

FILE NO. 884/3.

LIGHT OR BERTHS - FANSHAWE STREET.

Includes: Contract No.1328 "Larssen" Steel Si eet Piling for Lighter Berths.

Co tract No.1370, Excavation for Li ther Berths, Fanshawe Street.

Con tract No.1374, Contruction of Broastwork at Pakenham Street

Lifater Basin.

Lighter Berths

884/3

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FILE NO. 884/3.

LIGHTER BERTHS - FANSHAWE STREET.

Includes: Contract No.1328 "Larssen" Steel
Sheet Piling for Lighter Berths.

Contract No.1370, Excavation for
Lighter Berths, Fanshawe Street.

Contract No.1374, Contruction of Breastwork at Pakenham Street Lighter Basin. Auckland Harbour Board

MEMORANDUM

26th January 1967

FROM

THE HARBOURMASTER

TO

THE CHIEF ENGINEER

Attached is a copy of letter from the District Officer, Marine Department, requesting consideration of a less exposed berth for their vessel "OHORERE".

As there is no alternative berth suitable for this vessel I am sure the present berth can be made safe for "OHORERE" if three light piles suitably backed by rubber tyres were placed along the berth to hold the vessel clear of the steel sheet piling.

Would you please advise cost of carrying out this work in order that authority can be obtained.

HARBOURMASTER

Monda

RHC/HG

OHORERE (SS')

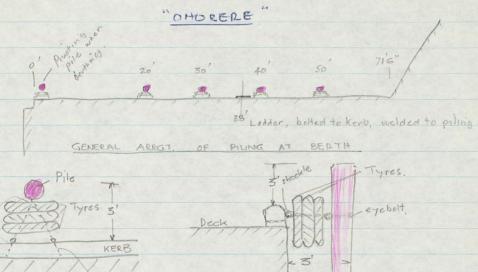
Pile well hyre behind how feeler had min feeler had min feeler had min feeler had been h

PLAN OF PILE & BUFFER

LOST.

2, 2.67 Nº 53

IMPROVEMENTS TO BERTHAGE ACILITIES FOR



ELEV. AT PILE

	9	
Transport No. 4 3days.	£150.0.0	
Crane hire for piles 1hr. Piles 5/30' @ 6/- pu-11.	2, 12. 6 5.0. 0	Design and
Piles 5/30' @ 6/- pur ft.	45.0.0	asting:
Steel izader Sta. 18	25.0.0	
Steel izader Sta. 18' Eyebolts, Sonly D 13 en	15.0.0	J. Forsyth.
Gezr 2 Tools	20.0.0	
Chain 50' 2 7/- puft	17.10.0	
Shackles Sundries	10.0.0	
Welder for legger - Idey	4.0.0	

Chain to be corried round Kerb and shackled.

Amen, Godeys a \$ \$ / Azy. 96.0.0 \$ \$ 400.2.6

No allawance for H/O enpurses.

Succomish

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE,

To THE FOREMAN OF WORKS

Date 6th June

19 58

Subject LIGHTER BASIN KERBS - MAINTENANCE

Some of the existing precast concrete kerbs have been fairly badly damaged.

Please arrange to renew the worst of these in hardwood kerbing giving priority to those which have been displaced outwards through mobile cranes working against them. Thereafter replace precast concrete kerbs with hardwood kerbing as opportunity affords.

The last portion of the basin to be completed was provided with hardwood kerbing during its construction. Replacement kerbing is to conform to this.

JAG : HEB

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 - : :

Material - - : :

Total £ : :

25553

19

REMARKS:

Signature

E10

Date____

LIGHTER BASIN AND PAKENHAM STREET RECLAMATION.

Following on the anticipated early completion of alterations to Cargo Store No. 2 and the provision of offices and accommodation therein, the following works remain to be done to bring the Lighter Basin - Pakenham Street Reclamation project into full working order as far as services are concerned: -

A. Loan Account 21 - Pakenham St. Reclamation.

1.	Roading and Quays.	Estimated	Cost	£25,875.
2.	Drainage.	17	-11	10,500.
3.	Water Supply.	tt.	17	2.500.
LL	Electrical Services.	H	11	4.000.
5.	Gates and Fences.	Ħ	11	3,000.
		To	tal:	£45,875.

B. Loan Account 24 - Lighter Basin.

100	Quays. Water Supply. Electrical Services.	Estimated	. Cost	£6,150. £750. 1,000.
				-
		To	tal:	£7.900.

Until precise land usage is established in this locality and the dependant building development proceeds there is no real need for early expenditure on the bulk of items A. 1 to 4 above but consideration could well be given to carrying out the remaining works in order that full use may be made of the berthage for lightered cargoes and that the area be adequately fenced and controlled.

To do this would entail the expenditure of some £21,000 on the following works : -

Complete the quays to the lighter basin and to the Pakenham St. breastwork, complete the water supply and electrical services to these quays and provide the necessary gates, fences and gatckeepers hut.

In addition to the above the Traffic Manager has requested that adequate hard standings be built for cargo working. A suitable hard standing of some 3,500 sq.yfs. extent would cost about £6,000.

The General Manager.

24th. November, 1955.

The total unexercised loan authorities Loan A/c. 21 and 24 amount to approximately £33,000.

This total could be applied to any of the works enumerated above since the line of demarkation between Lighter Basin and Pakenham St. Reclamation is not precise. The total unexercised authority will not cover all of the work necessary to complete both projects.

Priorities therefore require to be established and I recommend that works be carried out in the following order, subject to finance: -

- (a) Gates and Fences, Gatekeepers Hut.
- (b) Completion of Quays with attendant underground services.
- (c) Hard standing.

RAJS:BH

ACTING CHIEF ENGINEER TO THE BOARD.

Mr. Goodsir.

The Make up of the £21,000 referred to above is as follows:-

Quays 7,050 + 6,150 = £13,200
Water Supply 800 + 750 = 1,550
Elect. Services 1,000 + 1,000= 2,000
Gates & Fences & Gatekeeprs
Hut = 4,000
£20,750

PAKENHAM ST. RECLAMATION - LICHTER BASIN. APPORTIONMENT OF COSTS TO DATE.

Item	Total	Treasurer's Apportionment	Engineer's Apportionment
Pakenham St. Reclama	tion (Loan	A/e 21 £130,000)	
1. Various Charges	22,460.15.	9	19,800
2. Roading Drainage & Water Supply			
(1391)	44,353. 6.	4	38,585
3. Breastworks (1374	.)		
	133,235. 2.	5	47,275
4. Electr. Lighting.	5,682.16.	4	4,682
5. Sheetpiling supplied by the			
Board.	13,029.16.	1	4,343
6. Dredging 1953/4	2,909. 5.	9	2,909
		£96,981.15. 5	£117,594
Lighter Basin (Loan	A/e 24 £185	,000)	
1. Excavation (1370)	60,045. 3.	11	60,045
2. Quays (1391)	44,353. 6.	4	5.768
3. Breastworks			
	133,235. 2.	5	85,960
4. Electr.Lighting	5,682.16.	4	1,000
5. Sheetpiling	13,029.16.	1	8,687
6. Various Charges	22,460.15.	9	2,660
		£184,733. 0. 4	£164, 120
TOTAL LOAN ACCOUNTS	21 & 24.	\$281,714.15. 9	£281, 714

Copy of Schedules Sew to Theasurers under Memo classed 23/4/55 Refer Enges. File No 234 Loan + Empowering Bills

PAKENHAM STREET RECLAMATION AND LIGHTER BASIN.

ALLOCATION OF COSTS & FORECAST OF EXPENDITURE.

Loan A/c 21. Pakemham St. Reclamation (£130,000)

Existing Costs :	£.	Treasurer's Allocation.	Engineer's Alloc.
Treasurer Sept. 54 Hollerith Aug., 55	91,102 5,879	£96,982	£117,594
Future Works: Roading & Quays. Drainage. Water supply. Electrical. Gates & Fences.	25,875 10,500 2,500 4,000 3,000	£l ₁ 5 , 875	£45 , 875
		£142,857	£163,469
Balance on Le	oan Amoun		+£33 , 469
Loan Mc 24. Lighter 1	Basin (£18	5,000)	
Existing Costs: Treasurer Sept. 514 Hollerith Aug. 55 Outstanding Contract 1374	173,666 10,733 333	£184,733	£164 . 120
Future Works: Quays. Water Supply. Electrical. Hard Standings.	6,150 750 1,000 Nil	£7, 900	£7,900
		£192,633	£172,020
			escentia per colonida contratorio de colonida contratorio del colonida

-£12,980

Balance on Loan Amount. +£7,633

18th November,

5

THE TREASURER.

PAKENHAM ST. AND LIGHTER BASIN RECLAMATIONS.

The value of steelwork in place at the above breastworks is, in terms of the contract rates, £85,102. 12. 9d.

RAJS:BH

ACTING CHIEF ENGINEER TO THE BOARD.

Refer also to Lile 498

extract from minutes ordinary meeting of Board -20-SEP-1955

INFORMATION - MR. FREELAND.

Mr. Freeland stated that, when the information he had previously requested was ready, could he also have the following additional information:

Luca-

- 1. Full details of the costs to date of the Board's Upper Harbour Scheme.
- 2. Full details of the total costs to date of the Lighterage Scheme, including such items as Depreciation and Maintenance.

Treas.

Jetails of income derived to date from the use of the Board's lighters.

The Chairman stated that the information requested would be made available.

Mer Smith:

Then 2. Freasurer would a reasonable

split of expenditure to date properly changeable

against (b) Rekenham II. Reclamation.

(b) Rokenham II. Reclamation.

touther with estimates of dark of lamplitum
ander same traderies Its enable him to adjust
the charges against appropriate loans, which must be
done before end of mouth.

Auckland Harbour Board.

Mr. Curith.

Please have their

Arranged. Jr.

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bur. Goodlers

B+H Courty by well variable

hy the best of their worth

Sources who wed of their worth

Auckland Harbour Board

MEMORANDUM

19th September 1955

FROM

THE GENERAL MANAGER

TO

THE ENGINEER

3846

WORKS OFFICE: BASIN CONSTRUCTION CO.LTD.

PAKENHAM STREET RECLAMATION
Your Memo 10.8.1955.

The Traffic Manager has reported adversely in the matter of allowing the Company a temporary tenancy on the present site, on the ground of security.

I recommend that the Company be required to vacate the site.

PROPERTY OFFICER

GCB.JB

Item

11 12 13 14 15 16 17	Handle & transport Board's piles Pitch and drive Anchorage Walings Fix tie rods Splices.	}	£598. 0. 0 5,362. 0. 3 750. 2. 2 888.12. 8 1,551. 2. 3 514.16. 0 265. 0. 0
19	Tie Rod holes Angle cope Rubbing Strips		1,392.11. 8 2,149. 9. 6
25 26a 27 28 29 30 31 33 34 35 36	Supply, L., pitch & dr. piling. Anchorage Spec. Walings "Corner piles "Tie rods Long tie rods Splices Tie rods holes Rubbing strips Angles cope.		21,723.13.7 2,210.8.9 429.5.9 1,274.7.2 1,274.7.2 160.0.0 80.0.0 3,829.0.1 1,612.11.8 620.0.0 316.0.0 2,775.14.0 1,770.17.0
44 45 46 47 48 49	Piling Anchorage Walings " Tie rods Splices Holeslfor tie rods.		12,906. 7. 3 1,555.12. 4 721. 4. 9 721. 4. 9 2,861.17.11 500. 0. 0 191. 0. 0
54	Cope Angle		1,067.10. 0
			72,072.16. 8
	cost of piling and tie rods		13,029.16. 1
		£	85,102.12. 9

Item

11	Handle & transport Board's piles	£598. O. O
12	Pitch and drive	5,362. 0. 3
13	Anchorage Walings	750. 2. 2
15	II .) 888.12.8
16 17	Fix tie rods Splices.	1,551. 2. 3 514.16. 0
18	Tie Rod holes	265. 0. 0
19	Angle cope	1,392.11. 8
20	Rubbing Strips	2,149. 9. 6
25	Supply, L., pitch & dr. piling.	21,723.13. 7
26 26a	Anchorage Spec.	2,210. 8. 9 429. 5. 9
27	Walings	1,274. 7. 2
28	(1) (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	1,274. 7. 2
29 30	Corner piles	80. 0. 0
31	Tie rods	3.829. 0. 1
32	Long tie rods Splices	1,612.11. 8
33 34	Tie rods holes	316. 0. 0
35	Rubbing strips	2,775.14. 0
36	Angles cope.	1,770.17. 0
111	Piling	12,906. 7. 3
45	Anchorage Walings	1,555.12. 4 721. 4. 9
47	"ALLINGS	721. 4. 9
48	Tie rods	2,861.17.11
49 50	Splices Holes for tie rods.	500. 0. 0 191. 0. 0
54	Cope Angle	1,067.10. 0
		72,072.16. 8
Plus	cost of piling and tie rods	
	plied by the Board.	13,029.16. 1
2000		
		£ 85,102.12. 9

Date Date To least of Shortbiling Anchorage of the Bars

0	Description	Quantity	Item	Rate	£	S.	d.
Item			*				
· 11.	Hundle & transport Board's biles				598	_	7
12	Fitch & Dine.				5362		
13	Anchorage				750	2	2
14	Walings ")	000		-
16	jix tie rods.			2	888		
17	splices				514		
18	Tie rod holes				265		7
19	Angle cope				1392	11	8
20	Rubbing Ships				2149	9	6, -
24	Supply, L., sitch & dr. Siling				1/722	12	-
26	Supply, L., Sitch & dr. Siling Duchorage			-	22/0		
26 a	Spec. "						/
27	Valings "				1274	7	2
					1274	7	2 10
29	Corner piles				160		
30	tie rods.				2000		
32	lone. " "				3829	11	8
33	Splices				620		
34	tie rod holes.				316	0	0 2
35	Rubbing Strips				2775	14	0
36	Angla cope.				1770	17	0 72
144	filing				12906	7	3
45	Anchorage				1535		
46	Walings				721		9
47					721	4	9 - 20
	tie Rods				2861		11
49	Splices , +				500		
54	holes for the rods.				191		0.
24	læpe Angle.				72,072		8
01					121012		
Plus	by the pourd.			^	13029	16.	1.
	by the poard.			1	85102.	13	. 9
				- (

PROPERTY COMMITTEE 16 AUG 1955

7. AUCKLAND WATER TRANSPORT LTD. - APPLICATION FOR SITE, LIGHTER BASIN AREA.

Report of Property Officer, 12.8.55, stating that the Company had applied for lease or tenancy of a site off Pakenham Street East within the area gazetted a landing place in connection with the lighterage project; that the Company operated six small coastal vessels and wanted to obtain a shore depot handy to where its craft berthed; that in view of proposals to deepen the viaduct basin that would be a convenient locality from the Company's viewpoint; that for ease of control meantime, it would be preferable to deal with such land under the By-laws, so that a better flexibility could be maintained; accordingly a scheme for fencing a part of that area and making it available on a "stored by arrangement" basis would be drawn up for consideration; that for the present it was recommended that the Company be advised that the application for lease or tenancy was declined but that the Board was investigating the possibility of making land in that area available on a "storage" basis as an interim measure; the General Manager recommended accordingly. Recommended:-

That the reports be adopted.



ADO 2 3 AUG 1955

THE PROPERTY OFFICER.

TEMPORARY TENANCY - WORKS OFFICE, BASIN CONSTRUCTION CO. LTD. PAKENHAM ST. RECLAMATION.

Messrs. Basin Construction Co. Ltd's Contract for the construction of the Lighter Berths at Pakenham Street Reclamation has been completed for several months except for payment of an adjusted (and now agreed) claim for escalation on wages of £236. 6. 6d and an item of the Bill of Quantities of £100. 0. Od for "clean up site".

While we still retained these moneys and the contract was not finally "wound up" the Contractor has been allowed to leave his works office and telephone on the site. In this regard we were somewhat in his debt as throughout the two years covered by the contract our own supervisory staff on the contract had the use of the office and telephone as the Board was unable to obtain its own telephone connection.

The contractor now wishes to uplift the final contract payment and his deposit. For that reason he has written the attached letter concerning which it is recommended that he be granted a temporary tenancy on the lines indicated commencing on say 1st. August, 1955.

Final Contract payments are being withheld until the matter of the Contractor's tenancy of the site is determined. Would you please advise in this regard.

THE TRAFFIC MANAGER.

LIGHTER BASIN AREA - PAKENHAM STREET.

On 18th August, 1954, the Auckland City Council installed a 4 - inch water meter No.26365/ 6032K in Halsey Street to serve the Pakenham Street area. The meter is located at the south-west corner of Cargo Store No. 1.

Up to the present time, all water through this meter has been used on construction work and accounts have been passed for payment by this Department.

This meter serves the whole of the Lighter Basin area and, as construction work has now ceased, I would be pleased if arrangements could be made for the meter to be placed under the control of your Waterman, and for future accounts to be passed by your Department.

CHIEF ENGINEER TO THE BOARD.

WJT:BH

AUCKLAND HARBOUR BOARD

CONTRACT NO. 1374

FOR CONSTRUCTION OF BREASTWORK AT PAKENHAM STREET LIGHTER BERTHS.

ORDER FOR VARIATION UNDER CLAUSE NO. OF THE GENERAL CONDITIONS OF CONTRACT.

Variation Order No. Two (2)

To: Messrs.

BASIN CONSTRUCTION CO. LTD.

I hereby order the following variation in the Works comprised in the above Contract:—

Description:-

Please carry out the following works in accordance with detailed instructions issued at the rates and amounts shown:

l. Provide ten additional ladders

£412.10. Od.

2. Replace fourteen broken kerbs

70. 0. Od.

3. Substitute timber kerbs for concrete Kerbs @ £9. 2. 6d. per kerb.

Date

December, 1954.

Chief Engineer to the Board.

Construction

Instruction to Resident Engineer:

The work entailed by this variation order will be paid for by:-

- (b) Rate to be fixed. Rate fixed as above.

29th September, 4.

CONTRACT NO.1374 - BASIN CONSTRUC-TION CO. LITO.

This Contract provides for the construction of Breastwork, Pakenham Street Reclamation and Lighter Berths.

For the sake of convenience all payments have been charged to the Lighter Berths and on completion of the works the cost will be apportioned accordingly.

As an interim adjustment, however, £30,000 representing part of the cost of the Pakenham Street Reclamation Breastwork can be transferred to that work.

CHIEF ENGINEER TO THE BOARD.

30th July,

4.

THE TRAFFIC MANAGER.

Herewith Drawing illustrating the water depths and quay levels at the lighter basin and at the basin between Northern Wharf and Kings Wharf Landings.

The Sugar Company's lighters draw nine feet under 210 ton load and their tug draws eight feet.

CHIEF ENGINEER TO THE BOARD.

Enc.

Drawing S.885.

Basin Construction Co., Ltd. GENERAL CONTRACTORS 54 SHORTLAND STREET, C.P.O. Box 1398 AUCKLAND, C.1.

No. 803. Phone 34-090

15th June, 1954.

The Engineer, Auckland Harbour Board, Quay Street, AUCKLAND. C. 1.

Dear Sir,

We acknowledge receipt of your letter of the 2nd June from the Construction Engineer's Office asking for a price for the shaping and fixing of wooden kerbs to the Lighter Basin in lieu of the concrete kerbs as specified.

We have to advise that our price for handling, shaping and fixing of the tallowed wood kerbs as specified, including the supplying and fixing of galvanized bolts, is

On account of the fact that it will be some time before we will be able to indent the timber for the kerbs, it is suggested that your Board should supply us with the necessary quantity of tallowed wood ex your store and that we should indent and replace this timber.

For this reason we have not included in the above the cost of the timber and suggest that the Board reimburses us for the indent cost of our order plus cartage and indicent-al expenses of delivering timber to the Board's store.

We have placed an order for the necessary quantity of tallowed wood and will supply it to the Board at indent cost to us plus charges for handling ex ship and cartage to Board's store.

Yours faithfully, BASIN CONSTRUCTION CO.LTD.

why this

file

Construction Engineer's Office. 16th. June, 1954.

The Manager,
Messrs. Basin Construction Co. Ltd.,
C.P.O. Box 1398,
AUCKLAND C. 1.

CONTRACT 1374 HARDWOOD KERBS.

Dear Sir,

Your quotation of £9. 2. 6. per kerb (approx. 20' lengths) for shaping and fixing tallow wood kerbs and the supply of necessary bolts is accepted.

The Board will make the following materials available to you ex store:-

Brush box 9" x 3" 1/16', 2/14'
Tallow wood 8" x 5" 15/24', 2/22'

The Board will purchase from you the equivalent of the above materials at cost delivered to our store.

Yours faithfully,

Sal.

Construction Engineer.

PDLH.DMW.

Attention:

Purchasing Officer,

Herewith copies of Contractor's letter and our reply confirming verbal arrangements re supply of this timber.

33.

Construction Engineer.

Auckland Harbour Board

MEMORANDUM

1st March, 1954.

MC

THE GENERAL MANAGER

TO

THE ENGINEER

3846

BLASTING OPERATIONS - LIGHTER BASIN

Regarding the attached letter from the Fruit Case Company, will you please take all necessary steps to ensure that maximum safety precautions are carried out to prevent any further possibility of alleged damage.

Please confer with the Fruit Case Company and safeguard the Board's liability.

GENERAL MANAGER

Appleale

ENCL.

THE

FRUIT CASE COMPANY

LIMITED

FRUIT CASES
MADE UP, OR IN SHOOK
IN SEASONED TIMBER

ALSO
RE-CONDITIONED
FRUIT CASES
ALWAYS ON HAND

	HARBOUR BO MANAGER'S DE	ARD	UCKLAND, N.:	Z.
NECO. 26	FEB 1954	25t	February,	1954.
ACKED.	All and the second seco			
ANSD.				

The Manager,
Auckland Harbour Board,
AUCKLAND. C.1.

Dear Sir,

We wish to bring to your notice our concern over the effect on our building of the heavy blasting operations nearby in the lighter basin.

During the week several particularly heavy explosions have rocked our building and we fear that should further blasts occur, some damage will result.

Inspection of the building reveals a number of cracks in the masonry, and as a result we are asking our architect to examine the building and report his opinion.

there tracks have been sur supported with the branger by Halmes. To there was made of the bracks of was agreed that they were not caused by Alantins. By

Yours faithfully, FRUIT CASE CO., LTD.

Est boursent

MANAGER.

54.

THE PROPERTY OFFICER.

PAKENHAM STREET RECLAMATION - TEMPORARY TENANCY, BASIN CONSTRUCTION CO. LTD.

In reply to your memo dated February 8th, referring to Basin Construction Coy's application for temporary tenancy I have to advise that this proposal does not interfere with any works now being planned, and I raise no objection to the Company being granted the suggested tenancy.

Your sketch is returned herewith.

CHIEF ENGINEER TO THE BOARD.

Enc.

Sketch Plan.

RAJS: PM.

Auckland Harbour Board

MEMORANDUM

8th February, 1954.

FROM

THE GENERAL MANAGER

TO

THE ENGINEER

3846

The attached plan shows (edged purple) the area occupied by Basin Construction Co. Ltd., in connection with the Lighter Basin Contract.

The Company has stated that in the ordinary way it would be vacating about the end of April, but has made application for continued occupation on a month to month tenancy for about 12 months.

Would you please advise whether you see any objection to this being granted.

Mr. Smith

I see no objection to their.

If you of Construction buys. are also in agreement place draft a riply accordingly.

Gr. 2.54.

PROPERTY OFFICER

3rd December, 1953.

Messre. Basin Construction Co. Ltd., P.O. Box 1398, AUCKLAND, C.1.

Dear Sirs,

CONTRACT No. 137h - LIGHTER BASIN:

Returned herewith please find Invoice No. 1031 covering 82 tons, 14 cwts, 2 qrs, 26 lbs. of larssen Steel Sheet Piling purchased by you from Steel Import Co. Ltd., for use on the abovementioned Contract.

This has been recorded for the purpose of subsequent computation of escalation on this material.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD.

ANT: SSK.

Auckland Harbour Board

MEMORANDUM

FROM

Construction Engineer.

27th November 1953

TO

THE ENGINEER

Pakenham St. Lighter Basin Breastwork. Contract 1374.

Herewith Invoice 1031 of 23.9.53 from Steel Import So. covering delivery of 82. 14. 2. 26 of Larsen No 2 sheet piling. This should be recorded for the purpose of subsequent computation of escalation under clause 51, and then returned to the Contractor.

Sutton

~ 00 P INVOICE NO. 1031. STEEL IMPORT CO. LTD. 48 Wellesley Street West, AUCKLAND, C.1. 23rd September, 1953. Basin Construction Co. Ltd., 54 Shortland Street, AUCKLAND, C.1. Per S.S. "RUAHINE". Terms Inter - Bank Letter of Credit. Larssen Steel Piling Section No. 2. 32.792. lbs. - tarred one coat one lifting hole drilled in each pile 14" diameter 6" down 244 Bars in lengths 6/26' 82 tons. 14 cwt. 2 qrs. 26 lbs. @ £45. 15. 0. per ton £3785. 4. 0. C.I.F.E. Auckland including tarring one coat. B.C.C. Auckland (in a dia). Shipping Mark:

23rd November, 1953.

Messrs. Basin Construction Co. Ltd., C.F.C. Box 1398, AUCKLAND, C.1.

Dear Sire,

CONTRACT No. 1374:

I return herewith Tessrs. Steel Import Company's invoice covering 165 tons. 3 cwt. 2 qrs. of Larssen Steel Sheet Piling, forwarded with your letter of 4th instant.

This has been recorded for the purpose of subsequently dealing with escalation under Clause 51 on this material.

Yours faithfully,

CHIEF ENGINEER TO THE BOARD.

ANT: SEK.

COPY SENT TO CONSTRUCTION ENGINEER.

Auckland Harbour Board

MEMORANDUM

FROM

- Resident Engineer Import what

18th. November

1953

TO

THE ENGINEER

8079

Gakenham St. Sighter Basin Breastwork. Bontract 1374.

Acrewith letter from Basin Bonstruction 60. forwarding Invoice 1028 of 20.8.83 from Steel Import Bo. covering delivery of 168.3.2.2 of Larssen No.2 sheet piling.

This should be recorded for the purpose of subsequently dealing with escalation under clause 51, and then returned to the pender.

Les frants is to the contract of the contract

Sutton

Basin Construction Co., Ltd.

54 SHORTLAND STREET, C.P.O. Box 1398 AUCKLAND, C.1. GENERAL CONTRACTORS

Phone 34-090

No. 3097

4th November, 19 53

THE Secretary, Auckland Harbour Board, Quay Street, AUCKLAND.

Attention Mr. Holmes. as requested.

Dear Sir,

We enclose invoice from Steel Import Company for steel sheet piling.

Yours faithfully, BASIN CONSTRUCTION CO. LIMITED.

Inderson

BA:ML Enc.



INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE,

To RESIDENT ENGINEER.

Date 14th September 19 53.

Subject CONTRACT 1374 - Construction of Breastwork to Pakenham Street Lighter Basin.

Confirming overhaul instruction on site, please arrange for the installation of ten additional ladders similar to those shown on the Contract Drawings.

Engineer to the Board.

C O P

Box 2756, Auckland.

STEEL IMPORT CO. LTD.,
48 WELLESLEY STREET WEST,
AUCKLAND, C.1.

20th August, 1953.

Invoice No. 1025.

Per S.S. "Port Adelaide".

Messrs. Basin Construction Co. Ltd., 54 Shortland Street, AUCKLAND, C.1.

Larssen Steel piling Section No. 2. tarred one coat one bolting hole drilled in each pile 1⁴/₄" diameter 6" down.

541 bars in lengths 6'/26' as per attached shipping specification.

Extra for short lengths 175 bars 6' 0" long

T. C. Q. Lbs.

165. 3. 2. 2.

@ £45.15. 0. per ton CIFE Auckland including tarring one coat

£7556. 16. 0.

2/9 per bar

24. 1. 3.

£7580. 17. 3.

Shipping Mark:

ABCC Auckland (in dia.)

AUCKLAND HARBOUR BOARD

CONTRACT NO. 3374

FOR THE CONSTRUCTION OF BREASTWORK TO PAKENDAM OT. LIGHTER BASIN

ORDER FOR VARIATION UNDER CLAUSE NO. 12 OF THE GENERAL CONDITIONS OF CONTRACT.

Variation Order No.

To: Messrs. Basin Construction Co.

I hereby order the following variation in the Works comprised in the above Contract:—

Description:-

Drill and Slot m/s angle coping in accordance with Drawings BL/S.289 and 3.789/2 for the sum of £71.0.0 in accordance with your letter dated 20.5.53

humbered for No. 500
Paid Ham Wh

DUPLICATE

Date

Chief Engineer to the Board.

Instruction to Resident Engineer:

The work entailed by this variation order will be paid for by:-

- (a) Measurement under Item No. A of the Bill of Quantities.
- (b) Rate to be fixed. as above.

Auckland Harbour Board

MEMORANDUM

Resident Engineer Import what 78th. clay

1953

Sighter Basin Breastwork. Bontrack 1374.

Attached letter from Basen Benetruction Bo. gives their force for extra work on coping angles as covered by Indu. 20628 oplano EL 5.289 + 5.789/2.

9. Holmes has discussed with the contractor the method of carrying out this work and it is satisfactory. I recommend that his quotation be accepted and that variation order be issued to cover this work.

Dedutton.

Vaon Onder 1101

Resident Engineer, For your comments, please.

28. 21/5/53.

Basin Construction Co., Ltd.

GENERAL CONTRACTORS

54 SHORTLAND STREET, C.P.O. Box 1398 AUCKLAND, C.1. Phone 34-090

1346

20th May, 19 53.

The Engineer,
Auckland Harbour Board,
Quay Street,
AUCKLAND. C.1.

Dear Sir,

Re: Lighter Basin Contract.

We wish to advise that our price for drilling and slotting Angle sections 9^{11} x $4\frac{1}{2}$ x $\frac{1}{2}$ as detailed on drawing EL/ S289,8789/2 is £71. 0. 0

Yours faithfully, BASIN CONSTRUCTION CO. LTD.

SECRETARY.

LRW: HJD

16th April, 3.

THE TREASURER.

CONTRACT NO. 1370

EXCAVATION FOR LIGHTER BERTHS FANSHAWE ST.

This Contract has now been completed to my satisfaction and all outstanding money, including the deposit, due to the Contractor may now be paid.

KOB.JS.

CHIEF ENGINEER TO THE BOARD.

Auckland Harbour Board

MEMORANDUM

Resident Engineer Import whay

1953

THE ENGINEER

Excavacion of Lighter Basin Dakenham St. -Bontiact 1370

This Contract was certified complete on 8.2.53. Final payment in terms of blause 10 became due on 11.3.53 But was withheld pending satisfactory cleaning up of site. This has now been done, and final payment may be made.

\$60,048. 3. 11 Total value as per my certificate of 25.2.53 54,040 . 13 . 6 Less Previous payments (1-7) £ 6,00A . 10 · 5 Final payment (NOB) now due

This payment includes the extras referred to in Bint actors letter of 11.3.83, covered by Variation Orders 1 + 2.

Sutton

THE GENERAL MANAGER.

LIGHTERS AND LIGHTER BASIN.

(Board in Committee Resolution 10.3.53)

The probable cost compared with estimate is as follows:-

Lighter Basin	Estimate	Cost
Estimate Stage I £90,000 Stage II £96,000 Stage III £20,000		
Total estimate to Stage III	206,000	
Cost Contract 1370 (excavation) £60,045 Contract 1328 (piling) £14.250 Contract 1374 (breastwork) £63,779 Contract 1391 (roading etc.) £23,200		
Total for Contracts already let £161,274 Estimate to complete to Stage III 17,800		
Probable cost to Stage III		179,074
Completion of approaches to 5 ft. at L.W.S.T. (Estimat	e) 44,000	75,000
	£250,000	€254,074
T4 white are		
<u>Lighters</u> <u>Estimate</u> 12/200 ton lighters	180,000	
Cost Contract No.1372		127,800
Total for Lighter Basin and Lighters	£430,000	£381,874
Estimate 2 launch type	13.000	20,000
Probable Total Cost	£443.000	
TIODEDIC TOUT OUG		

Pakenham At leelamation & lighter ag Scheme.

1			1	
	Gatinate		Cost	
	Esternate		light But	
	I'm h. st. DI I I		Leghlin Berthin 1370	0
	Legher Westas. Papart of accu	end gody.	Execus of basin, Contract 15th	Phone
	dated 29 2.52		(part 0+3)	60.043
0	Lighter Berths. Report of acre dated 29 2.52. Alage I 4 Serths. to LW.ST.	90.000.	Sheetfelling, Contract 1328.	THE
			(part D)	14,250
(E)	Alege II. remainder of boson.	96,000.	Breastwork Contract 1374	
			(put (1)+ (2) 31,481 32,298.	
(3)	Alpening to 5' LWST.	20,000 -	32,298.	63,779
0	and f			
	mercal a string	206,000.	Townston of allow 4 bertho	
			Tornation of group 4 berths	8,200
	nii 1 / rl r		part partiest 1391	-
(4)	approach to 5 LWST.	144,000.		146,2/4
			But morting contract.	15,000
		250,000-	Formation of quays	
		and a	remainder (externet).	18,800
	Papenhow At Reclamation !	Esternate	(Bart (b))	
	dated 22 6. 51 for 1951		Completes of services (est.).	3,500.
	Bill . (Originally included	in 1946	(ports () 4 (D).	
	Empararing Bill).		Beofginering (est)	5,500.
PE	Beent	41.000	11	
(9)	Bill (Originally included Empararing Bill). Breastrooms	41/000.	Latal cate at camplete	164,074
	11 1 101 - 20-		Lotal externate camplete.	
(6)	Reclamation + filling . 35000			75.000
			Oh I as On the	254074
0	Reading + Drawage . 50000		Pakenham At Reclamation	-
			0	
(8)	Museellaneous cleurs. 4000	89.000.	Breastwark Contract 1374	(F2 /F)
			() + part ()	92421
		130,000	Less part rending allowed above	-15 000
		1	Rosding & Oge - Part Contract	1591
			part. (040)	25900
y	Engineer estimate. Leghters. Lawbools.			
(0)	of denti Valte Date		Reading + Dge remainder	43,000.
(a)	hit -	150 ans.	Enteriate based in about.	
9	P 1	150,000	Aard standing Est.	17,000.
(10)	Lawbello.		Darys. Est hand on above.	8,000.
			_ /	4,000.
(b)	Report of 9 fm. dated 4.3.53. Lighters Nawbooks.	127	Engineering test.	-
	Lighters	140,000	015	151,351
	Lawbarts.	13,000.	Leghtus.	136,000
		193,000		
	Employmen hall		12 heghter - Centreet 1572	127,800
(0)	Empawering Bell			1
	Emparoring Bell actually pracides ?	(200,000 .	Lowboots est.	20,000
	1			

127,860

Basin Construction Co., Ltd.

GENERAL CONTRACTORS

54 SHORTLAND STREET, C.P.O. Box 1398 AUCKLAND, C.1.

Phone 34-090

718.

19th March, 1953.

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

Dear Sir,

Re Contract 1374.

We acknowledge receipt of your letter of 18th March and have to advise that we accept the 1st of February 1953 as the date for the commencement of the work for the purposes of this contract.

Yours faithfully, BASIN CONSTRUCTION CO.LTD.

LRW: JMM

In Autten to see, note 4 return, J. 31.3.53. Motea and achained M. 4.4.53.

18th March, 1953.

Messrs. Basin Construction Co., C.P.O. Box 1398, AUCKLAND, C.1.

Dear Sirs,

CONTRACT 1374 - CONSTRUCTION OF BREASTWORK LIGHTER BASIN & PAKENHAM STREET.

It is noted that your tender for the above was qualified by letter dated 25.8.52 to the effect that the contract time was to date from the completion of earthworks by the earthworks contractor. This was in fact completed in respect of the portion affecting task I of your contract about Mid-December.

However, since sheetpiling, specified to be supplied by the Board, was not delivered to the site until the first half of January, I am willing to concede that it would have been unreasonable to have expected you to commence construction until delivery of this, had actually commenced and a sufficiency had been received of the Board's order, to ensure continuity of the work.

Your further verbal contention that cartage of spoil on the earthworks contract, right up to the completion of Lane B. on 9.2.53 is noted. There is no question that you were however able to proceed with the planning and organisation of the work before this latter date.

Having regard to all the circumstances, I am prepared to fix the date of the commencement of the work for the purposes of the contract as 1st February, 1953. Please confirm your concurrence.

Yours faithfully,



RICKARDS BROS.

54 TITIRANGI ROAD NEW LYNN, S.W.4.



SPECIALISING IN EARTHWORK

The Incaraver Harbour Board Wackland

Dear Sir

for Funal payments on bontract 1370 excavation of lighter Basin. Also Extras over contract (Day labout Harsham It stores & Bryan 40 yard

Thanking your

your faithfully

p.p. RICKARDS BROS. LTL.

- b. A. Rickards

11-3-53

Res. Engr. Dite must first be cleared & drawn opened.

16.3.43 - Advised Richards per phone that drain must be cleaned ont and temporary compound removed before final payment is authorised John

Works & Traffic Committee dated 2, 3, 1953.

Mr. Roose referred to Item 2 - Progress of Works - Provision of Lighter Berths and sustained, at length, his previous objections to the scheme as a whole.

It was decided (a) That the Chief Engineer report to the next meeting as to expenses of the scheme to date as compared with estimates and (b) That the General Manager report to the General Purposes Committee on policy matters in relation to the lighterage scheme.

ADOPTED BY BOARD IN COMMITTEE

The matter to remain the in bommittee

INSTRUCTIONS TO FOREMEN & INSPECTORS

Mr. J.R. Sutton, Resident Engineer.

To

ENGINEER'S OFFICE,

Date 5th March

193.

Subject CONTRACT 1374 - CONSTRUCTION OF BREASTWORK
TO PAKENHAM STREET LIGHTER BASIN.

I enclose herewith two copies of Drawing S. 789, which shows details of special kerbs and positions of electric plug boxes at the breastwork.

Please hand one copy of S.789 to the Contractor and instruct him accordingly.

Encl. 2 Copies Drg. S.789. Copy to Electrical Engineer with 1 Copy Drg. S.789.

Engineer to the Board.

Auckland Harbour Board

MEMORANDUM

FROM

Resident Engineer Import what

1953

Ath. dlarch
THE ENGINEER

Central 1374

Breastwork at Jakenham St. Lighter Basin Bempletion Date.

The question of date of commencement of this Beneral should be decided, and Bentractor showed be advised in writing.

blause 37 states that it is desired to complete I II TIII by 30.11.53. Contractor guarantees compection of I II TIII 69 weeks from date of acceptance of tender, qualified by letter of 25.8.52 which states "The times stated for completion are to be from the date of acceptance of the tender or the date of completion of the encavation, whichever is the later.

The excavation of the basin was completed on 9.2.53, but this was zone B. Zone A was completed in mid-December. Sheet paling provided by AHB. was delivered in December January. Contractor however claims that cartage of sport night up to the completion of zone B on 9.2.83 so interfered with his access and use of the works area that he could not even saligactory set out the job until the carting deased on 9.2.53. with this view I agree, and suggest that 9.2.53 be accepted as the starting date for the purposes of alauses 9 + 37.

of 9.2.53 is agreed upon, Jack I should be completed 10.8.53, Jases I +111 on 7.12.53 and Jases I III +11 on 7.6.54 (whereas 30.11. 83 was asked for in clause 37)

Juston

Auckland Harbour Board



FROM

Desident Engineer Import Whay.

25th February 1953

TO

THE ENGINEER

8079

Excavation of Lighter Basin, Pakenham St.

I certify that the total value of work done up to 8.2.53 under Bontract 1370 for which payment may now be claimed in terms of the Bontract is

\$60,045 - 3 - 11

(Sixty thousand and forty five pounds three shillings and eleven pence)

Jetal value of work up to 8.2.53 \$60,045.3.11

Less 10% Retention 6,004.10.50

Sess previous payments (1-6) A1,796.5.1.

Payment (No7) now due \$12,244.8.50

on 8.2.53. Final payment due 11.3.53.

Dutton



54 TITIRANGI ROAD NEW LYNN, S.W.4.



SPECIALISING IN EARTHWORK

19 - 2 - 53

The Toneasurer Auckland Hanbour Board Auckland

Dear Sir

payment for work done on boutrast 1370 (highler Basen) \$12038-9-0 as her Schedule

Item	Rate	Quantity	W mann 7
1	Item		9 - 10 - 0
2	Liem		20 - 0 - 0
3	tem		15 - 0 - 0
4	\$5-16-6	150 Lyds	873 - 15 0
5	15 - 6	16309 yd3	12639 - 9 - 6
6	16-6	13182 yds	10875 - 3 - 0
7	17-0	19183 yd3	7 805 - 11-0
9>	17.6	4-067 yd3	
11	12-10-0	94.54 443	3558 - 12 - 6 J 613 · 2 · 11 23-635 - 0 - 0
			1

Total Value of 59.432-1-0 \$60045. 3. 11 Less \$ 10% Retention 5943-4-0 6004. 10.5 = \$53 488-17-0\$540A0. 13.6 kes frevious formers = 41 450-14-0 A1.796. 5.1

Thanking your faithfully Gross Lid PR Rokends Bros Lid Let Rokends Amount Due \$12 038-3-0\$12,244. 8. 5

ANGLEDOZERS . CARRYALLS . SHOVELS . DRAGLINES, ETC. . BY HIRE OR CONTRACT

Auckland Harbour Board

MEMORANDUM

FROM

lesident Engueer Import Wharf.

TO

21 January 1953.

THE ENGINEER

8079

Contract 1370. Accident to a labourer luployed by Rickards Bros on Friday 16.1.53.

a report from P. D. L. Holmes gives the following

a sharp explosion followed by smaller explosions was heard in the "contractors bunch shed at 1.25 p.m. on 16.1.53. a labourer by the have of foung was tujued and lumediately taken to hospital. It appears that formy was making up charges at the same, and had hoploded a los or part has of dehonators. The explosion broke the black and some bothles which were part of Considerable like on the black at the time several hade up gelignike charges were on the floor, and some prepared fuses with detonators which became ignifica were Le A.C.C. Inspector of Dangerous Goods was On the sele lumediately and the Police about 2 hours labe. Turrediale warning! and for precartions were correct out a Farshave St Stone by A.H.B. Staf.

holes. The Contactor was werned in the Sleagar.
Certy stays on the way he has handley Sleagar.
Captured for 221 53.

Auckland Harbour Board

MEMORANDUM

Resident Engineer Import what

15th, January
TO
THE ENGINEER

1953

Escavation of Lighter Basin - Pakenham St. Bonciact 1370.

I certify that the total value of work completed up to 15.1.53 under Contract 1370 for which payment may new be claimed in derms of the Bontrack is

J52, 245 : 6 : 4
(Fifty two thousand two hundred and forly five pounds six shillings and fourpence)

Total value of work up to 15.1.52 152,245 . 6 . A Less 20% retention 10,449 . 1 . 3 841.796 · 5 · 11 41,450 . 14 . 0 / Less previous payments 8 345. 11. 1 V Payment (NO6) now due

Note: This claim is on account of variation orders Nos 1 +2.

On yo variation order 1 \$65.6.3.

u - 2 1366.12.7

8 431. 18.10 V

Less 20% retention 86.7.91

& 3A5. 11. 1 V

Lefer Tengineis Office Contaylor

Solution



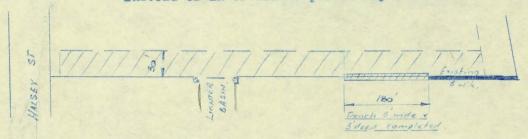
INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE,

To THE FOREMAN OF WORKS. Date 23rd January, 19 53.

Subject DREDGING AT PAKENHAM ST. LIGHTER BASIN.

Further to my instruction No.20245 dated 21st October, 1952, please carry out dredging to 5' L.W.S.T. over 30' wide strip as shown on sketch below instead of in trench as previously instructed.



Copy sent to: Resident Engineer,

Engineer to the Board.

Copy sent to Resident Engineer.

22nd January, 1953.

Messrs. Basin Construction Co. Ltd., C.P.O. Box 1398, AUCKLAND, C.1.

Dear Sirs,

CONTRACT 1374 - CONSTRUCTION OF B EASTWORKS FOR LIGHTER BASIN.

I acknowledge receipt of your letter No. 4529 of 16th inst.

The contours of the banks of the lighter basin proper, as evident while the basin was dewatered, were reasonably regular and there should be no difficulty in arriving at a close measurement of the net compacted volume of scoria backfill in the manner specified. This portion should be measured in the manner specified.

Along the line of the continuation of the existing breastwork parallel to and north of Pakenham St. however, it is agreed that the existing bank is irregular and I would be prepared to agree to make payment for this as suggested by you at £1.0.5 per cu.yd. as measured on the truck at the point of delivery allowing for 15% consolidation in the work, provided that the line of sheet piling as driven is sufficiently accurate to warrant this being done.

Your comments regarding the hardness of some of the exposed sandstone and mudstone have been noted.

Yours faithfully.



54 TITIRANGI ROAD NEW LYNN, S.W.4.

SPECIALISING IN EARTHWORK

The Treasurer Engineer Huckland Hanbour Board Huckland

Dear Sir We wish to apply for payment of estras over contract 1370 (highter Basin bontrack) Amounting To \$ 431-18-10 as per Invoices 1382 & 1484 Assuring you of our best attention at all time

Your Faithfully
ARickards Bros Lid
bet Rickards

RICKARDS BROS.LTD ROADING CONTRACTORS Specialising in Earthwork ANGLEDOZERS . CARRYALLS SHOVEL . DRAGLINE . ETC. BY HIRE OR CONTRACT 20 × Jan 53 M Auckland Hanbour Board Anckland Nº 1382 Extra to Contract 1370 Day habour - Schedule Flanshowe St Stone HO19 - 2334 hr ax \$15 118 15 0-HO5 - 38 hrs 2 12-10-0 95 0 0-Pump - 834 hrs @ -5/-Labour 3014 hrs @ 7/9/2 2 3 9 117 7 3 333 6 0-Establishmen V Change + \$10% 33 6 7 OB , by Duby 36612 7

INVOICE FROM RDS BROS.LTO ROADING CONTRACTORS Specialising in Earthwork ANGLEDOZERS . CARRYALLS SHOVEL . DRAGLINE . ETC. BY HIRE OR CONTRACT 20 Jan 53 Mc Duckland Warbour Board Auckland No 1484 Extra to bontract 1370 Day habour Schedule Bryants Yard Day Labour schedule \$ 2 19 11 hm & \$5 55 0 0 HD 5 13 hrs 2 \$2-10-0 476 59 7 6-Establishmen Y blange + # 10% which have

Basin Construction Co., Ltd.

GENERAL CONTRACTORS

No.4529

54 SHORTLAND STREET, C.P.O. Box 1398 AUCKLAND, C.1. Phone 34-090

16th January, 1953.

The Engineer,
Auckland Harbour Board,
Quay Street,
AUCKLAND C.1.

Dear Sir,

Re: Contract 1374, Construction of Breastworks for Lighter Basin.

We have recently inspected the site with your Representative and find that the lines of the country against which we are to place the scoria filling are most irregular, and for this reason it would present considerable difficulty in arriving at the quantities accurately.

On discussing this matter with your Engineer it was agreed that the probable consolidation would be in the vicinity of 15% of the schedule quantities. We suggest that we should be paid at the rate of £1. -. 5. truck measurement, for the scoria filling in lieu of consolidated measurement at the rate of £1. 3. 6. This rate is calculated on the basis of consolidation as stated above. We would be pleased if you would advise us whether or not this suggestion is satisfactory to you.

We also took the opportunity of inspecting the ground into which the steel sheet piling is to be driven, and we consider that a considerable portion of tasks 1 and 3 are harder than the type of sub-grade specified "Soft Sand Stone and Soft Mud Stone"

Yours faithfully,
BASIN CONSTRUCTION CO. LIMITED

LRW: ME

TELEGRAMS "DREDGER", WELLINGTON
TELEPHONE 70-789

CO. LTD.

PLEASE ADDRESS ALL MAIL
TO THE COMPANY
P.O. BOX 792
WELLINGTON, N.Z.

Auckland Harbour Board

SECRETARY'S OFFICE,

157/1957 ary, 1953.

To Engineer

ated 4/7/52.

warded you one Sheet Piling v. "Rangitata" ne date of to forward Tensile these are now

rou have been

RICHARDSON McCABE & CO.LTD.

holid Gr. blever file.

Per: w. Dety!

TELEGRAMS "DREDGER", WELLINGTON TELEPHONE 70-789 RICHARDSON, McCABE & CO. LTD. PLEASE ADDRESS ALL MAIL TO THE COMPANY BRANCHES AT AUCKLAND 13 GREY STREET. P.O. BOX 792 WELLINGTON, N.Z. WELLINGTON, C.1, N.Z. CHRISTCHURCH WP:MD 14th January, 1953. Auckland Harbour Board, P.O.Box 1259, AUCKLAND. Dear Sirs, Contract No. 1328 dated 4/7/52. On the 23rd December, we forwarded you one invoice No. G.21509 covering Steel Sheet Piling which arrived at Auckland on the m.v. "Rangitata" against your above contract. At the date of forwarding this invoice we omitted to forward Tensile Test Certificates for the Piling and these are now enclosed. enclosed. We regret any inconvenience you have been caused over this matter. We are, Yours faithfully, RICHARDSON McCABE & CO.LTD.

CARGO FLEET IRON COMPANY LIMITED TENSILE TESTS.

Siemens' Basic Open Hearth Process. OCT 1952

CF. 870	-		Test	Dimens	ions of Se Fest Piece	ction of	Brea	king	Elong	gation		ons of Sec eing broke	ction after en	Reduc- tion	Yield	Stress	
Pilera	Date	Cast	No. of	Breadth	Thick	Area	Load in Tons	Stress sq. inch in Tons	Total	On 8	Breadth	Thick	Area	%	Total in Tons	Per sq. inch in Tons	Remarks
<i>d</i>	6/																***************************************
No 2 x 32 7926	10/52	3716		1.50	142	630	19.7	320		22							
	/	H909			·H2	630	18.0	28-6		27							
		134			·H3	645	207	320		27						CTOD	y
		135			.39	:585	182	31./		26		BEN	D TES	TS S	TISFA	CIOR	
	•••••	137				.615	19-0	30.9		27					***********		
		136			:40	600	16.8	28.0		28					••••••		
		138			H	6/5	18.8	30.6		28			CARGO	C) FE	T IRO	N Co.	LTD.
		139			39	585	16.7	28.5		27		For (DARGO	TLEE	i inc		
		470/			39	585	16.6	28:4		28				27	10011		
		91			· 40	:585	17.4			24		<u> </u>	ASS	STANT.	TEST.HI	USE MAI	VACIER:
		!!				600	1/. 7	27:0		- SH							

. The BSP Co Ltd Landon CARGO F.

CARGO FLEET IRON COMPANY LIMITED TENSILE TESTS.

3607	Siemens'	Basic Open	Hearth	Process.
270 (Contd)	Dimensions of S	ection of Breaking	Elongation	Dimensions of Se

CF. 870 / Cons			Test	Dimens	ions of Se Test Piece	ction of	Brea	king	Elong	gation	Dimensi	ons of Sec eing broke	tion after en	Reduc- tion	Yield	Stress	
Piling	Date	Cast	No. of	Breadth	Thick	Area	Load in Tons	Stress sq. inch in Tons	Total	0%8	Breadth	Thick	Area	%	Total in Tons	Per sq. inch in Tons	Remarks
0	6/																
No.2x 3279266	110/52	92		1.50	.39	-585	16.7	286		26							
	***************	86			'H0	600	17.3	28.6		25							
		140			:40	.600	19.5	32.5		2H							
	***************************************	106			Ho	600	18.5	30.8		27		BEN	D TES	STS S	ATISF	ACTOR	Υ
		141			.39	585	17.3	29.6		28							
		142			42	630	19.9	31.6		24					••••••		
		143			· H0	600	19.2	32.0		24	A	***********				***********	
												For	CARGO	FLEE	T IRC	N Co.	LTD.
														4			
														FANT	TEST	HISE MA	NAGER.
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,																

Auckland Harbour Board

MEMORANDUM

FROM

Desident Engineer Import what

12th January

1953

THE ENGINEER

Execution of Lighter Basin - Sakenham &t. -Boneract 1370

Herewith claim for fifth progress payment on account of Bontract 1370 for \$9,453. 12.0

I carrier that the loval value of work composeted up to 15.12.52 under Bontiact 1370 for which payment may now be claimed in terms of the bonts act is

\$51,813:7:6

(Fifty- one shousand eight hundred and thirteen foounds seven shellings and suspence)

Total value of work up to 15.12.52 Less 20% retention

Less previous payments Payment (Nos') now due (as per attached claim) £51,813. T. 6 10,362 . 13 . 6

8 A1, 450. 14. 0

31,997 . 2 . 0

\$ 9.453.12.0

Solution



RICKARDS BROS.

54 TITIRANGI ROAD NEW LYNN, S.W.4.



SPECIALISING IN EARTHWORK

Ohe Tressurer Ame kland Harbour Board. Ame kland Harbour Board. Alexon dix We wish to apply for a progress payment of We wish to apply for a progress payment of We wish to apply for a progress payment of Breavetion as per schedule Streavetion as per schedule Attention of John Guentity Late. Latel Value. 4 150 1. Judo. Long 15.6 1873-15-0 878.15.0. Long 19.908 yell. Long 19.908 yell. Long 19.908 14.6 19.908.19.6.
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7 8977 jedo. 17-0 / 1630 - 9.0 7630. 9.0
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dolar Value to. 13/12/32 00 01 01 2 " d -6
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Tayment Dul. of
In the state of
Jours Faithfully 12.1.53 Rickards Bros Ltd. C. et. Rickards

- her, Goodsin Blenhow I breastwork - Thetpely busholm (of kich heal) now informs that the following skutpilling will arrive in Rayitata in Harkland 13, 12, 52; -352 M. 26-0" by. her tay has her informed + told to allocate site for clumping. The following will arrive in "towarchi" Surport Wharf Grave Tender's hololu says that Christy would tile to decrees details of stathet & lett's Thuder. He will were up from Welley ten to suit your conveneurce Clease communecate through healer lun

THE SECRETARY.

CONTRACT 1374 - CONSTRUCTION OF BREASTWORKS

Basin Construction Co.Ltd.

P.O. Box 1398. akd C1. V 54 Shortland St.

The Contract documents are now in order with the following two exceptions:-

- (a) the Board's formal Form of Tender requires to be included and this should bear a signature.
- (b) the schedule of materials annexed to the Bill of Quantities requires to have the appropriate rates entered.

These omissions should be corrected and the documents executed by the Board.

Your file is returned herewith.

JAG.JS.

CHIEF ENGINEER TO THE BOARD.

Copy sent to Resident Engineer. 5th December, 1952. Messrs. Basin Construction Co. Ltd., P.O. Box 1398, AUCKLAND, C.1. Dear Sirs. CONTRACT 1374 - CONSTRUCTION OF BREASTWORKS FOR LIGHTER BASIN. In reply to the technical portions of your letter dated 3rd December, addressed to the Secretary, in which you nominate Messrs. Mason Bros. Ltd. as Sub Contractors for the steel work, consent is hereby given to your engaging this firm as sub-contractors for this work. The chemical and physical tests of steel for steel sheet piling appear to be satisfactory. Yours faithfully, JAG.JS. CHIEF ENGINEER TO THE BOARD.

4156 BASIN CONSTRUCTION COMPANY LIMITED Phone: 34-090 Box No. 1398 54 Shortland St., Auckland. 3rd December, 1952. The Secretary, Auckland Harbour Board, Quay Street, AUCKLAND, C.1. Dear Sir, Re Contract 1374 We are returning herewith a copy of the Contract Documents which have been executed under seal by the Company. You will note that we have included a copy of our letter of the 25th August as part of the Contract Documents as it sets out certain conditions under which we tendered. We also enclose our cheque for £400 which represents the balance of the deposit. We wish to advise that we will be engaging Messrs. Mason Bros. Ltd. as Sub Contractors for the steel work and particularly the welding, and wish to obtain your written consent in terms of Section 21 of the Contract. Mason Bros. wish to be cited as Sub Contractors in terms of the Wages Protection and Contractors Liens Act. We have already placed an order for sheet piling, and approximately half of the total quantity is due to be shipped from England on the 18th December. We are enclosing for your information the Works Tensile Tests and Laboratory Report of this portion of the order. Also, a drawing showing dimensions and properties of the Section supplied. Yours faithfully, BASIN CONSTRUCTION CO. LTD. (Sgd.) L.R. Willis SECRETARY. ENCL.

MEMORANDUM

FROM

Resident Engineer

25th. November 1952

TO

THE ENGINEER

8079

Excavation of Lighter Basin - Pakenham St.

Herewith claim for fourth progress payment on account of Bontract 1370 of \$12.343.3.2.

I certify that the total value of work completed up to 15.11.52 under Bontract 1370 for which payment can now be claimed in terms of the Bontract is

\$ 39,396 :- 7 : 6

(Thirty nine thousand, nine hundred and ninety six pounds seven shellings and surpence)

Lotal value of works up to 15.11.52 \$39.336 · 7 · 6

Less 20% retention 7.999 · 5 · 6

\$31.997 · 2 · 0

Less previous payments 19.653 · 18 · 10

Payment (NOA) now due \$12,343 · 3 · 2

(as per attached blaim)

Salvaton



RICKARDS BROS.

54 TITIRANGI ROAD NEW LYNN, S.W.4.



21-11-5

SPECIALISING IN EARTHWORK

The Treasurer Auckland Harbour Board Auckland

for a progress payment of (#12314-7-2) for work completed to the 5/11/52 on contract 1370 highten Basin Excavation as

per so	heclule	The second second second		
ITEM NO	TOTAL Q TO DATE	RATE	TOTALVALUE	
4	150 Lyds	\$5-16-6	\$ 837-15 0	873 . 15 . 0
5	13177 yds	15 - 6	1 10212 3 6	10212.3.6
6	7847 yds	16-6	1 6473 156	6473.15.6
7	4548 uds	17/-	1 3865 16	3865.16.0
8	2721 yd3		1 2380 17-6	
11	6476 yd3		116 190-0-0	2380 - 17 - 6
		TOTAL VALUE 80 15-11-52}	130010-7-1	16190.0.0
		-1/	2776.0 1 6	239,996. 7. €

Jess 20 / netentend 7992 1 - 6 7.999.5.6

121968 6 0 31.397.2.0

Less frecross Repres 119653 18 10 19673.18.10

Paymen V Due \$1231.4-7 - 2 \$12343.3.2

Times your of our best attent on at all
Times your Faithfully

PRICKENDS Bros Atd

Bet Rickonds

3411157

21st November, 1952.

Messrs. Rickards Bros. Ltd., 54 Titirangi Road, NEW LYNN. S.W.4.

Dear Sirs.

CONTRACT 1370 - EXCAVATION OF LIGHTER BASIN - PAKENHAM STREET

Further to my letter 884/3 dated 6th November, 1952, and in acknowledgement of your letter dated 7th November, 1952, covering daywork schedule, I enclose herewith Variation Orders No.1 and 2 on Contract 1370 for the work at Bryant's property and for the sub floor filling in Fanshave St. Store.

Your proposals for daywork and plant hire are accepted as below:-

HD 19 Dozer 163HP £5.0.0)

HD 5 " 40HP £2.10.0) Labour and Fuel

AD 3 Grader 80HP £3.0.0) Inclusive

3" Pump inclusive of fuel 5/- per hr. (Labour excluded)
Pine Timber £3 per 100 super.
Labour 7/9½ inclusive of necessary tools.
Establishment Charge and supervision £10% on total.

It is understood that the labour rate of $7/9\frac{1}{2}$ d is inclusive of hand tools and overtime.

Yours faithfully,

RAJS.JS.

CHIEF ENGINEER TO THE BOARD.

Encl: One Copy of each Variation Order 1 and 2.

CF 2683

BEX 4068.

CARGO FLEET IRON COMPANY, LTD.

CARGO FLEET IRON WORKS, MIDDLESBROUGH

Mov 18 1952

LABORATORY REPORT.

		Cour			ATTENDED TO A TO	S 14156—2254
CAST	SECTION	Comb Carbon	SILICON	SULPHUR	PHOS- PHORUS	MAN- GANESE
P31		.20	.037	.055	036	.70
832		. 21	.056	.056	.036	66
833		20	.056	.055	.038	.68
836		.22	. 037	.054	.027	.70
835		.22	.042	.054	.027	.74
134		. 22	.047	.053	.025	-72
837		. 22	.037	.056	.036	.71
840		20	.037	-047	.030	-69
842		.18	. 047	.041	.031	.74
838		19	.028	.048	-034	72

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a.					callbed	٨
1-1				pu	well	/
					14	***************

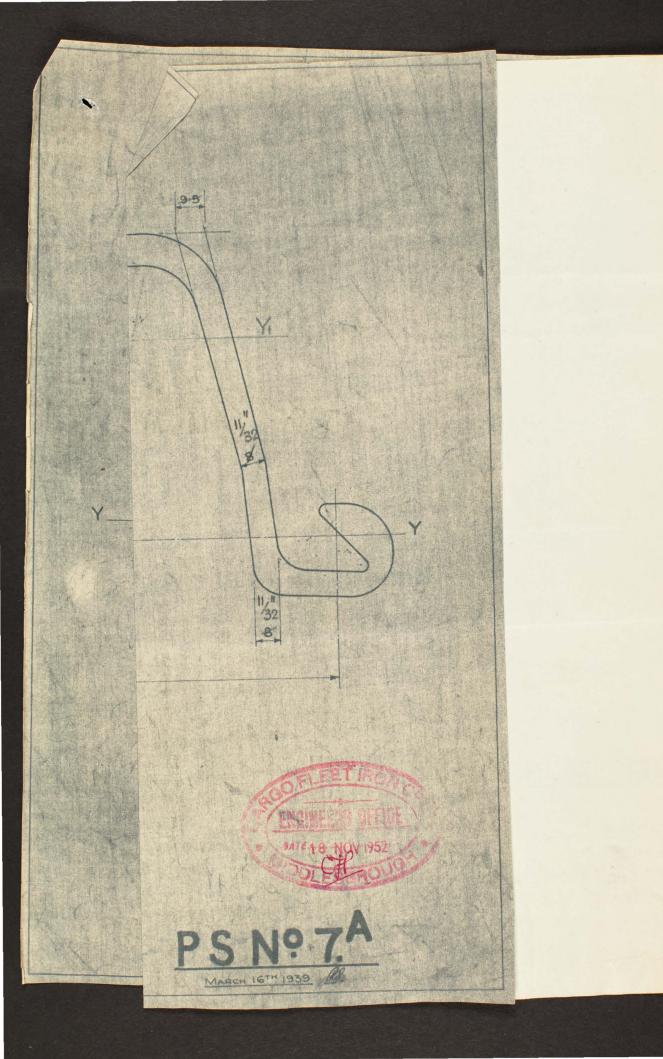
Sagma Ltd. BEX, 4068

S&S 14311-3607

CARGO FLEET IRON COMPANY LIMITED TENSILE TESTS.

Siemens' Basic Open Hearth Process.

CF. 2683	of Collection and Col	A STREET, SELECTION OF COLUMN PORT O	Test	Dimens	ions of Se Test Piece	ection of	Brea	king	Elong	gation	Dimensio	ons of Sec eing broke	ction after en	Reduc- tion	Yield	Stress	
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		833			42	630	192	30.5		25				*************			
BSS 15-1948		836			·H0	600	19-2	320		28							***************************************
		835			·H2	-630	19-6	31.1		26							***************************************
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		8.37			:HO	600	14.3	28.8		26							
		840			:40	600	18:H	30.6		25							
		842			:40	.600	18-9	31.5		26			For CA	RGO F	LEET I	RON CO), LTD,
		838			'40	600	180	30-0		28					16	MI	aller
															TEST	HOUSE E	MANAGER
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AUCKLAND HARBOUR BOARD

CONTRACT NO. **1370**

EXCAVATION OF LIGHTER BASIN PAKENHAM ST.

FOR THE CONSTRUCTION OF IMPORT WHARFY

ORDER FOR VARIATION UNDER CLAUSE 51XOF THE GENERAL CONDITIONS FOR THE GENERAL SPECIFICATION

Variation Order No. 1

To: Messrs. Rickards Bros. Ltd.

I hereby order the following variation in the Works comprised in the above Contract:—

Description:—

Filing and regrading at Bryants property.

Please carry out this work as described in paragraph 1 of my letter 884/3 dated 6th November, 1952, in accordance with the daywork and plant hire schedule confirmed in my letter dated 21st November, 1952.

Date	
	Engineer to the Board.

Instruction to Resident Engineer:

The work entailed by this variation order will be paid for by:-

(a) Measurement under Item No. *** of the Bill of Quantities.

(b) Rate to be fixed. Work to be measured in accordance with approved daywork and planthire schedule.

AUCKLAND HARBOUR BOARD

CONTRACT NO. 1304

FOR THE CONSTRUCTION OF IMPORT WHARFX

ORDER FOR VARIATION UNDER CLAUSE I OF THE GENERAL CONDITIONS OF CONTRACT. SPECIFICATION

Variation Order No. 2

To: Messrs. Rickards Bros. Ltd.

I hereby order the following variation in the Works comprised in the above Contract:—

Description:-

Filling under floor in Fanshave St. Store.

Please carry out this work as described in paragraph 2 of my letter 884/3 dated 6th November, 1952, in accordance with the daywork and planthire schedule confirmed in my letter dated 21st November, 1952.

Date	
	Engineer to the Roard

Instruction to Resident Engineer:

The work entailed by this variation order will be paid for by:-

(a) Measurement under Item No. of the Bill of Quantities.

(b) Rate to be measured in accordance with approved daywork and planthire schedule.

Mr. Rickards explains that his rate
for labout includes over time & no
extra rate will be changed for over time work
Work
MHolans



RICKARDS BROS

54 TITIRANGI ROAD NEW LYNN, S.W.4.

SPECIALISING IN EARTHWORK



7-11-52

The Engineer Ouckland Flanbour Board Dear Sin submitting our price We have pleasure in forcesent contract on a plant hire & day labour basis as per schedule # D 19 Dozor 163HP \$5 HD5 " 40HP \$2-10-0 AD3 Grader 80HP \$3-0-0 Labour Y Luel
Inclusive 3" Premp anchised of fuel 5/. Jerho (Sabour Excluded Pine Timber of 3 per 100 super Labour 7/92 unclusive of necessary tools Establishmen I bhange & supervision \$ 10% on Total Thanking you for a appolimely of qualing yours taithfully bet Kickards

ANGLEDOZERS - CARRYALLS - SHOVELS - DRAGLINES, ETC. - BY HIRE OR CONTRACT

AP RICKARDS BROS LTD

Copy sent to Resident Engineer,

Please negotiate daywork schedule and arrangeto. supervise this work.

884/3

6th November, 1952.

NEW LYNN, S.W.4.

Messrs. Rickard Bros., Rickards Kros Hd

Dear Sirs.

CONTRACT 1370 - EXCAVATION OF LIGHTER BASIN PAKENHAM STREET.

Following discussion on site this morning between yourselves and my Designing Engineer, I now confirm the arrangements made as follows:-

Filling and regrading at Bryant's property. 1.

Please carry out filling and grading on this property as indicated on accompanying Drawing B.929/12.

The provision of filling is to be covered by disposal of surplus spoil from Contract No.1370. Excavation and grading will be paid for as an extra to Contract 1370 on a daywork - plant hire basis.

Please submit a schedule of rates for approval to my Resident Engineer. A variation order on Contract 1370 will then be issued.

Filling under floor in Fanshave St. Store. 2.

Please carry out filling under this floor as indicated on accompanying drawing S.740/3. The provision of filling is to be covered by disposal of surplus spoil from Contract No.1370. Trimming and consolidating filling and ancillary work will be paid for as an extra to Contract 1370 on a day work - plant hire basis.

Please submit a schedule of rates for approval to my Resident Engineer. A variation order on Contract 1370 will then be issued.

The removal of timber flooring and joists will be carried out by the Board starting within the next few days.

Yours faithfully,

RAJS.JS.

CHIEF ENGINEER TO THE BOARD.

Encl: Drawing B.929/12. 5.740/3.

I have to inform you that His Excellency the Administrator of the Government has approved the plans (2 sheets) marked M.D.9445 of lighter berths which your Board proposes constructing at Pakenham Street Reclamation and the completion of the sheet pile breastwork along the northern face of that reclamation, and to authorise your Board to carry out the said works in accordance with the said plans.

I may add that a copy of the plan M.D. 9445 (2 sheets) has been forwarded to you under separate cover this day.

Yours faithfully,

(Sgd.) W.C. Smith)

SECRETARY FOR MARINE.

Telegram from Mr. Goodsir,

EXPECT MD APPROVAL LIGHTER BASIN MONDAY PLANS SIGNED 22 OCT

Rakenham Rt. Lighter Basin & Lighters.

Contract. 1370. Exlavation. Recepted 1 July 52.

Lasks (a) + extra depth. 17 weeks. but approx.

4 weeks behind peledule Aley and her. 52.

Lask (b) + extra depth. 12 weeks.

Lotal line 17+4+16. = 37 weeks. Bay Mid. Feb. 53.

Contract. 13 26 Roffey of Sheet kilong. Accepted 1 July 52.

Nov. 4-5 miths i.e. hov. 52.

hot likely to be descharged before mid-blec.

Contract 1374 Construction of Basin + Breastwork. Lender not get formally accepted.

Lesk I. 26 weeks from Receptance of lander are completion of excavation (or presentably availability of shut peling).

6 menths from 15 Dec. = 15 June. 53.

Lask I + III 43 weeks from Remmencing date.

17 weeks extra from 15 June. = 12 Oct. 53.

Lesks I, III + II by weeks from remmencement.

26 weeks from 12 Oct. 53. = 12 Apr. 54

Contract? Raading & Plge. Inshor and.

Their should begin in hind fam probably complete

(except grays) by may 53. Walis pupply may not

be complete. Quay can be formed to boscourse

by July 53 but sealing will have to walt till how. 53.

Contract. 1372. Lighten. Deleving to F.O.B. Co commence 10 weeks from receipt of steel. Mobably shipped at the rate of 3 per month. Prabably assembled in N.Z. at the rate of 1 per 3 weeks.

Neid Jan. + 10 weeks. it. In 3 to F.O.B and have 1953 by transit say 2 months. " hoy 53.

Delivered to N.Z. complete farther 3 meths. " Aug. 53.

Tabrication. commence say. end. apr.
Calevery of 10t. 4 - 3 meths. = end. apr. 53.

2nd. 4 - Rob. 53.

3rd. 4 - 46. 54.

DEVELOPMENT OF PAKENHAM ST RECLAMATION & LIGHTERS.

TEM. 1952 1953 1954 Inc. Dec Jan Feb Mar Apr. May June July Aug Sept Oct Nov Dec Jan Feb Mar Apr. Excavation			24	Δ	SSES	SED		30-1	Oc	7	195	2.							•	
EXCAVATION TASK (a) TASK (b) SHEETPILING SUPPLY CONST. OF BASIN AND BEAST WORK TAK I A INNER BEETH I BASIN COMPLETE WITH PAKENHAM ST BWK COADING 9 DRAINAGE INSHORE END QUAYS TO BASECOVER SEALING WATER SUPPLY CLICHTERS MANUFACTURE MANUFACTUR		19	52					1.	953	5								195	4	
TASK (A) TASK (B) SHEETPILING SUPPLY CONST. OF BASIN AND BREASTWORK TASK I A INNER BERTH I BASIN COMPLETE IMPAKENHAN ST BWK PAKENHAN ST BWK PODDING 9 DRAINAGE INSHOKE END QUAYS TO BAKECOVER SELLING WATER SUPPLY WATER SUPPLY WATER SUPPLY DELIVERY TO N.Z. FABRICATION 1ST 4 2ND 4	I LEM.	how.	Dec	NAL	FEB	Mar	APL.	May	JUNE	JULY	AUG	SEPT.	047	Nov	DEC	JAN	FEB	MAC	APR.	
I BASIN COMPLETE. ITT PAKENHAH ST BWK COADING 9 DRAINAGE INSHOKE END QUAYS TO BAKECOVER SEALING WATER SUPPLY WATER SUPPLY MANUFACTURE OK DELIVERY TO N.Z. FABRICATION 1ST 4 2ND 4	TASK (A) TASK (b) * SHEETPILING SUPPLY * CONST. OF BASIN AND BREASTWORK																			
15T 4 2ND 4	BASIN COMPLET THE PAKENHAM ST BY COADING 9 DRAINAGE INSHORE END QUAYS TO BASECOVE SEALING WATER SUPPLY CLICHTERS MANUFACTURE		avai	labil	irty.	08 0.	h	imp	oreid	~ 4	o fr									
e Towsoars.	157 4 2 ND 4 3 RD 4																			

MEMORANDUM

FROM

Resident Engineer, Imper Whay 22nd. October

1952

TO

THE ENGINEER

Excavation of Lighter Basin, Pakenham St.

derewith claim for third progress payment on account of Bontract 1370, of \$5,449. 7. 3.

I certify that the total value of work completed up to 15.10.57 under Bontract 1370 for which payment can now be claimed in terms of the Bontract is

\$24,567 : 8 : 6

(Twenty four chousand five hundred and sixty seven pounds eight shillings and sixpence)

Joral value of work up to 18.10.52 \$24.567. 8.6

Less 20 90 retention 4,313. 3.8

£ 19,653. 18.10

Less forevives payments 14,204.11.7

Payment (No3) now due £ 5,449. 7.3

(as per attached claim)

Dutton



RICKARDS BROS

54 TITIRANGI ROAD NEW LYNN, S.W.4.



SPECIALISING IN EARTHWORK

The Treasurer Cluckland Harbour Board auckland

Dear dir, We wish to make application for a progress payment of \$5449-7-3 for work completed to the 15-10-52 on Entract 1370 Excavation of higher Basin as per Schedule.

ITEM NO	TOTAL O TO DATE	RATE	TOTAL VALUE	
4	150 L yds.	25-16-6	1873-15-0	*
5	13037 yds.	15-6	10103-13-6	-
6	5329 yds.	16 - 6	4396-8-6	•
7	4222 yds.	17-0	3588-14-0	•
8	1377 yds.	17-6	1204-17-6	-
11	1760 yds.	12-10-0	4400-0-0	v
71	25725	TOTAL	24567-8-6	~
	20 / 20	Less 20%	4913 -9-8	

19653-18-10 -Less prev. payments: 14204-11-7 -Payment now due, 5449-7-3

Thanking you your Richards Bros. Itel.

ANGLEDOZERS - CARRYALLS - SHOVELS - DRAGLINES, ETC. - BY HIRE OR CONTRACT

Copy sent to Resident Engineer.

22nd October, 1952.

Messrs. B. & H. Construction Co., 54 Shortland Street, AUCKLAND. C.1.

Dear Sirs.

CONTRACT NO.1374

CONSTRUCTION OF BREASTWORK TO PAKENHAM ST. LIGHTER BASIN.

I enclose herewith two copies of Drawing A.15e which gives details of the bollards and bolts for Contract 1374, Bill of Quantities items 21, 37 and 52 refer.

The pattern for the bollard is now being amended and will be available on loan to you as soon as it is ready.

Yours faithfully,

RAJS.JS.

CHIEF ENGINEER TO THE BOARD.

Encl: Two copies Drawing A.15e.

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE.

THE FOREMAN OF WORKS. To

Date 22nd October, 19 52.

Subject PAKENHAM ST. LIGHTER BASIN - CONTRACT 1374.

Please amend pattern No.19 for "F" type Bollard as shown on Drawing A.15e herewith and hold for issue on loan to Contractor for Contract 1374.

Please inform Resident Engineer when pattern is amended and ready for issue.

Encl: Drawing A.15e.

Copy sent to Resident Engineer.

Please arrange issue of pattern
on loan to B. & H. Construction Engineer to the Board

INSTRUCTIONS TO FOREMEN & INSPECTORS

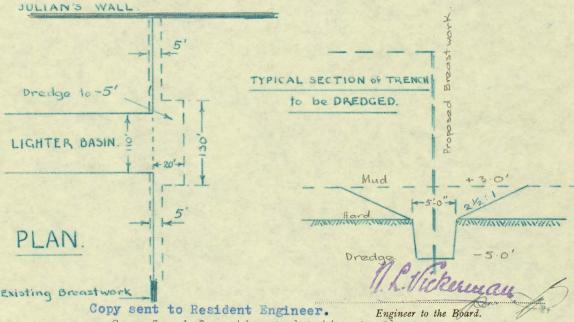
ENGINEER'S OFFICE,

To THE FOREMAN OF WORKS.

Date 21st October, 19 52.

Subject PAKENHAM STREET LIGHTER BASIN.

Please carry out rock chopping and dredging (a) at entrance to basin, and (b) along the line of proposed breastwork to lines and levels as indicated by the Resident Engineer in accordance with the sketch, below:-



Copy for information and action as above. Your memo of September 26th, para. 3 refers.

15th October, 1952.

Messrs. Rickards Bros. Ltd., 54 Titirangi Road, NEW LYNN. S.W.4.

Dear Sirs.

CONTRACT NO.1370.

The carrying out of blasting operations on this contract has been most unsatisfactory and unless you can ensure complete control of flying rock no further blasting can be permitted.

In spite of a warning issued to you yesterday and your giving to my Resident staff an assurance that all holes would be screened before firing shots this was not done. The blasting carried out last thing yesterday resulted in 9 fresh holes in the roofs of both the cargo stores at Halsey St., one of which fractured a valley gutter. This occurred after the stores were closed for the night and during the nights heavy rain some cargo and some of the Board's records were damaged by rain water.

You are being held liable for all damage occurring to property or cargo arising as a result of your blasting to date. I must point out however that it is no longer possible to obtain replacement material to carry out repairs and that in any case there is considerable risk to persons in the vicinity and you have been extremely fortunate that nobody has been hurt.

For the protection of property lodged in the Board's custody, I must now insist that no blasting be carried out after 1 p.m. on any week day or at any time during week-ends or public holidays or during strong winds particularly from a north easterly quarter.

To ensure protection of persons and property generally, I must insist that the charges be still further reduced when necessitated by conditions of ground or depth of hole and that adequate screening be provided to ensure that material will not fly beyond the limits of the area given over for your operations. It is not enough for you to be well covered by insurance. Your shot firer is responsible for the safe conduct of blasting unless this obligation is met, I shall have no option but to require you to cease blasting and adopt other methods.

Yours faithfully,

Extracts from Minutes of Works and Traffic Committee 9/9/52

1. CONTRACT NO. 137L - CONSTRUCTION OF BREASTWORK PAKENHAM STREET LIGHTER BERTH.

Report of Chief Engineer to the Board, 3.9.52, stating that two tenders had been received for Contract No. 1374 - Construction of Breastwork Pakenham Street Lighter Berth as under:

of Breastwork Fakemican o	Tasks 1 & II	Task III
a Construction Co. Ltd.	47 03	
Fletcher Merring		a destananti

that he recommended acceptance of the tender of B. & H. Construction Co. Ltd. for the Contract and including the extra work subject to slight adjustment being made to the satisfaction of the Chief 190PTED BY 19ART .19/ 9. /52 Engineer. Recommended: -

That the report be adopted.

Adopted by Special Meeting Board 19/9/ 52

10th October, 1952.

Messrs. B. & H. Construction Co. Ltd., P.O. Box 1398, AUGELAND.

Dear Sirs.

Contract No. 137h - Lighter Berths.

Receipt is acknowledged of your letter dated 3rd instant asking for an interpretation of Clauses 11 and 20 of the Specification for the above Contract.

The Wages Protection and Contractors Liens Act applies to the Contract in its entirety but as it is presumed that your enquiry is mainly in connection with the possibility of portion of a monthly progress payment being retained under the Act in addition to the retention money prescribed in Clause 11, I have to advise in this regard that generally speaking the Liens Act requires the following to be provided for:-

If a notice of lien or charge on the Contract was given to the Board it would be the Board's duty under the Act to retain until the claim was satisfied or otherwise disposed of, a sufficient part of the money payable to the Contractor to satisfy the claim of the Claimant.

In addition to the above amount (if any) the Board is required by the Act to retain until the expiration of 31 days after the completion of the work covered by any monthly progress payment the following:

- 25% of the first £2,000 or part thereof.
- (b)
- 20% of the next £8,000 " " 15% " " £15,000 " " 10% " " £75,000 " " (c)

The application of the above to this Contract is as follows:-

Once the amount of retention money has reached the £5,000 limit under Glause 11, unless any monthly progress payment claim was in excess of £31,500, the £5,000 retention would be sufficient to satisfy the requirements of the Act and claims would be paid in full.

If any progress payment claim was in excess of 231,500 after the £5,000 retention limit had been reached, for the purposes of the Liens Act, the Board would be required to retain for 31 days after the date of measuring up 10% of such excess in addition to the £5,000.

In order that this interpretation may be applied you will be required to produce receipted wages sheets etc. for the period covered by any claim in terms of Glause 11 of the Specification.

If there is any further information you require in this regard please get in touch with Mr. Taylor of the Engineer's Department.

Yours faithfully,

SECRETARY

ANT. JMM.

8th October, 1952.

The District Commissioner of Works, Ministry of Works, P.O. Box 46, AUCKLAND. C.1.

Dear Sir,

LIGHTER BASIN PAKENHAM ST.

In reply to your 27/167/68 of 1st inst., I enclose copy of each of specifications Nos. 1328 and 1374 for the supply of a limited quantity of sheet piling and for the supply of the balance of sheet-piling necessary to complete the Lighter Basin and Pakenham St. Breastwork together with the construction of these breastworks.

The estimate of the cost of the work covered by this application is made up as follows:-

Excavate basin to L.W.S.T. " L.W.S.T. to - 5' Sheetpile breastwork for	42000 cu. yds. 10000 cu. yds.	2/-/-	£35,700 20,000
4 berths remainder of basin Dredge approach to L.W.S.T 5'	650 lin. ft. 670 lin. ft.	75/-/- 75/-/-	48,750 50,250
in papa and remove Surfacing to queys Water supply and other services)	30000cu. yds. 6000sq. yds.	2/10/-	75,000 15,000
Loan expenses)			5,300 £250,000

The above estimate excludes the completion of the Pakenham St. breastwork which it is intended to construct concurrently, end general roading and servicing of the area, both of which are covered by the 1951 Empowering Bill.

The balance of the work scheduled above but not covered by the two detailed specifications will be carried out to the Boards normal standards.

Yours faithfully,

JAG.JS.

CHIEF ENGINEER TO THE BOARD.

Encl: 1 Copy specification 1328 .

1			7 .10.50
3	Paakenham At. Lighter Basin		
	Esterial for hinistry of Works exa		en
0	Execution to L.W. S.T. 42000 e.yas. 17/-	35,700	
3	Execution L. H.S.T. to L. W. S.T5 10,000 c.yds. 2/-/-	20,000	
3	Sheetfele breastwork to 4 beesths. 650 lin ft. £751-1	46750	
0	Sheetpele breastroom to remainder of basin 670 len ft. £75/-	50,250	
0	Aredge approaches to L.W.S.T 5 in paper 30,000 c.yds. 2/10/-	75,000	
0	An Jasenia la array 1300x 40 x 4.	15,000	
	18	3,300	
	Loan expenses.	2,000	
	125	0,000	
	The above is based on the following.		
	Earthworks. hickords lantract. Slews & to 7. 40,760 eyds. \$34,11.	4	= 16/9 c.yd.
	Ilemo 8 to 11 9,900 " \$ 18,49		1/17/6 ~
	Hem 11 alove papa.	1	Kal101- "
	Sheet pele Breastivarks.		
	Contract. 1326 Sheetpeling for 650' \$14235 B+H Contract. etenos 16 34		
*	650 lin ft. 2.45 716		\$70:100 lanft.

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE,

To THE RESIDENT ENGINEER. Date 6th October, 1952.

Subject CONTRACT 1374 - THE CONSTRUCTION OF BREASTWORK AT PAKENHAM ST. LIGHTER BASIN.

The successful tenderer for the work is Messrs. B. & H. Construction Co. Please arrange to supervise this Contract.

One copy of the priced Bill of Quantities along with 3 copies each of Drawings A.548/2 and 3 are enclosed herewith. One linen and one paper of each are for your use the other linen copies being for the Contractor.

Encl: 1 Copy Priced Bill of Quantities.

3 Copies each of Drawings A.548/2 and 3 1 Copy of B.& H. Construction Coy's. covering letter.

Engineer to the Board.



JW/FO'K.



P.W. 12/14/1
PLEASE QUOTE THESE NUMBERS.
27/167/68

MINISTRY OF WORKS,

P.O. BOX 46, AUCKLAND C1.

1st October 1952.

Lighter Basin, Pakenham Street.

The Chief Engineer, Auckland Harbour Board, AUCKLAND C1.

Dear Sir,-

I have to acknowledge receipt of your letter of 10th September, together with plans of the proposed work.

In order to facilitate the complete examination of this proposal kindly let me have a copy of the specification, also a detailed estimate showing how the figure of £250,000 is made up.

Yours faithfully,

(W.L. BELL) District Commissioner of Works.

We Gooding

MEMORANDUM

FROM

Resident Engineer Import what

30th September

1952

TO

THE ENGINEER

8079

Excavation of Lighter Basin Bortiace 1370.

The acturities of L.O.B. tamber company are impeding the progress of above contract, and I suggest that the company be informed that they must confine their operations within the boundaries of the area of their lease.

The bontractor has endeavoured to arrange his work to suid their workings, and he states that the company is not now carrying out the verbal agreements made with him, and he has formally complained to us that his foregrees is new being impeded. Our area which it is now expedient for him to fill, and which it had been arranged to beep clear for him, is now covered with a heap of logs which he says will take two weeks to use, and more are being delivered.

If we have to claim damages from our centractor for delay, it would not be satisfactory if he were able to show that we did not give him prossession of the site to enable him to prosecute the work to the best advantage. Furthermore, any delay in completion of his contract could involve delays in completion of contracts for the remainder of the scheme, with attendant arguments re extension of time, bonus and claim for damages for delay.

Inspected site 2.10.5% satisfactorily
Can be arranged quite satisfactorily

Sutton

MEMORANDUM

Resident Engineer Import what

70
THE ENGINEER

19 52

Bontrack 1370. Escavation for Lighter Basin.

1 The Contractor estimates that he will complete zone A on or about 26.11.52, or about 31/2 weeks over scheduled time.

At foresent rate of foregress I doubt if he will achieve this without additional plant, and to avoid damages of 25 per week il would not necessarily pay to bring in plant costing perhaps \$5 per hour. However, the Bontractor is endeavouring to obtain additional plant.

In 3 one A original total quantity to be moved 23, 100 yd3 Removed from gone A in 10 weeks 9.600 yd3 ... To be removed in seven weeks 13,500 yd3 Fotal quantity of material removed in 10 weeks = 20,600 yd3 = 2000 yd3 per week.

But the proportion of sanddore in the remaining 13.500 yd3 is much higher than in the quantity of material removed to date, and I think the Contractor is optimistic in his estimate of completing zone A by 26.11.52.

- @ Desposal of surplus sport is now becoming a serious poroblem. We should like a decision upon
- (a) what area, y any, is to be set aside for the use of the sheet piling contractor.
- (b) It would be desirable to raise the levels in the area occupied by Borganis within a week or two. This would absort about 5000 yd3 of surplus spire.
- (c) This would still leave some 14,000 yd 3 g material to be disposed of . - which , if storead over the whole reclamation east of basen, including Sakenham St. entension, well

MEMORANDUM

FROM

TO

THE ENGINEER

8079

raise the level of the whole reclamation by 3 feet.

3 The Bontractor has a stop bank across the end of the basin from which he will complete encavation of the onter portion of his contract. It would appear that AHB. should diredge the entrance to the basin before he removes this bank in December of January to avoid the pilling up of the basin as the contractor removes the bank. At the same time AHB has to remove the sandstone for driving sheet pilling in line with Pakenham It. Breastwork, and it appears as if this work will have to be commenced immediately and pushed on as fast as possible to avoid causing delay to the sheet pilling contractor

Dutton

Mr Goodie

Verhal untrections on points raises essuid to his ting.

22, 1.53

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE.

THE FOREMAN OF WORKS. To

Date 25th September, 1952.

Subject PAKENHAM ST. RECLAMATION - CONSTRUCTION OF LIGHTER BASIN.

Please make up 129 No. tie bars 2" diam as described below and hold for delivery to the Contractor for "The Construction of Breastwork at Pakenham St. Lighter Basin -Contract 1374".

Materials: Tie bars and steel plate for washers are held in Board's stock. Nuts are to be requisitioned.

Specification of Work:

129 No. 2" diam. 40' long screwed for 9" at one end Tie Bars and 6" at the other end to B.S.84/1940 for B.S. Whitworth Free Fit.

258 No. 2" diam. hexagon shape to B.S.916 and screw-Nuts ed to B.S.84/1940 for B.S. Whitworth Free Fit. 258 No. 9" square x 2" thick with central hole Washers 23" diam.

Protection of threads:

The threads on all nuts shall be thoroughly greased. The threads on all tie bars shall be thoroughly greased and wrapped with hessian.

It is estimated that the tie bars, nuts and washers will be required by the end of October ickerman

Copy sent to Resident Engineer.

Engineer to the Board.

MEMORANDUM

FROM

Resident Engineer

24th Reptember 1952

TO

THE ENGINEER

8079

Excavation of Sighter Basin, Sakerham St. Contract 1370.

Herewith claim for second progress payment on account of Bontract 1370 of 27050. 4. 10.

I certify that the total value of work composed up to 15.9.52 under Contract 1370 for which payment can now be claimed in terms of the Contract is

L17.755: 14: 6

(Severdeen thousand; seven hundred and fifty five pounds fourteen shullings and singeence)

Jotal value of work up to 15. 9.52 \$17,755. 14. 6

Less 20% retention 3,551. 2. 11

\$14,204. 11. 7

Less previous payments 7.184. 6. 9

Payment (No 2) now due \$7.050. 4. 10

Cas per attacked claim)

Voucher Sassed for payment 29/9/52. for \$1,050 - 4-10

Auckland Harbour Board MEMORANDUM

To

FROM

The Electrical Engineer

23rd September, 1952

THE ENGINEER

LIGHTER BERTHS - LIGHTING

Considerable advantage in cost will arise if sodium vapour lighting is acceptable instead of tungsten. For approximately equal illumination for the complete scheme, 33 poles with about two fittings per pole will be required for the sodium type, and 42 poles with two fittings per pole for the tungsten type. The connected load for the sodium lights would be about 9 KW, and tungsten 40 KW, so that the sizes of cable in the latter will be greater, as well as the power consumption.

The sodium type fittings proposed are the same as being used with success at Western Wharf. These give ample illumination, and were adopted because the distinction of colour marks on cargo was of no importance. It is necessary to confirm the same point in this case.

TGP/AWJ

being to be on basis of tungsten lamps. Very doubtful if Sodewn lamps acceptable.

Electrical Engineer

22nd September, 1952. The Manager,
A.W. Bryant Ltd.,
30 Albert Street, AUCKLAND. C.1. Dear Sir, I have to advise that to enable the services, i.e. roadway from Fanshawe Street, drainage and water supply, to be constructed for the Board's development scheme at the Pakenham Street Reclamation, it is necessary that the Board resume possession of Lots 28/29 at present occupied by you. Would you therefore accept this advice as formal notice of the termination of your tenancy. It is estimated that a strip of land 30ft. wide on the western side of the proposed roadway will be required for sewer construction purposes by the end of October, 1952, and that the remainder of the site will be required by the middle of December. It is intended to fill and grade the vacant land adjoining the area you now occupy, and this area can be made available for occupation by you. After filling to road level and grading, that portion of your present area not required for road access could also be made available, leaving you finally in possession of an area approximately 115' x 150' on a tenancy basis. Plans showing the proposed changes are held by the Board's Property Officer, and may be inspected, and the site can be pegged on the ground when required. Your co-operation in making the necessary changeover would be appreciated, and I would be pleased to receive confirmation that you will make the necessary arrangements. Yours faithfully, (SGD) G. PEACE SECRETARY The Engineer. For your information. Property Officer. GCB. JB



RICKARDS BROS.

54 TITIRANGI ROAD NEW LYNN, S.W.4.



SPECIALISING IN EARTHWORK

22-9-52

The Freezuser

Auckland Harbour Board

Dear Sur

the west to apply for a progress frequent of \$17050-4-10 for work sompleted on contract 1370 for the period ended 15-9-52 as for schedul.

ITEM	QUANTITY FOR PERIOD	RATE	Amount
3	9911 yds		13031-0-6
6	3752 yes		13095-8-0
7	2140 yds		11819-0-0'
8	357 yes		1 312-7-6
11	222 yds		1 555-0-0
E.	10382 yas		18812 16-0

Total walne of work for the period \$8812-16-0

Less 26/40762-11-2

There of your \$17050-4-10

1 9:57 Packers Bro Ald

ANGLEDOZERS . CARRYALLS . SHOVELS . DRAGLINES, ETC. . BY HIRE OR CONTRACT

22nd September, 1952. Messrs. B. & H. Construction Co. Ltd., 54 Shortland Street, AUCKLAND. Dear Sirs, I have to inform you that the Board, at its meeting held on Friday last, accepted your tender for the Construction of Breastwork to Pakenham Street Lighter Basin as set out in Schedule and Bill of Quantities as under: Tasks 1 and 2 £84,931. 17. 2d. Task 3 £32,298. 0. 4d. and in terms of Specification and Conditions of Contract No. 1374, subject however to slight adjustment being made to the satisfaction of the Engineer. Contract Agreement is accordingly enclosed and I shall be glad if you will have this signed and returned to me at your earliest convenience together with a further cheque for £400 for completion of Deposit. Your attention is drawn to Clause 17 of the Specification - Insurance. Yours faithfully. SECRETARY GP. JEM. ENCL: Contract Agreement

10th September, 1952.

The District Commissioner of Works, Ministry of Works, AUCKLAND. C.1.

Dear Sir,

LIGHTER BASIN, PAKENHAM STREET.

I forward herewith copy of Drawings Nos. A.548/1 and 2 showing details of a lighter basin which the Board proposes to construct at Pakenham Street Reclamation.

Copies of the plans have been submitted to the Marine Department for consent of the Governor General in Council, and an application is being made to the Local Government Loans Board for loan authority for this work.

The Board has recently accepted a tender for the supply of twelve 200-ton steel lighters. It is intended to operate these to and from a lighter basin in sheltered water adjacent to the Board's Halsey Street and Fanshawe Street Stores and where a sufficient area of land for open storage of rough cargo is available.

The estimated cost of construction of the lighter basin including deepening of the approaches is £250,000.

Yours faithfully,

NLV.JS.

CHIEF ENGINEER TO THE BOARD.

Lighter Basen (and Pakenham & Breetwork)

(file 884/3)

Charle						
Whinalis.						
1 4 90,000 to 1	LWST					
£ 96,000 to	LWST					
	5 LWST					
1. 94,000 6	5' LWST - 2 - 0 - 1/1					
	for Lighter Brusin Complete					
(3) 321	Pt. Sh. Pska + cutting trench					
321,000 + services mostly chargable to Pakenhand or Reals:						
100 11						
10 10 lender Encar & Br	asin part (+3 . h 53.600 -					
Sheet Pole	ing part () 14, 250 /					
I Breakwon	k. part +5 , \$85,000 1					
Jotal Dotal	1,3 +5 \$ 152,850 ~					
	a 1+3+5 £ 181,000					
(Estimate far (included) S. W. dge. not allowed for	for roading +					
highlis Basin only	m commental to					
Stage I						
Excavation (53.000 - \$20.000)	= 133.000 .					
Steel Shoet Peling (R. McCala)	f 14.250					
Breastwork (13+H)	£ 31,500 V					
	1 78,750 -					
4.4						
· Extra bepth (estimate).	£ 20,000 ×					
But Int	£ 33,000 1 Ext 96,000					
Completion of Basis B 4H portion Remarder (Estimate)	63,000 1)					
bredging of approveds (Estimate) Register Basin	£44.000 v					
Reghter Basin	complete. # 238, 750 -					
as againh	estimate \$ 250,000.					
	Miles In the South Control of the Co					

her. Goodsin.
Contract 1374 - Comparison of Tenders. O. Two teadures received. F.M.R. F 136,688. 6.0 (I . II) By H. 84,931. 17. 7 (Ia II) 2. F.MR. roles are consistently higher than by the with one (3). FMR. roles for a hutpiling in place \$165 per ton for N.º. Z. las port whose for N.º. 3. for 52 peles \$82 per ton.

Nº. 2 32.79 lbs.

Nº. 3 Al. 66 lbs. whereas B+H note probably undedes for plant fuce A It opprass that B+H rate for driving shut peluj isea 12. \$10. 4.0. per pile is not too low. 3. FMR. notes for Task TIT are very different from notes quoted for similar job in Task II. 6. Two withoutiest wors in B+H Tender Henres >5 +11. 10. The rate only shown by B+H at item 10. should By H quality they tender accordingly FMR. similarly but not so described. (8). Sterling Funds 9 Jales Tax B+ # does not welled sales Tax. To lubbing Strips but reacastes ok. but we judge the Toundation Conditions & Ekstrustions both tendros one qualifies. This runs reasonable. Dollars FMR. quality their tender on availability

(B) Time for Completion is satisfactory in both come.

(B) Financial Standay FMR. Known.

(B) Abelity to do the fols FMR. Known.

By H. Lave not slove shatpeley before but one well experienced in hridge or reservois 14 , 9 work for ACC., Mof W, Tauraya County etc.

AUCKLAND HARBOUR BOARD

3rd September, 1952.

MEMORANDUM.

From:

To:

THE ENGINEER.

THE GENERAL MANAGER.

CONTRACT NO. 1374.

CONSTRUCTION OF BREASTWORK PAKENHAM ST. LIGHTER BERTHS.

Two tenders were received for the above Contract as under: –

B. & H. Construction Co. Ltd.

Tasks I & II £84,931.17. 2 £32,298. 0.

Fletcher-Merritt-Raymond

£136,688 6. 0 £41,835.10. 0

8 6 0 £41,835.10 0

Both of the tenders are qualified in different respects but are both made subject to availability of steel sheet piling from the fourth quarter 1952 rollings and subject to the availability of certain overseas funds. The tender of B. & H. Construction Co. Ltd. is stated to exclude sales tax but this will have very limited application.

There is little difference between the two tenders in the time required for completion of the work.

Tasks I and II provide for the construction of the four lighter berths and the completion of Pakenham St. Breastwork respectively. Task III covers the driving of the balance of the sheet pile walls of the lighter basin.

The tender of B. & H. Construction Co. Ltd. is generally satisfactory and within the estimate. Both tenders quote very favourable prices and good completion times for the extra work to complete the walls to the lighter basin.

I therefore recommend acceptance of the tender of B. & H. Construction Co. Ltd. for this Contract and including the extra work, subject to slight adjustment being made to the satisfaction of the Engineer.

CHIEF ENGINEER TO THE BOARD.

Millickerman



WILLIAMSON HORNIBROOK CONSTRUCTIONS LTD.

CIVIL ENGINEERING CONTRACTORS

175 = 187 Montreal Street,

CHRISTCHURCH

*

29th. August, 1952.

The Engineer,
Auckland Harbour Board,
AUCKLAND.

Dear Sir,

re CONTRACT NO. 1374 - WORK TO BE DONE AND MATERIALS TO BE USED IN THE CONSTRUCTION OF BREASTWORK AT PAKENHAM ST.LIGHTER BASIN.

We are returning to you, under separate cover, two sets of Specifications in regard to the above mentioned works.

Yours faithfully, WILLIAMSON HORNIBROOK CONSTRUCTIONS LTD.

Secretary.

NW/JR.

We enclose our tender for the above contract, together with a bill of quantities and schedules showing how the tender

is calculated.

We set out hereunder the special conditions attaching to our tender.

- (1) Sheet Piling. Our tender is based upon the sheet piling being available in the fourth quarter of this year and is subject to the necessary sterling funds being made available to us and the export quota being available at the date of receipt of acceptance of the tender.
- (2) Sales Tax. No provision has been made for sales tax and if it is applicable it is to be added to the contract price.
- (3) Rubbing Strips. We have tendered on the basis of rubbing strips being welded to every fourth pile and not riveted and that the welding be done in the horizontal position before the piles are driven. Rubbing strips would be seal welded all round.
- (4) Foundations. Our price for driving sheet piling is conditional upon the foundations being as shown in the plans and specifications.
- (5) Time for Completion. The times stated for completion are to be from the date of acceptance of the tender or the date of completion of the excavation whichever is the later.

Yours faithfully,
B. & H. CONSTRUCTION CO. LTD.

(Sgd.) W.H. Blundell

STEEL IMPORT CO., LIMITED

48 WELLESLEY STREET W. AUCKLAND, N.Z.



KJB/rfs

25th August, 1952

The Engineer,
Auckland Harbour Board,
Quay Street,
AUCKLAND, C.1.

Dear Sir,

re: Tenders for Contract
No. 1374

As previously advised, we have been interested in the supply of LARSSEN Piling for the above project and have accordingly quoted several concerns who are likely to be tendering.

We wish to confirm our discussion with your Mr. Goodser that the Manufacturers have undertaken to roll up to 500 tons of piling necessary for Tasks II & III by the end of September, subject to immediate reply.

Yours faithfully,

p.p. STEEL IMPORT CO. LIMITED

K. J. Bishop SECRETARY

Mis hole G.

WILLIAMSON HORNIBROOK CONSTRUCTIONS LTD.

CIVIL ENGINEERING CONTRACTORS

175-187 Montreal Street,

CHRISTCHURCH

*

21st. August, 1952.

Mr. N.W. Vickerman, Chief Engineer, Harbour Board Office, Quay Street, AUCKLAND.

Dear Sir,

CONSTRUCTION OF BREAST-WORK AT PAKENHAM STREET LIGHTER BASIN.

We regret that we have been unable to tender for the above works.

Unfortunately we feel that the nature and size of the contract would make any tender from us uncompetitive the necessary capital costs in our case being too large.

However, if the tenders received appear to your Board to be unreasonable, we would be pleased to supply one at some later date.

We do appreciate the opportunity we have had of tendering and hope our failure to do so has not caused undue inconvenience.

We would appreciate the like opportunity for any further works which you consider would interest us.

Thanking you,

Yours faithfully, WILLIAMSON HORNIBROOK CONSTRUCTIONS LTD.

NW/JR.

n Williamson

Auckland Harbour Board

MEMORANDUM

Resident Engues Import whay.

19th. August TO THE ENGINEER

1952

Execution of Lighter Basin, Pakerham St.

I certify that the total value of work completed up to 15.8.52 under Bontract 1370 for which payment can now be claimed in terms of the Bentract is

88,942 - 18 - 6

(Eight thousand nine hundred and forty two pounds, eighteen shillings and sixpence)

(This is subject to a deduction of 20% in terms of clause 10 of the contract, making the amount due on account of first payment \$7154. 6. 9, provided that the retention is Sufficient under the Wages Protection and Bentraction's Seems Act. There have been no forevious payments.)

Holmes to arrange with fickand to submit account for this according to details which have been agreed on site . J. D18.52.

Lighter Berth Pakenhan St. C/A.



RICKARDS BROS.

54 TITIRANGI ROAD NEW LYNN, S.W.4.



SPECIALISING IN EARTHWORK

The Treasurer Aug 821 AUG 8

Hand Hanbour Bound

1952

Dear Sir

We wish to make application

for a fragress payment to 15-18-52 for word

completed on Contract 1370 as per schedule

Item No Quantity Rate Amount

4 150 1 glas 45-16-6 4873-15-0

5 8669 yds 15/6 46873-9 6

6 860 yds 16/6 \$ 709-10-0

7 572 yds 17/- \$ 486-40

Jotal walue of work to 15-82 \$ 8942-18 6

Leas 20% retention

\$80% \$ \$7154-6-9

Assuring you of our best attention at all

times

of The Richards Propositionels

ANGLEDOZERS . CARRYALLS . SHOVELS . DRAGLINES, ETC. . BY HIRE OR CONTRACT

30th July, 1952. Messrs. W. & H. Construction Co. Ltd., P.O. Box 116, CHRISTCHURCH. Dear Sir, In accordance with your telegraphic instructions, I wish to advise that a copy of Plans and Specifications of Pakenham St. Breastwork has been forwarded per airmail to Mr. Hornibrook, P.O. Box 514, Brisbane. Yours faithfully, AFC.JS. CHIEF ENGINEER TO THE BOARD.

	Lighter Basin & Pakenhamst Breastruck
350	LIGHTER DUSING FOR ENNOYEST BASISTANTE
	Forecast of Expenditore
	Supply Skeetpiling Contr. 1378. Ex cavate Basin " 1370. Construct Breastwork " 1374.
300	Supply Skeetpiling Contr. 1378.
	Ex cavate Basin " 1370.
	Constract Breastwork . 1374. 15
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	Dredging etc.
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	1374
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100	
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	services I (Estimate) f60,275
50	
	prodging etc (Estim) # 44 000.
	Contract 1328 £14235 Dredging etc. (Estim) £44000.
2	
Jen.	1952 9 1953 9 9 1955 1954

Lighter Basin a Pakenham St. Breastwork £366,748 \$342,000. Forecast Rote if Expenditure from August '52 300 Office Fib 250 200 d di \$170, 400 150 entrat 1370 \$53,608 Services I (Estimate) \$0,275 50. Contract 1328. \$14,235..... Drodging, a offer Mortes (Estimate)..... \$44,000

Pakerham Street tegler krien & hedruntwin Foresast of Expusiteers covering the following: -Supply of Stal Shat pelling Excavation of basen. Construction of breakword Contract 1328 v 1370 u 1374 Roading & Drawage, Inreductal Works medging by the board. (Contract 1328 f.14; 235 - 4-5 with foren Luly 1st 1e. Noo. 5) @. Contract 1370. f.53,608. July 1st 1.e. up to Feb 53 3 Contract 1374 Estemale Stage 1 650 lint Of 110 less Contaat 1328. Total. 71,500 14,200 \$ 57,300 Commence. finish Apr. 53 Stope I 710 luft @ 2110 Communes finish Noo. '53 f. 78, 100. \$35,000 Stope III 670 lingt. @. Luly 153

A loading · Doamaje a Elistr. P60 275 Stope I. Commerce Oct. 57. fraich Nov 53. (10,000) 134730 Course. Nov 53. Stage II. 1 other Works doedging \$44,000

33 CHRISTCHURCH 5 16 P F 260 Box 1259 ENGINEER AUCKLAND HARBOUR BOARD AUCKLAND + Checked Ву NEW ZEALAND POST OFFICE TELEGRAM PLEASE AIRMAIL PLAN AND SPECIFICATIONS CONSTRUCTION OF BREAST WORK AT PAKERHAM STREET LIGHTER BASIN TO M R HORNIBROOK PROPRIETARY LTD BOX 514 H G P O BRISBANE QUEENSLAND + CHIPS CT 514 H +

INSTRUCTIONS TO FOREMEN & INSPECTORS

To

ENGINEER'S OFFICE,

THE FOREMAN OF WORKS. Date 25th July, 1952.

Subject PAKENHAM ST. LIGHTER BERTHS - STEEL SHEET PILING.

Further to Instruction No.19792 dated 26th May, 1952, please arrange to return to Messrs. Rope Construction Co's depot at Abbot's Way the following sheet piling loaned by them to the Board.

B.S.P. Larssen No.2 Sheet Piling 1/12', 1/21-6" 1 only Helmet.

This has been loaned to the Board free of charge and a 22' length which was expended on the job is not being charged for. Please therefore ensure that when returned the material is placed in the depot in the same position from where it was obtained or to the lender's requirements.

Engineer to the Board.

25th July, 1952.

Messrs. Rope Construction Co. Ltd., Colonial Mutual Building, Queen Street, AUCKLAND. C.1.

Dear Sirs,

Further to my letter dated 20th May, last and confirming verbal arrangements made with your Mr. Parker, I have to advise that we will shortly be returning to your Abbot's Way depot the following sheet piling loaned by you to the Board:-

B.S.P. Larssen No.2 Sheet Piling 1/12', 1/21'-6" 1 only Helmet.

One 22' length was expanded and is therefore unable to be returned.

Please accept the Board's thanks for your Co. operation in this regard.

Yours faithfully,

ANT.JS.

CHIEF ENGINEER TO THE BOARD.



HEINE BROTHERS (N.Z.) LTD.

Associated with: Heine Bros. (A'sia) Pty. Ltd., Melbourne & Sydney Heine Bros. (England) Limited, London Gebruder Heine, G.M.B.H., Frankfurt A/Main Heine Bros. Kabushiki Kaisha, Tokyo & Osaka

Wellington, P.O. BOX 2135

25 PARAGON CHAMBERS. KELBURN AVENUE. WELLINGTON.

AA:MW:

21st July, 1952.

The Auckland Harbour Board, Quay Street, AUCKLAND. C. I.

Dear Sirs,

Contract No. 1374.
Sheet Pile Breast Work.
Closing - 25th August, 1952.

Please furnish us with three copies of your above specification at the earliest opportunity.

Yours faithfully, HEINE BROS. (N.Z.) LTD.

Auckland Harbour Board

TENDER

FOR CONTRACT	No.	1374	for	
	CTION OF BE			
TO THE CHAIRMAN OF THE			July,	53.
AUCKLAND HARBOUR BOAR	RD.			
Sir:—				
I, We, the undersigned, do hereby Tender provisions named, described and alluded to in BREASTWORK AT PAK	the Specification	ns for the	CONSTRUCTI	
and under and in conformity to the General Connine hundred of thirty-orange and I and I annex hereto the Schedule of Prices				
I, We enclose herewith cheque payable to one hundred pounds (£100.0;0)			
Should this tender be accepted $\stackrel{ m I,}{ m We}$ under	take to execute	a Contract as	nd Bond embody	ing the
deposit with the Treasurer of the Auckland Five hundred pour making a total of £ (\$500.0.0)	deposited.		of £ (£400.0)	
Ad	dress 54, A	Shortla	nd ST. a	uchland
The within Tender is accepted by the Aud	ckland Harbour	Board, Auckl	and,	Management of Contract
The Common Seal of the Auckland Har was hereto affixed at a meeting of the Board				
day of	· · · · · · · · · · · · · · · · · · ·			
by	and			
the members of the Board, in the presence of	two of			
and members of the Board, in the presence of	Chairman.			
	Members			
	Secretary A.H.B.			

AUCKLAND HARBOUR BOARD.

Engineer's Office.

CONTRACT NO. 1374.

SPECIFICATION FOR.

WORK TO BE DONE AND MATERIALS TO BE USED IN THE CONSTRUCTION OF BREASTWORK AT PAKENHAM ST. LIGHTER BERTHS.

1. TENDERS:

Tenders addressed to "The Chairman", Auckland Harbour Board, and endorsed on the envelope "Tender for Breastwork" will be received up till 12 noon on Monday, 25th August, 1952, for the construction and completion of Breastwork at Pakenham St. Lighter Berths in accordance with this specification.

Tenders received through the post will be recorded by the Secretary or his representative in the Tender book and placed in the Tender box. Tenders delivered by hand shall be signed for by the Secretary or his representative and be placed in the Tender box in the presence of the person delivering the tender. Tenders may be submitted by telegraph only provided proof is available that a written tender accompanied by the specified deposit has been posted not later than the time of closing of tenders.

2. INTERPRETATION OF TERMS: In this Specification wherever they may occur the terms:-

> "Board" shall mean "The Auckland Harbour Board". "Secretary" shall mean the person for the time being acting as Secretary to the Board.

"Engineer" shall mean the person for the time being acting as Engineer to the Board or his

authorised representative.

"Contractor" shall mean the person or persons whose tender for construction of the works to which this Specification refers shall be accepted, and who shall sign the necessary Contract, and it shall include the executors, administrators and permitted assigns of such person or persons.

"Works" shall mean all the works, materials, acts, matters and things mentioned and described in the Specification and also such other works, materials, acts, matters and things as are contracted to be performed by the Contractor.
"Approved" shall mean approved by the Engineer or

his representative.

DEPOSIT WITH TENDER: Each tender shall be accompanied by cash or Bankers cheque certified good for 30 days for One Hundred pounds (£100.0.0) deposited against the due execution of the contract documents and performance of the Contract. Should any tenderer withdraw his tender after the advertised time for the closing of tenders, or should he in the event of its acceptance by the Board refuse or neglect or fail to carry out the provisions of Clause 4

-2of this Specification, then the amount of the deposit accompanying such tender shall be forfeited absolutely to the Board as and for liquidated damages and the Board may call on any of the other Tenderers to sign and carry out the Contract The deposits lodged by unsuccessful Tenderers and which have not become forfeited to the Board will be returned as soon as the necessary contract has been signed. FURTHER DEPOSIT AND EXECUTION OF CONTRACT: The successful Tenderer shall, within three clear days of notification of acceptance of his tender, execute a legal contract embracing all the clauses of this Specification and shall make a further deposit of Four hurdred pounds (£400.0.0) making a total of Five hundred pounds (£500.0.0) deposited against the due performance and completion of Contract, which sum will be returned only after satisfactory performance and completion of the Contract as certified by the Engineer. 5. SCOPE OF CONTRACT: This contract shall be for the provision of all labour, material, plant, and other things necessary for the carrying out and completion of the works shown on drawing No. A.548/2 and more fully described or implied in this specification and enumerated in the schedule included herewith, and shall include all works incidental thereto and the maintenance of the said works for a period of Thirty days from date of their completion, the whole to be done in accordance with the true intent and meaning of this specification and to the entire satisfaction of the Engineer. 6. DRAWINGS: The drawings and specifications in connection with this contract are the property of the Auckland Harbour Board and two complete copies will be furnished for the use of the Contractor. such copy shall be kept on the work in the charge of the Contractor or a competent foreman. Both copies shall be returned to the Engineer immediate ly upon receipt of the final certificate or upon termination of the contract. The drawings and the dimensions and descriptions written thereon shall be strictly adhered to, together with such further drawings or explanations as may be given from time to time by the Engineer for the more particular and detailed description of various portions of the work. The scale to which the drawings are made is to be made use of only where no figured dimensions are given either on the drawings or in the specification. Figured dimensions shall be considered as correct, although the may not in every instance agree with the scale. INSPECTION OF SITE: Tenderers shall make a careful inspection 7. of the locality of the proposed work and satisfy themselves as to the nature of the work to be undertaken and of their ability to carry out the Contract in accordance with the true intent and meaning of this Specification.

and Schedule Forms which may be had on application to the En gineer's Department, Auckland Harbour Board.

The quantities given in the Schedule are measured nett, as shown on the drawings and are believed to closely approximate the quantities of the various classes of work to be done, or materials to be supplied, under this Contract.

Each Tenderer shall satisfy himself as to the accuracy of the quantities shown in the Schedule and should he not agree with the quanity of any item he shall amend such item in the Schedule accompanying his tender.

Should the Schedule accompanying the accepted tender not agree with the lump sum tender, the schedule prices shall be amended to the satisfaction of the Engineer so as to make the Schedule total agree with the tender price.

9. TIME OF COMPLETION AND DAMAGES FOR DELAY: Tenderers shall state in the accompanying schedule the time within which they are prepared to guarantee completion of the whole of the works in accordance with this Specification. Should the works remain uncompleted at the expiry of the time within which the Contractor has guaranteed completion, then the Contractor shall pay to the Board, as and for liquidated damaged, the sum of Twenty pounds (£20.0.0) per week for each and every week during which completion is delayed beyond the due date. Any such sums payable to the Board by the Contractor may be deducted from any moneys that may be payable or may become payable to the Contractor by the Board or may be sued for as a debt.

10. COMPLETION AND MAINTENANCE:

The care and maintenance of all worksunder this Contract shall remain with the Contractor until the completion of the Contract.

If the Contractor does not so maintain the works to the satisfaction of the Engineer such maintenance as the Engineer considers necessary shall be carried out by the Board at the expense of the Contractor.

vill be made to the Contractor by the Board once in every month up to 80% per centum of the value of the work done as certified by the Engineer but the amount retained excluding any deposit shall not exceed £5000. The Contractor shall, if required, supply to the Engineer any vouchers, dockets or other papers he may require in order to arrive at a fair estimate of the value of the work done. Payment up to 90% per centum of the Contract sum will be made by the Board on satisfactory completion of the works as certified by the Engineer.

The final payment of 10% per centum to complete payment will be paid by the Board after expiry of the periof of maintenance against a certificate from the Engineer that the work has been maintained in a satisfactory manner and any defective material or workmanship has been made good.

12. VARIATIONS AND EXTRA WORKS: The Engineer shall have power to vary, diminish or extend the quantities of work without invalidating the Contract provided always that such variation, increase, decrease or change shall be of a nature contemplated by the Contract and the Contract price shall be adjusted in accordance with the schedule rates. Where the schedule rates are not fairly applicable to such variations new rates shall be agreed. All variations shall be ordered in writing by the Engineer who will, at the time of issuing such order, decide the method of payment and the time to be added to or deducted from the contract completion time consequent on such variation.

13.=MEASUREMENT OF WORK: All measurements of the work shall be made nett as shown on the drawings or described in the specification.

14. PRIME COST AND PROVISIONAL SUM:

PROVISIONAL SUM means any sum of money fixed by the Engineer and to be included in the Contract price to provide for work not otherwise included or unforseen contingency.

It shall not be expended except as specifically directed by the $^{\rm E}{\rm ngineer}$ at his discretion and any portion not so expended shall be deducted from the Contract Sum.

15. WATCHING AND LIGHTING:

The Contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or by any competent statutory or other authority for the protection of the works or for the safety and convenience of the public or others.

16. DAMAGE TO PROPERTIES:

The Contractor shall be liable for, and shall at all times keep the Board indemnified against, all actions, claims and demands in respect of any injury or damage caused by himself, any of his workmen or any other person in his employ or actting undar his direction, to the land or buildings or person of any third person or persons as a result of the execution of the specified works including the conveyance of materials or persons to or from the site.

17. INSURANCES:

The Contractor shall at his own cost, effect and maintain during the continuation of the Contract the following insurances in offices approved by the Board.

- (1) FIRE INSURANCE: All works comprised in the contract and all plant and materials brought into or onto the works shall be kept insured against fire for their full insurable value.
- WORKERS' COMPENSATION: The Contractor shall effect and maintain an approved insurance such as will protect him and the Board from claims under any Act for the time being in force relating to worker or workers' compensation or employers liability or under any other statutory provision or at common law. Before employing any labour on the works the Contractor shall lodge with the Board a certificate to the approval of the Engineer that such insurance has been effected and the name of the office concerned.

18. CONTRACTOR TO OBSERVE ALL LAWS BY-LAWS AND REGULATIONS:

In executing the contract, the Contractor shall comply with the provisions of all Acts of Parliament and with all regulations and by-laws of state, local or other authorities that may be applicable to the works and shall pay all fees lawfully demanded by the public authorities for matters in connection with the Contract.

Where the express approval of the Building Controller is required for any aspect of the work or any material specified to be used such approval will be obtained by the Board.

19. STATUTORY CONDITIONS RELATING TO WAGES: The Contractor shall observe all the provisions of every award or order of the Court of Arbitration and of every Industrial agreement and of every other statute, order or requirement from time to time in force in respect of payment of wages, conditions of labour and other matters relating to the employment of labour. 20. SUBJECT TO LIENS ACT: This contract shall be subject to the provisions of "The Wages Protection and Contractors Liens Act 1939" and its amendments. 21. SUB-LETTING AND FACILITIES FOR OTHER CONTRACTORS: The Contractor shall not suc-let the Contract or any part of the Contract without the written approval of the Engineer, such approval not to be unreasonably withheld. Any approval for such sub-letting shall not be deemed to be a waiver of any of these conditions of Contract and shall not discharge the Contractor from the responsibility of ensuring that any part of the Contract so sublet is executed and completed in terms of the Contract. The Contractor, if so requested by the Engineer, shall afford all reasonable facilities to any other contractor or his workmen or to workmen directly employed on or near the site on work ancillary to this Contract. 22. SERVICE OF NOTICES: Any notice to be given to the Contractor under the terms of this Contract shall be served by sending the same by post to or leaving the same at the Contractor's principal plaze of business (or in the event of the Contractor being a company to or at its registered office). Any notice to be given to the Board under the terms of the Contract shall be served by sending the same by post or leaving the same at the Board's Office at Quay St., Auckland. 23. CONTRACTORS REPRESENTATIVE: The Contractor, when he is not personally present on the works shall be represented by a responsible agent approved by the Engineer to receive instructions and to represent the Contractor for all purposes of this Contract. 24. QUALITY OF WORK: All workmanship shall be in accordance with the best practice and all materials shall be the best of their respective kinds and shall be approved by the Engineer or his representative before being used in the work. 25. SANITATION AND CLEARING UP THE SITE: The Contractor shall maintain the works and the site of the works in a sanitary and hygienic condition and on completion of the Contract he shall clear the site of all temporary works, surplus plant and materials, and debris and leave the works and the site of the works in a clean and tidy state to the satisfaction of the Engineer.

-6-

-7-

- 26. BENCH MARKS AND SURVEY STANDARDS: Before the commensement of the work the Board will establish any necessary "Bench Marks" and "Survey Standards" at suitable positions in the vicinity of the work and the Contractor shall preserve and use these marks for fixing all level and line pegs that he may require during the course of the work.
- 27. SETTING OUT THE WORK: The Contractor shall be responsible for the accurate setting out of the whole of the work true to the lines, levels and crossfalls shown on the drawings, and in accordance with such further instructions as may be given from time to time during the course of the work.
- 28. INSPECTION:

 The whole of the work will be subject to close inspection on behalf of the Board. Any material which is not approved by the Engineer shall be removed from the site immediately by the Contractor and replaced with approved material. Any work which is not approved by the Engineer shall be made good immediately by the Contractor to the satisfaction of the Engineer. Should the Contractor refuse or neglect or fail to remove from the site any material or to make good any work immediately when instructed by the Engineer to so do, then it shall be lawful for the Board to employ any other person or persons to remove such material or to make good such work and the Board may deduct the cost of doing so from any moneys that may be payable or may become payable to the Contractor by the Board.
- 29. RIGHT OF BOARD TO TERMINATE CONTRACT: Should the Contractor continue to refuse or neglect or fail to provide materials of a quality satisfactory to the Engineer or to carry out any works in connection with this contract in a manner to the satisfaction of the Engineer, or should the Contractor refuse or neglect to carry out the Works with such despatch as the Engineer shall consider necessary for the due completion of the Contract within the time specified, then it shall be lawful for the Board forthwith, without further notice to the Contractor, to terminate the contract so far as it relates to the Works remaining to be done and the Contractor shall have no claim whatsoever against the Board as compensation in respect of such termination of contract.

In the event of such termination of contract by the Board, the Contractor shall be paid only the value of the work done as certified by the Engineer but the deposit lodged by the Contractor shall be forfeited absolutely to the Board as and for liquidated damages.

30. BANKRUPTCY ETC. OF CONTRACTOR:

If the Contractor shall become bankrupt or shall make any assignment for the benefit of his creditors or if the Contractor being a company shall go into liquidation then unless the assignee, trustee or liquidator forthwith makes arrangements satisfactory to the Engineer for the due

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prosecution of the works then in any of such cases the Board may on three days notice exercise all the powers conferred as is provided in the case of the right of the Board to terminate the Contract.

31. PIANT AND MATERIALS TO BE THE PROPERTY OF THE BOARD:

If the Contractor brings onto the Works plant and/or materials for which he desires an advance of payment to be made then such plant and/or materials shall become the absolute property of the Board.

Except for the purpose of carrying out the Contract the Contractor shall not, without the written permission of the Engineer, remove any of the said plant and/or materials until the Engineer has certified the completion of the Contract when the said plant and all unused materials shall re-vest in and become the property of the Contractor.

32. ARBITRATION:

Should any dispute arise between the Contractor and the Board in the execution of this Contract it shall be referred to the Engineer for his decision and that decision shall be binding on both parties. Should either party be aggrieved by such decision he may serve a notice on the Engineer requiring the matter to be referred to an Arbitrator to be agreed upon between the parties or, failing agreement, to be nominated on the application of either party by the President for the time being of the N.Z. Institution of Engineers and such reference shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act 1908 or any statutory re-enactment or amendment thereof for the time being in force. The award of the Arbitrator shall be final and binding on the parties.

33. THE LOWEST OR ANY TENDER will not necessarily be accepted.

34. HEADINGS: The headings to the foregoing clauses shall not be deemed to be part of the Contract nor explanatory thereof.

35. GENERAL:

This Specification is for the construction of a steel sheet pile breastwork as shown on the drawings and includes the following:-

TASK I: Construct the breastwork complete with anchorage, tie bars, ladders and bollards with the following materials supplied by the Board, the Contractor to provide the remainder:-

Bulkhead: Larssen steel sheet piling No.2 26' lengths in 510 No.

Anchorage: in 255 No. Larssen steel sheet piling No.2 6' lengths 22.4 tons

Larssen steel sheet piling No.2 66/21' lengths 20.29

Tie Bars: in 130 No. 2" diam. M.S. Tie bars 40' lengths 24.8 tons -9-

down to 5' below L.W.S.T.

TASK III: As for Task II above.

drawings.

TASK II: Provide all necessary materials and construct the breastwork complete as shown on the

EXCAVATION: The excavation of the Lighter Basin (Tasks I & III) is being done separately by contract and will include the removal of all material

38. STEEL SHEET PILING: The sheet-pile breastwork shall be constructed as shown on the drawings.

The steel sheet-piling for breastwork and anchorages shall be at least equal in all respects to the "Larssen" steel sheet-piling specified.

It shall be of approved section and shall comply with the following minimum requirements:

Size of Piling

Sectional Area sq. ins.per ft.

width

Weight lbs. Weight lbs. per sq.ft. interlocked

per lin.ft.

Sectional Modulus ins.cub.per ft. width interlocked

Larssen No. 2

7.35

24.98

32.79

15.8

The steel shall conform to B.S. 15/1936.

Rolling margins shall be:-

Weight: Not more than 4% over and 2% under. Length: Not more than 3 in. over and 2 in. under.

> All junction, corner and make-up piles shall be fabricated as shown on the drawings and to suit the requirements of the work as approved by the Engineer.

The Contractor shall supply to the Engineer copies of the maker's Certificates for each shipment of piles establishing the quality of the steel, the dimensions, weights and section moduli of the piles singly and interlocked.

All steel sheet piles shall be treated as follows:-

(a) At Works:

All mill scale, grease, dirt and rust shall be removed and the piles shall be breated in an approved manner with acid-free coal tar.

(b) On Site Before Driving:

The piles shall be cleaned and brush painted one coat of acid-free coal tar paint of the slow drying type.

(c) In Place After Driving:

Exposed faces of the pile above low water shall be cleaned, any defective coating made good, and the whole brush painted one cost of acid-free coal tar paint of the quick drying type.

Coal tar paint shall be prepared and applied in accordance with B.S.1070/42.

All junction, corner and make-up piles and splice pieces shall be similarly treated.

39. DELIVERY HANDLING & STACKING OF STEEL SHEET-PILES:

The lengths, number and sizes of piles are shown on the Drawings and in the Bill of Quantities, but should the site conditions prove such that in the opinion of the Engineer it is necessary to vary the lengths or sizes of piles in any part of the work the Contractor shall make such variation as directed by the Engineer. Piles shall be carefully handled and properly stacked so as to avoid abrasion, distortion or other damage. Where the protective coating is damaged the Contractor shall promptly clean off and make good the coating.

40. <u>DRIVING SHEET-PILES</u>: Before being driven all piles shall be straight, true to shape and length and shall be inspected and passed by the Engineer. Any pile rejected by the Engineer shall be removed from the site immediately and shall not be incorporated in the work.

The piles shall be driven vertical and true to the lines, levels and penetrations shown on the Drawings by means of approved driving gear. To ensure the accurate alignment of the sheet-piling the Contractor shall provide to the approval of the Engineer a suitable temporary staging or fence which shall be removed after completion of the driving.

The Contractor shall take such necessary precautions and provide such equipment as may be necessary to ensure that the piles are not damaged during driving. The use of taper piles to correct errors of alignment in driving shall not be allowed without the Engineer's approval.

41. WALINGS, TIE-BARS AND ANCHORAGES:

The walings and tie bars to sheet-piling shall be as shown on the $\ensuremath{\text{Drawings}}$.

The walings shall be surface treated as described for sheet-piling and shall be made continuous by means of spliced joints as shown.

Before being placed in position the tie bars shall be thoroughly cleaned of all mill scale, dirt and rust and shall be hot dipped in acid-free coal tar. They shall then be wrapped with hessian laid spirally with 50 per cent overlap at each turn and again hot dipped in acid-free coal tar.

After being placed in position any defective places in the protective coating of the bars shall be made good, the joints shall be treated similarly to the bars, and the whole given a final good coat of acidfree coal tar.

Should any damage be done to the protective coating during the subsequent placing of filling the same shall be made good to the satisfaction of the Engineer.

The tie bars shall be tightened by the nuts provided in such manner that all the tie rods will equally share the load.

The anchorages shall consist of steel sheet-piling of the lengths and sections shown on the Drawings and shall be driven to the penetrations shown.

- 42. COPING: The Coping shall consist of 9" x 4" x $\frac{1}{2}$ " mild steel angle welded to the sheet-piling as shown on the drawings.
- 43. FILLING: The Contractor shall provide and build the "Scoria Bank", as follows:-

Scoria for Scoria Bank shall consist of approved run of quarry scoria free from soil and vegetable matter and shall contain a sufficient quantity of the larger sizes to ensure a strong and well drained bank.

All banks and fills shall be placed in such manner as to avoid damage to sheet-piles, anchorages and tie bars.

Banks and fills shall be thoroughly consolidated to the satisfaction of the Engineer and shall be finished to the grades and levels shown on the Drawings.

- 44. RUBBING STRIPS: Rubbing strips in mild steel 3" x \(\frac{5}{4}\)" x 14'-O"
 long similar to Messrs. Skelton's Special Flat Type
 39 (Handbook No.19 1923) shall be fixed to the outer
 face of every fourth sheet pile after driving as
 shown on the drawings. Fixing shall be by riveting
 with countersunk head on outer face. Immediately
 prior to fixing, the mating faces of sheet pile and
 rubbing strip shall be painted with hot coal tar.
- 45. BOLLARDS:
 Bollards shall be provided and fixed where shown on the drawings and shall be in cast steel to pattern supplied by the Board (A.H.B. Type F.l. amended approx weight 125 lbs).
 Bollards shall be securely bolted and fixed as shown of the drawings shall be securely bolted and fixed as shown of the drawings shall be to B.S.529/1940 for the grade of 28-35 tons per square inch. and shall be in accordance with that standard.

All castings shall be true to pattern smooth and free from all flaws and blemishes and to the approval of the Engineer.

46. <u>LADDERS</u>: Ladders shall be provided and fixed where shown on the drawings. Ladders and lugs shall be in mild steel galvanised after fabrication.

Ladders shall be constructed to the sizes and shapes shown and shall be welded to the sheet piling by means of lugs.

47. PRECAST CONCRETE KERBS: Concrete kerbs shall be provided and fixed where shown on the drawings. Kerbs shall be in precast concrete to the shapes and dimensions. shown on the drawings and shall be reinforced with 4 No.38" diam. bars with No.8 wire bending at 4" pitch.

The concrete materials and workmanship shall be in accordance with N.Z.S.S. 95 Part V High Grade Concrete Mix. No. IV. Kerbs shall be bolted to the cope angle with three galvanised mild steel bolts $\frac{1}{6}$ " diameter.

- 48. SURFACE TREATMENT OF STEELWORK: All exposed steelwork other than sheet piling shall be thoroughly cleaned and painted two coats hot tar as specified above after fixing.
- 49. WEIDING: Welding workmanship and methods adopted shall be in accordance with the best trade practice and to the approval of the Engineer.

Welding shall be carried out only by approved tested welders.

50. WORK OR MATERIALS NOT DESCRIBED: Should any work or portion of any work to be carried out under this contract be not particularly described in this Specification it shall be carried out in accordance with the best trade practice.

Should any of the materials to be used in this contract be not particularly described in this Specification, they shall be the best of their respective kinds and, wherever possible, to the appropriate British Standard.

51. VARIATION OF PRICE (LABOUR AND MATERIALS) CLAUSE.

- (1) If under decision of the Court of Arbitration in New Zealand or of any other body recognised as an appropriate body for regulating the rates of wages in any trade or industry or by reason of any Statute or Statutory Instrument there shall during the currency of the Contract be any increase or decrease in the wages or the rates of wages or in the allowances or rates of allowances (including allowances in respect of holidays) payable to or in respect of labour of any kind prevailing at the date of Tender as then fixed by the said Court or such other body as aforesaid or by Statute or Statutory Instrument or any increase in the amount payable by the Contractor by virtue or in respect of any Scheme of State Insurance which increase or increases decrease or decreases shall result in an increase or decrease of cost to the Contractor in carrying out the Works the net increase or decrease of cost shall form an addition or deduction as the case may be to or from the Contract Price and be paid to or allowed by the Contractor accordingly. Provided always that for the purposes of this sub-clause any payment to workmen of travelling or subsistence allowances if the subject of an award by the Arbitration Court in New Zealand shall be deemed to be an increase in allowances.
- (2) If after the date of Tender there shall be any increase or decrease in the cost prevailing at such date of any of the materials consumable stores fuel or power (and whether for permanent or temporary works) named and priced in the Schedule of Materials annexed to the Bill of Quantities (or added thereto by the Contractor when tendering) and purchased by the Contractor at ruling market prices after the date of Tender which increase or increases decrease or decreases

AUCKLAND HARBOUR BOARD.

CONTRACT NO.1374.

FOR THE CONSTRUCTION OF BREASTWORK AT PAKENHAM STREET LIGHTER BERTHS.

SCHEDULE.

I/We guarantee to-complete the work specified in Specification No.1374 and shown on the Drawings at the rates shown in the accompanying Bill of Quantities and within the times set out below:-

withinweeks from date of (a) Task I acceptance of Tender. (b) Tasks I & II withinweeks from date of acceptance of Tender. or, if Task III is included in the Contract. withinweeks from date of Task I (c) acceptance of Tender. (d) Tas... I & III within#3......weeks from date of acceptance of Tender. (e) Tasks I, III & II withinweeks from date of acceptance of Tender. for Conditions of Tender see attacher letter clated 25/8/52 (on Best's ple) T.P. Ba A Construction Co. Ita. Signature . A. Blundell 54 Shortland St. Address

Date

25 th august 1952.

CONTRACT NO. 1374 BILL OF QUANTITIES FOR THE CONSTRUCTION OF BREASTWORK AT PAKENHAM STREET LIGHTER BERTH.

Attention is directed to the Specification and the (a) Drawings, and these documents are to be read in conjunction with the Bill of Quantities. Directions and descriptions of work to be done and materials to be supplied are given in the Specification and are not necessarily repeated in the Bill of Quantities.

PREAMBLE:

- The prices and rates entered in the Bill of Quantities (b) are to be the full inclusive value of the work described under the several items including all costs and expenses which may be required in and for the construction of the work described, together with all general risks, liabilities and obligations set forth or implied in the contract documents and drawings. Where special risks, liabilities and obligations cannot be so dealt with then the price thereof is to be stated in the separate items provided for that purpose. no such item is provided the Tenderer is to describe and price the risk, liability or obligation concerned and enter it in the space provided.
- (c) All prices and rates shall be in terms of New Zealand currency.
- Unless specified to the contrary all items are measur-(d) ed net as shown on the Drawings. No allowance has been or will be made for bulking, shrinking or waste.
- The quantities of work and materials in the Bill of (e) Quantities are not to be taken as limiting or extending the amount of work to be done or materials to be supplied by the Contractor.
- Provisional sums are to be dealt with as described in (f) the Specification Clause 14.
- The prices entered in the Bill shall be totalled to (g) form a Lump Sum price for the whole of the works as described in the Contract -Documents and taken for in the Bill of Quantities. The Tenderer is to enter a rate and price against each item in the Bill of Quantities such that the total of these rates and prices agrees with the Lump Sum quoted. Items against which no rate or price is entered shall be considered to be covered by other rates or prices in the Bill. Engineer considers that the prices set cut in the Bill do not fairly represent the relative values of the several items in proportion to the total amount of the tender, he may arrange with the Tenderer as to the rates at which the several portions of the work shall be valued, having due regard to the total amount of the tender, and failing agreement the tender shall be The rates so fixed shall be the rates at rejected. which the work shall be valued for payment, additions and deductions.

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- (h) Unless specified to the contrary all items shall include for provision and installation.
- (i) For the purposes of Clause 51 of the Specification a Schedule of materials is annexed.

The photo common majority of the	The second secon		Marie Aus Marie et sus 1800 a Speciel Milassa es automologicas	· · · · · · · · · · · · · · · · · · ·	on an amount of the last transfer of the last trans		rianting days in maker 1967 to
ITEM NO.	DESCRIPȚION	QUANTITY	UNIT	RATE	JOMA	NT	
	PRELIMINARY ITEMS:						
1.	Allow for visiting the site, ascertaining the nature of the works, the character of the founds tion, the evailability and location of works and accommodation space, and examining and verifying Drawings and Specifications and other like investigations.				100	•	
2.	Allow for setting out the works from base lines and level datum fixed by the Engineer including all necessary instruments, pegs, templates, profiles and for measuring any part of the works.	Item	Pan J. 6413/12	ment)	250		•
3.	Specify and allow for providing any special plant, tools, machinery and other matters and things necessary for the satisfactory execution and completion of the work not elsewhere described nor covered in general rates and prices.						
		Item					
		Item					
		Item					
4.	Allow for giving all notices and paying all fees required by law to any persons or bodies so entitled in respect of operations under this Contract.	Item	for the Part	en -	7 25	*	
5.	Allow for indemnifying the Board in accordance with the Specification against all claims for accident or damage arising out of the execution of the work.	Item	Pay 1	6/13/4 hom/k	- 250		,
6.	Allow for making good all surfaces of lands in or through which the works are performed and for making good injury or damage to property or land occasioned by the execution of the works or by extraordinary traffic arising therefrom.				100	•	
7.	Allow for providing, maintaining in an approved sanitary condition, and clearing away on completion all necessary canteens, latrines, stores, sheds, offices and ot her temporary accommodation.	Item			1500		·
	Carried Forward				2225		-
	a					4	

					4.		
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	RATE	AMO	UNT	An are for all the
		Brought	Forwar	d	2225		
8.	Allow for maintaining in an approved sanitary condition the site and the works and for cleaning up on completion to the approval of the Engineer.	v- d			So		•
	Allow for providing, erecting and removing on completion approved temporary staging and fencing for the accurate and safe driving of the sheetpile breastwork and anchorage.	Item			3000		-
	Specify and allow for any work specified to be done, materials and plant to be supplied or any special risk, liability or obligation to be undertaken by the Contractor for which no separate item is provided in the Bill. Button, of piles //of.			Α^			
	THE FOLLOWING IN TASK I:-						
11.	Allow for receiving from Board's Store Pakenham St. steel sheet piling, tierods and fittings and caring for, transporting to work site and making good surface ttreatment prior to drivin		tons	2/101.	598	The state of the s	•
	Handle, pitch and drive steel sheet piling Larssen No.2 at 32.79 lbs. per foot in lengths of 26' to benetrate 5' into soft mudstone and soft sandstone to form breastwork Task I as shown on the drawings. (Steel sheet piling supplie by the Board)	3	tons	27/12/6	536 r	0	3
13.	Construct anchorage of steel sheet piling Larssen No.2 at 32.79 lbs. per foot in picket lengths of 6', supporting breastwork in item 12 above as shown on the drawings. (Steel sheet piling supplied by the Board).				750	ν	~
14.	Fix walings of steel sheet piling Larssen No.2 at 32.79 lbs. per foo to breastwork including all necess ary drilling and bolting as specified and shown on the drawings. (Steel sheet piling supplied by the Board).	5	tons	43/15/6	444	6	4
15.	ditto but to anchorage ditto (teel sheet piling supplied by the Board).	10.15	tons	43/15/6	12, 873	6	4
	Carried Forwar	rd	1	4.00	12, 873	15	/

-				2	•		-ATTRIBUTE WAY
ITEM NO.	DESCRIPTION	QUANTIT	UNIT	RATE	ΑM	OUNT	1
	Brough Fix 2" M.S. tie rods (129 No.) in lengths of 40' to breastwork and anchorage including treating with tar and hessian wrapping of rods, making and fixing 9" x 9" x 3" washers and adjusting tension all as specified. (Tie rods, nuts and steel for washers supplied by the Board). (weight includes for nuts and washers).			57/1012	12,873	15	,
17.	Welded spliced joints in walings to breastwork and anchorage in- cluding fixing and surface treat- ment all as specified and shown on the drawings.				514	16	•
The state of the s	Drilling or burning through steel sheet piling in breastwork and anchorage to accommodate tie rods including making good surface treatment.	258	No.	<i>‡</i> ,	258		•
	Provide and fix 9" x 4" x ½" M,S. angle to form cope of breastwork as specified and shown on the Drawings.	6.34	tons		1392	11	8
of the control of the	Provide and fix m.s. rubbing strips including surface treatment all as specified and shown on the drawings. (3" x 3" special flat x 14'-0" long).	127	No.	16/18/6	2149	9	ک
22.	Provide and fix complete cast steel bollard and mounting including bolting and welding to sheet piling and treatment of surface all as specified and shown on the drawings (pattern supplied by the Board). Provide and fix complete m.s. ladder and mounting lugs including welding to sheet piling and galvanising and treatment of surface all as specified and shown on the	29	No.	20/14/6	601	,	6
	drawings.	4	No.	41/5/-	165	•	
24.	Provide and fix precast concrete kerbing 8" x 8" x 5'-2" including		cu.yds	.1/3/6	11410	8	6
	all necessary formwork and gal- vanised bolts and including drill- ing coping angle, fixed complete all as specified and shown on the drawings. Carried Forward	113	No.	57-1-	565 31,481		٠. ٧

			TO MAKE THE SAME AND AS THE	· · · · · · · · · · · · · · · · · · ·	er verrorienteten er en		THE PROPERTY OF
Item No.	DESCRIPTION.	QUANTITY	UNIT	RATE		TNUC	
	THE FOLLOWING IN TASK II:- Brow	ight For	rward		31,481	3	3
	Steel sheet piling as specified and shown on the drawings in breastwork including all necessary surface treatment handling pitching and driving into soft mudstone and soft sandstone to 5'-0" penetration Larssen No.2 & 32.79 lbs. per foot in 26' and 25'-6" lengths		tons	8 1/148	21548	/	5
	Steel sheet piling as specified and shown on the drawings in anchorage and special anchorage including all necessary excavation handling into position and surface treatment Larssen No.2 & 32.79 lbs per foot in picket lengths of 6!.		tons.	94/4/3	2346	16	r
(a)	Steel sheet piling as specified and shown on the drawings in special anchorage including all necessary surface treatment handling pitching and driving into soft mudstone and sandstone. Larssen No.2 & 32.79 lbs. per foot in 161 lengths.				673	•	
	Steel sheet piling Larssen No.2 at 32.79 lbs. per foot in walinga to breastwork including surface treatment, drilling for tie bars and bolts, and fixing in place all as specified and shown on the drawings.					7	~
28,	ditto but to anchorage ditto.	12.28	tors.	103/15/6	1274	7	1
	200° closed corner pile Type 9 in Larssen No.2 26' lorg including all necessary surface treatment, handling, pitching and driving to penetrate 5' into soft mudstone and soft sandstone all as specified and shown on the drawings.	4				•	•
30.	All as last item b ut for 90° open corner pile Type 9 (a).	2	No.	401.1.	80		
	Mild steel round bars 2" diameter with ends threaded to form 130 No. tie rods 40' long complete with nuts and washers (9" x 9" x $\frac{5}{4}$ ") including fixing, adjusting tension tessian wrapping and surface treatment all as specified and shown on the drawings (weight includes for	kçit Ko:	r. ord				
32.	nuts and washers). All as last item but to form 28 No	26.8	tons.	139/15/-	3745 1612 64,195	6	,
	tie rods 58' long complete with nexagonal nut coupling.	8.18	tons.	197/2/9	1612	10	.8
	Carried F	orward			64,195	13	1

Item NO.	DESCRIPTION	QUANTITY	UNIT	RATE	MUOMA	NT	
	Welded spliced joints in walings to breastwork and anchorage in- cluding fixing and surface treat-	ht Forwa	rd		64,195	13	/
34.	ment all as specified and shown on the drawings. Drilling or burning through steel	68	No.	10/-1-	680		
	sheet piling in breastwork and anchorage to accommodate tie rods including making good surface treatment.	316	No.	£	316	A CONTRACT OF THE PARTY OF THE	
	Provide and fix complete mild steel rubbing strip all as item 20 above.	162	No .	16/18/6	2741	17	3
	Provide and fix 9" x 4" x ½" m.s. angle to form cope of breastwork as specified and shown on the drawings.	7.95	tons.		1746		-
	Provide and fix complete cast steel bollard and mounting all as item 21 above.	37		20/14/6	-00		
	Provide and fix complete galvanised mild steel ladder and mounting lugs all as <u>item 22</u> above.	2	No.	41/57.	82	10	•
39.	Scoria bank in place to breastwork and anchorage all as <u>item 23</u> above but approx. 13 cu.yds. per ft. run				12097	16	
40.	Provide and fix precast concrete kerbing all as <u>item 24</u> above.	141	No.	75	705		
41.	Cutting through steel sheet piling between H.W.S.T. & L.W.S.T. in breastwork or anchorage for holes for services and making good surface treatment.	R _a te O _n ly	lin.ft.				
42.	Provisional Sum. Provide the sum of £400 for additional work as directed by the Engineer in connecting up and making good at junctions with existing breastwork at east and west ends.				. 400 .		
43.	Provisional Sum. Provide the sum of £1200 for the construction of two stormwater sewer outfalls at the breastwork each including approximately 5 tons of Larssen						
	No.2 steel sheet piling.	•••••	• • • • • • • •	•••••	1200	-	-
	Total Lump Sum Tender.			€	84,931	17	2
	23 4 5 1 31 4 7 1						

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TDIM		1	Τ	0.5		4	
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	RATE	OMA	UNT	and the same in the same
	THE FOLLOWING TASK III:-						
	Steel sheet piling Larssen No.2 all as item 25 above but in 26' lengths.	146.53	tons.	87/16/8	12870	3	5
45.	Steel sheet piling Larssen No.2 all as item 26 above.	17.04	tons.	94/4/3	1605	7	6
46.	Steel sheet piling Larssen No.2 all as item 27 above.	6.95	West of the second	103/15/6		4	9
47.	Steel sheet piling Larssen No.2 all as item 28 above.	6,95	tons.	103/15/6	721	4	9
	Mild steel round bars 2" diameter all as item 31 above but in 98 No tie rods.	20.48	tons.	139/14/1	o 2861	17	11
49.	Welded splice joints in walings all as item 33 above.	40	No.	210	(600		
50.	Drilling or burning through steel sheet piling all as item 34 above.	196	No.	Z'	196	-	•
	Provide and fix complete mild steel rubbing strip all as item 20 above.	97	No.	16/18/6	1641	14	6
	Provide and fix complete cast steel bollard and mounting all as item 21 above.	22	No.	20/14/6	455	19	
	Frovide and fix complete galvanised mild steel ladder and mounting lugs all as item 22 above.	2	No.	41/07-	82	10	
	Provide and fix 9" x 4" x $\frac{1}{2}$ " m.s. angle to form cope of breastwork all as item 36 above.	4.86	tons.	219/13/	1067	10	
55.	Scoria bank in place to breastworl and anchorage all as item 23 above.	6591	cu.yds.	23/6	7744	8	6
56.	Provide and fix precast concrete kerbing all as item 24 above.	86	No.	15	430		•
57.	Specify and allow for any work specified to be done, materials and plant to be supplied or any special risk, liability or obligation to be undertaken by the Contractor for which no separate item is provided in the Bill for Task III.	Ko			1500		
	Then To - Sur Variater Clade No. 1				,		
	Total Tender for Task III as an EXTRA to the Contract.				32,298	•	4
	11		1			1	4

AUCKLAND HARBOUR BOARD.

CONTRACT NO.1374 SCHEDULE OF MATERIALS.

(to be annexed to the Bill of Quantities)

For the purposes of Clause 51 (2) of the Specification the Tenderer shall detail in this Schedule any materials, and the ruling market price delivered on site prevailing at the date of tendering of such materials, to which such Clause shall apply.

The Tenderer shall add to or delete from the Schedule as necessary and any materials not specified or not priced in this Schedule will not be subject to the said Clause 51 (2).

I	tem No.	Materi	al	Unit	Rate
	1.	Mild Steel.	Angle Round Flat	ton ton ton	62/-1- £ 70/-/- £ 72/-/-
	2.	Cast Steel.		lb.	11
, the	3.	Steel Sheet Pi	ling.	ton	52/15/6 C.I.F.E.
See letter	4.	Run of Quarry	Scoria.	cu.yd.	
Les letter on www. il on the file 3.	5.	Concrete.	Cement Aggregate Premix Concrete	ton cu.yd.	70

M.B. Price plement reduced by

17th July, 1952. The Manager, Williamson Hornibrook Constructions Ltd., P.O. Box 116, CHRISTCHURCH. Dear Sir, I have pleasure in forwarding your under separate cover copies of Plans and Specifications for the Construction of Pakenham St. Lighter Basin Breastwork. Yours faithfully, CHIEF ENGINEER TO THE BOARD. AFC.JS.



WILLIAMSON HORNIBROOK CONSTRUCTIONS LTD.

CIVIL ENGINEERING CONTRACTORS

12.7.52

175 - 187 Montreal Street,

CHRISTCHURCH

*

14th. July, 1952.

Mr. Vickerman, Chief Engineer, Auckland Harbour Board, AUCKLAND.

Dear Sir,

Many thanks for your letter of the 26th. ultimo notifying us that you intend to call for tenders for the Construction of a Lighter Basin at the Parkenham Street Reclamation.

As Mr. M.R. Hornibrook of Brisbane Australia and the writer have recently formed the abovenamed Company we would appreciate very much an opportunity of submitting a price for this work.

Yours faithfully, WILLIAMSON HORNIBROOK CONSTRUCTIONS LTD.

wulsilianson.

WW/JR.

Managing Director.

Copy also sent to:-

Messrs. Rope Construction Co., Colonial Mutual Building, Queen Street, AUCKLAND. C.1. Messrs. Williamson Construction Co. Endeans Building, Queen Street, AUCKLAND. C.1.

Messrs. B. & H. Construction Co., 54 Shortland Street, AUCKLAND. C.1.

11th July, 1952.

Messrs. Fletcher-Merritt-Raymond, P.O. Box 644, AUCKLAND. C.1.

Dear Sirs,

CONTRACT NO.1374 - CONSTRUCTION OF LIGHTER BERTHS PAKENHAM STREET.

As already discussed with you, I am enclosing one set of Tender documents for the above Contract. Should you require to inspect the site or to discuss any aspect of this project, I would be glad if you would communicate with me.

Yours faithfully,

RAJS.JS.

CHIEF ENGINEER TO THE BOARD.

Encl: 1 Copy Drawing A.482/2.

1 " A.482/3.

1 " Specification & Bill of Quantities.

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE,

Mr. J.R. Sutton, Resident Engineer.

To

Date 9th July, 1952.

Subject CONTRACT 1370 - EXCAVATION OF LIGHTER BASIN.

I enclose herewith one copy of Specification and Bill of Quantities along with four copies of Drawing A.548/1 for Contract 1370 - Excavation of Lighter Basin.

The Contractors for this work are Messrs. Rickard Bros. of New Lynn.

Their Contract now includes item 11 of the Bill as part of the Contract and no longer an extra as described in the Specification. In this connection a copy of Messrs. Rickards letter of June 20th is enclosed.

Please arrange to supervise this Contract.

Encl:

1 Copy Specification 1370.

1 Copy Messrs. Rickards letter of June 20th. 2 Paper prints of A.548/1 (one of which please hand to Contractor).

Linen prints of A.548/1 already handed to Mr. Holmes (one of which he has handed to the Contractor).

Engineer to the Board.

7.7.52 her buith Contract 1358 - Sheet filing. Odjastment of tourages is required en order to finalise thes. Have those been taken out yet? her Goodser Adjusted quantities herewite the will require to obtain the following for tack I 1) Hote 260 Nº 2" of hex 1) Thraday of 2" Tu hars The following will be unlacted in lank 11 Coping L 8'x4" K. 8.7.52 Contract 13 > 8. Adjusted Quantities

Quantitue adjusted on the following accounts:

Delay piling available les 74.2

Dela piling available les 74.2

Dela H. Larasen N. 2. Walings, 66/21' @ 32.79 ' 20.29 bas

7. Larasen N. 2. Walings, 66/21' @ 32.79 ' 194.1 fore

3. Machonoge 255/6' @ 32.79 V 22.4 Loss.

H. S. 7.57

7th July, 52.

THE TRAFFIC MANAGER.

PAKENHAM STREET LIGHTER BERTHS.

The Excavation of the Pakenham Street Lighter Basin will commence Tuesday, July 8th and it is necessary that all traffic be excluded from the site of these works.

Please arrange to exclude all traffic from the area to the West of the open ditch which has now been set out.

CHIEF ENGINEER TO THE BOARD.

4th July, 1952. Messrs. Richardson McCabe and Co. Ltd.. P.O. Box 792, WHILL INGTON. Dear Sirs, I have to inform you that the Board at its meeting held on Tuesday last accepted your tender for the supply and delivery of "Larssem" Steel Sheet Piling for Lighter Berths at the price set out in the schedule i.e. £14,235.11.2d., in terms of Specification and Conditions of Contract No. 1328 and your letters of 30th May and 3rd June, 1952. Contract Agreement is accordingly enclosed and I shall be glad if you will have this signed and returned to me at your carliest convenience together with a further chaque for \$50 for completion of deposit. No satisfactory tender was received for items 4 and 5 fresh prices are to be called. Official Order will be forwarded in due course by the Board's Purchasing Officer. Yours faithfully. SECRETARY GP.JMM. ENCL: Contract Agreement.

2nd July, 1952.

Messra. Rickards Bros. Ltd., 54 Titirangi Road, NEW LYNN, 9.W.4.

Dear Sire,

I have to inform you that the Board, at its meeting held yesterday, accepted your smended tender for the Excavation of Lighter Basin Pakenham Street to full depth of 5 ft. below L.W.S.T. - Contract No. 1370- for the sum of 253,608 in terms of your letter of 20th June and in terms of Specification and Conditions of Contract No. 1370.

Contract Agreement is accordingly enclosed and I shall be glad if you will have this signed and returned to me at your earliest convenience together with a further cheque for £80 for completion of deposit.

Yours faithfully,

SECRETARY

GP.JUH.

Contract Agreement.

**MORKS AND TRAFFIC COMMITTEE

Report of Works and Traffic Committee dated 17.6.52, re Item 5 - Bulk Excavation of Lighter Basin - Contract No. 1370 - Supplementary report of Chief Engineer to the Board, 24.6.52, stating that the amended tender and schedule submitted was satisfactory, provided it included the extra work of deepening the basin to give 5 ft. depth at L.W.S.T. and recommending -

- (a) The excavation of the basin to the full depth of 5 ft. below L.W.S.T. be approved.
- (b) The tender of Rickards Bros. Limited be accepted for the sum of £53,608 in accordance with their letter of 20th June and the accompanying schedule.

Recommended:That the recommendations set out in the Chief Engineer's report dated 24th June, be adopted.

TADOPTED BY BOART ./. / 7. / 62

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SXTRACT FAG 11UTES
WORKS & TRAFFIC COMMITTEE
./7. 6. /52.

2. CONTRACT NO. 1328 - LARSSEN STEEL SHEET PILING & FOLLED MILD STEEL FOR LIGHTER BERTHS.

Report of Chief Engineer to the Board, 11.6.52, stating that six tenders had been received for Contract No. 1328 - Larssen Steel Sheet Piling and Rollel Mild Steel for Lighter Berths and recommending acceptance of the tender of Messrs. Richardson McCabe and Co. for Items 1-3 amounting to £14,235.11.2d., subject to a small adjustment of the tonnage and that no tenders be accepted for Items 4 and 5, fresh prices to be called.

Recommended:That the report be adopted and that authority be given to place the order immediately for Items 1/3.

DOPTED BY 30ARD .! / . 15Z

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Copy also sent to :-

Messrs. Williamson Construction Co., Endeans Building,

Endeans Buildin Queen Street, AUCKLAND. C.1.

Messrs. Tapper Construction Co., AucklandDomain, AUCKLAND. C.1.

Messrs. B. & H. Construction Co., 54 Shortland Street, AUCKLAND. C.1.

26th June, 1952.

Messrs. Rope Construction Co., Colonial Mutual Building, Queen Street, AUCKLAND. C.1.

Dear Sirs,

CONSTRUCTION OF LIGHTER BASIN.

I intend in the next few weeks to advertise for Tenders for the construction of a steel sheetpile breastwork to form a Lighter Basin in the Pakenham St. Reclamation.

The work comprises driving some 650 tons of steel sheetpiling, fixing some 60 tons of tie rods and coping angles and providing approximately 26,500 cubic yards of scoria filling.

The Board will supply some of the steelwork required and the Contractor will be required to provide the balance.

Should you wish to make preliminary enquiries before the specification is available, I shall be glad if you would call at this office. A specification will be sent to you as soon as available.

Yours faithfully,

24th June, 1952. From: To: THE ENGINEER. THE GENERAL MANAGER. CONTRACT NO. 1370 EXCAVATION OF LIGHTER BASIN. Further to my report of 12th June, a test with the tenderers plant has shown that the sandstone and mudstone included under item 11 of the schedule is not "digable" by any of the machines that are available! If this material is "digable" the tender price is £50,608 If this material requires the use of explosives £62,859/5/the tender price is This latter price is too high and in addition the scheduled rates on which it is based do not fairly represent the values of the several portions of the work in relation to the total tender price. Since making the test referred to above, the tenderer has offered to procure extra plant to break up the sandstone and mudstone to enable its removal without the use of explosives at a tender price of He has adjusted satisfactorily the scheduled rates in relation to the total tender price and he has guaranteed to complete the excavation to the full depth to the satisfaction of the Board. The tender and schedule as now submitted is satisfactory provided it includes the extra work of deepening the basin to give 5 ft. depth at L.W.S.T. and I recommend:the excavation of the basin to the full depth of 5 ft. below L.W.S.T. be approved. the tender of Rickards Bros. Limited be accepted for the sum of £53,608 in accordance with their letter of 20th June, and the accompanying schedule. Mickerman CHIEF ENGINEER TO THE BOARD. The Chairman, AUCKLAND HARBOUR BOARD The amended arrangements are the result of a practical test and I recommend acceptance of the tender on the condition now put forward by the Engineer.

20th June, 1952.

The Manager,
Steel Department,
A.M. Satterthwaite & Co. Ltd.,
P.O. Box 881,
AUCKLAND. C.1.

Dear Sir,

CONTRACT 1328 SHEET PILING AND ACCESSORIES.

Your offer of 6" x 6" x $\frac{1}{2}$ " M.S. Angles dated 16th inst., is to hand.

As the size of angle may have to be amended according to the size of sheet piling available it is likely that fresh tenders will have to be called for this item.

Yours faithfully,

JAG. JS.

CHIEF ENGINEER TO THE BOARD.

Anckland Barbour Woard

SECRETARY'S OFFICE.

11 6 1952

Truel.

Recel.

2.1. N. 2.

16 June, 1952.

CT 1328

AND ACCESSORIES.

If this contract for which we an offer.

Our principals have received the following offer from the British Iron & Steel Corporation:

M.S. Angles 6^{H} x 6^{H} x $\frac{1}{2}^{\text{H}}$, about 6 tons, to B.S.S. 15/1936, no official test.

Time of delivery: Period 1 and 11 1953.
This indication is subject to such restrictions as may be in force from time to time whether by Government regulations or otherwise.

Price: To be determined by the Seller and advised by Seller to Buyer before delivery.

You will notice that absolutely no indication of price is given. We fear this is not very satisfactory but it appears to be typical of the British Iron & Steel Corporation's method of doing business to-day. For your information we can say that the Corporation's official export price to-day is about £48/10/- per ton FOB Shipping Port, and we have no means of telling what rates will be in 1953.

As this can hardly be a satisfactory quotation for your Board we are perfectly willing to explore the possibility of obtaining an equivalent section from a Continental source; however, since tender closing date is now well past we will not take this idea any further unless you request us to do so.

Yours faithfully Mellingbill MANAGER, STEEL DEPARTMENT.

HPC:nk.

juckland Garbour &

CHRISTCHURCH



TELEPHONE 38-355 POST OFFICE BOX 881

A. M. Satterthwaite & Co. Itd.

ACKED AND ASSE

203 Hereford Street, Christchurch, c.1. N. Z. 16 June, 1952.

The Chairman, Auckland Harbour Board, AUCKLAND.

Dear Sir:

CONTRACT 1328
SHEET PILING AND ACCESSORIES.

We write concerning item 5 of this contract for which we have not yet made your Board an offer.

Our principals have received the following offer from the British Iron & Steel Corporation:

M.S. Angles 6" x 6" x $\frac{1}{2}$ ", about 6 tons, to B.S.S. 15/1936, no official test.

Time of delivery: Period 1 and 11 1953.
This indication is subject to such restrictions as may be in force from time to time whether by Government regulations or otherwise.

Price: To be determined by the Seller and advised by Seller to Buyer before delivery.

You will notice that absolutely no indication of price is given. We fear this is not very satisfactory but it appears to be typical of the British Iron & Steel Corporation's method of doing business to-day. For your information we can say that the Corporation's official export price to-day is about £48/10/- per ton FOB Shipping Port, and we have no means of telling what rates will be in 1953.

As this can hardly be a satisfactory quotation for your Board we are perfectly willing to explore the possibility of obtaining an equivalent section from a Continental source; however, since tender closing date is now well past we will not take this idea any further unless you request us to do so.

Yours faithfully MULLIGHT MANAGER, STEEL DEPARTMENT.

HPC:nk.

12th June, 1952.

MENORANDUM.

From:

To:

THE ENGINEER.

THE GENERAL MANAGER.

CONTRACT NO. 1370

EXCAVATION FOR LIGHTER BERTHS.

One tender only was received for the above contract from Rickard Lros. Ltd. who tender:

(a) for the contract comprising preliminary items and removal of bulk material down to hard

£44709. 5. 0

(b) for removal of hard material down to 5' below L.W.S.T. provided it is digable with heavy machinery as an extra to the contract

€ 5894.15.0

Total tender price including extra work

£50608. 0. 0

The tenderers unit rate for removal of material overlying the hard are very high even allowing that the character of the material is unpredictable, but by contract the unit rate for removal of extra hard material below low water are very favourable if the material can be removed without blasting.

This tender will therefore be acceptable only if it includes the extra work of deepening the basin to provide 5 ft. depth at L.W.S.T. and provided this can be done by heavy machinery without blasting.

It was intended to carry out this extra work as a second phase, mainly on account of the time factor, but this tender allows of it being done immediately without delaying the construction of the breastworks, and with some reduction in the subsequent cost of constructing these. A further advantage is the experience gained in the removal of hard material likely to be met in the approach channel

I recommend that subject to the tenderer showing to the satisfaction of the Engineer that his plant can dig the hard material without blasting:-

- (a) the excavation of the basin to the full depth of 5 ft. below L.W.S.T. be approved.
- (b) the tender of Rickard Bros. Ltd. be accepted for excavation to the full depth of 21 ft. below datum (5ft. below L.W.S.

Arrangements are being made to test the ability of the Contractors plant to deal with the hard material and a report will be made to the next meeting of the Board in Committee.

CHIEF ENGINEER TO THE BOARD.

All Chercucal

W. STEVENSON & SONS LTD. GENERAL CONTRACTORS

PHONE 426

P.O. Box 9,

PUKEKOHE 11th June, 1952.

The Chief Engineer to the Board, Auckland Harbour Board, P. O. Box 1259, AUCKLAND C. 1.

Dear Sir,

We return herewith plans and specifications for the "Excavation of Lighter Basin" at Pakenham Street, and very much regret that owing to pressure of work we could not see our way clear to submit a price for this job.

Thanking you for giving us the opportunity of tendering.

Yours faithfully,

For W. STEVENSON & SONS LTD.

Oarkh Secretary.

11th June, 1952. MEMORANDUM. From: To: THE ENGINEER. THE SECRETARY. CONTRACT NO. 1328. "LARSSEN" STEEL SHEET PILING FOR LIGHTER BERTHS. Tenders were received from six firms as under:-Steel Import Co. Ltd. for British rolled "Larssen" Items 1 to 3 only £49.10. O per ton F.O.B., U.K. port. Adams & Harvey Ltd. of London per L.J.Fisher & Co.Ltd.

for British rolled "Larssen" Items 1 to 3 £14,014 C.I.F.

plus item 4 £1150. 0. 0) C.I.F. (approx. £14,187. 2. 0 C.I.F.

item 5 £ 317.18. 6) & E.) Richardson McCabe & Co. Ltd. for British rolled "Larssen" Items 1 to 3 only £14.235.11. 2 C.I.F. & E. 4. McLean & Todd Ltd. for British rolled "Frodingham" section Items 1 to 3 only and tender corrected for tonnage£14,127.18. O C.I.F. A.M. Satterthwaite & Co.Ltd. for British rolled "Larssen" Items 1 to 3 £14,240. O. O C.I.F. plus item 4 £1,460 6. National Electrical & Engineering Co.Ltd. for French (Rombas) rolled "Larssen" Item 1 to 3£12,688. O. C C.I.F. Tenders 5 and 6 were received late, but as tender No.5 is higher than others and tender No.6 does not comply with the Specification these need not be considered further. Tender No.1 quotes a basis price only, considerably in excess of the basis price for tender No.3 and need not be further considered. Tender No.4 has been adjusted for the tonnage of material required if this make of piling is used. For this particular work the "Frodingham" section is not considered to be as suitable as the "Larssen" section and the price is very little less. All the tenders for British rolled sheet piling offer comparable delivery for items 1 to 3, but none will guarantee delivery within the time stated and the pena ty for late delivery could not therefore be applied. Likewise all are subject to variations and all, with the exception of No.2 clearly state that the tenders and subject to the granting of overseas funds and that prices will be adjusted to those ruling at the date of manufacture. This tender however implies that payment will require to be made in London.

(Please turn over) It appears that though the time allowed for tendering was generally sufficient for the major items of sheet piling it was not sufficient for items 4 and 5, for tie rods and mild steel angle and no satisfactory t ender was received for these latter .

The two best tenders are Numbers 2 and 3 both of which are for the same piling manufactured by the same firm, and deliveries offered are identical.

The tender of Adams & Harvey is qualified only in relation to exchange and landing charges and is apparently about £48 below that of Richardson McCabe.

Richardson McCabe have however given excellent service over many years and are the recognised N.Z. Agents for this material whereas the Board has not had dealings with Adams & Harvey or their local agent L.J. Fisher & Co. for whom in addition arrangements would have to be made for payment in London.

Under the circumstances I consider the tender of Richardson McCabe & Co. the more satisfactory at the small apparent difference in price and I recommend its acceptances for items 1 to 3 subject to a small adjustment of the tonnage.

 $\,$ For items 4 and 5 I recommend no tender be accepted and fresh prices called.

Tenders returned herewith.

Requisition N. 342 E. 10/4/52. W.J.T.

CHIEF ENGINEER TO THE BOARD.

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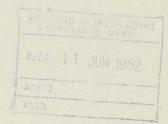
STEEL IMPORT CO., LIMITED

48 WELLESLEY STREET W. AUCKLAND, N.Z.

KJB/rfs

10th June, 1952

The Chairman, Auckland Harbour Board, Quay Street, AUCKLAND, C.1.



Dear Sir,

Tender 1328 - Larssen Steel Sheet Piling for Lighter Berths

Since our letter of June 3rd enclosing our Tender for the above, we have received a cable from our Principals advising that they airmailed full particulars for the Tender, including tie bars and angles.

We shall be pleased to give you further details as soon as their letter reaches us.

Yours faithfully,

p.p. STEEL IMPORT CO. LIMITED

K. J. Bishop SECRETARY

hat received until after report hat hen sent forward of . 11-652.

Douglas.

6th June, 1952.

Messrs. Rickards Bros. Ltd., 54 Titirangi Road, NEW LYNN, S.W.4.

Dear Sirs,

With reference to your tender for Contract
No.1370 - Excavation for Lighter Basin and in confirmation
of my telegram despatched this morning, would you please
call at this office at your earliest convenience in order
to discuss your tender with particular reference to the
following aspects:-

- 1. The type and size of plant you have available for this work.
- The method and order of work you propose to adopt for this work.

Please telephone my Designing Engineer (Mr. Smith) at 32-674 who will make an appointment with you.

Yours faithfully,

RAJS. JS.

CHIEF ENGINEER TO THE BOARD.

6th June, 1952.

RICKARDS BROS 54 TITIRANGI RD NEW LYNN

> REFERENCE YOUR TENDER FOR EXCAVATION OF LIGHTER BASIN PLEASE TELEPHONE SMITH 32674

> > AUCKLAND HARBOUR BOARD

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NEW ZEALAND POST OFFICE TELEGRAPHS (If prepaid in stamps, affix in this space.)	Date-stamp.	
	No	
Code: Time: Words: Charges: Charges:	FOR OFFICE USE ONLY	
ADDRESS (To facilitate accurate transmission, please print in BLOCK CAPITALS.) C.W.F. HAMILTON & CO.	Sent Arm	Nr.
CHRISTCHURCH	By Chec	ked.

HAVE ALREADY QUOTATION FOR THIS COMPANY'S MANUFACTURE
STOP CANNOT ACCEPT FURTHER TENDER
HARBOUR BOARD

\$MOTE,-The name and address of the sender, if not to be telegraphed, must be written on the back of the form.

NOTICE TO THE SENDER OF THIS TELEGRAM

CONDITIONS OF ACCEPTANCE

This telegram is presented for transmission subject to the Post and Telegraph Act and Regulations.

The sender of a telegram is responsible for all charges incurred in the transmission and delivery thereof.

NEITHER His Majesty the King nor the Government of New Zealand will be responsible for errors, omissions, or delays in the transmission of any telegram, or for the non-delivery or non-transmission of any telegram.

The signature or name of the sender of this telegram must be written hereunder. If given by an agent, the latter must add his name or initials.

Name and Address of Sender:

Telephone No.—Day: Night:

Night:

Tel. 130. 8,000,000/9/46-7195)

A 5 2 3 3 0 CHRIST CHURCH 4 . 6 P

+ ENGINEER AUCKLAND HARBOUR BOARD

AUCKLAND +

Rec'd at

NEW ZEALAND POST OFFICE TELEGRAM

To

Checked

Ackgd.

Tol. 142 25,000 pads/8/51—5624.Ak.12.

CARGO FLEET IRON CO ENGLAND FOR LARSSEN

STEEL PILING WILL YOU ACCEPT SAME +

C W F HAMILTON AND CO +-

Reply Have already quotations for their company's really manufactions greaternot acceptions

CABLE-PRICE CORPORATION LTD.

enoineerino sales e service

Head Office: Quay Street, Auckland, New Zealand C.P.O. Box 2426 Auckland. Telephone 44-860 (4 lines) Cable Address: "Caprice"

3rd June, 1952

The Engineer,
Auckland Harbour Board,
Quay Street,
AUCKLAND, C.1.

Dear Sir,

Relative to your tender concerning contract No. 1328, which closes today, we would advise that unfortunately we did not notice that your specification was for steel piling of British manufacture only. We had received a favourable quotation from Dusselldorf, Western Germany, but in view of the conditions, we have not been able to lodge a tender.

One of the purposes for writing you, is to advise that should you, in the near future, be calling for any further tenders, we would like to draw attention to the fact that the Minister of Customs has agreed to the suspension of duty on steel imported from foreign countries, such suspension to take effect until the 31st December, 1952. You will, of course, realise that this suspension is very beneficial in so far as importation from foreign countries is concerned.

Yours faithfully, CABLE-PRICE CORPORATION/LTD

> S.F Harries, Sales Manager.

SFH.MR



Geological Investigations Ltd.

PETROLEUM ENGINEERS
SUBSURFACE GEOLOGY BY TEST CORING
SUBMARINE DRILLING A SPECIALTY

PO BOX X X 103 INVERCARGIDA NEW ZEALAND. TELEPHONE 212

352 Hereford st. Christchurch June 2, 1952.

The Chairman of the Auckland Harbour Board AUCKLAND

Excavation of Lighter Basin.

Contract No. 1370.

Dear Sir,

We are returning herein, the tender forms and drawing, for the above named contract.

We have not tendered for this work as we have observed that it is primarily a surface earth moving contract, where-as we are mainly equipped to carry out underwater rock removal, such as in the lower 5 feet of this contract.

Should the tender, which you accept, not include the removal of this lower hard strata, we would be pleased to submit a price for this section of the work.

Very truly yours,

J.G. Antliff.

26th May, 1952. N.Z. Road Makers Ltd., 197A Gt. South Road, PAPATOETOE. Dear Sirs, CONTRACT NO.1370 As requested I am forwarding herewith copy of plan and specification for Excavation of Lighter Basin. Yours faithfully, WJT.JS. CHIEF ENGINEER TO THE BOARD.

INSTRUCTIONS TO FOREMEN & INSPECTORS

ENGINEER'S OFFICE,

To

THE FOREMAN OF WORKS. Date 26th May, 19 52.

Subject PAKENHAM ST. LIGHTER BERTHS - STEEL SHEET PILING.

Please collett from Messrs. Rope Construction Coy's dump at Abbott's Way 4 lengths Larssen No.2 Sheet Piling (1/22', 2/11', 1/12') and One B.S.P. helmet.

The sheet piling is to have ends cut square and made up into two 22' lengths plus one 12'. The helmet is to have a new wooden cushion fitted. Interlock of sheet piling to be cleaned and tarred.

Please carry out the above and hold pending further instruction re test piling at Pakenham St.



WINSTONE LIMITED

PO BOX 395
TELEGRAMS & CABLES
WINSCOAL AUCKLANE
CODES: BENTLEYS, ACMI
ABC 5 th EDITION
PHONE 44-880 (DUINES

Manufacturers & Distributors of Building Materials — Auckland CI-

22nd May, 1952.

The Chief Engineer, The Auckland Harbour Board, Quay Street, AUCKLAND C.1.

Dear Sir,

We are in receipt of your letter of the 13th May, and thank you for the opportunity given us to tender for the Excavation of Lighter Basin at Pakenham Street. We regret to advise however, that in this instance, we shall not be tendering.

Plans and specifications are returned herewith.

9

HE: OD

Yours faithfully, WINSTONE LIMITED

Sales Manager

20th May, 1952.

Messrs. Rope Construction Co. Ltd., Colonial Mutual Building, Queen Street, AUCKIAND. C.1.

Dear Sirs,

In confirmation of recent verbal arrangements, I have to advise that on 19th inst., we took delivery on loan of the following:-

B.S.P. Larssen No.2 Sheet Piling 1/22', 2/11', 1/12'. 1 only Helmet.

Every endeavour will be made to return this material to you as arranged but as we intend to drive it very hard as test piling we may not be able to recover it after driving. If such is the case a price can be agreed on later.

I have to thank you for your help in this matter.

Yours faithfully,

ANT. JS.

CHIEF ENGINEER TO THE BOARD.

Auckland Harbour Board.

TENDER

FOR CONT.	RACT No.	1370	for	
	EXCA	VATION OF	LIGHTER BAS	IN
TO THE CHAIRMAN OF THE				19
AUCKLAND HARBOUR	R BOARD.			
Sir:—				
V_{ϵ} , the undersigned, do hereby	Tender and offer t	o execute and p	erform the sever	al works and
provisions named, described and allud	ed to in the Specia	ications for the		
EXCAVATION OF 1	LIGHTER BASIN	- PAKENHA	M ST.	- F (MIN) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
and under and in conformity to the Ge Fifty three three three of the Schedule of I, enclose herewith cheque pa £ 20.0.0 (Twenty pounds) Should this tender be accepted W aforesaid Specifications and Conditions deposit with the Treasurer of the Auc	Prices upon which yable to Treasurer e, undertake to ex within three days	this Tender is b , Auckland Ha ecute a Contrac of the date of a	ased and calculate rbour Board (contract and Bond emacceptance, and	or cash) for bodying the undertake to
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The within Tender is accepted by The Common Seal of the Aucklan was hereto affixed at a meeting of the day of the day o	Address Address the Auckland Hark ad Harbour Board Board held on the of two of Chairman	PICHAROS C. SH. TITIRI FOUR BOARD, AU	- Вгос. LT. 3- RICKARDS 9N61 - ROHP,	pounds NEW-LYNN

AUCKLAND HARBOUR BOARD.

Engineer's Office,
May, 1952.

CONTRACT No. 1370.

SPECIFICATION FOR

WORK TO BE DONE AND MATERIALS TO BE USED IN THE EXCAVATION OF LIGHTER BASIN PAKENHAM STREET

1. TENDERS

Tenders addressed to "The Chairman", Auckland Harbour Board, and endorsed on the envelope "Excavation of Lighter Basin" will be received up till 12 noon on Tuesday, 3rd June, 1952 for the completion of Excavation for Lighter Basin Pakenham Street in accordance with this specification.

Tenders received through the post will be recorded by the Secretary or his representative in the Tender book and placed in the Tender box to be opened in the presence of the Board. Tenders delivered by hand shall be signed for by the Secretary or his representative and be placed in the Tender box in the presence of the person delivering the tender. Tenders may be submitted by telegraph only provided proof is available that a written tender accompanied by the specified deposit has been posted not later than the time of closing of tenders.

2. INTERPRETATION OF TERMS: In this Specification wherever they may occur the terms:-

"Board" shall mean "The Auckland Harbour Board". "Secretary" shall mean the person for the time being acting as Secretary to the Board. "Engineer" shall mean the person for the time being acting as Engineer to the Board or his authorised representative. "Contractor" shall mean the person or persons whose tender for construction of the works to which this Specification refers shall be accepted, and who shall sign the necessary Contract, and it shall include the executors, administrators and permitted assigns of such person or persons. "Works" shall mean all the works, materials, acts, matters and things mentioned and described in the Specification, and also such other works, materials, acts, matters and things as are contracted to be performed by the Contractor. "Approved" shall mean approved by the Engineer or his representative.

3. DEPOSIT WITH TENDER: Each tender shall be accompanied by cash or cheque for Twenty pounds (£20.0.0) deposited against the due execution of the contract documents and performance of the

Contract. Should any tenderer withdraw his tender after the advertised time for the closing of tenders, or should he in the event of its acceptance by the Board refuse or neglect or fail to carry out the provisions of Clause 4 of this Specification, then the amount of the deposit accompanying such tender shall be forfeited absolutely to the Board as and for liquidated damages and the Board may call on any of the other tenderers to sign and carry out the Contract.

The deposits lodged by unsuccessful Tenderers and which have not become forfeited to the Board will be returned as soon as the necessary contract has been signed.

4. FURTHER DEPOSIT AND EXECUTION OF CONTRACT:

The successful Tenderer shall, within three clear days of notification of acceptance of his tender, execute a legal contract embracing all the clauses of this Specification and shall make a further deposit of Eighty pounds (£80.0.0) making a total of One hundred pounds (£100.0.0) deposited against the due performance and completion of Contract, which sum will be returned only after satisfactory performance and completion of the Contract as certified by the Engineer.

SCOPE OF CONTRACT: This contract shall be for the provision of all labour, material, plant, and other things necessary for the carrying out and completion of the works shown on drawings No. A 548/1 and more fully described or implied in this specification and enumerated in the schedule included herewith, and shall include all works incidental thereto, the whole to be done in accordance with the true intent and meaning of this specification and to the entire satisfaction of the Engineer.

6. DRAWINGS:

The drawings and specifications in connection with this contract are the property of the Auckland Harbour Board and two comple te copies will be furnished for the use of the Contractor. One such copy shall be kept on the work in the charge of the Contractor or a competent foreman. Both copies shall be returned to the Engineer immediately upon receipt of the final certificate or upon termination of the contract. The drawings and the dimensions and descriptions written thereon shall be strictly adhered to, together with such further drawings or explanations as may be given from time to time by the Engineer for the more particular and detailed description of various portions of the work. The scale to which the drawings are made is to be made use of only where no figured dimensions are given either on the drawings or in the specification. Figured dimensions shall be considered as correct, although they may not in every instance agree with the scale.

-3-

7. INSPECTION OF SITE: Tenderers shall make a carefull inspection of the locality of the proposed work and satisfy themselves as to the nature of the work to be undertaken and of their ability to carry out the Contract in accordance with the true intent and meaning of this Specification.

The Contractor shall be held to have complied with this clause and no allowance will subsequently be made for any claim on account of insufficient information.

8. TENDER FORMS AND SCHEDULES: Tenderors shall submit a

lump sum price for completion of the

Contract in accordance with this specification.

Tenderers shall also submit with their tenders the Schedule of Quantities and Prices duly completed showing how the lump sum price has been arrived at. The valuation of work done for assessing progress payments and for authorised variations shall be based on the Schedule rates.

Tenders shall be submitted on the official Tender and Schedule Forms which may be had on application to the Engineer's Department, Auckland Harbour Board.

The quantities given in the Schedule are measured nett as shown on the drawings and are believed to closely approximate the quantities of the various classes of work to be done, under this Contract.

Each Tenderer shall satisfy himself as to the accuracy of the quantities shown in the Schedule and should he not agree with the quantity of any item he shall amend such item in the Schedule accompanying his tender.

Should the Schedule accompanying the accepted tender not agree with the lump sum tender, the schedule prices shall be amended to the satisfaction of the Engineer so as to make the Schedule total agree with the tender price.

9. COMPLETION AND MAINTENANCE: The care and maintenance of all works under this Contract shall remain with the Contractor until the completion of the Contract.

When, in the opinion of the Engineer, the works shall have been substantially completed and have been taken over from the Contractor by him in clean condition and first class order he shall issue a certificate of completion in respect of the works.

-4-Will be made to the Contractor by the Board 10. PAYMENT: once in every month up to £80 per centum of the value of the work done as certified by the Engineer. The Contractor shall, if required, supply to the Engineer any vouchers, dockets or other papers he may require in order to arrive at a fair estimate of the value of the work done. Payment up to £90 per centum of the Contract sum will be made by the Board on satisfactory comple-tion of the works as certified by the Engineer. The final payment of £10 per centum to complete payment will be paid by the Board thirtyone days after certified completion. VARIATIONS AND EXTRA WORKS: The Engineer shall have power 11. to vary, diminish or extend the quantities of work without invalidating the Contract provided always that such variation, increase, decrease or change shall be of a nature contemplated by the Contract and the Contract price shall be adjusted in accordance with the schedule rates. Where the schedule rates are not fairly applicable to such variations new rates shall be agreed. variations shall be ordered in writing by the Engineer who will, at the time of issuing such order, decide the method of payment and the time to be added to or deducted from the contract completion time consequent on such variation. 12. MEASUREMENT OF WORK: All measurements of the work shall be made nett as shown on the drawings or described in the specification. 13. PROVISIONAL SUM: PROVISIONAL SUM means any sum of money fixed by the Engineer and to be included in the Contract price to provide for work not otherwise included or unforseen contingency. It shall not be expended except as specifically directed by the Engineer at his discretion and any portion not so expended shall be deducted from the Contract Sum. 140 WATCHING AND LIGHTING: The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or by any competent statutory or other authority for the protection of the works or for the safety and convenience of the public or others. DAMAGE TO PROPERTIES: The Contractor shall be liable for, 15. and shall at all times keep the Board indemnified against, all actions, claims and demands in respect of any injury or damage caused by himself, any of his workmen or any other person in his employ or acting under his direction, to the land or buildings or person of any third person or persons as a result of the execution of the specified works including the conveyance of materials or persons

to orf rom the site.

The Contractor shall at his own cost, effect 16. INSURANCES: and maintain during the continuation of the Contract the following insurances in offices approved by the Board. (1) FIRE INSURANCE: All works comprised in the contract and all plant and materials brought into or onto the works shall be kept insured against fire for their full insurable value. (2) WORKERS' COMPENSATION: The Contractor shall effect and maintain an approved insurance such as will protect him and the Board from claims under any Act for the time being in force relating to worker or workers' compensation or employers liability or under any other statutory provision or at common law. Before employing any labour on the works the Contractor shall lodge with the Board a certificate that such insurance has been effected and the name of the office conerned. 17. CONTRACTOR TO OBSERVE ALL LAWS, BY-LAWS AND REGULATIONS:

-5-

observe all the provisions of every award or order of the Court of Arbitration and of every Industrial agreement and of every other statute, order or requirement from time to time in force in respect of payment of wages, conditions of labour and other matters relating to the employment of labour.

19. SUBJECT TO LIENS ACT: This contract shall be subject to the provisions of "The Wages Protection and Contractors Liens Act, 1939" and its amendments.

SUB-LETTING AND FACILITIES FOR OTHER CONTRACTORS: The Contractr shall not sub-let the Contract or any part of the Contract without the written approval of the Engineer, such approval not to be unreasonably withheld. Any approval for such sub-letting shall not be deemed to be a waiver of any of these conditions of Contract and shall not discharge the Contractor from the responsibility of ensuring that any part of the Contract so sublet is executed and completed in terms of the Contract.

The Contractor, if so requested by the Engineer, shall afford all reasonable facilities to any other contractor or his workmen or to workmen directly employed on or near the site on work ancillary to this Contract.

In executing the contract the Contractor shall comply with the provisions of all Acts of Parliament and with all regulations and by-laws

of state, local or other authorities that may be applicable to the works and shall pay all fees lawfully demanded by the public authori-

ties for matters in connection with the Contract,

21. SERVICE OF NOTICES: Any notice to be given to the Contractor under the terms of this Contract shall be served by sending the same by post to or leaving the same at the Contractor's principal place of

-6business (or in the event of the Contractor being a company to or at its registered Any notice to be given to the Board under the terms of the Contract shall be served by sending the same by post or leaving the same at the Board's Office at Quay Street, Auckland. RESENTATIVE: The Contractor, when he is not personally present on the works shall be represented by a responsible agent 22. CONTRACTORS REPRESENTATIVE: approved by the Engineer to receive instructions and to represent the Contractor for all purposes of this Contract. 23. QUALITY OF WORK: All workmanship shall be in accordance with the best practice and all materials shall be the best of their respective kinds and shall be approved by the Engineer or his representative before being used in the work. 240 SANITATION AND CLEARING UP THE SITE: The Contractor shall maintain the works and the site of the works in a sanitary and hygienic condition and on completion of the Contract he shall clear the site of all temporary works, surplus plant and materials, and debris and leave the works and the site of the works in a clean and tidy state to the satisfaction of the Engineer. BENCH MARKS AND SURVEY STANDARDS: Before the commence of the work the Board will establish any 25. Before the commencement necessary "Bench Marks" and "Survey Standards" at suitable positions in the vicinity of the work and the Contractor shall preserve and use these marks for fixing all level and line pegs that he may require during the course of the work. 26. SETTING OUT THE WORK: The Contractor shall be responsible for the accurate setting out of the whole of the work true to the lines, levels and crossfalls shown on the drawings, and in accordance with such further instructions as may be given from time to time during the course of the work. 27. INSPECTION: The whole of the work will be subject to close inspection on behalf of the Board. Any wo: which is not approved by the Engineer shall be made good immediately by the Contractor to the satisfaction of the Engineer. Should the Contractor refuse or neglect or fail to make good any work immediately when instruct-ed by the Engineer to so do, then it shall be lawful for the Board to employ any other person or persons to remove such material or to make good such work and the Board may deduct the cost of doing so from any moneys that may be payable or may become payable to the Contractor by the Board.

28. RIGHT OF BOARD TO TERMINATE CONTRACT: Should the Contractor continue to refuse or neglect or fail to carry out any works in connection with this contract in a manner to the satisfaction of the Engineer, or should the Contractor refuse or neglect to carry o t the Works with such despatch as the Engineer shall consider necessary for the due completion of the Contract within the time specified, then it shall be lawful for the Board forthwith, without further notice to the Contractor, to terminate the contract so far as it relates to the Works remaining to be done and the Contractor shall have no claim whatsoever against the Board as compensation in respect of such termination of contract.

In the event of such termination of contract by the Board, the Contractor shall be paid only the value of the work done as certified by the Engineer but the deposit lodged by the Contractor shall be forfeited absolutely to the Board as and for liquidated damages.

- 29. BANKRUPTCY, ETC. OF CONTRACTOR: If the Contractor shall become bankrupt or shall make any assignment for the benefit of his creditors or if the Contractor being a company shall go into liquidation then unless the assignee, trustee or liquidator forthwith makes arrangements satisfactory to the Engineer for the due prosecution of the works then in any of such cases the Board may on three days notice exercise all the powers conferred as is provided in the case of the right of the Board to terminate the Contract.
- O. PLANT AND MATERIALS TO BE THE PROPERTY OF THE BOARD: If the Contractor brings onto the Works plant for which he desires an advance of payment to be made then such plant shall become the absolute property of the Board.

Except for the purpose of carrying out the Contract the Contractor shall not, without the written permission of the Engineer, remove any of the said plant until the Engineer has certified the completion of the Contract when the said plant shall re-vest in and become the property of the Contractor.

31. ARBITRATION:
Should any dispute arise between the Contractor and the Board in the execution of this Contract it shall be referred to the Engineer for his decision and that decision shall be binding on both parties. Should either party be aggrieved

both parties. Should either party be aggrieved by such decision he may serve a notice on the Engineer requiring the matter to be referred to an Arbitrator to be agreed upon between the parties or, failing agreement, to be nominated on the application of either party by the President for the time being of the N.Z. Institution of Engineers and such reference shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act 1908 or any statutory re-enactment or amendment thereof for the time being in force. The award of the Arbitrator shall be final and binding on the parties.

32. THE LOWEST OR ANY TENDER will not necessarily be accepted.

33. HEADINGS: The headings to the foregoing clauses shall not be deemed to be part of the Contract nor explanatory thereof.

This specification is for the necessary excavation for the construction of the lighter basin as indicated on the drawings and the construction of open-cut stormwater diversion. The drawings and quantities are based on recent surveys and recent site investigation and samples of cores then obtained are available for inspection by Tenderers. As described in Clause 7 above, Tenderers are required inter alia to make a careful inspection of the site and locality of the work and

The site has been reclaimed by "town tip" methods with the result that the present formation is, in general, 15 to 16 feet of town tip and harbour mud overlying, 1 to 2 feet of compact mud and sand overlying soft mudstone and soft sandstone.

to carry out such further survey or site

investigation as they think fit.

A price is required for the excavation of the open trench and the excavation of the whole basin down to hard, (Stages I and II Clause 36) but Tenderers may if they wish, tender for "additional work" comprising the removal of material below hard to a level 5 feet below L.W.S.T.

35. EXCAVATION: The Contractor shall excavate and remove, tip, spread and level the spoil as indicated on the drawings. All spoil will be disposed of inside the boundaries Fanshawe Street, Halsey

The method of excavation to be adopted shall be to the Engineer's approval and Tenderers shall state in their tender, an outline of the method they propose to adopt.

Street, Future Breastwork and Market Place.

ORDER OF WORK: It is intended to follow on immediately after the excavation of the basin with preparations for sheet piling and the Contractor shall, therefore, carry out the work in such a manner that the work will be completed in the times set out below and in the following order:-

Open Ditch: The open ditch shall be completed as early as possible and in any case before the closing of the existing waterway.

Basin - Stage I: Excavate and remove down to "hard" to form lighter basin in Zone "A" as shown on the drawings.

Basin - Stage II: Excavate and remove down to "hard" to form lighter basin in Zone "B" as shown on the drawings.

Basin - Additional Work: Should the Contractor undertake the excavation of material below "hard" then this work will be carried as part of Stages I and II.

37. TIME FOR COMPLETION AND DAMAGES FOR DELAY: Tenderers shall state in the accompanying schedule the times from the acceptance of Tender within which they will guarantee to complete the relevant portions of the work and to complete the whole work. It is desired that such times shall not exceed the following:

Task (a). Construct open ditch and carry out excavation for Basin Stage I 2 months

Task (b). Carry out excavation for Basin Stage II 2 months

Total for Tasks (a) and (b) 4 months

Provided that, should the Contractor undertake the Additional Work at the Basin, i.e., the excavation and removal of material below hard, these times shall be amended as follow:-

Task (a). Plus relevant portion of Additional Work 4 months

Task (b). Plus relevant portion of Additional Work 3 months

Total for Tasks (a) and (b) plus .

Additional Work at basin 7 months

Should the works remain uncompleted at the expiry of the time within which the Contractor has guaranteed completion, then the Contractor shall pay to the Board as and for liquidated damages, the following sums per week for each and every week during which completion is delayed beyond the due date:-

Task (a) together with relevant portion of "Additional Work at Basin" if applicable Five pounds (£5.0.0) per week.

Task (b) together with relevant portion of "Additional Work at Basin" if applicable Five pounds (£5.0.0) per week.

Any such sums payable to the Board by the Contractor may be deducted from any moneys that may be payable or become payable to the Contractor by the Board or may be sued for as a debt.

N. L. VICKERMAN, M.I.C.E. Chiof Engineer to the Board.

CONTRACT No. 1370.

BILL OF QUANTITIES FOR:

EXCAVATION FOR LIGHTER BASIN - PAKENHAM STREET.

PREAMBLE: Attention is directed to the Form of Contract, the Specification, and the Drawings which shall be read in conjunction with this Bill of Quantities.

The prices and rates entered in the Bill of Quantities are to be the full inclusive value of the work described.

A price or rate is to be entered against each item whether quantities are shown or not. Items against which no price or rate is entered shall be considered as covered by other rates or prices in the Bill.

All quantities are measured nett as shown on the drawings and no allowance has been made for bulking or waste.

The quantities of work and materials in the Bill are not to be considered as limiting or extending the amount of work to be done or materials to be supplied by the Contractor.

Provisional sums are to be dealt with as described in conditions of Contract and specification.

Sheet No. 2

Item No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMOI	JNT	
	PRELIMINARY ITEMS:				£	S	D
1.	Allow for visiting and inspect- ing the site, for verifying the drawings and quantities; for ascertaining the nature of the ground and the nature and extent of existing works; for accurate setting out of the work includ- ing the provision of all necess- ary instruments templates, pegs and etc., for giving all notices and paying all fees required by law to persons or authorities so entitled in respect of this contract.				9	10	
2.	Allow for providing continuous access to adjoining property and to safeguarding the public as required by the specification			·	20	-	-
3.	Allow for making good all surfaces of lands and pavings in or through which the works are performed; for making good injury or damage to property or land occasioned by the execution of the works or by extraordinory traffic arising therefrom; for removing from time to time all objectionable, condemned or surplus material; for leaving the site in a clean and tidy condition on completion; for watching for and taking the necessary precautions against fire or any other accident arising from the works.				15		_
14.	ALL EXCAVATION DEPTHS ARE MEASURED BELOW DATUM 19.00 A.D.S The Following above M.H.W.:-					A.	
4.	Excavate and remove, tip, spread and level, as specified, in reclamation fill not exceeding 6'0' deep to form open trench for stormwater diversion as shown on the drawings		lin. yds	\$5-16-6	8 73	15	-
5•	Excavate and remove, tip, spread and level as specified, reclamation fill not exceeding 6'0" deep below datum	15,000	cu.yds.	15/6	11625	-	
	Carried Forward -	d			£ 12543	5	-

Item No.	DESCRIPTION	QUANTITY	UNIT	RATE	AMO	UNT	alkandungdistan dustah demuk
		15,000			£	S	D
	Brough Forward -				12,543	5	-
	The Following below M.H.W.						
6.	Excavate and remove, tip, spread and level as specified, reclamation fill and harbour mud from 6°0" to 12°0" deep below datum.		cu.yds	14/6	11,286	**. Salariti	_
7.	Excavate and remove, tip, spread and level as specified, reclama- tion fill and harbour mud from 12'0" to 18'0" deep below datum.		cu.yds	17/-	10,285	Number	_
8.	Excavate and remove, tip, spread	40,780					34/14
	and level as specified, compact mud and sand (overyling mudstone and sandstone) from 12'0" to 18' 0" deep below datum	3850	cu.yds	17/6	3,368	15	Salama .
9•	Allow the provisional sum of £1,000 to be expended as directed by the Engineer in additional excavation				1,000	0	O
10.	Specify and allow for items not scheduled						
	••••••						
	* * * * * * * * * * * * * * * * * * *						
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	*						
	•••••••						
	TOTAL LUMP SUM TENDER.			£	38,483		the strong frage from these tracks
	EXCAVATION IN MUDSTONE AND SANDSTONE.						
11•	Excavate and remove, tip, spread and level as specified soft mud- stone and sandstone from 16'0" to 21'0" below datum	6,050	cu.yds	50/- =	15125	-	

I/WE GUARANTEE to complete the work specified in Specification No. 1370 and shown on the drawings at the rates shown above and within the periods described in Clause 37 and set out below:-

Task	(a)		000		• • •	8	, weeks
Task	(b)	0 0 0 0 0 0 0		••••	• • •	8	weeks
Task	(a) plus relevan	t portion	of Addit	ional Wo	rk	17	weeks
Task	(b) " "	11	11	11	11	12	weeks
			DDRESS .	RICKAN	RICK TITINA	+NGL -	Posto
		D	ATE .	0000000	JUL	Y - 195	2

14th May, 1952. Messrs. Rickard Bros., Contractors, NEW LYNN. Dear Sirs, I wish to advise that the Board are calling tenders for the "Excavation of Lighter Basin" at Pakenham St. Plans and Specifications may be obtained on application to this Office and I trust that we will have the pleasure of receiving your tender. Yours faithfully, CHIEF ENGINEER TO THE BOARD. AFC.JS.

13th May, 1952. Messrs. Bitumix Ltd., Lunn Avenue, AUCKLAND. S.E.6. Dear Sirs, I wish to advise that the Board are calling tenders for the "Excavation of Lighter Basin" at Pakenham St. Plans and Specifications may be obtained on application to this Office and I trust that we will have the pleasure of receiving your tender. Yours faithfully, AFC.JS. CHIEF ENGINEER TO THE BOARD.

13th May, 1952. Messrs. Winstone Ltd., 69 Queen Street, AUCKLAND. C.1. Dear Sirs, I wish to advise that the Board are calling tenders for the "Excavation of Lighter Basin" at Pakehham St. Plans and Specifications may be obtained on application to this Office and I trust that we will have the pleasure of receiving your tender. Yours faithfully, AFC.JS. CHIEF ENGINEER TO THE BOARD.

13th May, 1952. Messrs. Amalgamated Roads Constructors, 2 Pukeiti Road, OTAHUHU. . Dear Sirs, I wish to advise that the Board are calling tenders for the "Excavation of Lighter Basin" at Pakenham St. Plans and Specifications may be obtained on application to this Office and I trust that we will have the pleasure of receiving your tender. Yours faithfully, AFC.JS. CHIEF ENGINEER TO THE BOARD.

13th May, 1952. Messrs. W. Stevenson & Sons Ltd., King Street, PUKEKOHE. Dear Sirs, I wish to advise that the Board are calling tenders for the "Excavation of Lighter Basin" at Pakenham St. Plans and Specifications may be obtained on application to this Office and I trust that we will have the pleasure of receiving your tender. Yours faithfully, AFC.JS. CHIEF ENGINEER TO THE BOARD.

13th May, 1952. Messrs. Ivan Whale Ltd., 239 Queen Street, Onehunga, AUCKLAND. Dear Sirs, I wish to advise that the Board are calling tenders for the "Excavation of Lighter Basin" at Pakenham St. Plans and Specifications may be obtained on application to this Office and I trust that we will have the pleasure of receiving your tender. Yours faithfully, AFC.JS. CHIEF ENGINEER TO THE BOARD.

Auckland Harbour Board.

TENDER

FOR CONTRACT	No	1328	for	
"LARSSEN"	Steel She	et Piling	for Lighte	er Berths
TO THE CHAIRMAN OF THE			May	1952.
AUCKLAND HARBOUR BOAL	RD.			
Sir:—				
I, We, the undersigned, do hereby Tender	and offer to e	xecute and per	form the severa	l works and
provisions named, described and alluded to in				
of "LARSSEN" Steel Shee				
and under and in conformity to the General Co	nditions stipul	ated, for the	sum of	
as stated in the				
and $\stackrel{I}{W}_{e}$, annex hereto the Schedule of Prices u	pon which this	Tender is bas	sed and calculate	d.
I, We, enclose herewith cheque payable to	Treasurer, A	uckland Harb	our Board (or	cash) for
25.0.0 (Twenty-five Pounds)				
Should this tender be accepted $\frac{I_s}{We_s}$ under	take to execut	te a Contract	and Bond emb	odying the
aforesaid Specifications and Conditions within				
deposit with the Treasurer of the Auckland H	Iarbour Board	, a further sun	of £50.0.0	(Fifty
making a total of £75.0.0 (Seventy-fi	ived Pounds	3)		Pounds)
N	ame			-
	-	***************************************		
Add	ress			
The within Tender is accepted by the Auch	cland Harbour	Board, Auck	sland,	
The Common Seal of the Auckland Harb	our Board			
was hereto affixed at a meeting of the Board I	held on the			
day of				
by	and			
	two of /			
the members of the Board, in the presence of				
	Chairman			
	Members			
J	Secretary			
	A.H.B.			

In addition the Board shall have the right to obtain from any other source the required amount of suitable material to replace the material undelivered by the Contractor and to charge the extra cost (if any), of such material against the Contractor, and the Board may refuse to take delivery of any material so replaced when delivery is offered and the Contractor shall have no claim against the Board for any payment against such material. Should the Contractor continue to refuse or neglect or delay to supply the whole of the materials in accordance with this Specification then the Board shall have the power to terminate the Contract without further notice to the Contractor and the Contractor shall have no claim whatsoever against the Board on account of such termination of Contract and the amount of the deposit lodged by the Contractor shall be forfeited absolutely to the Board as and for liquidated damages. Any sums due to the Board by the Contractor on account of such nondelivery or delay may be deducted from any monies that may be due or or may become due to the Contractor by the Board or may be sued for as a debt.

- 8. ORIGIN: The whole of the material shall be of British manufacture,
- QUALITY AND DESCRIPTION: Piling shall be "Larssen" Steel Sheet Filing of the sizes and sections stated in the attached Schedule, rolled from 9. mild-steel conforming in every respect with B.S. 15/1936. Tenderers shall give full details of the steel offered.

Piling shall be cleanly rolled to the correct dimensions and shall be

straight, true and out of winding.

Immediately after rolling, all mill-scale, grease, dirt and rust shall be removed and the piles shall be treated in an approved manner with acid-free coal tar.

Coal tar paint shall be prepared and applied in accordance with B.S.

1070/42.

The Contractor shall supply to the Engineer copies of the maker's Certificates for each shipment of piles establishing the quality of the steel, the dimensions, weights and section moduli of the piles singly and interlocked.

All piling shall be to the Engineer's approval and all piling of which he does not approve will be rejected and shall be replaced by the Contractor with approved piling at the Contractor's expense. To facilitate slinging each pile shall be provided with a 1" dia, hole not less than 5" from the end.

- 10. ALTERNATIVE TYPE OF SHEET PILING: Tenderers may quote for British steel sheet piling other than "Larssen", suitable for hard driving, provided that the structual, physical and chemical characteristics are not inferior to those required by this Specification.
- LENGTH: Piling shall be supplied in the lengths specified in the 11. attached Schedule and the ends shall be square to the axis of the pile. The Board will not pay extra for overlengths.
- 12. MARGINS: Margins shall be 3" over and 2" under the specified lengths. and 4% over and 2 winder specified weights.
- PAYMENT: Payment will be made within 30 days of certified completion. 13. of the Contract. Payment will be made at per ton for the actual weight of the material accepted provided that this does not exceed the calculated weight plus margin specified in Clause 12 hereof. The Board's liability will in any case be limited to payment for calculated weight plus 4%.
- TENDER FORMS AND SCHEDULES: Tenders shall be sent in on the official Tender and Schedule forms which may be obtained from the Purchasing 14. Officer, Auckland Harbour Board.
- 15. THE LOWEST OR ANY TENDER: will not necessarily be accepted.

N. L. Vickerman, M.I.C.E., Chief Engineer To The Board.

AUCKLAND HARBOUR BOARD

CONTRACT NO 1328

Bill of Quantities for "IARSSEN" Steel Sheet Piling & Rolled Mild-Steel for Lighter Berths Pakenham Street (Stage I)

SCHEDULE

Item No.	Description	Quantity	Unit	Rate	£ Amount	đ
/1.	"Larssen" Steel Sheet Piling					
	No. 2 as specified, 66/21;					
	for Walings.	20.29	Tons			
/ 2.	"Larssen" Steel Sheet Piling					
	No. 1.U. as specified,	194.1	1650	71		
	510/26', for Bulkhead.	167.81	Tons			
3.	"Larssen" Steel Sheet Piling					
	No. 1.G.B. as Specified,	22.4				
	510/6', for Anchorage.	33.20	Tons	-		
4.	Mild Steel Tee Bars 13" dia.					
	with ends upset and screwed					
	complete with two nuts per					
	tie bar. 130/40'	11.90	Tons			
5.	Mild Steel Angle 6" x 6" x ½"					
	for Capping Beam. 33/21	6.05	Tons			
	Total L	ump Sum Tend	er.	£	No appropriate them our surface processors in consequence of the conse	

in the above Schedule for the ance with Specification No. 13	rer to the Board the material stated prices set out therein and in accord- 128 and I/We guarantee to deliver such weeks
	Signature
	Address
Date	

ADOPTED BY BOARD 6.5.52

2. LIGHTER BERTHS - PAKENHAM STREET RECLAMATION.

Report of Chief Engineer to the Board, 16.4.52, submitting in terms of the Board's resolution of 11th March, 1952, plans - No.B929/8 - showing the proposed lay out of the Pakenham Street Reclamation to make provision for handling of cargo by lighters in that area and B929/9 - showing stage 1 of the development - the cost of providing the four berths for lighters to Stage 1 was estimated at £90,000; he stated that, although it was not intended in Stage 1 to provide more than four berths it might well prove economical, while the Contractor was on the site, to drive the remainder of the sheet piling of the lighter basin - estimated cost of the extra work being £35,000; that he recommended and the General Manager concurred therein that - (1) That the amended layout of Pakenham Street Reclamation as shown on Drawing B929/8 be approved and be submitted as necessary for consent of the Marine Department and the Auckland City Council; (2) That tenders be called immediately for the supply of steel sheet piling for four lighter berths; (3) That tenders be called for construction of the four lighter berths, for the completion of Pak enham Street Breastwork, and, as an extra to the contract, for driving the balance of the sheet pile walls of the lighter basin.

It was RESOLVED to recommend that the report be adopted, Mr. Carr dissenting.

hur Smith Spec. for (3).

IM F.

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16th April, 1952.

From the: ENGINEER

To the: GENERAL MANAGER.

MEMORANDUM.

LIGHTER BERTHS PAKENHAM STREET RECLAMATION. (Board's Resolution 11/3/52).

Drawing No. B929/8 shows the proposed amended layout of Pakenham Street Reclamation to make provision for handling of cargo by lighters in this area.

- Blocks C, E and K are occupied by existing Store buildings which are available immediately for storage of lightered cargo.
- Block D is particularly suitable for extra covered storage and would be reserved for this as soon as it becomes necessary.
- Blocks A, B, L and M would be reserved for open storage or covered storage as found necessary.
- Block G is leased on a renewable lease in perpetuity and need not be interfer ed with at present though if opportunity offers this lease should be resumed by the Board.
- Block H is occupied by a timber mill, the lease expiring in 1964. This need not be interfered with and Block F could be made available to this company for storage of logs until expiry of the lease of the mill site.
- Block N has been the subject of negotiations with the Customs Department for examination rooms and accommodation of its wharf staff which at present are occupying wharf transit sheds. This block would be reserved until this matter has been decided.

The internal roading serving blocks A to M as shown on the plan is tentative only and would be varied as necessary to suit the particular buildings that may be erected on these blocks. These would not be public roads and the whole of this area would be enclosed by gates and fences.

Drawing No. B929/9, shows Stage 1 of this development, comprising the construction of berths for four lighters adjacent to the stores on Blocks C, E and K and with open storage available on Blocks D and L. Operation at this stage would be tidal, but the berths would be constructed to allow of subsequent deepening to give floatation at all states of the tide.

The estimated cost of providing four berths for lighters to Stage I is £90,000.

As this work would be done by contract it would be advisable to include in the same contract the completions of the sheet pile breastwork along the northern face of Pakenham Street reclamation. This is exactly similar work to the construction of the lighter berths and requires the same type of construction plant. Some of the material for this breastwork has already been procured but the Board's own

plant and labour has been fully committed on other works. Financial provision for this work is made under the Loan Authority for Pakenham Street reclamation.

The estimated cost of completing Pakenham Street breastwork is £71,000.

Although it is not intended in Stage I to provide more than four lighter berths it may well prove economical, while the contractor's plant is on the site, to drive the remainder of the sheet piling of the lighter basin. This could be included as an extra to the contract, to be accepted or rejected according to the price tendered.

The estimated cost of this extra work is ... £35,000.

To reduce any delay in procuring steel sheet piling it is advisable that the Board place an order for sufficient of this for the four lighter berths as quickly as possible. The supply of the remainder of the steel sheet piling can be left to the contractor.

I recommend: -

- (1) That the amended layout of Pakenham Street
 Reclamation as shown on Drawing B929/8 be approved
 and be submitted as necessary for consent of the
 Marine Department and the Auckland City Council.
- (2) That tenders be called immediately for the supply of steel sheet piling for four lighter berths.
- (3) That tenders be called for construction of the four lighter berths, for the completion of Pakenham Street Breastwork, and, as an extra to the contract, for driving the balance of the sheet pile walls of the lighter basin.

Chief Engineer to the Board.

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The Chairman, Works & Traffic Committee, AUCKLAND HARBOUR BOARD.

Sir,

I endorse the recommendations of the Engineer and recommend approval be given accordingly.

GENERAL MANAGER

29th February, 1952. MEMORANDUM. To: From: THE ENGINEER. THE GENERAL MANAGER. BERTHS FOR LIGHTERS. Following your recommendation that the Board call tenders for lighters and in view of recent developments regarding possibilities of the allocation of space in wartime store buildings for purposes required by the Board, the possibilities of utilisation of the Pakenham St. reclamation area have been critically examined and a scheme of development has been prepared as shown on drawing S.736. The proposal provides essentially for the handling of lighter traffic in a well sheltered area and allows for stage development in order to:-(a), permit the operation of 4 lighter berths at the earliest possible moment. (b) reduce the initial cost to a minimum. (c) permit subsequent development of lighterage to be undertaken as warranted and according to experience As far as possible existing waterways have been utilised but in order to permit an economical development of the area and in particular to permit the initial unloading points to be located as near as possible to the existing buildings which will be available to serve the lighters, it has been necessary to allow some diversion of existing channels. In order to permit flotation of barges at all states of the tide it will ultimately be necessary to deepen the approach channel and lighter berths, involving the removal of up to 5 ft. of papa. There is no reason however why lighters should not be able to function satisfactorily without continuous flotation provided suitable safeguards are taken in preparing the bottom. Stage I of the development provides for the construction of a basin sufficiently large to accommodate 4 lighters in close proximity to the Fanshawe St. Store and Halsey St. Store, with sheet pile breastwork enclosing walls to retain the reclamation. be approached via an open channel with battered banks which would be formed by re-alignment of an existing channel. Dredging for this stage would be limited to providing a prepared bottom not above L.W.S.T. level except as necessary to permit sheet piling to be driven sufficiently low to enable an ultimate dredging depth of 5' below L.W.S.T. to be attained. It is estimated that this stage would take 12 months to complete and that in order to adhere to this time schedule the cost would be £90.000. would be £90,000. The nature of subsequent development would be largely dictated by the time factor. Extension of lighter landings could subsequently be provided more quickly in timber construction using if necessary locally grown piles which would have but a short life. This would not be wasteful if it permitted the construction of breastworks to proceed at a slower pace which would not require the importation of additional plant or would permit the work to be carried out under direct labour utilising the Board's own resourses of plant, provided the alignment of any such timber landing is set back to permit the subsequent construction of sheet pile breastworks and these are not long (Please turn over)

delayed. Based on present day costs the provision of a timber landing to the remainder of the lighter basin is estimated to cost £32,000 and this would take a further year to provide.

To complete the development of this area would involve:-

- (a) Completion of the breastworks to the lighter basin.
- (b) Completion of the breastworks to the northern face of the reclamation, which has already been provided for in the 1951 Empowering Bill.
- (c) Roading and drainage of the reclamation, which has already been provided for in the 1951 Empowering Bill.
- (d) Deepening of the lighter basin to 5' below L.W.S.T.
- (e) Deepening of the approach channel and available berthage along the north face of the reclamation, which was provided for in the design of the breastwork but for which no financial provision has been sought.

Estimates for the cost of the complete scheme, again based on present day prices, are as under. These exclude items (b) and (c) above:-

		Estimated Cost	Time
STAGE I:	Provision of 4 lighter berths operable by working tides.	£90,000	l year
STAGE II:	Completion of lighter basin to a stage for tidal operation:-		
	(a) Timber landing £30,400		l year
	(b) Breastwork £65,600	£96,000	2 years
STAGE III	:Providing flotation in lighter		4 years
Security Control of Co	basin.	£20,000	Executation of the Control of the Co
		£206,000	
STAGE IV:	Deepening approach channel	£ 44,000	
	to 5' L.W.S.T.	£250,000	
		total a programme a description of	

See Board's Resolution.
dexed 4 March 1952

ACTING ENGINEER TO THE BOARD.

STEEL IMPORT CO., LIMITED

48 WELLESLEY STREET W. AUCKLAND, N.Z.

9th January, 1952.

The Auckland Harbour Board, Quay Street, AUCKLAND, C. 1.

Attention the Civil Engineer:

Dear Sir,

We enclose information on Larssen Sheet Piling which we are advised is available in limited quantities.

If this is of any interest to you we should appreciate a specification of your requirements and we shall endeavour to forward a quotation as early as possible.

Yours faithfully, p.p. STEEL IMPORT COMPANY LTD.

KJB:NF

Secretary.

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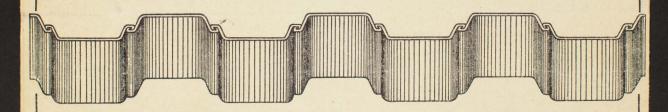
LARSSEN SHEET STEEL PILING

AS WIDELY USED IN ALL COUNTRIES
FOR OVER THIRTY YEARS

retaining walls coffer dams foundations breakwaters

Also for the construction

of walls for seaboard and river quays, lock walls and piers, moles, breakwaters, coffer dams, underpinning quay walls, reinforcing canal banks.



Works Technical Department is at your disposal to study any piling scheme entirely without obligation.

THE SPECIAL ADVANTAGES OF LARSSEN SHEET PILING

High moment of resistance. Long life because of adequate thickness of metal. Absence of torsion when driving. Being a symmetrical section the axial position of the joints strengthens the flanges, with improved bearing for driving. Design of the joints permits of driving to the right or the left as desired. The back of the section is flush, which facilitates anchorage. The small amount of play in the joints allows accurate driving of the wall without deflection.

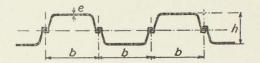
The use of copper-bearing steel

endows the piling with an ever greater assurance of long life.

The following are the characteristics of our LARSSEN Piling

Any intermediate section will be considered if the tonnage required warrants special rolling.

	QUALITY OF STEEL				
	MILD	FRENCH STD for Roads/Bridges	MEDIUM		
	Tons/Ins ²	Tons/Ins ²	Tons/Ins ²		
Minimum tensile	25 1/2	27	28 1/2		
Elastic limit	16 1/2	15	16 1/2		
Normal W. Stress	7 5/8	7 5/8	9 1/2		



					WEIGHT		MODULUS	INERTIA	
SECTION SECTION	WIDTH b	HEIGHT THICKNESS	THICKNESS	SECTION AREA PER FOOT OF WALL	PER FOOT OF PILE	PER SQ. FT. OF WALL	PER FOOT	OF WALL	RADIUS OF GYRATION
No.	Ins.	Ins.	Ins.	Ins ³	Lb/ft	Lb/ft²	Ins ^a /ft	Ins ⁴ /ft	Ins.
00	12,83	2,95	0,20	3,38	12,2	11,5	2,38	3,49	1,02
I c	15,95	3,94	0,26	4,40	19,9	15,0	4,78	9,41	1,82
l a	15,75	4,96	0,26	4,92	22,0	16,8	7,07	18,10	1,92
1	15,75	5,91	0,31	5,72	26,9	20,5	9,30	27,10	2,18
H	15,75	7,87	0,39	7,37	32,8	25,0	15,80	62,20	2,91
II n	15,75	10,63	0,37	7,37	32,8	25,0	20,50	108,80	3,84
111	15,75	9,72	0,55	9,31	41,7	31,7	25,40	123,30	3,63
III n	15,75	11,42	0,52	9,31	41,7	31,7	29,80	170,00	4,26
IV	15,75	12,21	0,61	11,30	50,3	38,3	37,90	231,00	4,53
IV n	15,75	14,17	0,58	11,16	49,7	37,9	40,90	290,00	5,09
٧	16,54	13,54	0,83	14,32	67,2	48,7	55,10	373,00	5,11
VI	16,54	17,32	0,87	17,68	82,7	60,0	77,60	672,00	6,17
Хa	17,75	7,87	0,50	8,08	40,5	27,4	11,70	46,10	2,39

Assembled piling.—If so desired, we will supply piling assembled in pairs (joints closed or not, according to specification).

Painting.—The Piling can be tarred at works if required.

Handling Holes.—Unless specially requested, all piling is holed for handling as indicated in the adjoining table. The indicated distance is that of the hole-centre from the end of the section.

SECTION	DIAM.	DISTANCE
00	1.575"	5.905"
I c to X a	2.047"	9.842"
Minimum	1.181"	3.937"

Corner Piles and Junction

Arrangements not shown here can be supplied to order. When ordering state Section, type required and angle d.

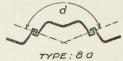
Example Section III
Type 2 a
d = 75°

The most acute angle realisable in ordinary steel of $25\frac{1}{2}/30$ tons per sq/ins., is:

Section	00 to I	11	Ш	IV	V et VI	Хa
Angle d	90°	120°	135°	145°	160°	135°







Alternatively one of the following types may be selected:

Not recommended for higher tensile steel.



TYPE:4

...

TYPE: 4a

TYPE: 8

RIVETED CORNER PILES

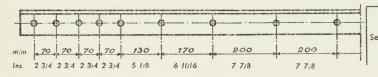
TYPE: 20



Types 2, 2a, 4 and 4a are produced for d between 70 and 170°

 $d = 30 \text{ to } 70^{\circ}$

Rivet centres for 200 mm standard riveting (7 7/8 ins.)

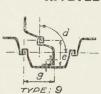


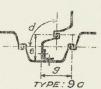
ction	00, I c, I a and I	ø17 mm (0,669")		
	li, II n, III, III n and X a	ø20 mm (0,787")		
	IV n, IV, V and VI	ø23 mm (0,906")		

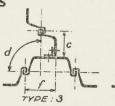
Rivet sizes

RIVETED BRANCH PILES

For ease of driving the junction member is placed 350 mm (14 inches) below the top edge of the main piles to permit the use of a driving cap.







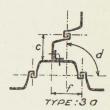


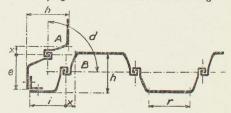
TABLE OF STANDARD WEIGHTS (Lb. per Ft. run) Unless otherwise demanded all riveted types employ piles cut down the centre line

TYPE	8 and 8 a	2 a, 4	2	METRIC SIZE ANGLES in brackets approx. Ins.	3, 3 a, 9 and 9 a	×	r
Section	lb/ft	and 4 a lb/ft	lb/ft	sizes	lb/ft	Ins.	ins.
00	12,23	17,41	17,41	60×60×8 2 3/8×2 3/8×5/16	23,52	1,772	8,347
l c	19,89	26,81	26,81	70×70×9 2 3/4×2 3/4×23/64	36,83	1,575	11,417
l a	22,04	28,96	28,96	70×70×9 2 3/4×2 3/4×23/64	40,01	1,181	12,087
1	26,88	33,73	33,73	70×70×9 2 3/4×2 3/4×23/64	47,24	1,378	11,339
11	32,79	41,59	41,59	80×80×10 3 5/32×3 5/32×25/64	57,99	1,575	10,827
II n	32,79	41,59	41,59	80×80×10 3 5/32×3 5/32×25/64	57,99	1,772	9,843
111	41,66	52,21	52,21	80×80×12 3 5/32×3 5/32×15/32	73,04	1,772	9,843
III n	41,66	52,21	_	80×80×12 3 5/32×3 5/32×15/32	73,04	1,575	9,843
IV	50,27	62,22	_	100×100×12 3 15/16×3 15/16×15/32	93,95	1,575	9,843
IV n	49,73	61,69		100×100×12 3 15/16×3 15/16×15/32	93,95	2,165	9,055
٧	67,20	82,65	_	110×110×14 4 21/64×4 21/64×35/64	_	1,772	10,236
VI	82,66	98,11	_	110×110×14 4 21/64×4 21/64×35/64	_	1,772	9,882
Ха	40,45	47,04	47,04	60×60×10 2 3/8×2 3/8×25/64	67,20	5,512	5,315

For convenience of driving avoid the choice of types 2, 9 and 9a as far as possible.

Important note

When laying out schemes note the following:



To drive A and B

 $\mathbf{i} + \mathbf{x}$ must be greater than \mathbf{h} or $\mathbf{e} + \mathbf{x}$ must be greater than \mathbf{h}

Otherwise A and B will override each other and driving will be impossible. The width of r at back of the section is given in table on left from which minimum values of c, e, f, g and i can be calculated.

