



Vehicular Landings Disposal

FILE NO. 336

VEHICULAR LANDING INSTALLATIONS

DISPOSAL

2nd September, 1959.

The Secretary, Dept. of Public Works Tasmania, G.P.C. Box 6628, HOBART

Dear Sir,

and a

VEHECHLAR FERRY LANDINGS

I acknowledge receipt of your 2/160-9/4 dated 5th August. Unfortunately it has taken a little time to assemble the information you requested. Even so it has not been practicable to provide the information in the exact form you desired but I believe that the information set out below will be sufficient to enable you to make your own assessments.

The Auckland Herbour Bridge Act makes provision for the payment of compensation in respect of the cessation of Ferry Services and my Board has accordingly lodged a claim in respect of redundant ferry landing facilities. The amount of the final claim will be influenced by prices obtained for saleable equipment.

In view of this I feel that I am unable to suggest to you any idea of prices that might be acceptable to the Board and the Bridge Authority and would prefer to receive an offer which could then be reported to the interested parties. I have therefore quoted below the actual cost to the Board of providing the equipment in which you expressed interest. These prices have been broken down to individual contracts but the scope of these does not in every case agree with the items listed by you:-

\$2,065.10. 3.

554. 0. 0. £2,619.10. 3.

(a) New 110 feet spare landing bridge (for Birkenhead) excluding flap operating gear

| Steelwork Hardwood decking in place Flap complete less operating | £6,717.10.10. £1,000. 0. 0. | |
|--|--------------------------------|----------------|
| gear, approximately | \$1,000. 0. 0. | \$8,717.10.10. |

- (b) and (c) steel Fortal Tower together with steel framed machinery house floor Steel framing for winch house R.P.M. sheeting not included.
- (d) and (e) Main Winch (built for Birkenhead) excluding motors and electrical work.
 Elap Winch (built for Birkenhead) excluding motors and electrical work.
 E1,215.10.9.

Sh,029.14.10

The Secretary, Dept. of Public Works Tasmania.

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(2) Old 110 feet steel landing bridge and flap complete with decking, built 1929 Approx.

> Approximate cost of main (£825) and auxiliary (£280) winches built 1929 for operating above bridge. These are in good condition and could be made available.

(g) For dismantling and loading allowance has been made for handling to bridges complete less flap by 80 ton floating crane and landing direct on to customers vessel or punt by the same means. Flaps and other gear would be handled by other means. on this basis the estimated chargeable cost would be approximately

£600. 0. 0.

£4,000. 0. 0.

\$1,105. 0. 0.

The estimate given under (g) makes no allowance for preparing customers vessel for receiving the loads nor for making any alteration to the bridges to reduce overall dimensions. We have been in touch with Mr. Maddock and pointed out to him that the dimensions of the bridges are such that they would have to be loaded on their sides if shipped aboard the ferries. Even then the complete bridges may be too long to fit on the clear deck space and may require to be cut in half. No doubt he will communicate with you on this aspect when he has had an opportunity of inspecting the gear and discussing the proposition with the insurers.

In reply to your enquiries, the flap controls on the Devonport landing and Birkenhead spare landing are similar, i.e. "Notes on Electrical Operation" are applicable to these two landing flaps on which the flap control circuit is 110V D.C. via rectifier and transformer across 400V A.C. In the case of the Eastern and Western landings the flap control circuits are 20V A.C. via transformers across 230V A.C. Two off either control system could be made available at your option, less transformers if you so desire.

The arrangement of main winding gear is as follows :-There are two motors mounted on a single shaft driving through gearing to two winch barrels but only one motor is on power at one time, i.e. the working motor drives both winch barrels plus the armature of the spare motor - See attached copy of drawing 8.324/2.

Cur experience has been that it is essential to have a spare landing flap available for interchange in the event of damage occurring or repair becoming necessary. The flaps are interchangeable and a third flap which we have used as a spare could be made available if required.

I shall be pleased to hear from you further and to receive offers for such of the components as you may consider to be of value to you.

. 2 -

2nd September, 1959.

From Wherry

Chapter VIII.

VEHICULAR FERRIES

For 40 years from 1865 the steamer ferries to Devonport transported vehicles, horses, stock and general cargo as well as passengers, but by 1895 the relative importance of the passenger traffic, and the need for making provision for the future expansion of the ferry facilities, led the directors of the Devonport Ferry Company to suggest to the Auckland Harbour Board that it should construct special terminals for the expeditious handling of vehicular and cargo trade, the company on its part would provide a special steamer, at a cost of £6,000; as an alternative plan the Company would itself finance the terminals if given a 21 year franchise. This marked an important departure in the ferry business on the Waitemata; though it may be remarked in passing, that in many places such as Vancouver, vehicles and passengers are still transported by the same boats. The Auckland Harbour Board, however, was not in a frame of mind to pander to the fancied wants of the North Shore and declined to entertain either proposition; but in 1898, "for the purpose of assisting in shipping goods and vehicles," it constructed a wide low level landing at the city ferry jetty, and later at Devonport.

In 1903 the Devonport Ferry Company, in the belief that the Harbour Board was to build special traffic landings, ordered the Condor, designed on American lines for the joint transportation of passengers and cargo; the vessel was housed in. When the hull was almost completed the Harbour Board intimated that unless the work was expedited the wharves would be ready first; as a result the Condor was launched without the deck housing and lifted race traffic and some holiday traffic from the old wharf, but the Harbour Board did not alter the wharves as intended. The vehicles were loaded on to the boat by means of planks and then screwed round to proper stowage position as had been the practice on the older style boats from 1865. The Condor, after being housed in, lay in a berth at the eastern end of Queens Wharf for two years; pressed

To Steam Ferry

into service only on race days; for which occasions she had a platform built forward to enable passenger traffic to be loaded at any state of the tide. As the Harbour Board made no further move in providing the special termini the Ferry Company stripped the Condor to convert her into a passenger boat. In 1905 the vehicular wharf project was revived by the Harbour Board; the suggested facilities being similar to those now adopted. Just about that time the Harbour Board decided to engage a new engineer and postponed work on the vehicular ferry terminal until his advent. He adopted the pontoon type landing and one was erected at Devonport in 1905; the corresponding one on the city side was not constructed until 1908; it was located on the western side of Queens Wharf; almost in line with the foot of Queen Street. The Devonport Ferry Company ordered the Goshawk for this special service which was extended to Birkenhead in 1910 and Northcote in 1913.

The Ferry Company must have been ahead of the times. for in the first summer the Sunday traffic did not reach 5/- at times; and the weekday loading was insignificant; as one ferry official pithily phrased it "the Goshawk did not earn enough to pay for the smoke she made." The service was dropped for a year but in 1911 was restarted and despite heavy loss, was maintained.

The coming of motor traffic turned the scale so far as the ferry was concerned and the Company built the Goshawk class boats to cater for patrons. The Condor had been partly housed in, so as to protect vehicles, and permit of passenger traffic travelling by vehicles loaded on the boat, to have room and to take shelter from the weather. The public complained loudly that gas fumes from the motor traffic would be poisonous, though now there is a demand for covered boats to protect motor cars from seaward spray.

In 1927 the Harbour Board partially completed a big scheme of ferry terminal improvement at Auckland and Devonport. Special mechanically hoisted landings replaced the old pontoon type for the vehicular traffic at a cost of £15,000, and the city side terminal was moved to a point on the eastern reclamation almost opposite Devonport to cut down the time of the sea journey in 1928. Another similar landing was finished in the Freeman's Bay reclamation to reduce the boat travelling time to Northcote and Birkenhead, in 1929. The City terminal was moved to the west of Hobson Street wharf in 1913; and was closed in 1929 when the other type terminals were put in use. THE CHIEF ENGINEER

THE GENERAL MANAGER.

NORTHERN STRAMSHIP CO. LTD.

TRAILER - SHIP FACILITIES AT AUCKLAND.

INVESTIGATION INTO THE USE OF EXISTING VEHICULAR LANDINGS AS TERMINALS.

(Your Memorandum of 10.10.66 refers)

A preliminary investigation has been completed with respect to

(1) Western Vehicular Landing. (Drawing SK 55/1.)

(2) Devonport Vehicular Landing.

The initial prerequisites which have been checked and accepted are :

- (a) The landings are capable of taking the 6 ton axle load trailers and prime movers.
- (b) The bridge and flap dimensions are compatible to the stern door dimensions of the ship. Matters of gradient and height clearance through the stern door should generally provide for the requirements.
- (c) As the stern door, which is an outward opening jack-knife type flush with the stern of the ship, may foul any flap, it has been assumed that the door will be open prior to the final berthing of the vessel.

The estimated costs in each case at this stage are :-

Western Vehicular Landing £30,000

£14.000 Devonport Landing

with the specific works involved provided in the attachments.

CHIEF ENGINEER TO THE BOARD.

Copy to : HARBOURMASTER.

NS:NG

ENCL:

Attachments.

1. PRESENT SITUATION.

The bridge is intact with the main ballast blocks in location. All machinery has been removed but is essentially available. No fendering exists. At the present time this facility is leased to the Navy Department who operate a pontoon off the portal for mooring of a training vessel and other purposes.

2. OPERATIONS FOR A TRAILER SHIP TERMINAL.

The Harbourmaster is not entirely enthusiastic regarding the restricted approach to the berth. However it is not impracticable to operate and assistance could be required from a small tug. The road approach and area available at the inshore end of the bridge is also restrictive, but no doubt the movement of trailers can be effected. From an operating view point there does not appear to be any specific problems which suggest that it is not a feasible proposition.

3. WORK AND COSTS TO PROVIDE FACILITIES.

(a) RN.VR Removal and Resiting.

It may be possible to retain the present facilities in the area, where shown. Estimated cost to resite including dredging. \$2,500.

(b) Reinstatement of Bridge to Working Order.

This work will require the replacement of the winches in the portal, a flap, wire ropes, attachments, new power supply and conversion of bridge to manual control for lifting. Estimated cost to bring into full working order.

\$3,000.

(c) Dredging.

Reinstatement and widening to a depth of - 14' L.W.S.T. will be required and could cost up to

£4,000.

(d) Berthage Facilities.

Construction of dolphins and end fenders for the berth with a guide dolphin and additional fendering at the corner of the cement jetty. Including miscellaneous work for moorings, the total cost allowed at this stage is

£20,500.

*

Total

\$30,000.

-

The estimate of 630,000 is taken to the generous side for initial consideration. It could well be possible to reduce the cost of the berthage facilities after a more specific investigation into dolphin design, types and construction related to the anticipated term of use of the facility.

DEVONPORT VENICULAR LANDING.

1. PRESENT SITUATION.

3

The bridge is intact with all machinery. Fondering existing only along the side of the cargo wharf.

OPERATION FOR A TRAILER SHIP TERMINAL. 2.

The cargo wharf does provide a reasonable area for manoeuvring and assembly of trailer units. Navigation of the vessel into this berth may be hazardous at times, particularly on the ebb tide so that any storn fender systems should be substantial. The location of the bridge relative to the present berth fender line is such that the vessel will only just fit for dimension.

3. WORK AND COSTS TO PROVIDE PACILITIES.

(a) Reinstatement of Bridge to working order. All mechanical and electrical should be completed for £1,800.

(b) Dredging

(c) Barthage Facilities Construction of dolphins and fender systems including miscellancous works for mooring is allowed at £12,200.

N11.

Total

£14,000.

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-2-

DEVONPORT VEHICULAR LANDING.

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2. OPERATION FOR A TRAILER SHIP TERMINAL.

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- (c) Berthage Facilities Construction of dolphins and fender systems including miscellaneous works for mooring is allowed at

\$12,200.

N11.

Total

£14,000.

336. Auckland Harbour Board

MEMORANDUM

1st. November, 1965

FROM THE CHIEF ENGINEER

1

TO THE DESIGNING ENGINEER.

DEMOLITION OF E.V.L.

It is proposed to proceed with this work in due course. Tentative proposals for undertaking the work are :

- 1. Remove all machinery.
- 2. Demolish reinforced concrete tower to base
- level and place material in Tasman Reclamation. 3. Remove the bridge, which will be presold for dis-
- posal.
 4. Demolish remainder of reinforced concrete structure and place in Tasman.

It is required to know whether it is desirable to retain any of the machinery and components for projected work or spare equipment in order that storage or disposal can be arranged.

Please let me have your recommendations.

G. woodsin'

CHIEF ENGINEER TO THE BOARD.

NS:MJC

<u>Copies to:</u> Mechanical Engineer. Electrical Engineer. Foreman of Works. Construction Engineer. Keep. The following Main hoist upper shearer, and that. I lover shearers and like plates. Conterweight shearers

Sold to Newberry Brox. See Sile 791.

3 Nov 65 91 1 Mr N Seagar, Demolition of EVL Ref Memo 336 of 1 st Nov 65 Mo Swales will examine the winch & sheaves to decide whether they would be of any use for the future Roll on I voll off bridge. Rolemberton N. bolen . bar havit /

THE CHIEF ENGINEER

THE GENERAL MANAGER.

DEMOLITION OF EASTERN VEHICULAR LANDING.

I have received advice from A.W. Bryant Ltd. that the Company no longer wishes to purchase the two remaining vehicular bridges at Eastern Vehicular Landing and Devonport Wharf, which sale was approved by the Board on 31st. July, 1962. The re-use of the bridges as envisaged by the Company at that time has not eventuated, and I recommend that they be released from their obligation to purchase.

Demolition of the Eastern Vehicular Landing should now proceed and I propose to proceed with the work as follows:

- (1) The bridge and such parts of the machinery which are of no further use to the Board, to be advertised for removal. Successful tenderer to take delivery on removal by the Board.
- (2) The reinforced concrete portal structure to be demolished by the Board and the materials deposited in Tasman Wharf Reclamation.
- (3) Timber piles and hardwood to be returned to the Stores Officer.

This work is provided for in the Programme of Works, Special Maintenance, Item.

CHIEF ENGINEER TO THE BOARD.

NS:NKG

336

1

BHYARASW. BRYANT LTD.

 23
 JERVOIS
 ROAD,
 PONSONBY,
 AUCKLAND,
 NEW
 ZEALAND

 TELEPHONE
 11-139
 (3 LINES)
 ●
 P.O. BOX
 7034
 ●
 PENROSE
 DEPOT
 595-757

19TH OCTOBER 1965.

Chief Engineer, Auckland Harbour Board, Box 1259, Auckland.

DEAR SIR,

REF: YOUR LETTER No.336.

We confirm that we no longer wish to purchase the two vehicular ferry bridges as outlined in your letter of 18th instant.

Yours FAITHFULLY, FOR A. W. BRYANT LTD.

225 e-c-

MANAGING DIRECTOR.

his Seagar. We shall now set about demolishing the E.V.L. & admitising this bridge for remaral. More organise. Dreft a brief memo to like. advising him of Byanto with drawal of offer & outlining A programme for densition & disparal of components. f. 20. 10.65.

1st. November, 1965

THE CRIEF ENGINEER

336.

THE PROTONING ENGINEER.

DEMOLITION OF N.V.L.

It is proposed to proceed with this work in due course. Tentative proposals for undertaking the work 20 EM EM

- 1. Remove all sachinery.
- 2.
- Demolish reinforced concrete tower to base level and place material in Taxman Reclamation. Remove the bridge, which will be presold for dis-30
- posal. Demolish remainder of reinforced concrete structure
- 240 and place in Tasman.

It is required to know whether it is desirable to retain any of the machinery and components for projected work or spare equipment in order that storage or disposal can be arranged. Please let me have your recommendations.

CHIEF ENGINEER TO THE MOARD.

NOSMJC

Conics to: Technoical Engineer. Electrical Engineer. Foresan of Forks. Construction Engineer.

18th. October, 1965

Messrs. A.W. Bryant Ltd., P.O. Box 7034. PONSONBY.

Dear Sirs,

VEHICULAR FERRY BRIDGES

This is to confirm telephone conversation Mr. Grant-Mr. Smith on 15th. October, 1965, from which it is concluded that you have no wish to complete the purchase of the remaining two vehicular ferry bridges (one at Devonport and the other at Eastern Vehicular Landing) as proposed in your letter of 16th. March, 1962.

The first of the three bridges has of course been in your possession for some time.

In order that I may make suitable recommendations to my Board for the disposal of hese bridges would you please confirm by the end of this month that you no longer wish to purchase them.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD.

RAJS: MJC

336

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Auckland Harbour Board

3903 A

INSTRUCTIONS TO FOREMEN & INSPECTORS

THE FOREMAN OF WORKS

580.

To

REI

Date 3rd. December, 1964

Subject DEMOLITION E.V.L.

REPAYABLE A/C: Navy States of Markens.

CODE NUMBER 070/698/10-19

ENGINEER'S OFFICE,

The recovery of the ballast blocks from the landing for use as mooring blocks at Kauri Point is a charge against the demolition of the landing. The cost of recovery when complete is to be reported so that a nominal value can be struck for charging to the Navy.

NS:MJC

| A | |
|-------|------------------------|
| and | 1 |
| J-H. | pouser |
| - FK | A'- |
| Chief | Engineer to the Board. |

(This Form to be filled up & returned to Engineer's Office immediately on completion of Work)

| | | T | This wor | rk was c | omp | oleted a | on | | | _at a cos | st of:- |
|--------|-----------|-------|----------|----------|-----|----------|------------|------|------|-----------|---------|
| | Labour | | | : | - | : | | | | | |
| | Material | | • 24 | : | - | : | | | | | |
| | | Total | £ | : | | : | | | | | |
| MARKS: | Sec. Sec. | | | | 33 | | Jan T. | | | 1 | |
| | | | | | | | Signature_ | | | | |
| E10 | | | | | | | 1 | Date | | and 1 | 9 |

Democrican y KV.L.

Juggedea forelimmain programme for Almerae.

- to knyant have advice that they do to be free surey tegine the binge, Back Shared setain & Verbal surey with winders and pleaves.
- 1 Att to left down have and wind will and store on reclamation. at EYL. See Infee.
- 2 Ballast Weights investigate use for Any at Kauri Point, Weight 18. Lans.] Done.
- 3 bridge remains parkens.
- * Tender for demolition complete wills Brand houng the Budge to North Wall at the appropriate time.

1 on ANB . down work.

Avait confirmation from by and re bridge. There has been an enquiring flow Tige re availability of year for vehicular landings. 9-

Noter. We already have a bet of winder and the W. V. L.

Grant of Bergard, se opinion on Alman two bridges development preproder a Sandar have chaged, hol how arbevertue in bridges. ? Wat actron. 336 791

The Managing Director, Messrs. A.W. Bryant Limited. P.O. Box 7034. PONSONBY.

25th. November, 1964

Dear Sir,

VEHICULAR LANDING BRIDGES.

1 1 ×

It is intended to proceed with the demolition of the Eastern Vehicular Landing in 1965 to improve berthing of ships at Jellicoe Wharf.

The bridge on this landing is one of two bridges remaining, which have been sold to your Company for the sum of 2642. less £156. or £482. payment to be made on receipt of your order to receive the bridge.

I would be pleased if you will advise me of your intentions regarding the receipt of these bridges in particular the Eastern Vehicular Landing bridge, so that the demolition work can be programmed.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD.

NS:MJC

3

Copy to Inspector of Machinery.

336

1

7th. May, 1964.

Captain D.W. Nielsen, Harbour Superintendent, Whangarei Harbour Board, P.O. Box 49. WHANGAREI.

Dear Sir,

VEHICULAR FERRY LANDING HOIST WIRE.

Further to my letter of 25rd. October, 1963, Paragraph 8, the hoist wire for the bridge is $3\frac{1}{4}$ " circumference galvanised langs Lay.

The coil we are holding for this bridge contains 840 ft. length which is sufficient for the initial installation plus one spare set of hoist wires.

In anticipation that you will be glad to have the spare wire, I am arranging for the whole coil to be sent to you. This confirms discussion between your Mechanical Engineer and my Foreman of Works.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD.

RCP:MJC

Bhead, D'part a Eastern ? has Bryant paid for 2306 B. 11.10.62 2307 Beposit, 250 Refunded. Vehicular Pridges - B'head, D'part & EV.L. in the sold to day. By your Ltd in the sold to day. By your Ltd per (100) sufer. ft. for decking. aw. B. Lta have only taken delivery of the B'head bridge and the others are still in place. They have only been charged (f156) for B thead but have not eyer been charged for the other two. Sale was approved by Board on 31 July 1962. Hele with recent report and this and get . G.

Telephone: 87-099

Telegraphic Address: "Harbour"

Mhangarei Harbour Board

Please address all correspondence to the Secretary

Your Ref..... Our Ref. 14/1/4

JRC/JMG

P.O. Boxes 141 and 269, WHANGAREI, New Zealand. 6th November, 1963

The Acting Chief Engineer, Auckland Harbour Board, P.O. Box 1259, AUCKLAND

Dear Sir.

Vehicular Ferry Landing

Thank you for your letter dated 23rd October, 1963 and for the enclosures concerning the Vehicular Ferry Landing. I have not had time to study all the details of the landing as yet but should any points arise on which I require information when studying the plans etcetera I will communicate with you.

Yours faithfully, lic

D.W. Nielsen. Harbour Superintendent

breehanical Engr. To mate. D. . R.P

Auckland Harbour Board

MEMORANDUM

FROM 120/46

то

6th November, 1963.

The Secretary, Whangarei Harbour Board, P.O. Box 141, WHANGAREI.

Dear Sir,

VEHICULAR FERRY LANDING

I acknowledge receipt of your letter of 1st November 1963 enclosing cheque for the balance of the purchase price on the vehicular ferry landing as previously agreed. Receipts for the total amount of £10,200 are attached.

The assistance of your Board is requested in taking delivery as soon as possible. This Board's Chief Engineer will co-operate with your Harbour Superintendent in making the necessary arrangements.

Yours faithfully,

ArC. GENERAL MANAGER

The Chief Engineer,

Copy for your information.

mechanical Engr Rel mer Laylor and. to note.

GENERAL MANAGERS

IER:VD

Copy to the Mechanical Engineer.

336

23rd October, 1963

Captain D.W. Nielsen, Harbour Superintendant, Whangarei Harbour Board, P.O. Box 269, WHANGAREI.

Dear Sir,

VEHICULAR FERRY LANDING.

Arrangements have now been made for all parts of the above equipment to be concentrated in a few places to facilitate handing over to you, and inventories of the items have been made, copies of which are enclosed herewith.

It has been decided to provide you with the original tracings as well as prints of all relevant mechanical drawings, photographic copies of which will be kept by the A.H.B. As the originals of the electrical drawings are still required, prints only of these drawings are being supplied. Lists of these drawings, which will be posted under separate cover are also enclosed.

A number of points which will concern you during installation of the landing are noted below:-

- 1. The main balance weight suspensionsheave units are not yet bolted down onto the portal beams this must be done during assembly of the bridge and balance weights in order to ensure correct alignment of the sheaves.
- 2. The main balance weight guides shown on drawing A.555/3 are not made, as these should also be fitted to place during assembly. The guide rails are existing.
- 5. The upper winch house access ladder has been removed to prevent vandalism, and this will have to be welded back into place.
- 4. I am willing to provide you with a spare flap for the bridge, spare electrical contractor coils and tips and spare float and limit switches.
- 5. No roadway safety barrier is available, but these barriers were of a simple tubular design as shown in the enclosed photographs.
- 6. Guide rollers for the bridge are available but are not fitted. The guide rails on which the rollers bear are not made, as these are a part of the portal foundations. See drawing A.555/3.
- 7. A float and weight for automatic control of the bridge by means of a float switch are available, but the float tank as shown on drawing A.555/3 has not been made. However, a suitable length of pipe will be supplied.
- 8. All the necessary wire ropes etc. will be provided. These are new ropes and have not been made up, as the lengths required would best be checked to suit any modifications you may make when the steel

2

23rd October, 1963

Captain D.W. Nielsen, Harbour Superintendant, Whangarei Harbour Board, P.O. Box 269, WHANGAREI.

1

portal is mounted on your base.

- 2 -

9. It has been noticed that the main shaft bearings of the flap hoist have been fitted incorrectly, and these should be turned around so as to avoid taking the load on the winch by tension in the bearing cap bolts.

- 10. The electrical equipment was new on original installation and has been "meggered" recently, although it is obvious that some deterioration has occured. Most of the conduit work is complete but wiring was temporary for testing only and will need to be replaced.
- 11. All the electrical equipment that is not pergamently fixed in the winch house is separately crated and marked. All limit switches are of the Igranic type and are complete with mounting brackets and operating arms.
- 12. No ammeter is supplied for inclusion in the main wiring as shown on drawing EL/B184.

The weights of the large items range up to about 45 tons and in particular the bridge and portal will be awkward to handle. I shall be interested to have details of your proposals for taking delivery of the equipment, and trust that you will be able to advise me shortly of the approximate date you propose to load the larger parts.

Yours faithfully,

ACTING CHIEF ENGINEER TO THE BOARD.

ENCL. Inventories. Drawing Lists. Plant Records. Notes on Electrical Operation. Photographs of Gate (10) Contactor Leaflets.

DDH:MJC:

Auckland Harbour Board

30

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE,

NUMBER

070 300 10-19

To MECHANICAL ENGINEER

336

Date 12th July, 1963

2549 A

Subject BIRKENHEAD VEHICULAR FERRY LANDING: /

Please note that the Whangarei Harbour Board has now made a substantial deposit towards the purchase of the Birkenhead Vehicular Ferry Landing and expects to complete the purchase early in October. Arrangements for taking delivery are to be made by their Harbour Superintendent, Capt. Neilson.

The main parts are stored on North Wall but odd items are stored in other places. The gear is to be delivered complete to make a working unit including flap, winging gear, control equipment and interlocks but without steel piles for foundations or timber lecking.

Please arrange with F.O.W. & Electrical Engineer to have all the necessary items concentrated in a few places to facilitate handing over, have an inventory made and check over to ensure completeness. See notes of interview 3.4.62 & letter 6.4.62 on file 336.

You are to report when delivery is effected to enable the Office to prepare charge sheets and etc.

Copies to: Foreman Of Works. Electrical Engineer.

RE

43970

Chief Engineer to the Board.

(This Form to be filled up & returned to Engineer's Office immediately on completion of Work)

| | | This work | was completed on | at a cost of: |
|--------|----------|-----------|--|----------------|
| | Labour | • • | The second second | |
| | Material | | ······································ | |
| | | Total £ | : . | |
| MARKS: | | | the second second | |
| | | | Signature | and the second |
| E10 | | | Date | 19 |
| | | | | |

Auckland Harbour Board MEMORANDUM

FROM

TO

26th April 1963

The Secretary, Whangarei Harbour Board, P.O. Box 141, WHANGAREI.

Dear Sir,

VEHICULAR FERRY LANDING

I acknowledge receipt of your letter WHB.9/5/4 dated 2nd April 1963 advising that the requisite loan authority has been obtained to purchase the vehicular ferry landing from this Board for the sum of £10,200.

If you would now prepare an "Agreement to Purchase" and forward same for our consideration, arrangements could be made for your Board to take delivery of the landing as soon as the Agreement has been signed, and for payment to be made in accordance with the terms and conditions laid down in the Agreement. It is considered that this may assist your Board in obtaining early delivery and proceed with the works prior to the actual raising of the necessary loan finance.

Yours faithfully.

allete

GENERAL MANAGER

THE CHIEF ENGINEER

Copy for information.

hetern to file after perasal. All GENERAL MANAGER

JRN.JB

19th February, 1963.

THE CHIEF ENGINEER

THE PURCHASING AND STORES OFFICER

VEHICULAR BRIDGE EX BIRKENHEAD

Messrs. A.W. Bryant Limited have dismantled and removed the above bridge and the site at the Breastwork between Bledisloe and Jellicoe Wharves has been left clean and tidy.

Their deposit of £50. 0. 0. may now be refunded.

CHIEF ENGINEER TO THE BOARD

WJT:HEW

336

1

15th November, 1962.

The Managing Director, Messrs. A.W. Bryant Ltd., P.O. Box 7034, POMSONBY

Vice

Dear Sir,

VEHICULAR BRIDGE EX BIRKENHEAD

Further to my letter dated 8th October, 1962, I wish to advise that the above bridge was transferred from Birkenhead and placed on the Breastwork between Bledisloe and Jellicoe Wharves on 15th November, 1962.

I would draw attention to the conditions of sale that the bridge is to be completely removed by you within one month and that the site on which you break it up is to be left clean and tidy to my satisfaction.

Your deposit of £50. 0. 0. will be returned to you after satisfactory observance of the above conditions.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD

WJT:HEW

ſ.

| Auckland | Harbour | Board |
|----------|---------|-------|
| | | |

MEMORANDUM

FROM

то

11th October, 1962.

The Purchasing & Stores Officer,

The Chief Engineer:

VEHICULAR BRIDGE EX BIRKENHEAD

Messrs A.W. Bryant Ltd., have, this day, lodged cheques for £156 and £50 as set out in your letter to them dated 8th October 1962, ref. 336.

Will you please advise me if the conditions relating to removal and clearance of site are observed in order that I may arrange for the refund of deposit.

CSB:NS der Huldrinson - please anage with SOW. to delive. Andge to an aged rite.

PURCHASING & STORES OFFICER

1912 A

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE.

THE FOREMAN OF WORKS To

Date 16th October 1962

CORE HUNDER 070 300 10 - 19

Subject VEHICULAR BRIDGE EX BIRKENHEAD

The Birkenhead Vehicular Ferry Bridge has been sold to A.W. Bryant Limited. Please arrange to remove the bridge from Birkenhead and place it ashore in the vicinity of Jellicoe Wharf. The Traffic Manager, "Harbourmaster have been informed so please make the detailed arrangements with them.

PSH: HEW

Engineer to the Board.

Chief

(This Form to be filled up & returned to Engineer's Office immediately on completion of Work)

| | | This work was completed on | at a cost of: | | |
|----------|--------------------|----------------------------|---------------|--|--|
| | Labour Material | : : : : Total £ : : | 1912 A | | |
| REMARKS: | | | | | |
| | E10 | Date | 19 | | |

PURCHASING AND STORES OFFICER: Copy for your information

336

8th October, 1962.

The Managing Director, Messrs. A.W. Bryant Ltd., P.O. Box 7034, PONSONBY

Dear Sir.

VEHICULAR BRIDGE EX BIRKENHEAD

I acknowledge receipt of your letter dated 13.9.62 regarding the purchase of the Birkenhead vehicular bridge and stating that this particular bridge is the one you require most urgently.

In reply I have to advise that on receipt of your cheque for £156 which should be sent to the Board's Purchasing and Stores Officer, arrangements will be made to land the bridge near Jellicoe wharf for you to cut up and remove.

Conditions of sale are that the bridge be completely removed by you within one month of its being delivered to you as above and that the site on which you break it up be left clean and tidy to my satisfaction. As a guarantee to this effect please forward a further cheque for £50. 0. 0. which will be returned to you after satisfactory observance of the above conditions.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD

ANT : HEW

Auckland Harbour Board. . Mr. So How The proposal to use the WUL bridge & portal of the Sistealead peert for RAV.R. is in Wellington for epporoal. Naoy & Moy W are happy with the terms & wish to proceed as soon as partible. \$ 19.9.62. SIL

BYAR BRYANT LTD.

23 JERVOIS ROAD, PONSONBY, AUCKLAND, NEW ZEALAND

TELEPHONE 11-139 (3 LINES) . P.O. BOX 7034 . PENROSE DEPOT 595-757

13TH SEPTEMBER, 1962

THE CHIEF ENGINEER, Auckland Harbour Board, C.P.O. Box 1259, AUCKLAND.

DEAR SIR,

We accept your price of $\pounds642$ for the three vehicular bridges as outlined in your letter of 3rd. August, 1962.

THE BIRKENHEAD BRIDGE IS THE ONE WE REQUIRE MOST URGENTLY, AND WE WOULD LIKE TO HAVE THAT ONE AS SOON AS POSSIBLE. THE OTHER TWO BRIDGES ARE NOT REQUIRED URGENTLY, AND WE SUGGEST THAT THE DELIVERY OF THEM COULD BE SUBJECT TO A LATER ARRANGEMENT.

\$156 for & had bridge

Replied to ans. 8. 10.62

YOURS FAITHFULLY, A.W.BRYANT LTD.

R.F.GRANT. MANAGING DIRECTOR.

Auckland Harbour Board MEMORANDUM

FROM

то

^{-6.} AUG. 1952 3rd August 1962.

The Secretary, A.W. Bryant Ltd., P.O. Box 7034, PONSONEX.

Dear Sir,

VEHICULAR FERRY BRIDGES

At a meeting of the Board on Tuesday last consideration was given to the disposal of the above equipment.

Your Company's interest in acquiring three vehicular bridges for use in wharf re-construction was referred to and it was agreed these be sold to your Company at the price offered amounting to a total of approximately £642.

I should be pleased if you would make the necessary arrangements with the Chief Engineer.

Yours faithfully,

The Chief Engineer -

Copy for your information.

SECRETARY.

SECRETARY.

DJP:FS

de Hulchinson

GENERAL FURIOSEFOS

9. DISPOSAL OF REDUNDANT VEHICULAR LANDINGS

The General Manager reported that the Bay of Islands Harbour Board had now advised it was unable to make use of the above equipment and he recommended that the three bridges be now sold to A.W. Bryant Ltd. as recommended by the Chief Engineer in May 1962.

Recommended -

That the report be adopted.

ADOSTD BY BOARD

ANTE

Acretary has notified applicant. F.O. W. To note that an receipt of a request from Bryont it well be necessary for the bridges to be lifted & placed ashere. Germal instruction well be lowed to lover thes work when timings are known. 4.

ATRACT FROM MINUTES GENERAL PURPOSES COMMITTEE

5. REDUNDANT VEHICULAR LANDINGS

The reports of the Chief Engineer and General Manager detailed the equipment under the above heading and recommendations for its disposal.

Recommended -

That the reports as amended be adopted.

During discussion on this item Mr. Nathan advised that the Bay of Islands Harbour Board was required to undertake improvement to ferry facilities in its area and considered that opportunity should be taken to contact that Board with a view to disposing of vehicular bridges intact rather than selling at scrap value as suggested in the report.

IT WAS AGREED to delete Section 2 of the Chief Engineer's recommendation to allow this approach to be made.

ADOPTED BY BOARD

hated . G. M. is arranging to ascertain the estime of the bay of Dalances Harbour bit interest. Mr. dnieth to note re havy proposals to use kinkenhead parloan.

22nd May, 1962.

The General Manager, <u>A.H.B</u>.

REDUNDANT VEHICULAR LANDINGS

Consideration has been given to the disposal of the various redundant vehicular landings and associated equipment. To date nothing actually "firm" has been achieved, but it appears likely that they may be disposed of in the manner set out below.

• The main parts of the redundant equipment are as follows:

| Birkenhead: Existing: " New, but not installed | One bridge (B) One pontoon (A) One bridge, flap & motor (C) One steel portal,) Winch & motors (C) |
|--|--|
| Devonport: Existing: | One bridge (B) One R.C. portal Portal winch & motors |
| Western Vehicular Landing: | One bridge & flap (A) One R.C. portal (A) Portal winch & motors |
| Eastern Vehicular Landing | One bridge (B) One R.C. portal Portal winch & motors |

- (A) The Royal N.Z. Navy is considering the use of Western Vehicular Landing as a training establishment for R.N.Z.N.V.R. in lieu of lot 12 Hamer Street. If this materialises they will also require the pontoon from Birkenhead. Conditions of license, sale and fees are at present under consideration. This would dispose of the items marked (A) in the above list.
- (B) There is an enquiry from A.W. Bryant Limited for three vehicular bridges for dismantling and alteration for use in a wharf reconstruction elsewhere. This would absorb the items marked (B) (ex Birkenhead, Devonport and Eastern Vehicular Landings). The price offered is really only scrap value, £4 per ton for steelwork and £1 % super. for hardwood. This would amount to some £432 for steelwork and £210 for hardwood. I recommend the acceptance of this offer if the enquirer wishes to proceed.
- (C) We have received an enquiry from Whangarei Harbour Board through their Harbour Superintendent for one only vehicular landing complete. The most suitable one for this purpose would be the spare bridge, new portal etc. constructed for Birkenhead but not installed. The suggested basis for sale of this landing complete except for piled foundations for portal is £10,200. A (Letter from Whangarei Harbour Board dated 3.5.62 copy herewith - refers). The Whangarei Harbour Board now ask for an option for the purchase until loan authority is obtained, which would probably mean a delay of at least six months. Since this offer is considerably above scrap value, I recommend that the Whangarei Harbour Board be given the option which they seek.

+ tember deckerie

... ...

19 120/46

This would appear then to leave us with three portal winches, bridge flaps, and two R.C. portals to dispose of. The winches, being built for the special purpose are unlikely to fetch anything more than scrap value. Some of the motors are being utilised for other A.H.B. purposes. The two R.C. portals (Devonport and Eastern Vehicular Landing) are a liability and should be demolished at a suitable opportunity.

To summarise, I recommend that -

- (1) The Birkenhead pontoon, Western Vehicular Bridge and R.C. Portal be disposed of to the Royal N.Z. Navy subject to satisfactory terms being arranged.
- (2) The three bridges listed under (B) be disposed of to A.W. Bryant Limited for a total sum of approximately £642.
- (3) An option to purchase the new portal, winch, bridge etc., ex Birkenhead be given to the Whangarei Harbour Board at a negotiated price of approximately £10,000.
- (4) Remaining winches, flaps, motors and parts not required by A.H.B. be disposed of through Stores Department to the bestadvantage.
- (5) The portals at Eastern Vehicular Landing and Devonport be demolished when opportunity offers.

CHIEF ENGINEER TO THE BOARD

The Chairman, General Purposes Committee, AUCKLAND HARBOUR BOARD.

I recommend that authority be given to proceed with the disposal of this equipment in terms of the Engineer's recommendation.

Ablente .

GENERAL MANAGER

23rd May 1962

12th April, 1962.

Capt. D.W. Nielsen, Harbour Superintendent, Whangarei Harbour Board, P.O. Box 269, WHANCAREI

Dear Sir,

VEHICULAR FERRY LANDING

I acknowledge receipt of your letter of 6th April, 1962.

The equipment listed therein, and as discussed by you with our Messrs. Goodsir and Hutchinson on 2.4.62 will be available. The R.S.J's purchased for use as piled foundation for the portal tower are not included. These have been used for other purposes and were not included with the equipment inspected by you.

If your Board submits a formal offer of £10,200 I shall recommend its acceptance by this Board, and I have no reason to doubt that my recommendation will be adopted.

Yours faithfully,

JRS: HEW

CHIEF ENGINEER TO THE BOARD

1

Telephones : 2382 & 7087

1

Please address all correspondence to the Secretary

DWN/JAB

P.O. Box 269, WHANGAREI, New Zealand.

6th April, 1962.

Mr. Sutton, Chief Engineer to the Board, Auckland Harbour Board, P.O. Box 1259, AUCKLAND.

Dear Sir,

Vehicular Ferry Landing

Mhangarei Harbour Board

Thank you for your letter dated 26th March, 1962. I wish to confirm discussions with your Mr.Goodsir and Mr. Hutchinson on Tuesday 2nd April, 1962 concerning the above equipment.

Listed below are the Board's requirements.

A vehicular landing complete as a working unit which will include the following equipment.

New 110 ft landing bridge complete with flap and operating

gear.

Stall plas purchased,

No hardwood decking.

Steel portol tower complete with winch house and winches.

Electrical motors and electrical equipment and gear.

Counter weights with all necessary sheafs and blocks.

Discussions with you revealed that our offer for the above equipment was £10,200 but before I put this matter to the Board I shall be glad if you would confirm in writing that the above arrangements are acceptable to your Board.

Yours faithfully,

Sto dielse.

Capt. D.W. Nielsen, Harbour Superintendent.

DEPARTMENT Coft helloon & hu. De Wilt. REPRESENTING . Uhengarei Harbau ka. WAITED ON Gooding + PS. Hateningen 3/.4./1962: @ a.m. 1030. SUBJECT OF INTERVIEW . Webeenlan Landings Propessels to Carchece for Whengari.

REMARKS:

Caps hulson explained that an one side there is an existing ramp which could be adapted to permet a scheme las fing pertion to sperate proveded it is equipped with I flap & a landing bridge is provided at the other terminal vez mareden It. One terminal bridge is expected to be jastified but two would render the survere aneconomic. after descessing the last's to the Board of procuring the vereaces stems the fallowing was agreed as a basis for negatiation, being that which Changarie reps larle recommend to than Board of which AH 5 reps would be prepared to recommend for a cceptance. It is based on reduced value of steerwork (3) & full value of wenches, electrical gear + balance weights, made up as under. 50% of stal sudge flap & partice. 5060 1 × 1717 + 3 × 2619 Wenches 4030 Electrical an 500 Balance Wrights 500 K. P. M. 110 \$ 10,200 Latal excluding decking when has been used up clouchere When gaven well now write (Officer to Officer) asking whether tengr. would be prepared to recommend acceptance & an offen of such an inder, to enable a registic figure to be quoted in a repair to their board. Itookin.

26th March, 1962.

Captain Neilsen, Whangarei Harbour Board, P.O. Box 269, WHANGAREI

Dear Sir,

VEHICULAR FERRY BRIDGES

Since your visit to Auckland when you inspected the disused vehicular ferry bridges and equipment a private company has made an offer for the bridges.

Could you please let me know whether you are interested in buying the bridges and equipment, and if so, when you will be in a position to negotiate their purchase.

Yours faithfully,

PSH:HEW

CHIEF ENGINEER TO THE BOARD

8

5 The bleif Engineer -I think portation it would be seek to get agreenere. of works & ommette at iles stage It noved seen clat selong of not less than side months ince occur refore purchase con le processes nell. qualertes 7/962

4 The only bridges available would O Devorport be 3 Eastern Delie Landy 3 Birkenhead. wester Velie Landy to Navy New apare bridge (en B'head scheme) a whangarei. 100 yet - 5 16/ 45 Desorport, 45 -Buh. Bihead 18 432 108@ A 63 126 P210% 210 Jumber 7 @ \$642

BRANASW. BRYANT LTD.

 23
 JERVOIS
 ROAD,
 PONSONBY,
 AUCKLAND,
 NEW
 ZEALAND

 TELEPHONE
 11-139
 (3 LINES)
 P.O. BOX
 7034
 PENROSE DEPOT
 595-757

THE CHIEF ENGINEER, Auckland Harbour Board, Private Bag, AUCKLAND 16TH MARCH 1962

DEAR SIR.

allottel chensen -

? approx quantilies concerned

We confirm that we are prepared to pay the price of $\pounds4$ (four pounds) per ton for the steel content and $\pounds1$ (one pound) per super foot for the hardwood content of the three vehicular ferry bridges at present situated a Devonport (2) the end of French Street on the Eastern reclaimation and (3) in storage on the viaduct next to the Wynyard wharf.

THIS PRICE OFFERED ON THE CONDITION THAT YOU ARE PREPARED TO TRANSPORT THESE BRIDGES TO AN ACCESSIBLE PIECE OF GROUND WHERE WE CAN CUT THEM UP SUBJECT TO REMOVAL. WE ESTIMATE THAT WE COULD COMPLETE THE REMOVAL 2 MONTHS AFTER THE BRIDGES ARE AVAILABLE.

TONAGES WOULD BE CALCULATED ON FLOATING CRANE WEIGHTS OR ON WEIGHTS ESTIMATED FROM DRAWINGS.

" Timber qual. 6,300 superfo.

WE WOULD LIKE TO HEAR FROM YOU AS SOON AS POSSIBLE.

Yours FALTHFULLY,

MANAGING DIRECTOR.

540

729

63×3 approx meight - steel 45 than

15x8 x4

STEEL BRIDGE AT BIRKENHEAD.

Taking off Job No Sheet No QUATITY OF STEEL 358 cwt. 18 TONS. SAY QUANTITY OF TIMBER 8,400 su ft. 500×6= 3000 12 100 24 4600 7,800 800 8×100 8 bas E 90

disposal of the various reducedant vehicular landings. + associated equipment "for "has been achieved, but it appears likely that in general they may be disposed of that the manner ad one in the achedule below The main parts of the ducdundard equipments are as follows: Berkenbrad's Exectly: One Bridge (B) One pontoon. (A) . New, but not Installed One brage ; flap, motor (C) One Steel foodal, winch & motion Devonport : Eners One bridge thep One RC Poral Sorral winde tholos B WUL. Grustry, Ore Ro Dolal A Fortat Winel Inoton Evit Brusty One De goral D Schol Winch moloro (A) the Rolzdavy is considery the use of what as a trains edablisment in lieur of lot 12 Hamer St. It this materialises, they will also use the portion for Bitischead Gordword of sale ture at preset under negotiated A marked A world dispose of items marked A (B) There is an erquin for Allo Boyas for three valuents. broges for desmantly and alterative for use in a what reconstruction describere. This world about the items maked B. (a Strad, Strad to they offer is really only ocrap value - but the purchases It per ton for steetwork and I per hundred super

" for bardwood. This would anoul to some \$ 132 for steel wole and \$ 210 for hardwood. I recommend the acceptance of this offer of the enquires wides 5 lowcod wides & forocad.

O be received an ergin for whayare Ho though their Alabour Lugt. for one only webscular landy complete. The most our lable and for the buffor would be the oppice bridge, new ported to. conclusted for B'lead but not installed. The suggested basis for sall of this lands complete except for poled foundar for portal is \$10,000. (Later from Habour Pupt. dated , my repay of , and Secretary with late of 3 day attaches for information) the with row cole for an option for the purchase " other might mean or unce loan authomy be obtained, which would probably mean a delay of at lead are monthing. Since this offer is considerably about the perchase offer is considerably about the perchase is considerably about the scrap value, I recommed that the With be given the option

This world appear them to Ceave us with the portal windless, I two RE portals to dispose of the windless, I two RE portals to dispose purpor are not likely to felch anyth more than scrap value. Some of the motors are being used for othe HARD purposes. The two RB portals (Opul T &) are a leabely thould be demolested at a sculable opportunity.

To Summaried, I recommed that I she chree bridges leded under D be disposed of the Horsongal to a local of approx I 6d2. O the option to privichase be grated to lotto subject to their

"for bardwood. This would anout to some \$ 432 for steel wole and \$ 210 for hardwood. I recommente the acceptance of this offer of the enquires wiches & forocach

O we received an ergin from whayare HB through their Alabour Supply for one only vehicular landy compolete. The most ourtable one for the pupper would be the opare bridge, new portal te. conducted for Blead but not indalled. The suggested basis for sale of thas landy compolete encept for preed foundar for portal is \$10,000. (Latter from Habour Augor. dated, my repoly of and lecrelay WHB later of 3 day attaches for information)

acceptance of the sugester purchase prace \$10,000 a Remaining winches, flagos and motors spants not required by at \$183 be despired of this stores Dept to bed advalage (3) The portals at 8th + I por be demolished when opportuning offers.

5th February, 1962.

The Managing Director, Messrs. A.W. Bryant Ltd., P.O. Box 7034, AUCKLAND

Dear Sir,

X

VEHICULAR BRIDGES.

I acknowledge receipt of your letter of 2nd February.

There is no vehicular bridge at Northcote this service having been discontinued in 1947.

We have, however, the vehicular bridges at Devonport, Birkenhead, Eastern Vehicular Landing (French Street) and Western Vehicular Landing (Freemans Bay) and in addition a new bridge built for Birkenhead, which was never installed in position - i.e. five in all.

With the exception of the bridge at Western Vehicular Landing (which is likely to be required for other purposes) the other four vehicular bridges are available for disposal.

I suggest that your Company make an offer for such of these as you are interested in. If you need any further particulars as to design, dimensions and permissible loading, you could get in touch with my Designing Engineer, Mr. P.S. Hutchinson who will be able to give you any further information you may require.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD.

JRS: HEW

BRYANAR. BRYANT LTD.

23 JERVOIS ROAD, PONSONBY, AUCKLAND, NEW ZEALAND

TELEPHONE 11-139 (3 LINES) . P.O. BOX 7034 . PENROSE DEPOT 595-757

Chief Engineer, Auckland Harbour Board, Private Bag, AUCKLAND.

2ND FEBRUARY 1962

DEAR SIR,

WE ARE CONTEMPLATING THE USE OF THE THREE FERRY LANDING BRIDGES AT PRESENT SITUATED AT NORTHCOTE, DEVONPORT, AND WYNYARD WHARF, IF YOU HAVE NO FURTHER USE FOR THEM.

Would you be good enough to advise if they are for sale, and if so, the price asked by the Board ? If no price has been set, you may consider an offer from us.

Yours FAITHFULLY,

11

R.F. GRANT. MANAGING DIRECTOR.

TRANSPORT DEPARTMENT

OFFICE OF THE COMMISSIONER FOR TRANSPORT, BOX 1002 K, G.P.O., HOBART

P.O. Box 505,

TELEPHONE 27131

File No.

AUCKLAND, C.l. N.Z.

8th August, 1960.

The Chief Engineer, Auckland Harbour Board, AUCKLAND.

Dear Sir,

The Transport Commission having purchased the motor vessel "Sumatra" have now decided that I should tow the vehicular ferry "Ewen Alison" to Hobart with her when undertaking the delivery voyage.

It is necessary now for me to collect the required towing equipment and whilst I have been successful in obtaining wire rope, swivels, etc., I have not been able to secure $l_8^{3"}$ cable from any of the merchants nor the Naval Department.

From discussions Captain Fant and I had with Mr. Hutchinson we are led to believe you have this particular size in stock.

For the purpose of making up a bridle to give us the correct catenary when coupled with our towing wire two 15 fathom lengths are required.

The purpose of this letter is to enquire whether you could see your way clear to sell to my Commission the required lengths of 13" cable with appropriate cable joining shackles from your stock.

If unable to sell then would it be possible to let us have the cable on a replacement basis and permit us to place an order in Australia with the Falkiner Machinery Company, Brisbane, for delivery to your Board.

Any assistance you could render to us in this direction would be greatly appreciated.

Yours faithfully. F. A.F. MADDOCK Marine Superintendent. MADDOCK

35531 (5M)

PHONE No. 2 2721

LEGRAMS: "STATEWORKS," HOBART

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY; G.P.O. BOX 662E, HOBART

de Goodsil.



Department of Public Works Tasmania

fighart 16th November, 1959.

WHEN REPLYING PLEASE QUOTE No. 2/180-9/4. SEPARATE LETTERS TO BE WRITTEN ON EACH SUBJECT

Dear Sir.

Vehicular Ferry Landings.

Thank you for your letters of 2nd September and 9th November, 1959, concerning the above matter.

We understand from Mr. Maddocks of the Tasmanian Transport Department, who visited Auckland in connection with the ferries, that it would not be a practicable proposition to ship the ferry landing gear on the ferries when they are sent to Tasmania.

We have investigated the cost of shipping the materials by normal commercial routes and have concluded that very little, if any, saving in cost would arise in the construction of ferry landings in Tasmania were we to utilise the materials you have for disposal.

The question as to whether or not the ferry is to be installed at the site that this Department was investigating has not yet been decided by the appropriate Parliamentary Committee.

It therefore seems inadvisable for us to make any temporary reservation from sale of any of the parts.

It is now recessary We would like to take this opportunity of to prepare adventuation you for the trouble you have taken in for sale. providing information about this equipment.

Yours faithfully,

The Chief Engineer, R. Survey, Auckland Harbour Board, OSECRETARY. Quay Street, AUCKLAND.

'Phore No. 2 2721

Telegrams: " STATEWORKS," HOBART.

All Communications to be Addressed to The Secretary, G.P.O., Box 662 E, Hobart.



Department of Public Works, Tasmania Hohart. 11th November, 1959

Mr. J.A. Sutton, Auckland Harbour Board, C.P.O. Box 1259, AUCKLAND. N.Z.

Dear Sir,

Receipt is acknowledged of your communication of 9th November, 1959

concerning

Vehicular Ferry Landings.

The matter is receiving consideration.

Yours faithfully

WHEN REPLYING PLEASE QUOTE No. 2/180-9-4 Separate Letters to be Written on each Subject.

WHEN REPLYING

der frott = Alease bring up in a week 40344

(E. Boyes) SECRETARY

336

9th November, 1959.

The Secretary, Department of Public Works, Tasmania, G.P.O. Box 662E, <u>HOBART</u> TASMANIA

Dear Sir,

VEHICULAR FERRY LANDINGS

Further to my letter 2nd September and your acknowledgment 2/180-9/4 of 7th September, will you please advise me whether you have reached any decision in this matter.

It is the Board's intention to advertise the vehicular ferry landing equipment for disposal but in view of your enquiry indicating that you may require a reasonable proportion of the machinery and equipment in sets no further action has been taken to dispose of any of the machinery or equipment piecemeal. However, it has now become necessary to proceed with the disposal of the landings and machinery.

I would be prepared to reserve temporarily from sale any parts in which you may be definitely interested if you require additional time to arrive at a decision provided I receive prompt advice defining which items you would like to have reserved and an indication when an offer may be expected. Will you therefore please advise how this matter stands with your Department.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD

JAG : HEB

Auckland Harbour Board. hi. Satten . The Marbaarmaster earres This size of chain in stack but could not release any of This except on a guarantic of replacement within a shart time. Copt. maddack shared arrange to place an order for his requirements immediately + otherin a ferrir delening date. If this is not early enough H.M. would release some of his state on a replacement basis, subject Ko G. In a appended. Cope. maddach has been informed accordingly by Copt. Kelany . 514 .

PHONE No. 2 2721 TELEGRAMS: "STATEWORKS," HOBART

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY, G.P.O. BOX 936J, HOBART



Department of Public Works Tasmania

Anhart 4th December, 1959.

| WHEN REPL | YING QUADA OU |
|-------------|-------------------------------------|
| PLEASE QUO | DTE No. 2/180-9/4 |
| SEPARATE LE | TTERS TO BE WRITTEN ON EACH SUBJECT |

Dear Sir,

Vehicular Ferry Landings:

With reference to your letter of the lst. of December, 1959, it would appear that our reply to your letters dated 2nd September and 9th November has gone astray and we herewith enclose a copy of this reply of 16th November, 1959 for your information.

Yours faithfully,

A-g. Eurnen SECRETARY.

The Chief Engineer, Auckland Harbour Board, Quay Street, <u>AUCKLAND</u>.

der Goodsis -

It is now recessary to propare for disposal observicere Moled J. 41469

16th November, 1959.

Dear Sir,

Vehicular Ferry Landings:

Thank you for your letters of 2nd September and 9th November, 1959, concerning the above matter.

We understand from Mr. Maddocks of the Tasmanian Transport Department, who visited Auckland in connection with the ferries, that it would not be a practicable proposition to ship the ferry landing gear on the ferries when they are sent to Tasmania.

We have investigated the cost of shipping the materials by normal commercial routes and have concluded that very little, if any, saving in cost would arise in the construction of ferry landings in Tasmania were we to utilise the materials you have for disposal.

The question as to whether or not the ferry is to be installed at the site that this Department was investigating has not yet been decided by the appropriate Parliamentary Committee.

It therefore seems inadvisable for us to make any temporary reservation from sale of any of the parts.

We would like to take this opportunity of thanking you for the trouble you have taken in providing information about this equipment.

Yours faithfully,

SECRETARY:

The Chief Engineer, Auckland Harbour Board, Quay Street, AUCKLAND.

No. B 2721 Telegrans: "STATEWORKS," HOBART.

All Communications to be Addressed to The Secretary, G.P.O., Box 662 E, Hobart.



Department of Public Works, Tasmania

Unhart. 7th September, 1959.

Chief Engineer, Auckland Harbour Board, Quay Street, AUCKLAND N.Z.

WHEN REPLYING 2/180-9/4 PLEASE QUOTE No.

Dear Sir,

Your reference - 336

Receipt is acknowledged of your communication of

2nd September, 1959.

concerning

Vehicular Ferry Landings.

The matter is receiving consideration.

Yours faithfully

du Goodans hoted fr.

32187

(E. Boyes) SECRETARY

...

In view of this I feel that I am unable to suggest to you any idea of prices that might be acceptable to the Board and the Bridge Authority and would prefer to receive an offer which could then be reported to the interested parties. I have therefore quoted below the actual cost to the Board of providing the equipment in which you expressed interest. These prices have been broken down to individual contracts but the scope of these does not in every case agree with the items listed by you :-

| (a) New 110 feet spare landing brid, (for Birkenhead) excluding flap operating gear Steelwork Hardwood decking in place Flap complete less operating | £6,717.10.10. £1,000. 0. 0. | |
|---|--------------------------------|---------------|
| gear, approximately | \$1,000. 0. 0. | £8,717.10.10. |
| (b) and (c) Steel Portal Tower together with steel framed machinery house floor Steel framing for winch house R.P.M. sheeting not included. | £2,065.10. 3. 554. 0. 0. | £2,619.10. 3. |
| (d) and (e) Main Winch (built for Birkenhead) excluding motors and electrical work. Flap Winch (built for Birkenhead) excluding motors and electrical work. | £2,814. 4. 1. £1,215.10. 9. | £4,029.14.10. |



TO HEAD OFFICE:

The Secretary, Dept. of Public Works Tasmania, G.P.O. Box 662E, <u>HOBART</u>

Dear Sir,

VEHICULAR FERRY LANDINGS

I acknowledge receipt of your 2/180-9/4 dated 5th August. Unfortunately it has taken a little time to assemble the information you requested. Even so it has not been practicable to provide the information in the exact form you desired but I believe that the information set out below will be sufficient to enable you to make your own assessments.

The Auckland Harbour Bridge Act makes provision for the payment of compensation in respect of the cessation of Ferry Services and my Board has accordingly lodged a claim in respect of redundant ferry landing facilities. The amount of the final claim will be influenced by prices obtained for saleable equipment.

In view of this I feel that I am unable to suggest to you any idea of prices that might be acceptable to the Board and the Bridge Authority and would prefer to receive an offer which could then be reported to the interested parties. I have therefore quoted below the actual cost to the Board of providing the equipment in which you expressed interest. These prices have been broken down to individual contracts but the scope of these does not in every case agree with the items listed by you:-

| (a) | New 110 feet spare landing bridg (for Birkenhead) excluding flap operating gear | ge | |
|-----|---|--------------------------------|---------------|
| | Steelwork Hardwood decking in place Flap complete less operating | £6,717.10.10. £1,000. 0. 0. | |
| | gear, approximately | £1,000. 0. 0. | £8,717.10.10. |
| (b) | and (c) Steel Portal Tower together with steel framed machinery house floor Steel framing for winch house R.P.M. sheeting not included. | £2,065.10. 3. 554. 0. 0. | £2,619.10. 3. |
| (a) | and (e) Main Winch (built for Birkenhead) excluding motors and electrical work. Flap Winch (built for Birkenhead) excluding motors | £2,814. 4. 1. | |
| | and electrical work. | £1,215.10.9. | £4,029.14.10. |
| | | | |

...

...

The Secretary, Dept. of Public Works Tasmania.

(f) Old 110 feet steel landing bridge and flap complete with decking, built 1929

> Approximate cost of main (£825) and auxiliary (£280) winches built 1929 for operating above bridge. These are in good condition and could be made available.

(g) For dismantling and loading allowance has been made for handling to bridges complete less flap by 80 ton floating crane and landing direct on to customers vessel or punt by the same means.
Flaps and other gear would be handled by other means. On this basis the estimated chargeable cost would be approximately

£600. 0. 0.

The estimate given under (g) makes no allowance for preparing customers vessel for receiving the loads nor for making any alteration to the bridges to reduce overall dimensions. We have been in touch with Mr. Maddock and pointed out to him that the dimensions of the bridges are such that they would have to be loaded on their sides if shipped aboard the ferries. Even then the complete bridges may be too long to fit on the clear deck space and may require to be cut in half. No doubt he will communicate with you on this aspect when he has had an opportunity of inspecting the gear and discussing the proposition with the insurers.

In reply to your enquiries, the flap controls on the Devonport landing and Birkenhead spare landing are similar, i.e. "Notes on Electrical Operation" are applicable to these two landing flaps on which the flap control circuit is 110V D.C. via rectifier and transformer across 400V A.C. In the case of the Eastern and Western landings the flap control circuits are 20V A.C. via transformers across 230V A.C. Two off either control system could be made available at your option, less transformers if you so desire.

The arrangement of main winding gear is as follows:-There are two motors mounted on a single shaft driving through gearing to two winch barrels but only one motor is on power at one time, i.e. the working motor drives both winch barrels plus the armature of the spare motor - See attached copy of drawing S.324/2.

Our experience has been that it is essential to have a spare landing flap available for interchange in the event of damage occurring or repair becoming necessary. The flaps are interchangeable and a third flap which we have used as a spare could be made available if required.

I shall be pleased to hear from you further and to receive offers for such of the components as you may consider to be of value to you.

CHTEP FARATA

- 2 -

2nd September, 1959.

Approx. £4,000. 0. 0.

£1,105. 0. 0.

1 (3) Desmantle Haf & flace on Western Viabuil or descent outs one of le ferries. 1 4 Transfect 4 hos (Edg) 7 21 Ahrs 2 fitters 4 11 launch 18 Bridge Prefaration, lastingbalandots, Ilraquing Bridge & removing wines Ahrs A Kigger) 224 4 " 2 Fetters S What carpeter rigging builts for Mahuarshings, 3 4 hrs & then Removing flaf counter weight ate . Transfort 4 hrs. Jauret 4 " 32 8 Cut off top of former Pole (Value of Polot labourt lift welk toroport) Electorion Mahua & day 1st hofil, subsequet 3/100211 3 whele planing bridge onto one of the provies) 127 Plus contingencies which night easily double up on above 200 Total estimate for above 7400 Hinches Auchy it would fay Hobart to prochase the winites If so we would have to take the lof of the house to left them out. To the board any material teftores from EVI would be only scrap. - we could sell the winches et for scrap volue + cost of removal - which would be much cheaper than Hobort could manufacture new ones Say 4 men I week - \$100 + Gear have ete + Serep value, day - 2 300

1 For loading all the gencontr be terms I suggest the Board charge the Makua I day a contract to do the work for about Z 100 forF I suggest we be prepared to accept half The figure of 2 4000 on your list A-F. Herefore, if we get 22000 for the bridge we would be doing well. Alternatively we might undertake to supply the EVI bridge & flap, removal & loading onto perry - together with the two 16 ton balance weights, flaf winch, main winch, tide float, refusete for 23000. 9 : Suggest a Men bridge 26720 1000 Hap 63 Tower Work floor 2620 0) al 4030 Winches Haf much gear. (Is the made ?) E Old Bridge F Handling old bridge & flop. ? 3000 g Loading them a - e Say 130 Total for suffly & loading \$ 17,500 h Here could get \$10 000 we should throw a farty 1. Rg 25 4-7 57

WINCH FLOOR 2619 - 10 - 3

ANDrox. 1000 - 0 - 0

D. WINCHES. 24029-14-10 F FLAP WINCH GEAR.)

BRIDGE .

TONER

336,

ıf Public Works Tasmania

phart 5th August, 1959

WHEN REPLYING Please Quote No. 2/180-9/4 separate letters to be written on each subject

(Built 1929) APROVI 4000-0-0

Tehdoular Ferry Cobssing-Ferry Berthing:

The bar bar to my letter of 23rd July 1959, the bar bar bar conclusion that it may be possible to bar bar bar bar bar bar stances, some of the opendices in your letter

supply us with prices

(a) Fride to the new spect truss and landing (land for Birke head)

(b) Price for the steel work for the new tower

the winch house floor

ear for the tower for

ar on gangway flap

(made for Birkenhead)

(f) Price for one old 110-ft. truss and landing flap

(g) Approximate cost of dismantling and loading Item (f) onto the ferry - (? what about a - e)

= 2 vehicular bridges, 2 bridge flagos (part) which house 1 steel powal + (part) which for B'head only ? main which that which for B'head only NE NO. 2 2721

TELEGRAMS: "STATEWORKS," HOBART

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY, G.P.O. BOX 662E, HOBART



Department of Public Works Tasmania

Hohart 5th August, 1959

WHEN REPLYING Please Quote No. 2/180-9/4 separate letters to be written on each subject

Dear Sir,

Vehicular Ferry Crossing-Ferry Berthing:

Further to my letter of 23rd July 1959, we have come to the conclusion that it may be possible to utilise in certain circumstances, some of the equipment described in the appendices in your letter of 14th July.

Could you please supply us with prices for the following equipments:-

- (a) Price for the new spare truss and landing flap (made for Birkenhead)
- (b) Price for the steel work for the new tower (made for Birkenhead)
- /(c) Price for the steel for the winch house floor (made for Birkenhead)
- /(d) Frice for the winding gear for the tower for Birkenhead.
- / (e) Price for flap winch gear on gangway flap (made for Birkenhead)
- (f) Price for one old 110-ft. truss and landing flap
 - (g) Approximate cost of dismantling and loading Item (f) onto the ferry - (I what about a - e)

= 2 vehicular bridges, 2 brack flagos (part) which house 1 steel portal + (part) which for B'head only ? main which that which for B'head only

At the present stage Parliamentary authority has not been given for the construction of the ferry berths; however, it seems possible that authority will be received to construct such ferry berths before the two ferries "Ewen Allison" and "Alex Allison" leave New Zealand for Tasmania in the event that the Tasmanian Government purchases the ferries. We have in mind that if this is the case, it might be possible to ship the portions of your landing gear which could be utilised here, on the ferries, and are therefore endeavouring to ascertain how much this will cost and what difficulties may have to be overcome.

It would appear that the spare vehicular landing for Birkenhead was made in 1954. We have understood that there are two separate 30" winches in each tower and we should like clarification on these points.

We presume that the gangway flap control for the spare Birkenhead landing is similar to that described in para. 2 of - "Vehicular Landings, Notes on Electrical Operation" enclosed in your letter of 14th July.

We do not require any of the electric motors or emergency petrol engines as our electrical supply is of a different voltage.

Transpert Commession of Varmania

We understand that Mr. Maddocks of the Tasmanian Transport Department may be visiting Auckland soon, and will ask him to confer with you regarding the loading problem if it seems feasible to send the gear over to us in the way we suggest.

Yours faithfully,

The Chief Engineer The Auckland Harbour Board Quay Street - <u>AUCKLAND</u> New Zealand. PHONE No. 2 2721

TELEGRAMS: STATEWORKS," HOBART

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY, G.P.O. BOX 662E, HOBART



WDC/5 Department of Jublic Works Tasmania

Anhart 23rd July, 1959

WHEN REPLYING PLEASE QUOTE No. 2/180-9/1 SEPARATE LETTERS TO BE WRITTEN ON EACH SUBJECT

Dear Sir,

Vehicular Ferry, Tamar River Crossing:

Thank you for your letter of 14th July 1959, enclosing photographs and descriptions of your vehicular ferry landing gear. The drawings forwarded separately have also arrived safely.

We are studying the information you have sent (which will be most useful to us) and we may communicate with you further regarding equipment which you have, and which may be available for disposal.

Your assistance and co-operation in this matter is greatly appreciated.

Yours faithfully,

The Chief Engineer, The Auckland Harbour Board, Quay Street AUCKLAND New Zealand

Me goodsin



KS," HOBART.

nications to be to The Secretary, Box 662 E, Hobart.

Department of Public Works, Tasmania Hohart, ^{17th} July, 1959.

Chief Engineer, Auckland Harbour Board, G.P.O. Box No. 1259, <u>AUCKLAND</u>.

WHEN REPLYING 2/180-9/4 PLEASE QUOTE NO. Separate Letters to be Written on each Subject.

Dear Sir,

Receipt is acknowledged of your communication of

14th July, 1959.

______concerning_____

Vehicular Ferry Landings. with Enclosures.

The matter is receiving consideration.

Yours faithfully

de Goodees 40344 A.

(E. Boyes) SECRETARY COPY TO THE GENERAL MANAGER

336.

AIR MAIL.

14th July, 1959.

The Secretary, Department of Public Works Tasmania, G.P.O. Box 662E, <u>HOBART</u>

Dear Sir,

VEHICULAR FERRY LANDINGS

I acknowledge receipt of your letter WDC/7 of 22nd June addressed to the Secretary and subsequent cable 10th July requesting copies of detailed plans of the ferry landings provided at Auckland and regret that some delay has occurred in sending these. I am accordingly forwarding by Air Freight certain general arrangement drawings and photographs together with notes on the various landings and general notes on the electrical operation and interlocking of safety provisions.

The landings were originally built nearly 30 years ago and in the intervening period many modifications have been carried out for one reason or another. Unfortunately not all of these modifications have been recorded on the original set of drawings and I am therefore reluctant to forward full sets of the detailed drawings as they stand. I believe however that the general arrangement drawings which I have enclosed, together with the appropriate clearance diagrams, will enable your Engineering staff to make a general appraisal of the suitability or otherwise of the landings to your own purposes. I would then be willing to furnish such other detailed drawings of such parts as you may require.

You will notice that the winding gear varies from landing to landing and I should make the following points relative to the supplementary notes:-

<u>Devonport landing</u> - This has given less trouble electrically than the other two landings but in replacing worn contactor gear some years ago opportunity was taken to revise the control scheme by adding rectifiers to provide D.C. operation of contactors. The two other landings have not been modified similarly and the general description given for Devonport is peculiar to this landing in this regard.

Western landing - The horsepower of motors is much greater than has proved to be necessary. The control scheme has therefore been modified to provide for a reduced starting current which in turn has reduced the effective horsepower of the motors.

Western and Eastern Landings - The motor circuits of these two landings have been modified to provide automatic changeover of motors, i.e. the standby motor will start up automatically after a certain time delay if the primary motor does not start up within that time. Provision is made for selecting which motor is to operate as the primary and changeover is effected periodically, manually. The

14th July, 1959.

The Secretary, Department of Public Works Tasmania, <u>HOBART</u>

Devonport landing draws supply from a different Supply Authority and it has not so far proved necessary to provide automatic changeover of motors and changeover is still done manually.

<u>Eastern Landing</u> - The $12\frac{1}{2}$ H.P. motor is a replacement for one original 25 H.P. motor which burnt out when phasing occurred in the supply system. It has proved to be adequate for the duty.

Ferry Slips - The timber piled slips shown on the original drawings have since been modified considerably to enable the "Allison" boats to operate into them. The alteration was however a compromise since the slips also had to accommodate the older vehicular ferry boats of the fleet and there would appear to be no good purpose in sending the details of the modification unless you specially desire to have them.

<u>Electrical Interlocking</u> - This subject is of the utmost importance from the safety aspect. The matters set out in the attached "Notes on Electrical Operation" give an indication of the devices and interlocks which we have found to be necessary for the protection of the equipment and the public.

<u>Birkenhead Landing</u> - This is a pontoon landing. The pontoon is only a few years old but the bridge is very old. It had been intended to provide a suspended bridge at this point and a new bridge, portal structure, winch house and winding gear was procured for the purpose. This gear was however not used, having regard to the time factor involved in effecting the changeover and the fact that a commencement was made on the Harbour Bridge at about the time the gear was delivered. This gear could be made available for disposal. It is a complete set. It has been test assembled and tested but has not been used in service.

As you are not doubt aware the vehicular ferry services at Auckland have now ceased entirely and it is unlikely that the landings need be retained. If you are interested in the purchase of any of the equipment I would be pleased to furnish the fullest possible details of any portions in which you may be interested.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD.

Encl: 1 copy of each
Drgs. A.413/1,6 & 7, A.416/1, A.555/1, E.605/2, S.603/1 & 2
Plant Records, Devonport Landing, E.V.L., W.V.L. Spare
Landing.
Notes on Electrical Operation
Description of Devonport Landing
Photographs E.V.L. from Jellicoe Wharf
Flap & Portal from seaward side
E.V.L. from Landside (2)

JAG :HEB

COPY TO GENERAL MANAGER

336

1

AIR MAIL

14th July, 1959.

The Secretary, Marine Board of Devonport, Devonport, TASMANIA

Dear Sir,

VEHICULAR FERRY LANDINGS

Some time ago Mr. E.W. Turner, one of our Board members mentioned that he had been discussing port problems with you while he was in Tasmania and that you were interested in his description of vehicular ferry landing facilities which have been provided at Auckland. He suggested that your Engineers would be pleased to receive a copy of the drawings. Since the four vehicular ferry landings operated by the Board are all different in detail and certain of these were quite substantially different from others I am sure you will appreciate my dilemma as to just what to send you.

Recently however there has been a more specific and detailed enquiry from the Department of Public Works, Tasmania and it occurs to me that the information prepared in answer to this enquiry may be of value to yourself also. I am accordingly forwarding by Air Freight certain general arrangement drawings and photographs, together with notes on the various landings and general notes on the electrical operation and interlocking of safety provisions.

The landings were originally built nearly 30 years ago and in the intervening period many modifications have been carried out for one reason or another. Unfortunately not all of these modifications have been recorded on the original set of drawings and I am therefore reluctant to forward full sets of the detailed drawings as they stand. I believe however that the general arrangement drawings which I have enclosed, together with the appropriate clearance diagrams, will enable your Engineering staff to make a general appraisal of the suitability or otherwise of the landings to your own purposes.I would then be willing to furnish such other detailed drawings of such parts as you may require.

You will notice that the winding gear varies from landing to landing and I should make the following points relative to the supplementary notes:-

<u>Devonport Landing</u> - This has given less trouble electrically than the other two landings but in replacing worn contactor gear some years ago opportunity was taken to revise the control scheme by adding rectifiers to provide D.C. operation of contactors. The two other landings have not been modified similarly and the general description given for Devonport is peculiar to this landing in this regard.

Western Landing - The horse-power of motors is much greater than has proved to be necessary. The control scheme has therefore been modified to provide for a reduced starting current which in turn has reduced the effective horse-power of the motors.

...

The Secretary, Marine Board of Devonport, TASMANIA

Western and Eastern Landings - The motor circuits of these two landings have been modified to provide automatic changeover of motors i.e. the standby motor will start up automatically after a certain time delay if the primary motor does not start up within that time. Provision is made for selecting which motor is to operate as the primary and changeover is effected periodically, manually. The Devonport landing draws supply from a different Supply Authority and it has not so far proved necessary to provide automatic changeover of motors and changeover is still done manually.

- 2 -

Eastern Landing - The $12\frac{1}{2}$ H.P. motor is a replacement for one original 25 H.P. motor which burnt out when phasing occurred in the supply system. It has proved to be adequate for the duty.

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Yours faithfully,

CHIEF ENGINEER TO THE BOARD

Encl: 1 copy of each
Drgs. A.413/1,6 & 7, A.416/1, A.555/1, E.605/2, S.603/1 & 2
Plant Records, Devonport Landing, E.V.L., W.V.L. Spare
Landing.
Notes on Electrical Operation
Description of Devonport Landing
Photographs E.V.L. from Jellicoe Wharf
Flap and Portal from seaward side
E.V.L. from landside (2)

Description

(Typical)

The main gangway is of steel construction and is 110 ft. from centre to centre of bearings and is 12 ft. wide from centre to centre of trusses. The roadway is approximately 9 ft. wide for single lane traffic. At the outer end of the gangway a flap is fitted which is lowered electrically onto the deck of the ferry boat.

The dead load of the gangway etc. suspended from the Portal is 41 tons of which 36 tons is taken by counterbalance weights and 5 tons by the lifting tackle.

The maximum live load that can come on the lifting tackle is 53 tons, making the total maximum load of 58 tons to be lifted by the winch with its two lifting tackles. Each of the two main dectrical motors are capable of lifting this load through the gearing without overload.

The gangway can be lifted at a speed of approximately 8 ft. per minute - see drawing roll A 411 for arrangements of bridge and machinery. The system of automatic control is such that the roadway surface at the outer end of the gangway is not more than 8 ft. and not less than 7 ft. above the level of the water at any stage of the tide.

The main machinery is boused on top of the portal. The main winch has two barrels to take the leads from the hoisting tackles, one from each side of the bridge to prevent racking of the bridge when loaded eccentrically. All hoisting barrels are connected through gearing to two 12 BHP electric motors driving at 720 RPM. In addition, hand operated gearing is provided. On the hand operated shaft, coupled through a chain drive, an 8 HP 4 cylinder, electrically started petrol engine, to act as emergency drives in case of an electrical power failure, is fitted.

The switchboard controlling the operation of the bridge mechanism is mounted in the winch house, and on this board are separate contactor panels with independent circuit breakers for each motor. A glass bottle float operates the control switch to the 110 Volt direct current circuit, which is rectified from 400 Volts A.C. supply.

Two rectifiers are installed, one for the bridge the other one for the flap. In the event of a failure by either rectifiers the other rectifier can be set to do the work of the bridge and flap for a limited period.

The flap is operated by push button control with over-run and limit switch, so that the flap shall not jerk, thereby obviating an extra load on the wires when a ferry boat is surging in bad weather.

In case the automatic bridge mechanism fails a push button control has also been fitted, which can be brought into service via a change over switch for manual operating. Contract No. for machinery 818 Date machinery installed 1927 Name of winch manufacturer Drawing No. A411/ Length C to C gangway bearing 110'-0" " C to C of trusses 12'-0" Width of roadway 91-0# Maximum gangway load 41 tons, 36 tons taken by counter balance " live gangway load 53 tons Max, live load on hoist motors 58 tons Diameter of hoist drums 30" Hoisting speed 8 ft. per minute Size and length of hoist rope 2/210'-0" x 31", galvanised Lang's lay " " " balance rope 21 2/170'-0" x 5" " f2 22 " " " flap rope 2/70'-0" x 2" " ordinary lay 22 " " balance rope 28. 92 2/50'-O" x 3' black non-spin 12 hp. @ 700 RPM, 400 Volts, 3 phase B. H. P. of hoist motors 88 88 No. 2 Makers Metropolitan Vickers Control Automatic float switch and contactor control B. H. P. of flap motor 9 hp. @ 950 RFM, 400 Volts. 3 phase No. # # Makers British Thompson, Houston Ltd. Control Push button contactor control Gangway height above) Maximum 8'-0" water at all tides) Minimum 7101 Emergency drive Petrol engine Size and type 1936 to 1939 model, 8 hp., & cylinder Maker Morris Date installed 1956 Hoisting emergency speed 5" per minute.

DEVONPORT VE

HICULAR LANDING

Contract No. for machinery Date Machinery installed Name of winch manufacturer Drawing No. Length C to C gangway bearing " C to C of trusses Width of roadway Maximum gangway load " live gangway load Max. live load on hoist motors Diameter of hoist drums Hoisting speed Size and length of hoist rope " balance rope 52 22 11 22 22 " flap rope 87 " " balance rope 13 11 \$1 B. H. P. of hoist motors No. Makers Control. B. H.P. offlap motor No. . . Makers Control Gangway height above) Maximum water at all tides) Minimum Emergency drive Size and type Maker Date installed Hoisting emergency speed

842 1928 A413/ S290 A411 for gangway 110'-0" approximately 12'-0" 9'-0"

30"

6 tons @ 14 ft. per minute 2/210'-0" x 31", galvanised Lang's lay 2/170'-0" x 5" 2/70'-0" x 2" " ordinary lay 2/50'-0" x 3h" Hack non-spin 1/12% hp. @ 940 RPM, 400 Volts, 3 phase, 1/25 hp @ 705 RPM, 400 volts, 3 phe. 1 off each 121 hp. L.S. & E., 25 hp. E.C.C. Automatic float switch and contactor control 10 hp. @ 965 RPM. 400 Volts, 3 phase Metropolitan Vickers Fush button contactor control 8'-0" 7'-0" Petrol engine 1936 to 1939 model, 8 hp. 4 cylinder Morris 1956 5" per minute Balance weight 18.4 tons

Contract No. for machinery Date machinery installed Name of winch manufacturer Length C to C gangway bearing Drawing No. Length C to C of trusses Width of roadway Maximum gangway load 22 live gangway load Max. live load on hoist motors Diameter of hoist drums Hoisting speed Size and length of hoist rope 55 11 " balance rope 目 " flap rope 督 " " balance rope 轻 52 B. H.P. of hoist motors No. Makers Control B. H. P. of flap motor Ež No. 62 Makers Control Gangway height above)Maximum water at all tides)Minimum Emergency drive Size and type Maker Date installed Hoisting emergency speed

866 1929 Messrs. Collett & Sons, Dannevirke 100'-7³/₄" ex Hobson V. landing Ah16/ Ah18/ & S324/1 12'-0" 9'-0"

30"

6 tons @ 14 ft. per minute 2/210'-0" x 31" galvanised Lang's lay 2/170°-0" x 5" 2/70°-0" x 2" ordinary lay **各条** 2/50'-0" x 3's" black non-spin 55 hp. @ 705 RPM, 400 Volts, 3 phase 2 British Thompson, Nouston Ltd. Automatic float switch contactor control 10 hp. @ 950 RPM Metropolitan Vickers Push button contactor control 8'-0" H.W.S.T. 6'0" L.W.S.T. Petrol engine 1936 to 1939 model, 8 hp., 4 cylinder Morris 1956 5" per minute 7: 1 purchase tackle. Hoist motors originally at Devonport Balance weight 12.85 tons

VEHICULAR LANDING

de for Birkenhead

Contract for machinery Date machinery installed Name of winch manufacturer Drawing No. Length C to C gangway bearing " C to C of trusses Width of roadway Maximum gangway load " live gangway load Max. live load on hoist motors Diameter of hoist drums Hoisting speed Size & length of hoist rope " " " balance rope " " " Flap rope 22 " " " balance rope 25 B.H.P. of hoist motors No. Makers Control B.H.P. of flap motor No. 22 22 Makers Control Gangway height above (Maximum water at all tides (Minimum Emergency drive Size and type Maker Date installed Hoisting emergency speed

A 555/5 8 324/2 6 tons @ 14 ft. per minute 2/210'-0" x 31" galvanised Lang's lay 121 mp. @ 940 RPM Automatic float switch contactor control 121 hp. @ 940 RPM Push button contactor control

1441 Bridge, 1452 Superstructure, 1465 Winch, 1521 Steel punt

110'-0"

12'-0"

9.0"

30

2

L.S. & E.

L.S. & E.

Winch, Mason. Bridge A. & G. Price, Portal, Cameron. Flaps and float control, A.H.B.

VEHICULAR LANDINGS NOTES ON ELECTRICAL OPERATION

MAIN BRIDGE :

The bridge is controlled by a float operated switch which raises or lowers the bridge at each four inches of tide change. Duplicate motors are installed, in some cases with automatic changeover controlled by time delay relays. If through power failure or other reason the bridge hoist equipment fails to operate, a further slight rise or fall of the tide, as the case may be, operates an alarm switch, which rings a bell, controlled over telephone lines, at the Harbourmaster's Duty Office which is manned at all times. This alarm has on several occasions been instrumental in preventing the immersion of the bridge by a rising tide. Upper and lower limit switches are fitted.

GANGWAY FLAP:

The flap is hand operated by a member of the ferry crew, by means of "RAISE" and "LOWER" push buttons mounted at the outer end of the flap. When the flap is lowered to the deck of a ferry, a slack rope switch operates automatically to pay out enough slack to allow for the normal rise and fall of the ferry during unloading and loading. If extra loading lowers the deck further, the motor restarts and stops automatically to pay out more slack rope. Limit switches operated by the flap counterweight are fitted. An emergency "STOP" button is fitted and a limit switch to protect against failure of the slack rope switch is being considered.

A steel gate is placed across the main bridge, and is electrically interlocked with the flap so that the flap cannot be raised from the deck of a ferry until the gate is closed. In addition, the gate is mechanically locked by the rising flap, and cannot be reopened until the flap has again been lowered to the deck of a ferry. A "STOP" light is mounted at the head of the bridge, and is interlocked with the gate so that it is illuminated at night when the gate is closed, and is extinguished by the opening of the gate.

GENERAL:

Hand winding gear is provided for both bridge and flap, in each case with interlocks to ensure that power cannot be supplied to the motor while the winding handle is engaged. To facilitate one man control of a bridge during periods of power failure or breakdown, small petrol engines have recently been installed in the bridge winch houses, for use in place of the slow and laborious hand winding gear.

14th October, 1957

VEHICULAR LANDINGS

ELECTRICAL OPERATION.

lotes and

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marine Board

Desapart

The Secretary

Aurkland Harbour Board.

14th October, 1957

Losmania,

laneral drogs. Net. landengs

ma E. J. Genner has requested There he ferwarded to the information of your Eng.



REFERENCE MY LETTER OF 22ND JUNE STOP WILL YOU PLEASE SEND THE SET OF PLANS OF THE LOADING RAMP AND BERTH TO THE FERRY EWEN ALLISON BY AIRFREIGHT PER QUANTAS AND TAA TO PUBLIC WORKS DEPARTMENT DAVEY STREET HOBART TASMANIA

STATE WORKS

case of a Tasmanian location where we have a range of tide of approximately 14 ft. to contend with, a similar installation would be most beneficial.

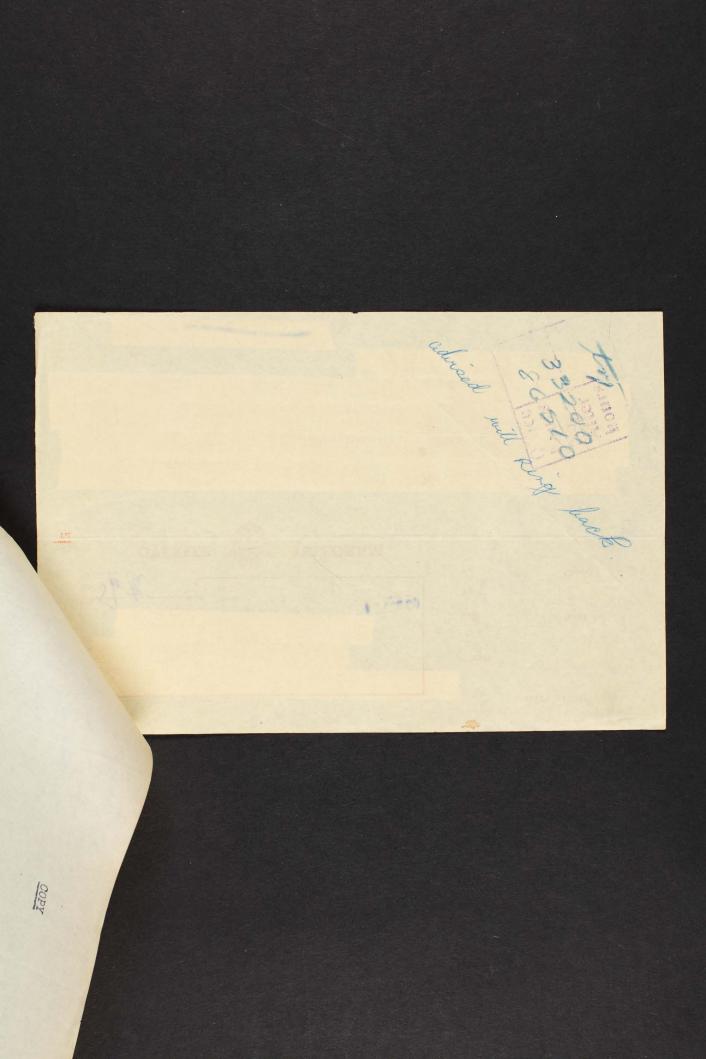
We would be most grateful if it could be arranged for this Department to be provided with a set of the detailed drawings of the installation referred to. This Department would, of course, reimburse your Organization with any costs involved in supplying the plans.

Yours faithfully,

SECRETARY

The Secretary Auckland Harbour Trust Quay Street <u>AUCKLAND</u> New Zealand

COLL 22ND



COPY

22nd June, 1959

Dear Sir,

Vehicular Ferry Crossing, Ferry Berths:

You will be aware that the Tasmanian Government has arranged to purchase the two steel ferries "Ewen Allison" and "Alex Allison" which have now become redundant due to the opening of the new Auckland Harbour Bridge.

This Department is required to construct suitable berths for the ferries at the site of their new operations. We learned from Mr. Maddock of the Tasmanian Transport Commission who visited New Zealand to negotiate the purchase of the ferries that the Harbour Trust has a most efficient ramp installation on its ferry berths for loading and unloading vehicular traffic; and that he considers that in the case of a Tasmanian location where we have a range of tide of approximately 14 ft. to contend with, a similar installation would be most beneficial.

We would be most grateful if it could be arranged for this Department to be provided with a set of the detailed drawings of the installation referred to. This Department would, of course, reimburse your Organization with any costs involved in supplying the plans.

Yours faithfully,

SECRETARY

The Secretary Auckland Harbour Trust Quay Street <u>AUCKLAND</u> New Zealand

