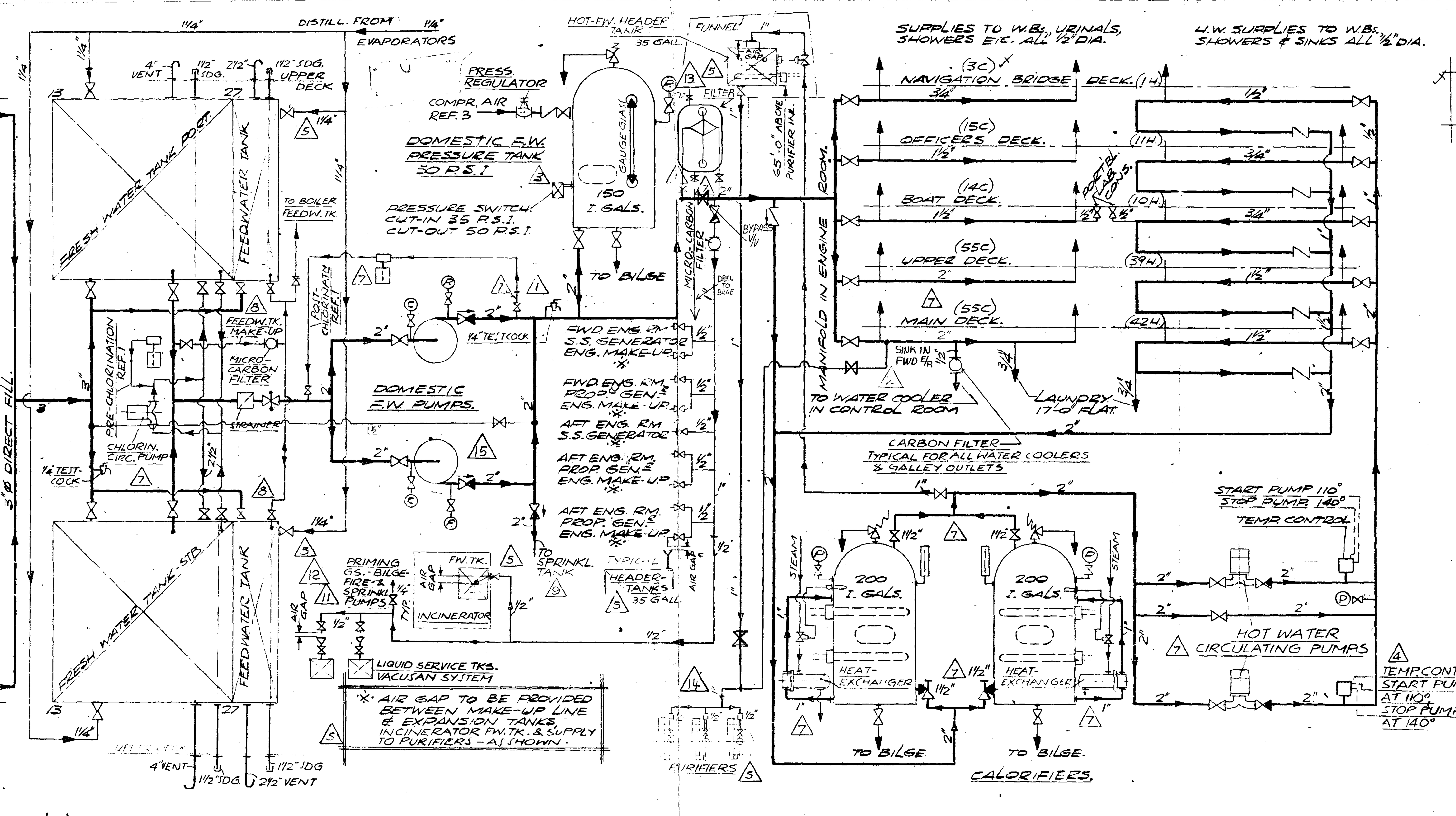

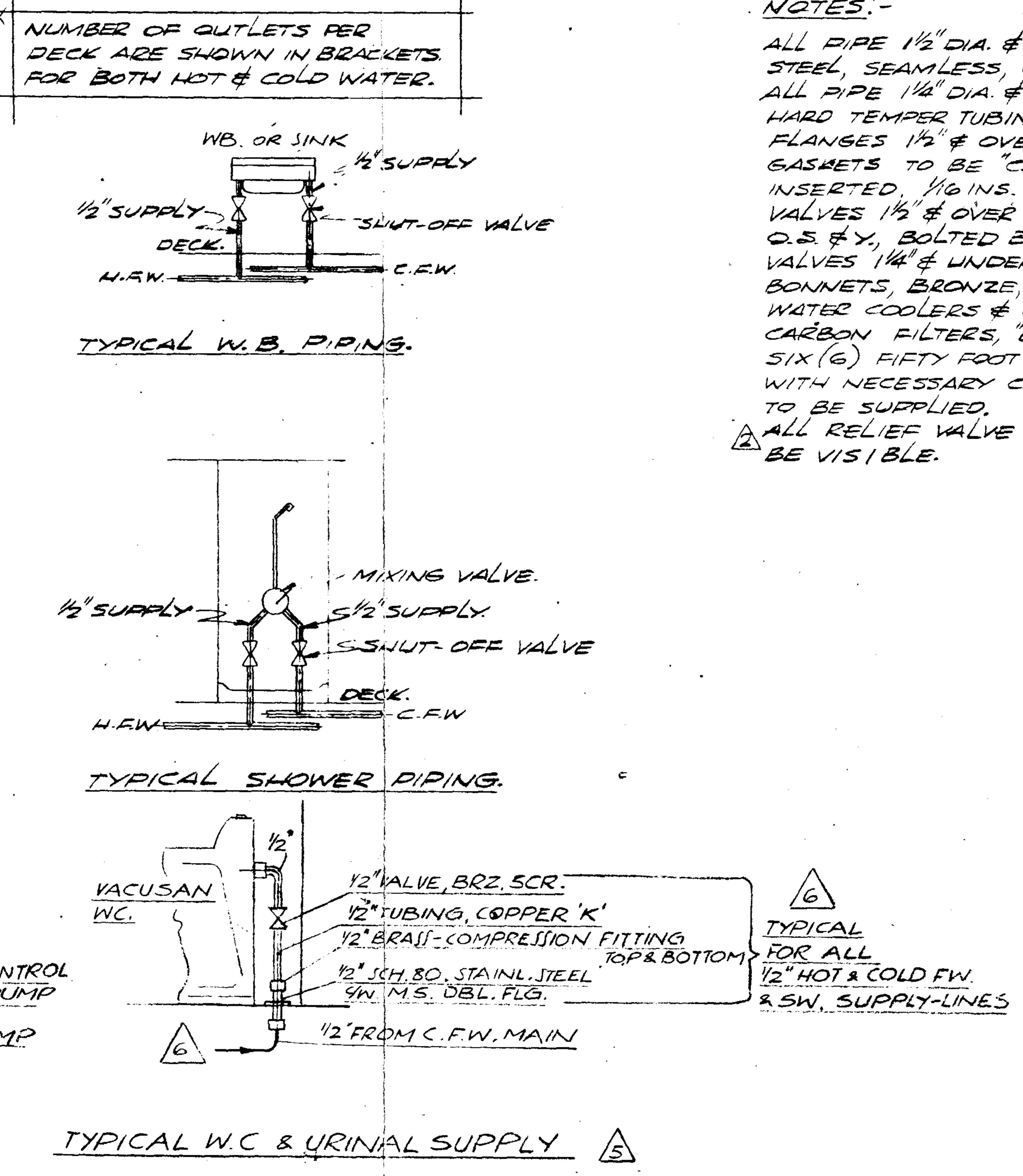

NOTES:-

ALL PIPE 1½" DIA. & OVER TO BE A.S.T.M. A53-73T "GR. A" STEEL, SEAMLESS, GALVANIZED.
ALL PIPE 1¼" DIA. & UNDER TO BE COPPER "TYPE K" HARD TEMPER TUBING WITH COMPRESSION FITTINGS.
FLANGES 1½" & OVER A.S.A. 150 LB. FORGED STEEL, GALV.D
GASKETS TO BE "CRANE" OR EQUAL, "GREY" RUBBER CLOTH INSERTED, 1/16 INS. THICK.
VALVES 1½" & OVER TO BE TO SPEC. C.S.A. B-109-1958 O.S. & Y., BOLTED BONNET, BRONZE, FLANGED 150 LBS.
VALVES 1¼" & UNDER TO BE C.S.A. B-109-1958, UNION BONNETS, BRONZE, SCR.D - 250 LBS.
WATER COOLERS & GALLEY OUTLETS TO BE FITTED WITH CARBON FILTERS, "EVERPUR" OR EQUAL.
SIX (6) FIFTY FOOT LENGTHS OF 3" DIA. HOSE TOGETHER WITH NECESSARY COUPLINGS & ADAPTERS FOR FILLING TO BE SUPPLIED.
(2) ALL RELIEF VALVE OUTLETS TO BILGE, ENDS MUST BE VISIBLE.

3	221-720-1	DIAGR. COMPRESSED AIR
2	221-685-1	DIAGR. SANY SW. SERV. SYSTEM
1	221-680-3	HYPOCHLORINATING SYSTEM

REFERENCE DWGS.

FLOW RATES:- G.P.M. = 2.045 D²V

3" DIA. - 50/2.045 × 3.07² = 2.59 FT/SEC.
2½" " - 50/2.045 × 2.47² = 4.01 "
2 " - 50/2.045 × 2.07² = 5.71 "
1½" " - 50/2.045 × 1.61² = 9.43 "
1" " - 2/2.045 × 1.05² = 0.89 "
½" " - 2/2.045 × 0.62² = 2.54 "

LEGEND.
- GLOBE VALVE.
- S.D.N.R. VALVE.
- CHECK VALVE
- COMPOUND AND PRESSURE GAUGES.
- RELIEF VALVE.
- ELECT. IMMERSION HEATER.

QTY.	PUMP.	CAP'Y I.G.P.M.	MOTOR HP	R.P.M.
2	DOM. F.W. PRESSURE	50 / 50 P.S.I.	10	1700
2	HOT WATER CIRC.	35 / 50 P.S.I.	1/4	1700

BURRARD DRY DOCK CO. LTD.
SHIPBUILDERS * SHIP REPAIRERS * GENERAL ENGINEERS
NORTH VANCOUVER, B.C., CANADA

DIVISION: ENGINEERING
HULL 221 — JOB No. 680
OWNERS: M.O.T.

TITLE
DIAGRAM
H.&C. DOMESTIC FRESH WATER

APPROVALS	REPRESENT.V	DATE
D.S.S.		9/7/76
D.S.S.		3/3/77
NAT.L HEALTH DEPT.		14/4/77

DRAWN: W.S.
CHECKED: P.A.
APPROVED: [signature]
SCALE: —
DATE: 28/5/76
DWG. No. 221-680-1
REV. 11

HULL 222

No.	REVISION	BY	DATE
15	DISCHARGE TO FILLING LINES FOR P/P OUT & DRY DOCK USE	OAB	MAR '87
14	PURIFIERS CONNECTED TO MAIN DK FW SUPPLY '86	OAB	DEC '87
13	F.W. FILTER INSTALLED 87 HALIFAX REFIT.	OAB	DEC '87
12	LIQUID SERVICE TKS REMOVED '87 TRIDENT [illegible]	OAB	DEC '87
11	TYP. CONN. FOR PUMPS-PRIMING & FILL. TO LIQUID SERVICE TKS. ADDED	BDD	JUNE 78
10	REDRAWN	P.G.P.	JAN/78
9	2" F.W. LINE TO SPRINKLER TANK ADDED	BDD	NOV. 21/77
8	FEEDW. TK. FILL REVISED MAKE UP ADDED	B.D.D.	MAR 30/77
7	CHLORINATION & HOT-FW [illegible] & PUMPS CONNECTED TO MAN[illegible] 2"	B.D.D.	MAR 3/77
6	S.W.-EMERGCY. CONN. TO W.C. & URINALS DELETED. TYPICAL DECK PENETRATION SHOWN	B.D.D.	FEB 16/77
5	MAKE UP CONN. TO HEADER TKS., PURIF. [illegible] FW-FEED TKS. CONN. & SUPPLY TO W/C URINALS UPDATED	B.D.D.	JAN. [illegible]
4	[illegible] H.W. CIRC. PUMP ADDED	B.D.D.	DEC. 16/76
3	AIR VOLUME CONTROL MOD. TO SUIT TANK SUPPLIER.	B.D.D.	AUG 17/76
2	[illegible] D.S.S.	DSS	5/8/76
1	SUPPLY [illegible] TANK ADDED	B.D.D.	22/7/76

DISTRIBUTION

DEPARTMENT	QTY.	DEPARTMENT	QTY.	DEPARTMENT	QTY.
Owners	5	Yard Manager		Shipwright	
Classification		New Const. Supt.	1	Rigger	
Steamship Inspection		Outfit Supt.		Joiner	
NAT. HEALTH D	3	Repair Supt.		Pipe Fitter	4
		Steel Supt.		Machine Shop	
				Patternmaker	
Hull D.O.	1			Blacksmith	
Machinery D.O.	1	Loft		Sheet Metal	
Electrical D.O.	1	Plater		Electric Shop	1
Welding Engineer		Welder		Engine Fitter	

REFERENCE DRAWINGS
BOILER FEED SYSTEM. — 221-631-2
FIRE & WASH DECK SYSTEM. — 221-660-2
COMPRESSED AIR SYSTEM. — 221-670-2
SW COOLING SYSTEM. — 221-670-
HOT & COLD DOMESTIC FW DIAGRAM — 221-680-1
GREY WATER SYSTEM DIAGRAM — 221-731-1
NOTE:-
SANITARY S.W. SERVICE SYSTEM 685-1. AND PRE-CHLORINATION SYSTEM ARE INCLUDED IN THIS DRAWING.
PIPES IN E.R. 1¼" & ABOVE TO BE STEEL GALV. WITH FLANGES ALL OTHER PIPING TO BE COPPER 'K' TUBING. WITH COMPRESSION FITTINGS - SYSTEM TO BE TESTED HYD? TO 100. PSI.
DRAIN PLUGS TO BE FITTED AT LOW POINTS IN SYSTEM
VENT PLUGS TO BE FITTED AT HIGH POINTS IN SYSTEM
5 ISOLATING-V. FW. TO FEEDW. TANKS - ADDED BDD
4 1" VALVE ADDED TO HOT-FW. LINE FR. MAIN TO PURIFIER TK. BDD
3 ½" GREYWATER TK FLUSHING DELETED BDD
2 2" FW PIPE TO SPRINKLER TANK. ADDED. BDD
1 MODIFIED TO SUIT DSS. APPROVED DRGS. & LETTER ETC. DATED OCT/27/77. DSS.
No. REVISION BY DATE
DISTRIBUTION
HULL 222
BURRARD DRY DOCK CO. LTD.
SHIPBUILDERS • SHIP REPAIRERS • GENERAL ENGINEERS
NORTH VANCOUVER, B.C., CANADA
DIVISION ENGINEERING DEPT
HULL 221
OWNERS M.O.T.
TITLE
HOT & COLD DOMESTIC FRESH WATER
ISSUED AUG 11 1978
BURRARD DRY DOCK CO. LTD. ENGINEERING DEPARTMENT North Vancouver, B.C.
STARB'D
PORT
UPPER DECK
MAIN DECK
FRESH WATER TANK
SECTION LOOKING AFT
ELEVATION LOOKING TO STB.
ELEVATION LOOKING TO PORT
ELEVATION LOOKING TO PORT
PROPULSION MOTOR ROOM
PLAN AT 1'9" FLAT
PART PLAN AT MAIN DECK
SECTION LOOKING FWD.
PART PLAN AT FOUR LEVEL
GREY WATER TANKS

NOTE:- SEE SHEET NO.1 FOR REFERENCES AND OTHER DETAILS

No.	REVISION	BY	DATE
2	1/2" CW TUBING FOR FUTURE ICE MAKER ADDED.	BDD	MAR. 7/78
1	MODIFIED TO SUIT DSS APPROVED DRGS & LETTER DATED OCT/27/77	BDD	NOV 10th 77

DISTRIBUTION

DEPARTMENT	QTY.	DEPARTMENT	QTY.	DEPARTMENT	QTY.
Owners		Yard Manager		Shipwright	
Classification		New Const. Supt.	1	Rigger	
Steamship Inspection		Outfit Supt.		Joiner	
		Repair Supt.		Pipe Fitter	3
		Steel Supt.		Machine Shop	
				Patternmaker	
Hull D.O.	1			Blacksmith	
Machinery D.O.	1	Loft		Sheet Metal	
Electrical D.O.	1	Plater		Electric Shop	
Welding Engineer		Welder		Engine Fitter	

BURRARD DRY DOCK CO. LTD.
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NORTH VANCOUVER, B.C., CANADA

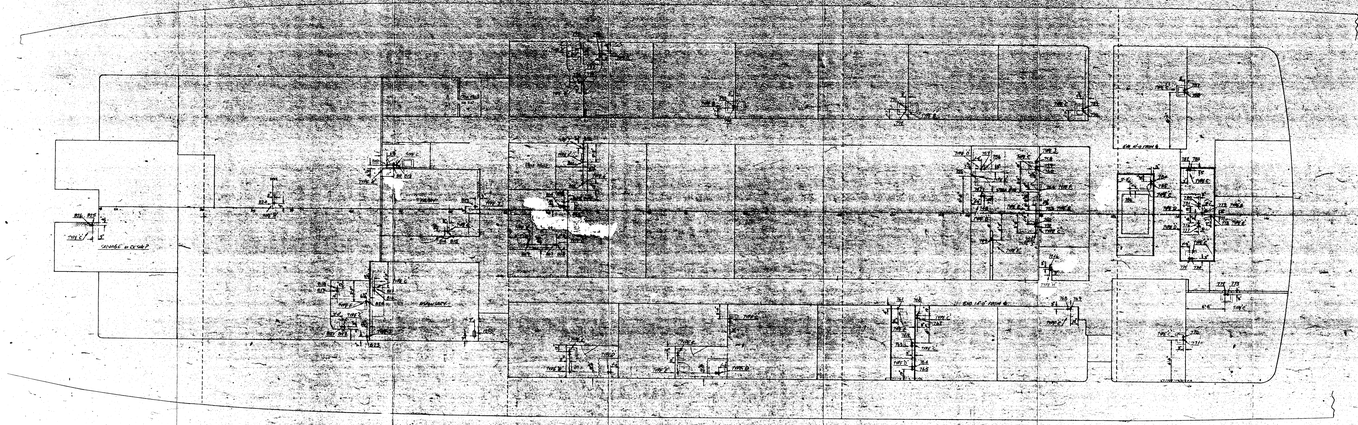
DIVISION: ENGINEERING DEPT. — HULL 227 — JOB No. 680-685
OWNERS

TITLE
MAIN DECK
HOT & COLD DOMESTIC FRESH WATER

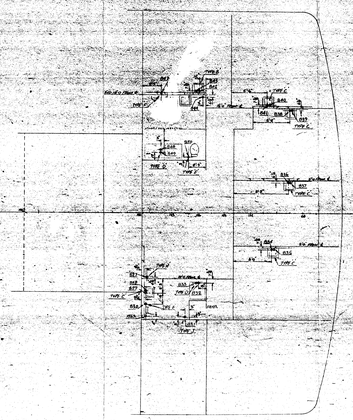
APPROVALS	REPRESENTS	DATE	
DSS		27-10-77	DRAWN E.J.L
			CHECKED
			APPROVED
			SCALE 1/4"=1 FOOT / DATE
			DWG. No. 221-680-2 SHT 2 OF 4

HULL 222

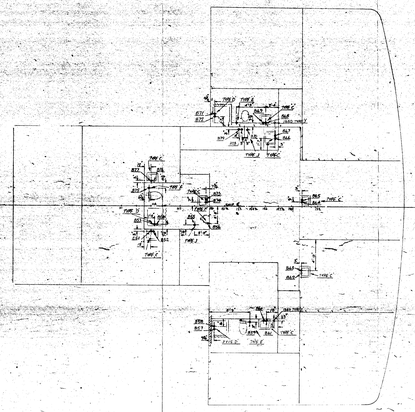
ISSUED
AUG 11 1978
BURRARD DRY DOCK CO. LTD.
ENGINEERING DEPARTMENT
North Vancouver, B.C.



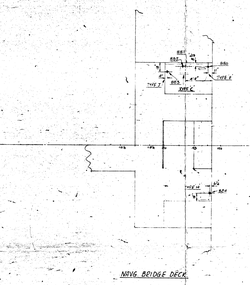
PLAN AT UPPER DECK



FLIGHT & BOAT DECK



OFFICERS DECK



NAVG BRIDGE DECK

No.	REVISION	BY	DATE

DISTRIBUTION

DEPARTMENT	QTY.	DEPARTMENT	QTY.	DEPARTMENT	QTY.
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	
[illegible]		[illegible]		[illegible]	

ISSUED
AUG 21 1972
BURRARD DRY DOCK CO. LTD.
ENGINEERING DEPARTMENT
NORTH VANCOUVER, B.C. CANADA

BURRARD DRY DOCK CO. LTD.
SHIPBUILDERS · DRY DOCKERS · ENGINEERS
NORTH VANCOUVER, B.C. CANADA

DIVISION: PURCHASING DEPT.
HULL 221 · JOB No. 6809-6805
OWNERS:

TITLE: UPPER DECK FOR SUPERSTRUCTS
HOT & COLD DOMESTIC FRESH WATER

DRAWN	DATE	DESIGN	DATE
[illegible]	23-11-72	[illegible]	[illegible]
		CHECKED	[illegible]
		APPROVED	[illegible]
		SCALE	1/4" = 1'-0"
		CHKD. No.	221-6805-4
		SUBSIDIARY	

HULL 222