buildings at the Terminus have been completely altered.

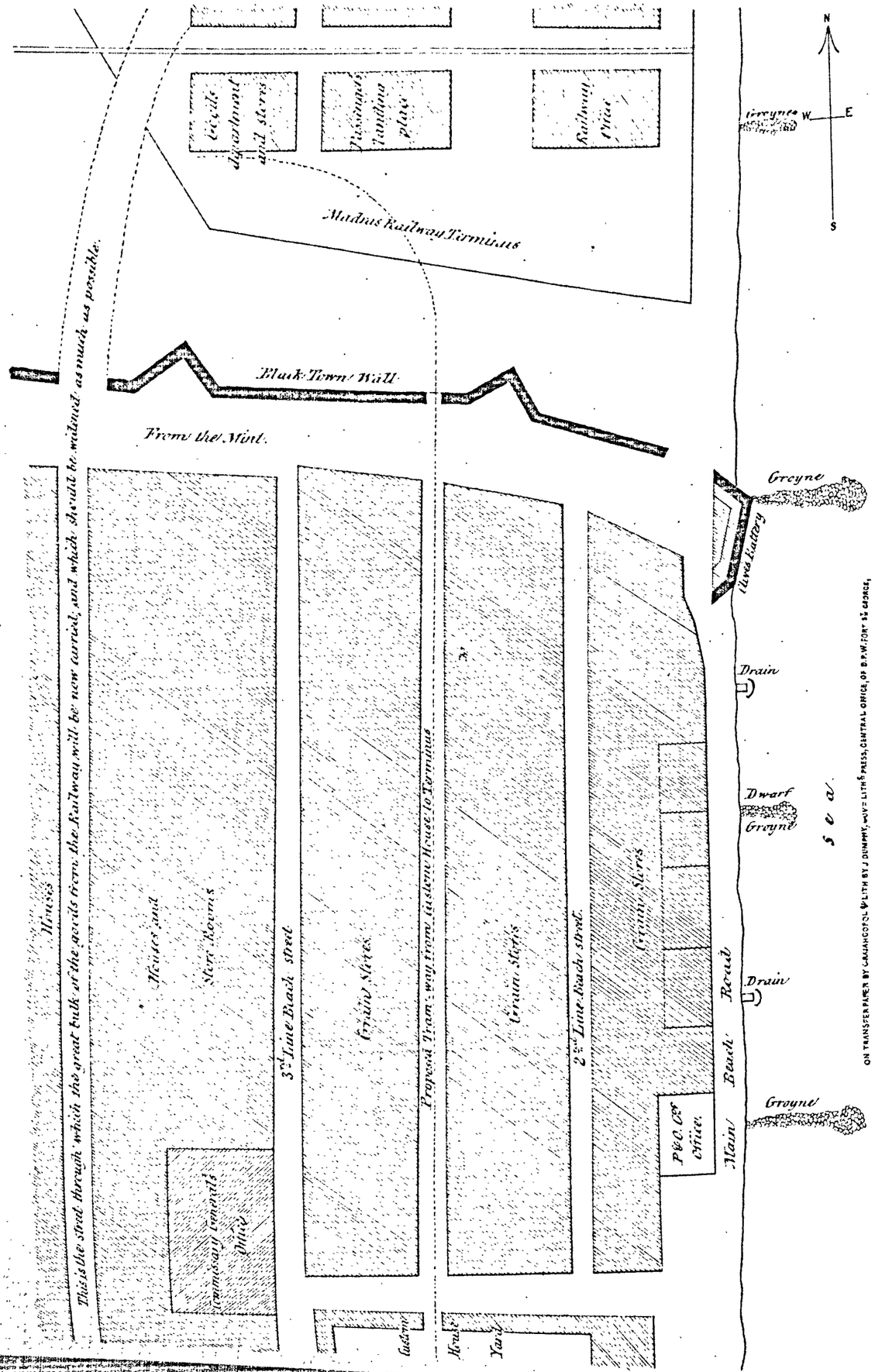
6. Formerly the large edifice in front, close on the beach, was intended to contain the passenger's landing place and goods stores ; but now new buildings have been erected for the goods Department further inland, and directly opposite one of the principal and broadest streets in Black Town. A great deal of the traffic originally intended to pass along the beach will now consequently go direct through the centre of the town. It may therefore be necessary to extend the beach road to the width at first proposed, and perhaps 50 instead of 100, feet will now be sufficient.

7. The best plan to be adopted appears to me to be the following.

1. To extend the "Dwarf Groyne" 40 yards between the two primary ones opposite Clives Battery and the P. and O. office.
2. To lengthen the two drains on either side 30 feet beyond "DeHavillands" retaining wall ; and when the sand permanently accumulates, (as Colonel Cotton so confidently thinks it will) to be content with increasing the width of the road 30 feet outside the wall.
3. To pile round with the Steam Pile Driver, the sea end of these three works, to prevent the stones being scattered about, and the mouths of the drains from being injured by the surf.
4. To make a narrow Tramway 3 feet guage, between the Customs and the Terminus, through one of the back streets, so as to draw off the traffic from the main beach road, a rough estimate for this was lately submitted by the Garrison Engineer.
5. To cover the side drains of the broad road leading from the Terminus direct through the centre of Black Town, to metal the road to its full width, and to purchase and pull down projecting encroachments, so as to widen the road to its maximum.

8. Captain Rawlins begs to append a rough ink sketch illustrative of the locality and the roads to which he alludes ; and which he trusts the Chief Engineer will accept in its imperfect state as time will not admit of a more elaborate survey.

recommend with Reference to Exc: Proc: 5/5/58



ON TRANSFER PAPER BY CAVANAGH & LITH BY J DUMPHY, W.V.E. LITH. PRESS, CENTRAL OFFICE, OF B.P.W. FORT ST GEORGE,

3

Fort Saint George, Public Works Consultation of 2nd February 1858.

Resolved with reference to the foregoing order No. 2309, dated 11th December 1857, para 5, to submit for the information of Government, copy of a memorandum from the Garrison Engineer, relative to the extent and partial removal of DeHavilland's Bulwark, and to recommend with reference to Extract Proceedings No. 5798, dated 8th Idem, that a Committee composed of the Commissioner of Police, Consulting Engineer for Railways, and Superintending Engineer Central Circle, should be directed to prepare a final report on the most suitable means of connecting the Railway terminus with the Custom House, and providing for the heavy traffic along the North Beach.

(Signed) C. E. FABER, Colonel,
Chief Engineer.

No. 33. ORDER THEREON, No. 160; dated 28th January 1858.

The Right Honorable the Governor in Council approves of the plan suggested by Captain Rawlins in the Memo. submitted to Government with the above Proceedings for affording further facilities for the traffic between the Sea Custom House and North Beach generally, and the Railway Terminus, and resolves to call upon the Chief Engineer to submit estimates for carrying it out for insertion in the Budget of 1859-60, as was already directed regarding one portion of the scheme in Extract Minutes Consultation, dated 19th December 1857.

2. Items 1, 2, and 3, of Captain Rawlins' plan will be included in one estimate, and for each of the remaining Items 4 and 5, a distinct estimate will be submitted.

(Signed) H. FORBES,
Acting Secretary to Government.

Boulevards, and to recommend with reference to Exc: Proc: No 5798

No 6101.

Extract from the Proceedings of the Chief Engineer in the Department of Public Works. Fort St. George, Under date the 21st December 1857.

Read the following.

Extract from the Minutes of Consultation P.W.D.

Observations on the Reports regarding the encroachments of the Sea on the N. Beach, and enquiries to what distance North-ward De Havillands Wall was originally carried, whether any portion of it ever extended beyond the Custom House towards Salives Battery, and if so whether it was left in position when the road was widened, and that a Plan elucidating these points should accompany the Report. ——

(Here Enter 11th Dec.r 57, No 2309)

Read also the following Rec.

From the Garrison Engineer submitting certain explanations called for by the Chief Engineer D. P. W. with reference to the length of De Havilland's Bulwark and the quantity of stones taken from it for the groyne, and offering certain Remarks upon the measures proposed for sheltering the North Beach Road. ——

(Here Enter 15th December 1857)

Resolved with reference to the foregoing Order No 2309, dated 11th December 1857, Para 5, to submit for the information of Government, copy of a Memorandum from the Garrison Engineer relative to the extent and partial removal of De Havilland's Bulwark, and to recommend with reference to Exc: Proc: No 5798,

Enclosure 1.

dated 8th Idem, that a Committee composed of the Commissioner of Police, Consulting Engineer for Railways, and Superintending Engineer Central Circle, should be directed to prepare a final report on the most suitable means of connecting the Railway terminus with the Custom House, and providing for the heavy traffic along the North Beach.——

I have the honor to be
Sir
Your most obedient
humble Servant
(Sd) [illegible]
Lieut. Colonel.
Chief Engineer.

To,

The Secretary to Government,

P. W. D.

L.L.

Cons 16th Decr 57 No 45–46.

P. Works Department
Lr. to Cons: 2d February 58
No. 2495.
Extract from the Proceedings of the Chief Engineer
To The Secretary to Government, P. W. D.

Dated 21st December 1857
Received 22d

No. 6101.

Enclosure
L. E. No. 169. 28th January 1858.
Forwards copy of a memo from the Garrison Engineer relative to the extent and partial removal of Dr. Havilland's Bulwark and recommends the appointment of a Committee for the preparation of a final report on the most suitable means of connecting the Railway terminus with the Custom House, and providing for the heavy traffic along the North Beach

No. 32.

C 24th Decr R 7th Jany/58 C 28th No 25th

Memorandum

With reference to the 5th para of Ex: Min: Cons No 2309 of the 11th instant, forwarded by the Chief Engineer for the immediate reply of the Garrison Engineer, Fort Saint George, Captain Rawlins has the honor to report, that "Dr. Havilland's Bulwark" extends from the N. E. angle of the Fort to 200 feet North of "Clives Battery".

2. The only stones taken from this Bulwark, were a few at the commencement of the groynes, between the P & O. Company Office and Clives Battery. Most of these projected above the level of the plateau for the proposed new road, and which could not have been made without removing them. Some of the small coping stones on the top of the retaining wall were also taken away for a short distance near the Battery, and were appropriated for other works connected with the groynes. It was useless to let them remain buried under the road, and their removal in no way interfered with the stability of the Bulwark. From the date of the order prohibiting the displacement of any of the stones, to the best of Captain Rawlins' recollection, not one was removed.

3. In February last Captain Rawlins submitted by order, an estimate for an outer Bulwark, but at the same time he represented its probable danger to the Boats. The Chief Engineer coincided in this view, and subsequently Colonel Cotton and Major Lawford.

4. It is difficult to decide upon the best remedial measures to recommend. It will not do to multiply the groynes in this much frequented part of the beach, while the great desideratum of a wider roadway cannot well be obtained without.

5. Captain Rawlins lately suggested the adoption of a Tramway ...

of

of the back streets to draw off the traffic between the Terminus and Customs from the front sea road which will always be an inconvenient thoroughfare because there is so much traffic across it from the Docks to the Grain Stores. Besides which, since the construction of the North Beach Groynes and road, the arrangements of the buildings at the Terminus have been completely altered.

6 Formerly the large edifice in front, close on the beach, was intended to contain the Passengers Landing Place and goods Stores; but now new buildings have been erected for the goods Department further inland, and directly opposite one of the principal and broadest streets in Black Town. A great deal of the Traffic originally intended to pass along the beach will now consequently be drawn into the centre of the Town. It may therefore be necessary to extend the Beach Road to the width at first proposed, and perhaps 20 instead of 100, feet will now be sufficient.

The best plan to be adopted appears to me to be the following.

1 To extend the Groyne 100 Yards between the two primary ones opposite Calves Battery and the C. & P. Office.

2 To lengthen the two drains on either side 30 feet beyond the Madras Railway retaining walls; and when the Sand permanently accumulates (as Colonel Boulton so confidently thinks it will) to be content with increasing the width of the Road 30 feet outside the wall.

3 To pile round with the Steam Pile Driver, the Sea end of these two works, to prevent the stones being dislodged about, and the mouths of the Drains from being injured by the surf.

4 To make a narrow tramway 3 feet gauge between the Customs & the Terminus, the one of the back streets, so as to draw off the traffic from the main beach road. A rough Estimate for this was lately submitted by the Garrison Engineer.

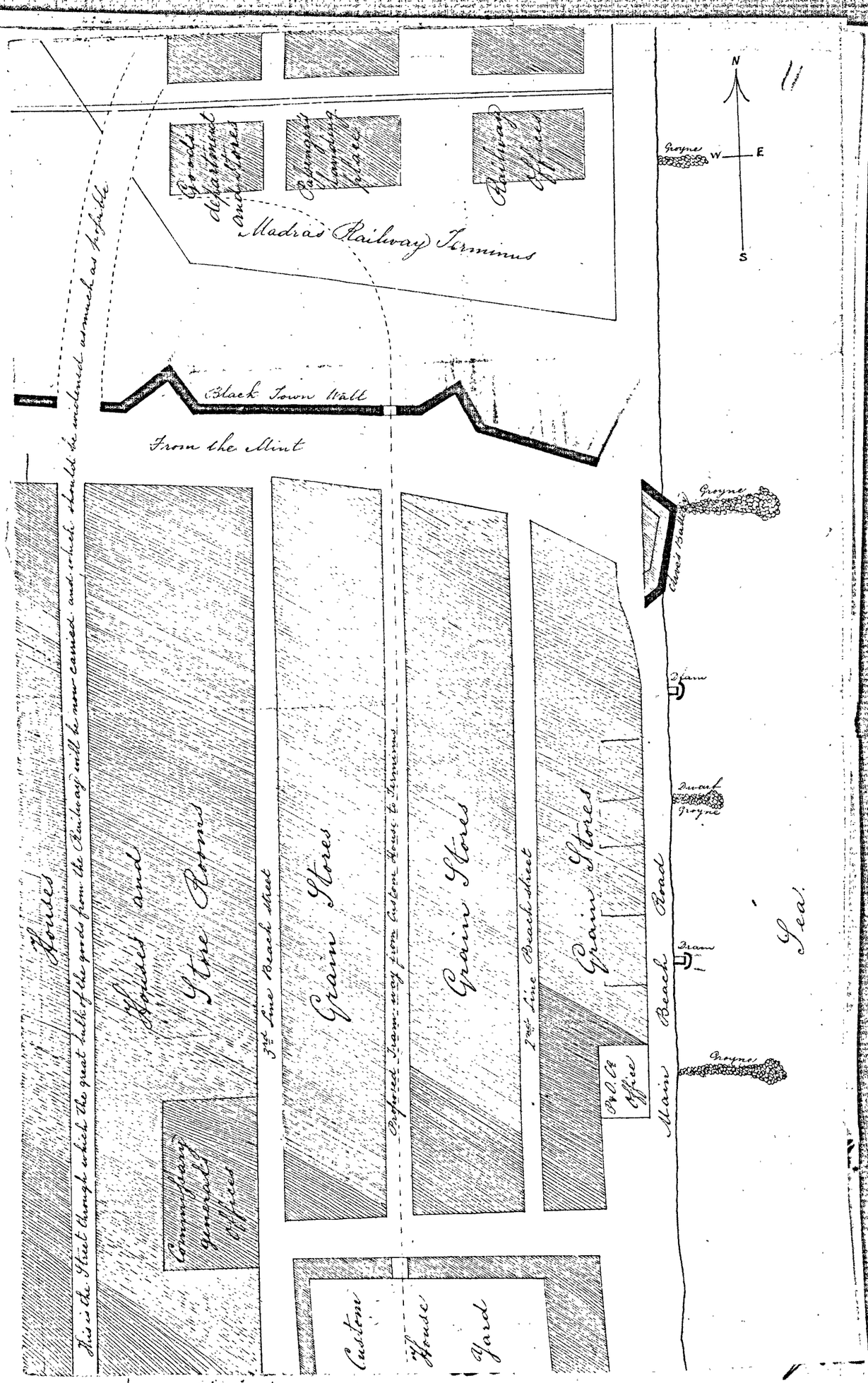
5 To cover the side drains of the broad road leading from the Terminus direct into the Centre of Black Town - to metal the road to its full width, and to purchase & pull down projecting encroachments, so as to widen the road to its maximum.

Captain Rawlins begs to append a rough outline sketch illustrative of the locality and the roads to which he alludes; and which he trusts the Chief Engineer will accept in its imperfect state as time will not admit of a more elaborate Survey.

Fort St. George,
13th December 1859.

A True Copy
Alex. Taylor Colonel.
Chief Engineer

(Signed) H. H. Rawlins Captain
Garrison Engineer.



Enclosure in Col. Bruce's Com. No.
Chief Engineer

Office Engineer, Operations
Dec 1st

Letter Rec'd
Returned

No 6401.
WM 2495 '07

Copy of Memorandum for
Captain Bruce, accompanying
plan showing position of operations under
Mr Lee, particularly in front of Sec. L
No 3 of the N.Y. Contract with reference
to the length of the Panama Railroad
& the quantity of stone taken from
for the groynes, and offering certain
remarks upon the method of protecting
& protecting the North Beach Cut.

No 160

Extract from the Minutes of Council dated 11th January 1858

Read the following extract from the Proceedings of the Chief Engineer -

Extract from the Minutes of Council dated 11th January 1858

Read and approved -

For Orders.

Public Works' Department No 2495.

Extract from the Proc: of the Chief Engr 21st Dec: 1857.

After Mr Walkin's suggestions approved Mr Walker working of adoption -

The Ch. Engr. to submit Estimates for carrying ~~it~~ out. for insertion in the Budget of 1859/60 as was already directed regarding one portion of the scheme in Engr. Off. 9. Oct. 1857.

Items 1. 2. and 3. of Capt Hutchins Plan will be included in the Estimate. and the Estimate of the remain: ing Items 4. and 5. a distinct Estimate will be submitted.

J.H.

20. Jany 58. J.G.

Copies to the Chief Engr
Asst Engr.

Cons. 15th Dec. 57 No 4574

Public Works 1858 Dept.
Ltr. to Cons: 2d February

No. 160.

Extract Mins: of Cons:
Dated 28th Jany. 58.

From Supt. of Engrs. in charge of the C. Dept. P.W. 21/18th Augt. 58
C. No: 1351/4 in C 139
From — Do — 3d Augt. 1858 Rdy.
C. No 1743 inclo:
From [illegible] C. Dept. Ltr. 19/13th Augt. 58
C. No. 1809 Do 27th Do
Approving the proposal suggested by Captain Rawlins in the Memo: submitted to Government for affording further facilities for the traffic between the Sea Customs House and North Beach generally, and requesting the Chief Engineer to submit Estimate for carrying it out for insertion in the Budget of 1859/60.

Chief Comee for Cash a Tramway 2d Line Beach - 9 Sep 58. No 1854 —

No 32-V 33.