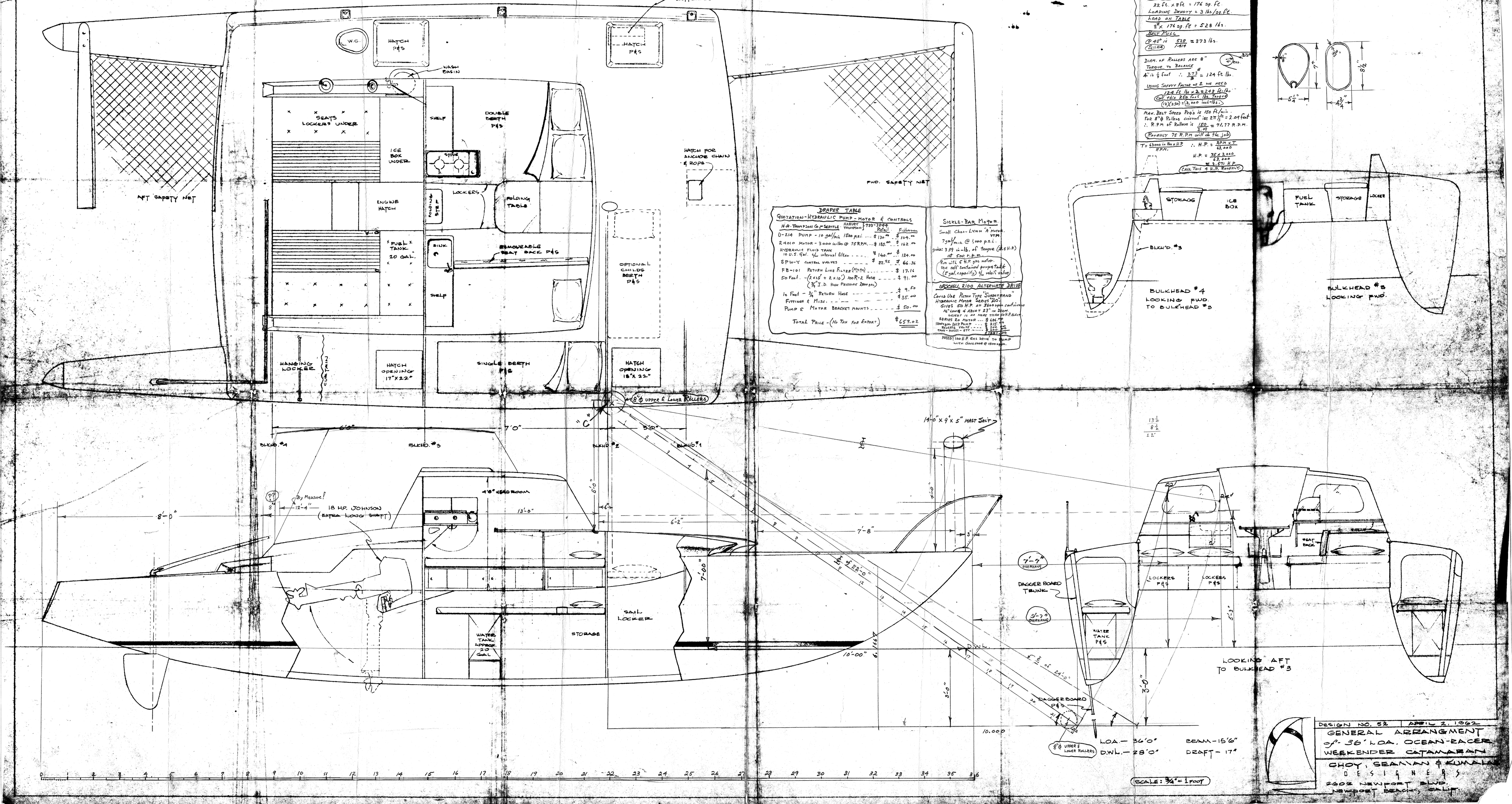
KILLEBREW TUBESUPPLY – SEATTLE (762-3400)

Series 60-63 Alum Alloy 8" Φ o.d. Irrigation Pipe – 1/16" = .062" sidewall @ 8" 29/ft × 20 ft = 580.40
Best Marine Alloy is 5086 by "Reynolds" 1/8" = .125" " @ 8" 7/ft × 20 ft = 130.20



DRAPER TABLE

QUOTATION – HYDRAULIC PUMP – MOTOR & CONTROLS

H.P. THOMPSON Co. SEATTLE	HARVEY THOMPSON 793-3242 Retail	Fishman
U-214 PUMP – 10 gal/min 1500 p.s.i.	$ 132.00	$ 104.00
R4010 MOTOR – 3000 in-lbs @ 75 RPM	$ 180.00	$ 142.00
HYDRAULIC FLUID TANK 10 O.S. Gal. 1/2 internal filter	$ 160.00	$ 124.00
SPW-Y CONTROL VALVES	$ 82.95	$ 66.36
FB-101 RETURN LINE FILTER (MICRO)		$ 17.16
50 Feet – (2 X 15' + 2 X 10') 100 R-2 Hose (3/8" I.D. High Pressure 2000 psi)		$ 91.00
16 Feet – 3/4" RETURN HOSE		$ 9.60
FITTINGS & MISC.		$ 35.00
PUMP & MOTOR BRACKET MOUNTS		$ 50.00
TOTAL PRICE – (No Tax for Export)		$ 659.02

SICKLE-BAR MOTOR

Small Chev. LYNN "A" motor. VTM
7 gal/min @ 1,100 p.s.i.
gives 3.97 in-lbs. of Torque (2 H.P.)
at 500 R.P.M.
Run with 6 H.P. gas motor.
Use self contained pump Tank (Fuel capacity) 1/4 relief valve

UNIVERSAL 2100 ALTERNATE DRIVE

Could Use Piston Type "SUNDSTRAND" Hydraulic Motor Series 20.
Gives 50 H.P. at 2500 rpm continuous
16" long & about 23" in diam.
weight is no more than P.R. Elec.

Series 20 Motor	$ 696.00
1500 psi Gear Pump	$ 245.00
Tank – Small – 5 gal.	$ 250.00
Tank – Large – 8 gal.	$ 300.00
	$ 1,491.00

NEED: 1500 H.P. Gas Drive to pump with Governor @ 1500 rpm.

HORSE POWER, R.P.M. & BELT PULL

TABLE AREA.
22 ft. × 8 ft. = 176 sq. ft.
LOADING DENSITY = 3 lbs/sq. ft.
LOAD ON TABLE
3# × 176 sq. ft. = 528 lbs.

BELT PULL
@ 45° is 528/1.414 = 373 lbs.

DIAM. OF ROLLERS ARE 8"
TORQUE TO BALANCE
A" is 1/3 foot ∴ 373/3 = 124 ft. lbs.
USING SAFETY FACTOR of 2 we need
124 ft. lbs × 2 = 248 ft. lbs.
Call this 250 feet lbs. TORQUE
(12 × 250) = (3,000 inch-lbs.)

MAX. BELT SPEED PROB'S is 150 ft./min.
For 8" Φ Rollers circumf. is 2π 8/12 = 2.09 feet
∴ R.P.M. of Rollers is 150/2.09 = 71.77 R.P.M.
Probably 75 R.P.M. will do the job

To 3000 in lbs × H.P. / R.P.M. ∴ H.P. = RPM × T / 32,000
H.P. = 75 × 3,000 / 32,000 = 3.671 H.P.
Call this 4 H.P. Probably