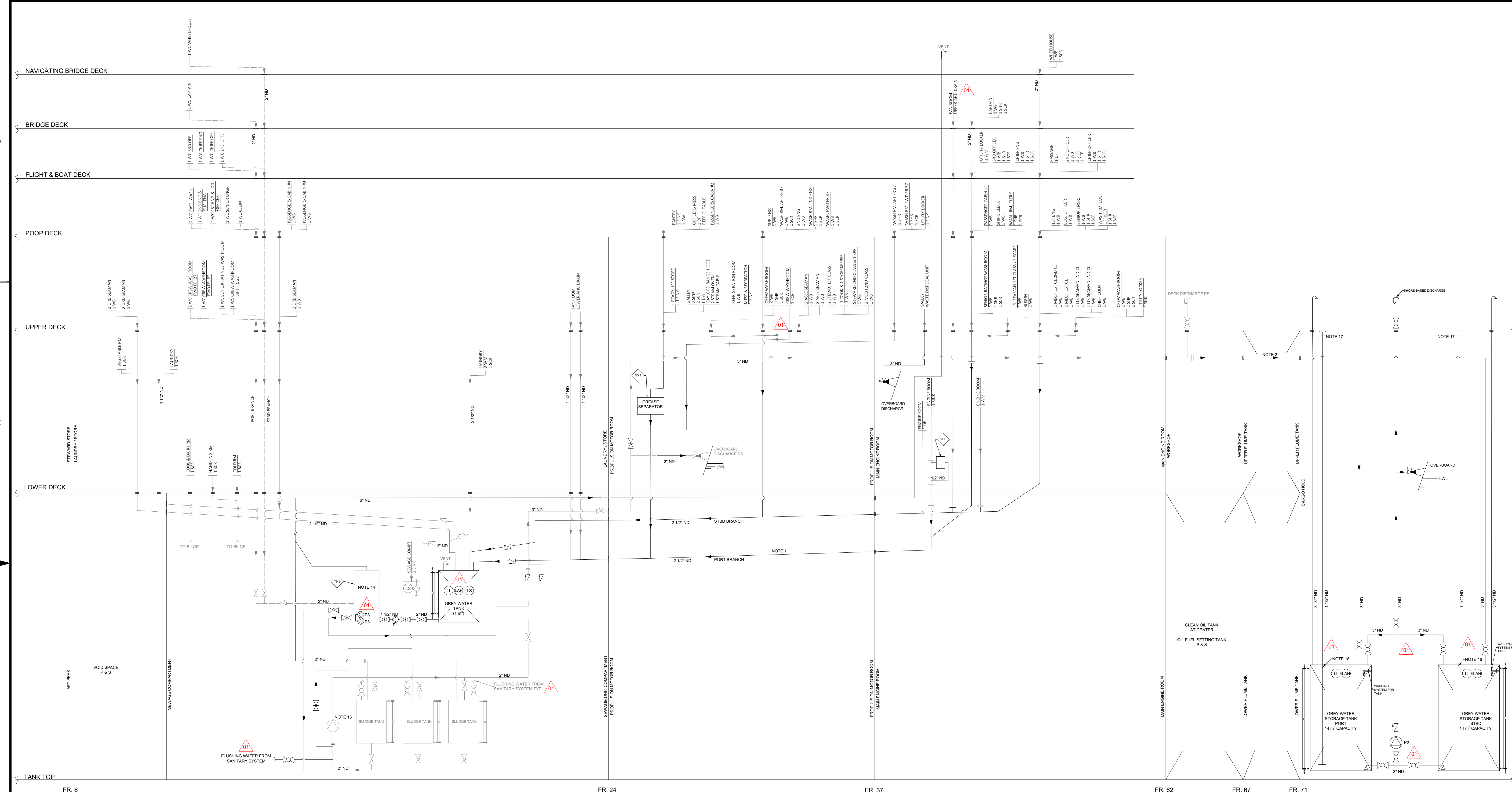


REFERENCE DRAWINGS			
AUTEUR / AUTHOR	DATE	TITRE / TITLE	ID
CANADIAN COAST GUARD	SEPT. 9 2021	BLACKWATER PIPING AND TOILET DIAGRAM - PROFILE	CMG05-342 - ME
CANADIAN COAST GUARD	NOV. 1 1994	CCGS GRIFFON GENERAL ARRANGEMENT	CMG05-111 -GA
GERMAN & MILNE INC.	NOV. 1998	BLACK AND GREY WATER SYSTEM	7328-817-01
CANADIAN COAST GUARD	JAN. 5 2022	SANITARY DISCHARGES	664-4085-11 REV 6

NOTES:

- NEW PIPING TO REPLACE EXISTING GREY WATER PIPING FROM ENGINE ROOM WASHING MACHINE AND SINK.
- PIPE THICKNESS THROUGH FLUME TANK MUST BE AT LEAST 7.1 MM.
- THE SLOPE MUST BE AT LEAST 1:50 FOR GREY WATER DRAINS AND ALL VENTS.
- ALL MATERIAL, WORKMANSHIP, TESTING, AND INSTALLATION MUST BE IN ACCORDANCE WITH THE LATEST RULES AND REGULATIONS OF TRANSPORT CANADA, AND THE SATISFACTION OF THE OWNERS.
- CLEANOUTS MUST BE ARRANGED AT THE END OF ALL STRAIGHT OR DIAGONAL RUNS AT BENDS GREATER THAN 150 DEGREES AND WHEREVER NECESSARY TO ALLOW PROPER CLEANING OF SYSTEM.
- ALL DRAINS LINES MUST HAVE PROVISION TO BE PURGED BY COMPRESSED AIR
- VALVES FLOW AREA MUST BE EQUAL TO ITS PIPE.
- PIPES MUST BE PROPERLY FIXED ACCORDINGLY TO ASTM F708 AND PIPE RUNS MUST BE DESIGNED FOR EASY REMOVAL.
- ALL SYSTEM ELEMENTS MUST BE READILY ACCESSIBLE FOR MAINTENANCE AND OPERATION.
- PIPE LINES MUST BE RUN IN SUCH A MANNER TO PREVENT AIR TRAPS.
- GASKET MATERIAL MUST BE EPDM COMPATIBLE WITH THE FLUID CONTENT OF THE PIPING.
- ALL OVERBOARD DISCHARGE VALVES MUST BE CLOSABLE AND ACCESSIBLE TO PREVENT DISCHARGE IN CERTAIN NAVIGATION.
- PLASTIC PIPING MUST COMPLY WITH APPLICABLE TRANSPORT CANADA RULES FOR SMOKE TOXICITY AND FIRE RESISTANCE.
- ALL CONNECTIONS TO THE SEWAGE TREATMENT PLANT MUST BE ADJUSTED FOR THE SELECTED UNIT.
- EXISTING SLUDGE PUMP.
- GREY WATER DOSING PUMP MUST ALSO BE CAPABLE OF TRANSFERRING SLUDGE FROM TANK BACK INTO THE STP FOR RE-PROCESSING IF NEEDED.
- SOUNDING PIPES TO BE FLUSH WITH UPPER DECK WITH A SOUNDING FITTING WITH BRASS PLUG. STRIKER PLATES ARE TO BE FITTED UNDER ALL SOUNDING PIPES.
- 3/8" DIAMETER HOLES TO BE DRILLED IN THE SOUNDING PIPE AS HIGH AS PRACTICABLE TO TOP OF TANK.



MECHANICAL SYMBOLS

	90° STORM VALVE		REDUCER		ULTRAVIOLET DISINFECTION SYSTEM		EXISTING PIPE LIMIT
	BALL VALVE		BELLMOUTH TANK SIDE SUCTION		LEVEL ALARM HIGH		GREY WATER PIPES (NEW)
	BUTTERFLY VALVE		MAGNETIC SIGHT GLASS		LEVEL INDICATOR		GREY WATER PIPES (EXISTING)
	DIAPHRAGM VALVE		PIPE CAP WITH CHAIN		LEVEL SWITCH		BLACK WATER PIPES
	STRAIGHT STORM VALVE WITH CONTROL SCREW		GOOSE NECK VENT WITH SCREEN		PUMP		
	SWING CHECK VALVE		INJECTION NOZZLE		WATERTIGHT BULKHEAD OR DECK PENETRATION		
	GATE VALVE		SOUNDING FITTING WITH BRASS PLUG		CAP		

LEGEND

CM	COFFEE MACHINE	REFRIG.	REFRIGERATION
CPVC	CHLORINATED POLYVINYL CHLORIDE	SCR	SCUPPER
DF	DRINKING FOUNTAIN	SHR	SHOWER
DPW	DISH WASHER	STBD	STARBOARD
EPDM	ETHYLENE PROPYLENE DIENE MONOMER RUBBER	TYP	TYPICAL
FR	FRAME	WB	WASH BASIN
LWL	LOADED WATER LINE	WC	WATER CLOSET
ND	NOMINAL DIAMETER	WM	WASHING MACHINE
PS	PORTSIDE		

EQUIPMENT

ITEM NUMBER	DESCRIPTION	QUANTITY	CAPACITY	NOTE
GS 1	GREASE SEPARATOR WITH HEATING ELEMENT	1	29 PERSONS (WITHOUT GARBURATOR)	MAX. TANK DIMENSIONS: WIDTH 750 mm, LENGTH 1200 mm, HEIGHT 700 mm
TP 1	BLACK AND GREY WATER TREATMENT PLANT	1	6 m ³ /DAY	
SI 1	SOLID INTERCEPTOR	1	MINIMUM 10 l/MIN	FOR SEDIMENTS
P1	GREY WATER DOSING PUMP (NOTE 16)	1	10 l/MIN @ 0.5 bar	VARIABLE SPEED PROGRESSING CAVITY
P2	DISCHARGE PUMP	1	500 l/MIN @ 1.2 bar	
P3	EFFLUENT DISCHARGE PUMP (INCLUDED WITH STP)	2	ACCORDING TO STP SPECIFICATIONS	

PIPE SCHEDULE

ITEM	SIZE	SCHEDULE	MATERIAL	FITTINGS	DEMOUNTABLE JOINTS	REMARKS
VACUUM BLACK WATER, GRAVITY GREY WATER & EFFLEUNT DISCHARGE EXCEPT IN TANKS AND CARGO HOLD	ALL	SCH 80 U.N.O.	CPVC	SOLVENT CEMENTING	UNIONS	NOTE 13
EFFLUENT DISCHARGE IN TANKS AND CARGO HOLD, SIDE SHELL CONNECTIONS, VENT, SOUNDING	ALL	SCH 80 U.N.O. NOTE 2	CARBON STEEL SMLS ASTM A 106, GR. B, ANSI B36-10	BUTT WELD	FLANGES	GALVANIZED

VALVE SCHEDULE

TYPE	SIZE	MATERIAL	CONNECTION	PRESSURE CLASS
CPVC PIPING	ALL	CPVC	THREADED	150 psi
ALL OTHER PIPING	ALL	CAST STEEL	FLANGES	PN10

01	CREW COMMENTS	GD	Feb 04 2022
rev	description	by	date
Asset - Actif			
CCGS GRIFFON			
Drawing - Dessin			
GRIFFON BLACK AND GREY WATER TREATMENT SYSTEM			
designed - conception date GABRIEL DEMERS 2022-02-04			
drawn - dessin date ALLISON PROCHER 2022-02-04			
checked - vérifié date GABRIEL DEMERS / VALÉRIE HÉBERT 2022-02-04			
approved - approuvé date GABRIEL DEMERS 2022-02-04			
abs # / description scale - échelle 16-D Waste Water Collection, Treatment and Discharge Systems NTS			
drawing no. / no. dessin sheet-feuille rev/rev G005-16-D 01/01 01			