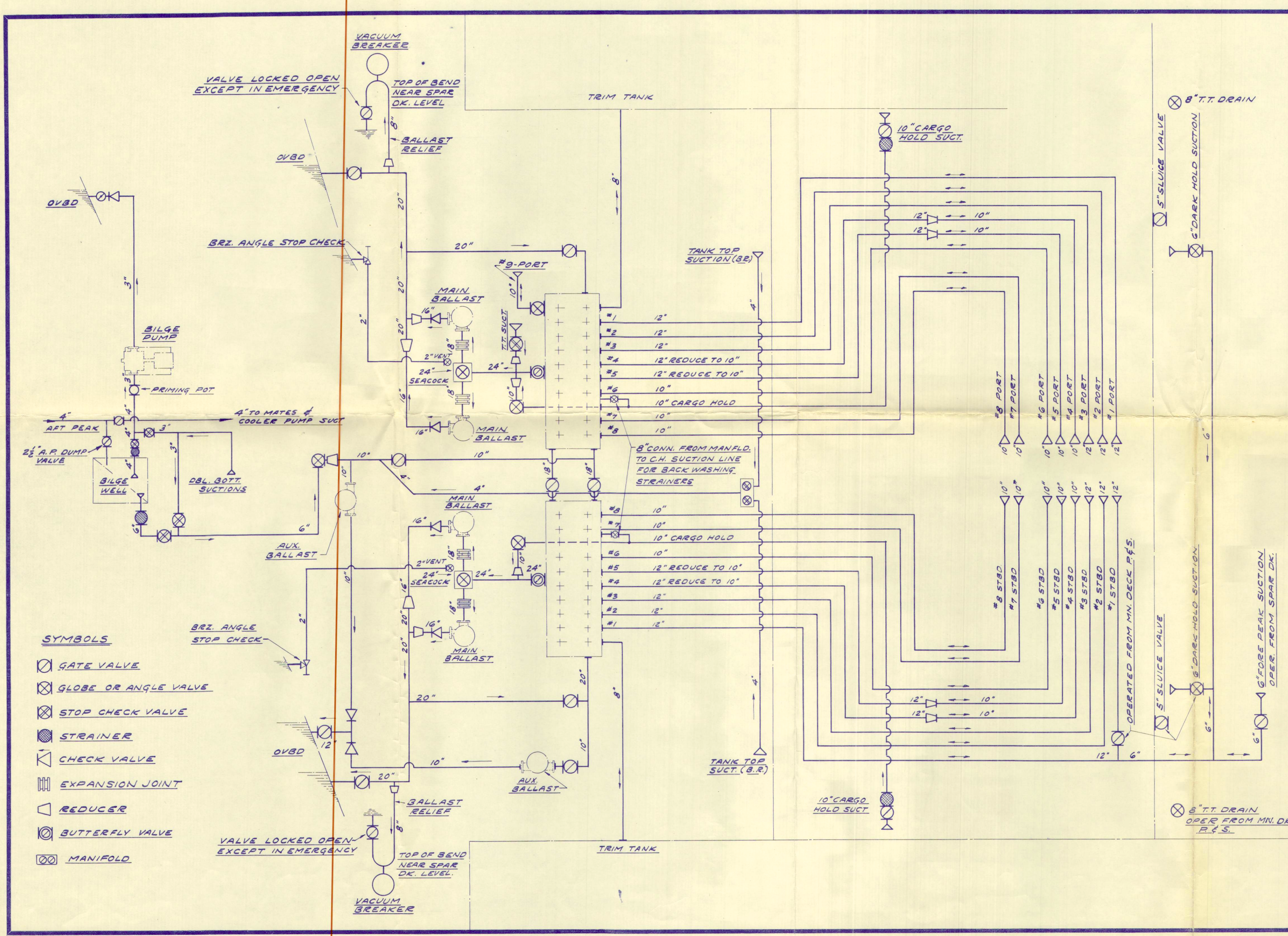




- SYMBOLS**
- GATE VALVE
 - GLOBE OR ANGLE VALVE
 - STOP CHECK VALVE
 - STRAINER
 - CHECK VALVE
 - EXPANSION JOINT
 - REDUCER
 - BUTTERFLY VALVE
 - MANIFOLD

MATERIAL SPECIFICATIONS	
PIPE	14" O.D. & ABOVE - SEAMLESS CARBON BLACK STEEL PIPE A.S.T.M. A-53 12" THRU 6" - ELECTRIC RESISTANCE WELDED BLACK STEEL PIPE A.S.T.M. A-53 4" & BELOW - BUTT-WELDED BLACK STEEL PIPE A.S.T.M. A-53 SHELL CONNECTIONS - EXTRA HEAVY BLACK STEEL PIPE
VALVES	12" & ABOVE - 50 LB. CAST IRON FLANGED 10" TO 2 1/2" - 125 LB. CAST IRON FLANGED 2" & BELOW - 150 LB. BRONZE SCD. UNION BONNET SHELL VALVES - 2 1/2" & ABOVE - 150 LB. CAST STEEL OR BRZ. FLGD. 2" & BELOW - 150 LB. BRZ. SCD UNION BONNET
FITTINGS	2 1/2" & ABOVE - SCH. 40 BUTT-WELDED BLACK FORGED STEEL OR 125 LB. CAST IRON FLGD. 2" & BELOW - 125 LB. CAST IRON SCD.
FLANGES	12" & ABOVE - 50 LB. STEEL SLIP-ON WELDED 10" & BELOW - 150 LB. FORGED STEEL OR 125 LB. CAST IRON.

John T. Carter 4-18-57

1 COLUMBIA TRANS. CO		301		
NO.	NAME		HULL	ENG. S.Y.O.
CONSTRUCTION LIST				
GLEW HULL #301				
DIAGRAM - BILGE & BALLAST SYSTEM ^{1/5} FITZGERALD				
Great Lakes Engineering Works				
DRAWN HIDER	DETROIT, MICH.		APPROVED	
TRACED DEBRUIN	ENGINEERING DEPT.		APPROVED	
CHECKED <i>[Signature]</i>	SCALE		DATE 15-FEB-57	