

Rpt. C.11.

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

Index. No. 34584  
(For London Office only.)

13 DEC 1934

GLASGOW REPORT No. 55232

Computation of Freeboard for M.V.  
having Bridge & Forecastle

Port of Survey Glasgow

(Type of Superstructures.)

Date of Survey While building

Ship's Name

Nationality and Port of Registry

Official Number

Gross Tonnage

Date of Build

MANOORACol. BritishMelbourne108001935Alexander Stephens & Sons Ltd. No 540Glasgow10855.72Name of Surveyor A.W. GatorMoulded Dimensions: Length 460' Breadth 66' Depth 35'-6"Moulded displacement at moulded draught = 85 per cent. of moulded depth 17720 tonsCoefficient of fineness for use with Tables .6721 (.68 least in Tables)Particulars of Classification +100 A1  
corresponding to a moulded draught of 23'-3 1/2"

Depth for Freeboard (D)			
Moulded depth	...	...	<u>35.56</u>
Stringer plate	<u>(.47)</u>	...	<u>.04</u>
Sheathing on exposed deck	...	...	...
$T \left( \frac{L-S}{L} \right) =$	<u>.25</u>	<u>.1998</u>	<u>.05</u>
Depth for Freeboard (D) =	<u>35.59</u>		

Depth correction	
(a) Where D is greater than Table depth (D - Table depth) R =	<u>(35.59 - 30.67) x 3 = + 14.76</u>
(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	<u>4.92</u>
If restricted by superstructures	<u>✓</u>

Round of Beam correction	
Moulded Breadth (B)	<u>66'</u>
Standard Round of Beam = $\frac{B \times 12}{50}$	<u>15.84</u>
Ship's Round of Beam	<u>9</u>
Difference	<u>6.84</u>
Restricted to	<u>✓</u>
Correction = $\frac{\text{Diff}^2}{4} \times \left( 1 - \frac{S_1}{L} \right)$	<u><math>\frac{6.84^2}{4} \times .2076 = +.35</math></u>

## DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed	✓				
" overhang	✓				
R.Q.D. enclosed	✓				
" overhang	<u>270.83</u>	<u>270.83</u>			<u>270.83</u>
Bridge enclosed	<u>282.04</u>	<u>282.04</u>	<u>8'-0"</u>	<u>✓</u>	<u>282.04</u>
" overhang aft	<u>13.56</u>	<u>10.12</u>			<u>10.12</u>
" overhang forward	<u>83.32</u>	<u>83.32</u>	<u>8'-0"</u>	<u>✓</u>	<u>83.32</u>
F'cle enclosed	<u>.43</u>	<u>.21</u>			<u>.21</u>
Trunk aft	✓				
" forward	✓				
Tonnage opening aft	✓				
" forward	✓				
Total	<u>368.08</u>	<u>367.29</u>			<u>367.29</u>

Standard Height of Superstructure	<u>7.5'</u>
" " R.Q.D.	<u>✓</u>
Deduction for complete superstructure	<u>42.7</u>
Percentage covered $\frac{S}{L} =$	<u>80.02</u>
" $\frac{S_1}{L} =$	<u>79.84 .24</u>
" $\frac{E}{L} =$	<u>79.84 .24</u>
Percentage from Table, Line A.	<u>✓</u>
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B.	<u>75.10 74.36</u>
(corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	<u>74.36</u>
Deduction = $42 \times .751 =$	<u>- 31.54 .23</u>

## SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P.	<u>56.00</u>	1		<u>56.00</u>	<u>57</u>	<u>57.00</u>	1		<u>57.00</u>
1/2 L from A.P.	<u>24.92</u>	4		<u>99.68</u>	<u>24.5</u>	<u>24.50</u>	4		<u>98.00</u>
1/2 L "	<u>6.16</u>	2		<u>12.32</u>	<u>6</u>	<u>6.00</u>	2		<u>12.00</u>
Amidships	<u>-</u>	4		<u>-</u>	<u>0</u>	<u>-</u>	4		<u>-</u>
1/2 L from F.P.	<u>12.32</u>	2		<u>24.64</u>	<u>14.5</u>	<u>14.50</u>	2		<u>29.00</u>
1/2 L "	<u>49.84</u>	4		<u>199.36</u>	<u>51.75</u>	<u>51.75</u>	4		<u>207.00</u>
F.P.	<u>112.00</u>	1		<u>112.00</u>	<u>114</u>	<u>114.00</u>	1		<u>114.00</u>
Total				<u>504.00</u>					<u>517.00</u>

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( .75 - \frac{S}{2L} \right) = \frac{13}{18} \left( .75 - \frac{.4001}{2} \right) = -.25$ If limited on account of midship superstructure. ✓If limited to maximum allowance of 1 1/2 ins. per 100 ft. ✓Deduction for Tropical Freeboard.  
Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = 35.54  
Summer freeboard = 11.75  
Moulded draught (d) = 23.79

Deduction for Tropical freeboard and addition for Winter freeboard =  $\frac{d}{4}$  inches = 5.95  
Addition for Winter North Atlantic Freeboard (if required) =

Deduction for Fresh Water.

Displacement in salt water at summer load water line

 $\Delta =$  13350

Tons per inch immersion at summer load water line

 $T =$  57.56Deduction =  $\frac{\Delta}{40T}$  inches $=$  5.80 $d/4 =$  6

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient

	+	-
Depth Correction	<u>14.76</u>	
Deduction for superstructures		<u>31.23</u>
Sheer correction		<u>0.25</u>
Round of Beam correction	<u>0.35</u>	
Correction for Thickness of Deck amidships		<u>0.60</u>
Other corrections, scantlings, etc.	<u>67.77</u>	
Summer Freeboard =	<u>82.88</u>	<u>32.08</u>
		<u>+ 50.80</u>
		<u>141.00</u>

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Steel, Deck: -

Tropical Fresh Water Line above Centre of Disc	...	<u>12</u>
Fresh Water Line	"	<u>6</u>
Tropical Line	"	<u>6</u>
Winter Line	below	<u>6</u>
Winter North Atlantic Line	"	<u>6</u>

Tropical Fresh Water Freeboard	...	<u>11.9</u>
Fresh Water	"	<u>11.3</u>
Tropical	"	<u>11.3</u>
Winter	"	<u>12.3</u>
Winter North Atlantic	"	<u>12.3</u>

18 DEC 1934

MARKING FORM

RECEIVED

MARKING FORM

RECEIVED

Lloyd's Register Foundation

# PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS										
Description of Hatchway	No 1 fore	No 1 fld	No 2 fld	No 3 Boat	No 3 Bridge	No 4 Prom.	No 4 Bridge	No 5 Bridge	No 5 fld	
Dimensions of Hatchway	15'-9" 12'-0"	15'-9" 12'-0"	24'-6" 16'-0"	12'-6" 15'-0"	12'-6" 15'-0"	25'-0" 15'-0"	25'-0" 15'-0"	17'-6" 15'-0"	17'-6" 15'-0"	
COAMINGS	Height above Deck	30"	30"	30"	30"	30"	30"	30"	30"	
	Thickness	.50	.50	.50	.50	.50	.50	.50	.50	
	Sides	.44	.44	.44	.44	.44	.44	.44	.44	
	Stiffeners	5 1/2 BA	5 1/2 BA	5 1/2 BA	5 1/2 BA	5 1/2 BA	5 1/2 BA	5 1/2 BA	5 1/2 BA	
HATCH BEAMS	Brackets, stays	one	two	one	one	two	two	one	one	
	Number									
	Spacing									
	Scantling and Sketch									
FORE AND AFTERS	Bearing Surface	thru keel	thru keel	thru keel	thru keel	thru keel	thru keel	thru keel	thru keel	
	Number									
	Spacing									
	Unsupported Lengths									
HATCH COVERS	Scantling* and Sketch									
	Bearing Surface	thru keel	thru keel	thru keel	thru keel	thru keel	thru keel	thru keel	thru keel	
	Material									
	Thickness									
HATCH COVERS	How fitted									
	Bearing Surface									
	Material									
	Thickness									
Spacing of Cleats										
Number of Tarpaulins										

\*Are wood fore and afters steel shod at all bearing surfaces? -  
 Are battens and wedges efficient and in good condition? -  
 Are tarpaulins in good condition and in accordance with rule requirements? -  
 Are lashings provided in accordance with rule requirements? -

Particulars of fiddle, funnel and ventilator coamings:— *No gratings on casing tops.*  
*Ventilators on casing tops in efficient condition*  
*Skylight of steel strongly constructed.*

Particulars of Flush Bunker Scuttles:—

*none.*

Particulars of Companionways:—

*Steel houses of substantial construction on Bridge & foreboard decks leading to tween deck spaces. For position & details of doors please see sketch on last page.*

Particulars of Ventilators in exposed positions on freeboard and superstructure decks:—

*On fore 1 @ 12" diam, coaming 36 x 34 to fore*  
*3 @ 9" " " 36 x 32 " " "*  
*1 @ 16" " " 36 x 36 to tween decks*  
*1 @ 9" " " 36 x 32 " " "*  
*1 @ 12" " " 36 x 34 " " "*  
*on Bridge 4 @ 15" " " 36 x 36 to fore*  
*" fld dk 1 @ 15" " " 30 x 36 to tween decks.*

*Ventilators constructed in accordance with the Rules & coamings closed with wood plugs & canvas covers.*

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks:—

*1 air pipe on fore fld dk 4" diam, 27" high to fore peak*  
*1 " " " fld dk 4 1/2 " " 36 " " " to D.B.*  
*2 " " " bridge dk 2 1/2 " " 27 " " " " "*  
*4 " " " " 4 1/2 " " 36 " " " " "*  
*2 " " " " 3 " " " " " " "*  
*2 " " " fld " 2 " " 36 " " " to aft peak.*

*Air pipes fitted with hinged steel flaps as means of closing.*

Particulars of Gangway Cargo and Coaling Ports:—

*1 N.T. door P.S. between fld & 2nd dks in way of No 1 tween dks 7' x 4' efficiently constructed.*  
*1 N.T. pass. door P.S. between bridge & fld dks " " 1st class passengers 6' x 4' "*  
*1 W.T. door between fld & 2nd dks (stbd) " " " gallery 6'-6" x 4' "*  
*1 W.T. door between fld & 2nd dks p.s. " " " oil filling stations 3' x 18" "*  
*1 W.T. door between bridge & fld dks. (stbd) " " 1st class passengers 6' x 4' "*  
*1 W.T. door between " " " (p.s.) " " 2nd " 5'-11" x 4' "*

Particulars of Scuppers and Sanitary Discharge Pipes:—

Scuppers & discharges led overboard below 2<sup>nd</sup> deck with y.m. storm valves at ship's side. Second valves fitted on those from spaces below freeboard deck.

Plan showing arrangement forwarded for reference.

Particulars of Side Scuttles:—

All <sup>side</sup> scuttles below freeboard deck fitted with hinged deadlights! Side scuttles to bridge & fore spaces fitted with hinged deadlights. All scuttles of substantial construction.

Plan showing arrangement forwarded for reference.

Particulars of Guard Rails:—

Guard rails on fore 4'-0" high with five rods & stanchions spaced 5'-0" apart. Steel bulwark in well & at after end of freeboard deck 4'-0" high efficiently constructed & supported. Steel bulwark on bridge 4'-0" high efficiently constructed & supported with guard rails at after end as per sketch, 4'-0" high with teak rail & 4 rods with stanchions spaced 5'-0" apart.

Particulars of Gangways, Lifelines, etc.:—

Suitable provision made for lifelines in way of fore well.

Particulars of Freeing Arrangements.

	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After <del>well</del> ... <sup>end of fore dk</sup> ...		4'-0"	3'-6" x 1'-6"	3	15.75	
Forward Well ...	34'-3"	4'-0"	3'-7" x 1'-7"	2	11.31	9.42
State position of each freeing port (F. and A. position and height above deck edge) { After <del>well</del> ... <sup>end of fore dk</sup> from bridge 26'-6" - 36'-6" - 46'. Forward Well:— from bridge 5'-7" & 11'-1" at above dk 15" hinged steel flaps. State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— Additional area where sheer is less than standard.						

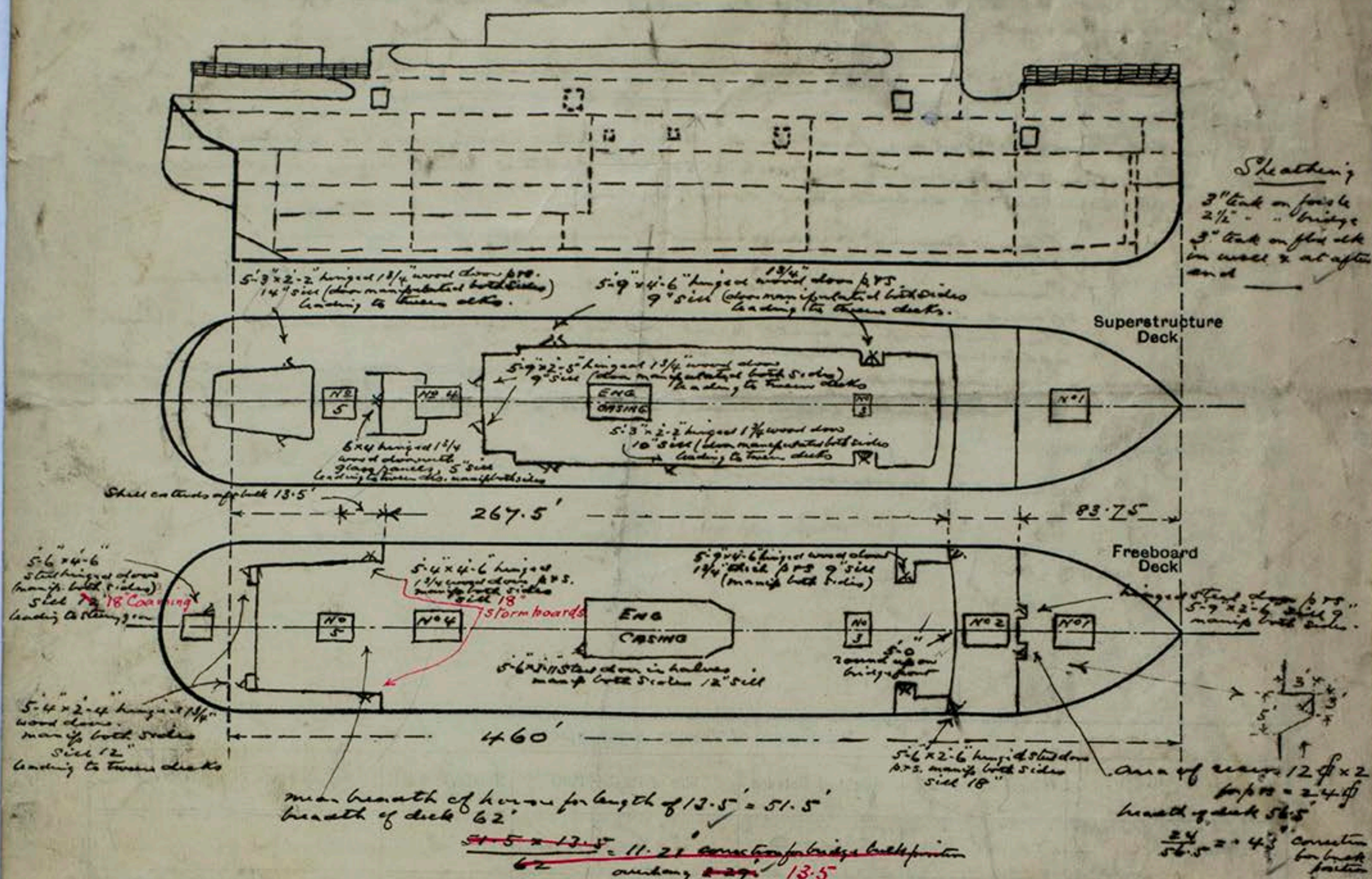
Particulars of Superstructures, Trunks, Casings, Deckhouses.

	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead ...	✓							
Raised Quarter Deck Bulkhead ...	✓							
Bridge, After Bulkhead ...	.30	.30	4 x 3 x 32	30"	bracketed top & bottom	5'-4" x 4'-6"	15"	8'-0"
Bridge, Forward Bulkhead ...	.44	.44	10 x 3 1/2 x 42	31"	lugged top & bottom	5'-6" x 2'-6"	18"	8'-0"
Forecastle Bulkhead ...	.30	.30	4 x 3 x 32	30"	✓	5'-9" x 2'-6"	9"	8'-0"
Trunk, Aft ...	✓							
Trunk, Forward ...	✓							
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	✓							
Exposed Machinery Casings on Superstructure Decks ...	✓							
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	.30	.26	3 1/2 x 3 x 30	30"	connected to beams & bottom angle	5'-6" x 3'-11"	12"	8'-0"
Deckhouses on Flush Deck Ships ...	✓							

Particulars of Closing Appliances (state if capable of being manipulated from both sides).

Poop Bulkhead ...	✓
Raised Quarter Deck Bulkhead ...	✓
Bridge, After Bulkhead ...	Hinged 1 3/4" wood doors (manipulated both sides)
Bridge, Forward Bulkhead ...	Hinged steel weather tight doors (manipulated both sides) also hinged 1 3/4" wood doors in passage (manipulated both sides) see sketch.
Forecastle Bulkhead ...	Hinged steel doors (manipulated both sides)
Exposed Machinery Casings on Freeboard or Raised Quarter Decks ...	✓
Exposed Machinery Casings on Superstructure Decks ...	✓
Machinery Casings within Superstructures not fitted with Class I Closing Appliances ...	Hinged steel door in hatch (manipulated both sides)
Deckhouses on Flush Deck Ships ...	✓

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shown on the following sketches:—



State any special features in the construction of the ship:— *Flare Vessel.*

*Approved Midship Section & Profile plans forwarded for reference. Plans showing scupper & sidelight arrangements also forwarded for reference. Freeboard request form herewith. Vessel is to be engaged in Australian passenger & cargo trade.*

<u>Draught</u>		<u>Est disp.</u>		<u>Tons per inch.</u>
22'-6"	—	12340	—	56.5
23'-6"	—	13020	—	57.25
24'-6"	—	13710	—	57.9

**NOTE:**— Subdivision draught assigned by B. of T. 23.2' moulded.

Builder's name and yard number *Alexander Stephens & Sons Ltd.*

*No. 540*

Names of sister ships

Owners

*The Adelaide Steamship Co. Ltd.*

Fee £ *20* 0 0

Received by me