CONSTRUCTION SPECIFICTIONS

FOR THE

H.T. GOZZARD 53

MOTOR YACHT

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Gozzard Yachts
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Prepared for: GOZZARD YACHTS

PRINCIPAL NUMBERS (Preliminary)

LENGTH OVERALL	55’ – 6”
LENGTH ON DECK	52’ – 3”
LENGTH AT WATERLINE	49’ – 5”
BEAM	16’ – 0”
DRAFT	4’ – 4”
DISPLACEMENT	56000 lbs. Full Load
MAXIMUM HEIGHT ABOVE WATER	TBA approx. 18’ 0”
MINIMUM HEIGHT ABOVE WATER	TBA approx. 13’ 6”
FUEL CAPACITY	880 GALLONS
RANGE AT CRUISE. (Estimated. 15kt.)	560 N.MILES
WATER CAPACITY	400 GALLONS
WASTE CAPACITY	100 GALLONS
BATTERY CAPACITY	700 AMP HOURS at 24Volts
ENGINES – 2 x Cummins 450CE	480 HP each
BOW THRUSTER	11HP at 24volt

SPEED AS TESTED ON “DAWN ZEPHYR” WITH STABILIZERS, ½ LOAD – FUEL BURN ACTUAL
(equipped with twin Cummins 450Cs @ 450 HP)

8 Knots	1050RPM	0.8 Gallons per Nautical Mile
11 Knots	1600RPM	1.07 Gallons per Nautical Mile
16 Knots	2200RPM	1.6 G/NM
18 Knots	2400RPM	1.8 G/NM
20 Knots	2650RPM	2.0 G/NM
TOP SPEED 21 Knots	2700RPM	

EQUIPMENT SPECIFCATONS

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Presenting the GOZZARD 53 Motor Yacht

1 SPECIFICATION DETAILS

1.1 Contract

The contract shall include the Preliminary Drawings and sketches and a detailed specification represented by this document.

1.2 Changes, upgrades or deletions

Once the contract is formalized, these specifications will form the base to which all future changes will be compared. A full disclosure Special Price Option Form (SPOF) will be the mechanism used to determine any additional costs or credits to the project and will include the actual costs involved, labor charges, overhead factor and profit margins (which are to be agreed to before hand).

1.3 CONCEPT and DESIGN

The concept is based on the original Gozzard 51 MY "Dawn Zephyr" (2001). Design alterations are intended to enhance performance and livability and are not intended in any way to lessen the quality of the project. Modifications to the original equipment specification list are intended to better represent your intended use and stay within your overall project budget.

1.4 HULL

After a full season of extensive testing on "Dawn Zephyr", we were able to create the next generation of the design. As the new design was not limited to a specific LOA, the overall length was increased by 2 feet (while still maintaining the same interior concept). The bow sections of the design were given a finer entry and a hollow was introduced to the run aft to reduce the need for trimming the boat out at speed. In addition a full-length splash chine was incorporated to reduce spray. The swim platform was incorporated into the hull to give a more modern look and increase the boat's designed water line length, which will result in a modest increase in hull speed.

1.5 EXTERIOR and DECKS

To compliment the added length, the rake of the windshield, Portuguese bridge, and other details was increased to 40 degrees. This will reduce wind drag at higher speeds while providing a fresh look. The roof of the pilothouse has also seen a style change with the original hard lines giving way to a softer Euro look that blends better with the much larger flybridge.

1.6 INTERIOR

The main reason for increase in overall length was to free up parts of the interior. The extra length provided the layout more room in areas that we felt were a little tight on the original concept. These improvements included a redesign of the pilothouse and an increase in engine room access. The entire layout remains a custom design allowing the customer tailor the concept to their needs.

2. STRUCTURAL

2.1 General

The builder's workmanship is to be done at a level equal or superior to that exhibited by a current Gozzard Yacht (2003 Vintage). All FRP calculations are based on a hand lay-up of alternating layers of glass mat and a knitted double bias E-Glass cloth using marine grade resins. All laminated schedules are recommended and approved by the material suppliers and are based on existing technology and known successful examples of comparably sized vessels.

2.2 Hull Construction

The hull will be molded using the "ATC" Bead and Cove method on a male form. The laminate, as with all Gozzard's, will be a cored sandwich construction. The "ATC" A550 (freeboard) and A600 (bottom) Core Cell foam core increases panel stiffness, strength, impact resistance and

sound/thermal insulation while maintaining an excellent weight to strength ratio. A marine grade "Cook" DCDP blend resin is used throughout except for the outer most layers where Hydrex 100 Vinylester resin is substituted for superior osmotic resistance below the waterline and higher heat distortion properties above. All fairing compounds are either Vinylester or epoxy based and are kept to a maximum thickness of 1/8".

The coring material is eliminated and replaced with a solid glass laminate in the areas of the sheer line, centerline, keel, rudderpost, and thru-hulls.

The solid and cored laminate areas are built up to approximately the following thickness:

AREA	TOTAL THICKNESS
Centerline – forward of keel	1.125"
Centerline – aft of keel	1.000"
Keel	1.25"
Sheer – above core	0.875"
Hull Flange	0.5"
Thru-hull platforms	0.75"
Engine Bearer – cored A1200	0.5625"
Hull below water – cored 1.25"	1.875"
Hull above waterline – cored 1"	1.5"

To accommodate the installation of stabilizers, the area just aft of station 6 located below the waterline and above the chine will have the core removed in lieu of a solid glass laminate. This area will also be further reinforced with extra laminates to eliminate hull flex in this area should stabilizers be installed.

Finish above the waterline is "Awlgrip" in any normal "light" color and style. Below the waterline is finished with 15 mils (dry) of "Inter-Protect" 2000 and the bottom anti-fouling paint of your choice.

2.2.1 Option:: Dark colored hull with the limited edition small upper accent stripe

2.2.2 Option: Anti-fouling Paint (MICRON CSC)

2.2.3 Option: Stabilizer System - RS600 Gyro Roll Fin Stabilizer System. Hydraulic power is provided by a PTO transmission mounted pump custom attached to the starboard engine. Water cooling for the hydraulic system is supplied by a direct single belt drive Jabsco #1673-1001 bronzed impeller pump custom mounted to the starboard engine. A ¾" intake thru-hull with a Perko bronze strainer supplies the water.

2.3 Deck Construction

The decks are molded FRP sandwich construction with ½", ¾", 1"and 1½" A500 Core Cell. In areas where equipment is to be installed, the coring material is eliminated creating a solid laminate. The outer and inner skins are built up to a thickness of approximately 1/4". The deck flange is solid and built up to ½" in thickness. The hull deck joint is bedded in 3M 5200. A teak cap rail finishes the joint

2.4 Rudder(s)

The rudder shaft is 2" diameter solid stainless steel. The rudders are FRP custom built from A600 Core Cell with stainless webs welded to the SS shaft. They are designed to be more hydrodynamically efficient than available bronze foils. Upper and lower bearings are installed with a shaft seal.

2.5 Skeg

The integral skeg is a solid, heavily reinforced FRP construction.

2.6 Bulkheads/Stringers

All main or structural bulkheads and stringers are constructed using cored FRP laminated for superior strength versus weight and total rot resistance. All bulkheads are glassed to the hull and deck before the interior trims are installed. No wood structures are used in the bilge areas. Where possible all wooden furnishings, shelves, seat tops, dividers, etc., are glassed to the hull or deck to minimize unsupported panel size.

2.7 Rub Rails and protection

The stainless steel capped primary rub rail is designed 6" wider than the roof line allowing the boat to be docked against large tall pilings without damaging the edge of the roof in most conditions. The primary rail starts at the transom and continues forward about ¾ of the boat's length. Smaller stainless steel chafe strips are installed on the edge of the main deck, fore deck and roof to protect against abrasion. A stern rub rail further protects the transom and corners when backing into a slip.

3. DECK

3.1 General

The deck, like the hull is finished with Awlgrip linear polyurethane paint. All horizontal surfaces (walkways) are coated with Awlgrip non-skid, a sand type anti-skid surface. The aft deck is finished with teak decking for improved durability, excellent wear and dirt resistance. The teak decking is glued to the deck (and together) with Sika-Flex 290 Deck Caulk keeping external screw fasteners and plugs to a minimum.

Teak Decking is provided also on the side decks and bridge decks.

3.1.1 Option: Teak decking on fore deck.

3.2 Exterior Details

- Port and starboard main deck boarding gates with keepers
- Port and starboard Portuguese Bridge deck boarding gates with keepers
- Teak cap rail
- Swim platform boarding ladder
- Stainless steel rub strake on rub rail, cap rail and upper deck edge
- The FRP antenna arch is hinged for low clearance bridges.

3.2.1 Option: Exterior finish "Cetol"

3.3 Stainless Weldments

All handrails and pulpits are manufactured using 316 Stainless Steel.

- A welded stainless steel bow pulpit is fitted above cap rail. The rail extends from the Portuguese Bridge and encompasses the fore deck including the anchor sprit. The bases are mounted to the side of the bulwark (not on the teak) with two side legs mounted on the sprit.
- Install handrails over gates.
- Stainless steel hand rail on upper deck with lower rail.
- Stainless steel ladder with hand grip for upper deck access
- Folding upper deck ladder.

3.4 Dinghy and Handling

Custom dinghy chocks can be manufactured to secure and store the customer provided 12' rigid bottom inflatable dinghy complete with 40 HP Outboard on the upper deck aft of the Flybridge. The swinging aluminum davit incorporates an electric winch and is designed to handle the 570 pounds of dinghy and outboard.

3.4.1 Option: Inflatable dinghy

3.4.2 Option: Outboard Motor

3.4.6 Option: Life Raft Storage.

3.5 Deck Hardware

- Search light with dual station remote includes flood and spot light control
- Ritchie compass at both helm stations, lower compass is a SP5C
- Three 2-speed wipers with windshield washer
- Shore cable TV and phone connection – cord not supplied
- 10 custom hawse pipes and cleats capable of handling 2 - ¾" mooring lines located at the bow, stern, mid forward, mid aft and transom.
- Two helm seats with fold down seats are supplied for the flybridge
- Dual trumpet horn

3.6 Anchoring Systems

The vessel is equipped to handle 2 bow anchors. Both the main and secondary anchors are held in stainless steel self-launching anchor roller assemblies. The primary anchor is self-launching so it can be deployed in an emergency from either helm station. Both anchor rode lockers are drained and are equipped with dead end attachment points. A Maxwell 2200 vertical electric windlass with foot controls forward and remote switch at both steering stations is used for anchor handling. Two chain locks are mounted on the sprit for securing the chain separately to the windlass.

Fresh water wash down with hose is positioned conveniently in the bow locker. Provision is made for possible installation of a seawater wash down system.

3.6.1 Option: *Primary anchor rode 200' of 3/8" HT galvanized chain*
3.6.2 Option: Primary Anchor with swivel
3.6.3 Option: Secondary Anchor with swivel
3.6.4 Option: Secondary anchor rode
3.6.5 Option: Anchor mooring bridal with Devils Claw Attachment
3.6.7 Option: Sea water Wash system
3.6.8 Option: Stern Anchor with rode and stern deck pipe.

3.7 Ventilation

The forward cabin is provided with 2 overhead stainless steel fore deck hatches (large enough to escape through). There are 9 stainless steel opening ports mounted in the hull side. Both heads/showers have 12 volt powered vents.

The main saloon area is provided with 4 sliding marine grade windows with 2 similar windows in the pilothouse. All hatches and opening ports are equipped with screens.

3.8 Companionway and Doors

Both pilothouse doors are FRP (over wood) that slide storing against the pilothouse side when open. The aft cabin/deck door slides open from the center and stores open outboard. The deck hatch to the upper deck hinges closed to provide a rain resistant aft deck.

3.9 Swim Platform

The swim platform is built in as part of the hull. A folding swim ladder is stored in a storage locker built into the transom. The platform surface is finished with a non-skid surface.

4 MECHANICAL

4.1 Main Engine

The right to review propulsion options is included and any cost difference will be based from the following standard engine selection.

- 2 – Cummins 480CE 6-cylinder marine electronic diesels rated at 450 HP each at 2600 RPM.
- Turbo charged with after-cooler.
- Heat exchanger cooling system
- 6" wet exhaust to muffler and 8" to transom
- Walker Air Sep air cleaner package

- Dual Station 24 Volt analog instrument panels complete with VDO Blue Line premium gauges. Tachometer, hour meter, oil pressure, voltmeter and water temperature with an audible alarm for low oil pressure, low voltage and high water temperature.
- Dual station digital instruments c/w backup throttle control
- 24 Volt Delco Remy 42 MT starters
- 24 Volt 70 Amp 21SI type 200 alternator
- 120 Volt 1000 watt block heater
- Water connection for cabin hot water
- Perko clear glass bowl type intake strainers

4.2 Drive Train

- The transmission is a ZF marine electronic gear model 280A with 1.98:1 reduction ratio
- Evolution Drive Shaft System
- 4 – Bladed bronze props 26" diameter by 25" pitch.
- Custom made stainless steel "V" struts.

4.3 Engine Room and Equipment Room

The equipment room, just forward of the engine room, houses:

- Fuel tanks.
- Fuel distribution manifold and filters with a transfer pump
- Batteries
- And miscellaneous ships systems

As with the engine room, all efforts will be made to provide maintainable, easy to clean, area that centralizes most systems.

The engine room is heavily sound insulated with access from the equipment room and from the lazerette under the aft deck. Containing the main engines, generator and engine-related systems, all efforts will be made to facilitate easy access for maintenance and repair. Dual overhead latched hatches can be removed for full engine access. A 7" Vetus exhaust fan is installed and switched from the pilothouse so hot air can be removed after shutdown.

The engine room is equipped with an automatic fire control system with remote indication lights and manual discharge control.

- Windows in engine room doors.

4.3.1 Option: *Install engine oil change system for both main engine and the genset.*

4.4 Steering System and Controls

The engines are controlled using dual station Mathers Micro Commander single lever shifters with hand held remote. System includes engine synchronizer, slow and fast idle control. The system also includes a standby throttle control. The hand held remote is full function and includes thruster control.

- Steering system is by Teleflex – Capalano II hydraulic dual station. Variable rate pumps from 5 to 2.5 turns lock to lock.
- A 28" stainless steel destroyer type steering wheel is used at main helm with a 24" wheel in the flybridge.
- Bennett Trim Tabs with dual station control.
- Bennett Trimdicators are installed for the main helm station.

4.5 Thru-Hulls and Seacocks

Where possible all thru-hulls below the waterline have Forespar Marlon ball type seacocks. Made from a re-enforced plastic, these valves are totally impervious to corrosion and electrolysis. Installed with ease of access in mind each valve has an independent function and is clearly identifiable (tagged). Manufactured by Shields, all hose are USCG approved for the particular application and are double clamped.

4.6 Refrigeration

- A single full size Nova Kool 8 cu. ft. refrigerator/freezer is located in the galley. It will run on either 24VDC or 120VAC.

4.6.3 Option: *U-Line icemaker*
4.6.4 *Option: Plumb icemaker into Seagull water filter.*
4.6.5 *Option: Extra 4.3 cu. ft. refrigerator/freezer*

4.7 Pumps

Located at the aft end of a heavily raked keel are the main bilge water pickups. A manual hand operated Whale Gusher 10 is positioned with access for pumping from the aft deck. The main electric bilge pump (Rule 3700GPH) has a manual and automatic switch with an indicator light. A cycle counter is also installed so you can see if the pump has operated without you noticing. Both main pickups can be lifted out of the bilge for easy servicing.

Independent shower sump pumps are supplied for each shower. (See 5.4) By removing (or smashing) the lid, these pumps can be included as emergency pumps.

4.7.2 *OPTION: Extra bilge pump(Rule 2400GPH) forward complete with auto/manual switch*
4.7.3 *OPTION: High water alarm*

4.8 Air Conditioning

Separate (2) 16000 BTU air conditioners/heat pumps are supplied for the main saloon and pilot-house climate control. Separate (2) 9000 BTU air conditioners/heat pumps are supplied for the two forward cabins. All units are reverse cycle and can heat as well as cool and have separate digital temperature controls. The forward cabin units operate from a single water pump, as do the main cabin units.

4.9 Stoves and Propane System

Force 10 stainless steel 3-burner propane stove with thermostatically controlled oven. 2-10 pound propane tanks are supplied and stored in a custom isolated and drained container located on the upper deck (flybridge). Installation includes a pressure regulator, gauge and shut-off valve controlled by a propane leak detector. If the leak detector senses propane gas it sets off an alarm and shut off the solenoid interrupting the propane supply.

An 800-watt 110-volt microwave convection oven is built into the galley.

- 2 x CO2 detector in sleeping areas.

4.91 BBQ on upper deck

4.10 Bow Thruster

A Side Power 11 HP twin prop bow thruster is provided for extra maneuverability while docking. The joystick control is located on the opposite side to the shifter within easy reach of both helm stations. Mathers remote includes thruster control with relay box.

4.10.2 Option: 8 HP Stern Thruster c/w hand held remote upgrade

4.11 Generator

A Westerbeke 12 KW, 3 cylinder diesel generator in installed in it's own sound box inside the insulated engine room. Instruments include oil pressure, water temperature and hour meter. The generator is equipped with an automatic shut down system. The exhaust is routed through a water separation system that exhausts the gas above the waterline and the water below the waterline to reduce noise.

4.11.3 Option: Generator Upgrade

4.12 Other Accessories

4.121 Optional: A combination washer and dryer is available, as are separate stand-alone units. Final location depends on the interior concept.
4.122 A Central Vacuum system can be installed with access in the main salon, pilothouse, and both forward cabins.

5 ELECTRICAL

5.1 General.

All ship's wiring is marine grade tinned copper including primary battery runs and is installed in accordance with ABYC specifications. All wires are coded and colored for easy identification. Schematics and a legend are supplied for servicing. All connections are crimped using tinned fittings with colored heat shrink covers for stress relief and easy identification.

5.2 DC Electrical System.

The ship's primary Direct Current (DC) system is 24Volt.

- The house battery consists of industrial quality 2Volt Gel-cells located amidships. These batteries combine for a total of 300-amp hours at 24Volt.
- 2 x Optima deep cycle Glass-mat batteries are combined forward with solenoid with diodes for engine charging to prevent voltage drop at the thruster.
- The engines have a dedicated pair of 8D (24Volt) series diesel starting batteries. The engines are started one after the other using the same bank.
- The generator has a dedicated Optima Red Top 12Volt diesel starting battery.

The ship also has a 12Volt DC system for electronics and other lower amperage draw equipment. The 12Volt is produced through a DC to DC converter that supplies 12Volts from the 24Volt system. If this supply were to fail a backup system utilizing the generator charging/starting circuit can be switched in.

All batteries are Gel-Cell or Glass-mat construction to maintain similar charging properties and virtually maintenance free operation. The system is wired for total redundancy. For emergency starting, the main engines can access the house batteries.

Each main engine is supplied with a 70 amp 24Volt alternator that charges the batteries automatically through an isolator. Each engine is capable of charging the system independently for redundancy. The generator battery is charged from the standard 35 Amp internally regulated OEM alternator supplied with the generator.

Alternatively, when the vessel has access to a 240Volt AC source, all batteries may be charged from the 65 amp automatic Freedom 2500 charger/inverter. The house batteries have direct access to the automatic charge (up to 65 amps) while the engine battery(s) are charged via a separate current limited Echo Charger. Another separate Echo Charger maintains and charges the bow battery bank.

The DC system is monitored by a Link 2000, (a power consumption meter for your main battery bank). It is integrated to the Freedom 2500 invertor/charger. The Link 2000 controls the invertor/charger 65-amp charge rate, as the batteries require through a multi-stage voltage regulator. The 70 amp alternators also have a "smart" multi-stage external voltage regulator but it is not integrated into the Link 2000. Each alternator is still equipped with the standard internal voltage regulator, which could be converted back as further additional backup.

Each battery bank is equipped with a main disconnect switch. Each main disconnect switch can be linked in parallel or in isolation to the other battery banks for emergency access.

5.2.1 Option: Upgrade House battery bank to 700 Amp-hours

5.2.2 Option: Upgrade DC charging capabilities to include an additional 65 Amp 24Volt Charles Electronic Battery Charger.

5.3 AC Electrical System.

The ship's AC system is 240Volt single-phase 60 cycle. AC power is supplied by a ship to shore connection, the on board generator, or from the 24Volt DC system via the invertor. All outlets are GFI protected. Two separate 120Volt load groups are supplied by a single 240Volt input.

The ship to shore connection is made through a single 50 Amp 240Volt shore cord. There is a primary-disconnect switch within 6' of the deck connection and a secondary disconnect at the distribution panel. Located in the transom, the shore chord will exit via a Glendenning Cable Master electric retraction system.

5.3.4 Option: Hand held remote for Glendenning Cable Master

Limited AC power can also be generated from the 2500-watt inverter using the ships DC system.

5.3.5 Option: Invertor upgrade.

To operate the entire AC system away from the dock a Westerbeke 12KW-diesel generator (see section 4.11) is installed in the main engine room. It is large enough to support the entire ship's full AC requirements.

The system also incorporates a galvanic isolator.

5.3.6 Option: Upgrade to Charles Isoboost power transformer

5.4 Distribution Panel.

The main DC and AC distribution panels are located conveniently in the pilothouse. The distribution panels are custom made using magnetic circuit breakers with indicators and back lighting. An analog voltmeter is integrated into the DC panel allowing you to test the voltage at the house bank, main engine and generator starting batteries. An analog DC amp meter measures amp draw at the panel. Similar meters are installed for the AC side and measure both load group #1 and #2. A reverse polarity light is included.

A 12-volt DC distribution panel controls 12-volt accessories.

5.5 Bonding System.

The vessel is fully bonded and is equipped with 4 external zinc anodes. The vessel's primary zinc is located aft on the transom. The thruster is equipped with a separate zinc, as are the propeller shafts, trim tabs and struts.

5.6 Lightning Protection.

The lightning protection system has all pulpits, lifelines and antenna arch grounded with 4 gauge tinned copper braid to a large Dyna-Plate (est.64sq.ft.)

5.7 SSB Ground Plain (Optional)

Approximately 100 square feet of copper is installed as a counterpoise for a Single Side Band Radio

6 PLUMBING

6.1 General.

All hoses are premium quality marine grade and are UL and CG approved for each specific application. The fresh water system uses the Whale 2000 tubing system. Made of hard plastic and colored blue for cold and red for hot, this system does not use hose barbs and clamps, rather quick disconnect fittings that are much easier to service.

6.2 Fresh Water System.

Three separate water tanks supply fresh water, each with it's own fill, vent and draw tube. Custom made, maximizing the available space, the FRP tanks are lined with a FDA approved epoxy to ensure no taste transfer and have removable lids with access panels for easy maintenance or service. A manifold is used to control water draw from each tank, thus allowing you to control the boats trim as the water is consumed. The level of water in each tank can be measured using the Hart Tank Tender located in the nav station. Total water capacity is set at 400 gallons but can be modified to suit specific needs.

The Whale centrifugal pump with inline filter and accumulator tank supplies water pressure. A pressure regulated shore water connection is installed to by-pass the on-board system if dock water

is available. Additional fresh water outlet is included at the bow. Hot and cold are run to 2 head vanities, galley sink, both showers, washing machine and cockpit shower.

6.2.1 Option: Additional water capacity.
6.2.2 Option: Seagull Water Filtration System. (Filtered drinking water)
6.2.3 Option: Second water pump with manifold for total redundancy
6.2.5 Option: Water maker pre-installation
6.2.6 Option: Water maker complete installation.
6.2.8 Option: Upgraded shower center-sets are thermostatically controlled
6.2.9 Option: Soap dispenser installed

A 20-gallon hot water heater supplies hot water. This heater can make hot water using a 120Volt electric heating element or a built-in heat exchanger using the closed loop engine coolant system from the port engine. A mixer valve is installed to regulate the water temperature at 140 degrees to prevent the 180-degree engine coolant heat exchanger from overheating the water.

6.3 Waste Management System.

The standard interior is designed to utilize 2 separate heads each equipped with a Sealand Vacu-flush toilet. A single vacuum generator is installed servicing both heads. A bilge mounted FRP holding tank can be emptied using a deck fitting or the onboard macerator system. Fluid levels are measured using the Hart Tank Tender. The holding tank utilizes a cross ventilation system by incorporating port and starboard vents. The advantage of this is that air is always moving through the tank, lessening the odor, and if one vent becomes blocked you always have a spare. Total waste capacity is set at 100 gallons

6.3.2 Option: A second Sealand vacuum generator is installed so each toilet has it's own generator.
6.3.3 Option: Sealand Tank Watch 4 automatic tank level monitor.
6.3.4 Option: Sealand Tank Master with pump (replaces standard macerator pump)
6.3.5 Option: Day head -third complete toilet assembly
6.3.6 Option: Different toilet system – Headhunter etc.

6.4 Grey Water System.

All sinks drain directly overboard through a seacock installed in close proximity and within easy reach.

Independent shower sump pumps are supplied for each shower and drain (pumped) overboard. The self-contained units are automatic and have strainers built-in. They are also used for the air conditioner condensation drains.

6.5 Diesel Fuel System.

Diesel fuel is stored in four baffled H5052 aluminum tanks. These tanks are custom built for the boat by Gozzard Yachts and are epoxy coated for exterior corrosion resistance. The tanks are located on the vessel's center of gravity so the boat's trim and performance are not effected by the fuel levels. Interconnected by a manifold assembly, fuel can be returned and picked up in any combination allowing you to maintain trim (athwartships) or to re-filter your fuel supply. Large inspection plates with the fill, vents and pickup pipes built-in are removable for easy servicing. A dedicated clean-out tube is installed to the very lowest section of each tank so you can check the condition of the fuel and if necessary pump it out without having to open the tank. Capacity is set at 800 gallons or approximately 200 gallons each.

Two Racor 1000 filters are supplied for redundancy. A simple valve system allows you to be able to by-pass either filter or even change one out on the fly. Fluid levels are measured electronically with the fuel gauges located near the helm stations.

- Vetus overflow containment system installed on each 2" deck fill.
- Fuel transfer pump.

6.5.1 Option: *Additional Racor 1000s (2) with manifold by-pass. Allows each tank to have it's own dedicated filter.*

6.5.2 *Option: Racor Vacuum Gauges (2) to measure filter restriction*
6.5.4 Option: Dedicated Hart Tank Tenders monitor for fuel system located in the equipment room.

7 INTERIOR

7.1 General.

As with all Gozzard designs, all usable space is made accessible for storage or machinery. Where possible, overhead panels, hull lining, nut covers, etc., are made removable for easy access to wiring and deck hardware.

The style and level of fit and finish is to Gozzard 2003 standards as set by boats shown at the 2003/04 Boat Show Circuit.

The flooring in the pilothouse, lower staterooms, and galley is hardwood. The cabin soles are teak and bass wood and are solid core not veneer. Glued to a FRP substrate, access panels are cut in or provided where required. All bilge panels have locks or are fastened securely. The teak flooring is finished to a closed grain, super high gloss finish. Carpet with a sound proof underlay is used in the main saloon.
7.1.1 Option: Teak flooring throughout instead of carpet in the saloon area.

7.2 Joinery Work.

The standard interior wood is American cherry finished with a rubbed effect varnish. The louvered cabinet doors feature a 4-way adjustable hinge to allow easy adjust for wood movement. All drawers are dove tailed and are installed on sliders.

All plywood is made with marine grade cores and waterproof glues. All main bulkheads are FRP cored structures with cherry veneer faces. All trims, fiddles, face frames, kicks and doors are solid cherry. All furniture and cabinets constructed using plywood have the end cuts finished with solid stock so they can not absorb or "wick" water into the laminates. All end grains are sealed. The owner has the option to select the use of Formica upper laminates or other veneers for a lighter effect.

Additional to the vanity mirrors, a dressing mirror will be included in each stateroom.

7.3 Counters.

All counters are made of cultured marble. All sinks are recessed and back splashed are provided. Color is the owner's choice.

7.4 Upholstery.

The owner may choose from a large in house selection of fabrics or purchase them independently with a credit equal to the cost of the standard Ultra Suede or the Ultra Leather. Cabins can be done in different materials bearing in mind that some materials are only available in minimum length orders.

Mini blinds are included in the main saloon, galley and for the pilothouse side windows. Snap on outer covers are supplied for the pilothouse doors and forward windows. All furniture shown on the attached drawings are included in the specification except where noted.

Cockpit cushions are provided for the flybridge seats.
7.4.3 Option: Fore deck cockpit cushions
7.4.4 Option: Credit material for owner supplied upholstery

7.5 Canvas

All canvas is made with Sunbrella fabric for long life and resistance to sun fading.

For protection from the sun, the flybridge has a full-length bimini starting from the radar arch and extending forward. A full enclosure is provided for the flybridge as well as the aft deck. Both enclosures have zip out sections so that it can be left up and still have decent ventilation.

7.6 Lighting and Accessories.

All interior and exterior lighting is 24Volt except the equipment and engine room where large florescent fixtures are installed. 120Volt receptacles are conveniently located for the addition of table lighting. General cabin overhead lighting (usually recessed) is grouped and attached to a conveniently located wall mounted switch for each cabin. Individual reading lights are provided and the head of the berths and over specific seats where required. Vanity mirrors also have separate lighting. Valance lighting is installed in the main saloon.

Courtesy floor lights are provided in the pilothouse, galley, stairs, and hallways. All closets have door activated lights. The main helm station is equipped with night lighting, as are the side and aft decks.

For ventilation, each stateroom is equipped with 2 24Volt Hella Turbo two speed fans. A fan is also located in the pilothouse and in the galley. Both showers are equipped with extraction fans.

7.6.2 Option: Extra fan(s)

The boat is equipped with a Pioneer 12volt-stereo/AM/FM radio with CD player and CD changer. Built-in speakers are located including flybridge, main saloon and pilothouse. A 20" RCA TV is built-in to the saloon entertainment area with additional space provided to build-in other customer provided equipment. A Shakespeare TV antenna is mounted on the arch for TV reception.

7.6.3 Option: Stereo upgrade

7.6.4 Option: DVD player

7.6.5 Option: TVs located in Staterooms.

7.6.6 Option: 12Volt outlets

8 RIGGING

9 ELECTRONICS

9.1 Basic Instruments.

Raytheon supplies all instruments. All instruments are integrated using Seatalk, HSB or NMEA cabling. Although there are many options the following list is provided as standard:

Pilothouse

- ST 60 Tridata – provides speed, depth, temperature and timing information.
- ST 60 Wind – provides wind speed and angle
- ST 60 Rudder Angle
- ST 6000+ Full auto pilot control including digital compass and GPS coarse information.
- RAY 215 VHF with antenna

9.1.2 Option: Hand held remote for auto pilot

Flybridge

- ST 60 Tridata
- ST 60 Rudder Angle
- ST 6000+ Auto Pilot Control
- RAY 215 second station kit

9.2 Advanced Instruments.

Pilothouse

- RL80RC – Radar/chart plotter – HSB and NMEA interface to RL70C

Flybridge

- RL70C Color Repeater
- 4kW - 48" open radar array
- R120 - WAAS GPS

9.2.4 Option: Upgrade to Ray 230 VHF

9.2.5 Option: Cell phone upgrade for R230
9.2.6 Option: Upgrade to RL80C
9.2.7 Option: Intercom system 4 station.
9.2.8 Option: Video monitor in engine room
9.2.9 Option: Video monitor facing aft – color and night IR

9.3 Auto Pilot.

- Autohelm Type 400 Computer – with fluxgate compass and rudder feed back
- Octopus hydraulic drive.

9.3.1 Option: Upgraded Autohelm computer to "G" series for radar chart overlay

9.4 Other Electronic Gear

9.4.1 OPTION: Satellite TV Antenna
9.4.2 OPTION: Satellite Phone Antenna

10 OTHER EQUIPMENT.

10.0.1 Option: Name and Hailport
10.0.2 Option: Brokerage and handling for personal items

10.1 Gear

- 4 – 50' ¾" Nylon Dock Lines
- 4 – 30' ¾" Nylon Dock Lines
- 6 – 10" Fenders
- Boat Pole with deck storage
- 8 USCG Life Jacket in storage bags
- Olin Flare Gun Kit
- 4 Fire Extinguishers
- Flag Poles with bow and stern sockets

10.2 Spares

10.2.1 Option: Spare primary, thruster and shaft zinc anode
10.2.2 Option: Main engine cruise kits
10.2.3 Option: Generator cruise kit
10.2.4 Option: Spare alternator belts.
10.2.5 Option: Ship's fuse kit.
10.2.6 Option: Ship's spare bulb kit
10.2.7 Option: Additional spares.

10.3 Manuals

- Owners manual complete with users guide, specification and equipment literature
- As-built schematics for the electrical and plumbing systems
- Electrical legend and color code
- Manuals for main engine and generator

11 COMMISIONING

11.1 Delivery Dates.

Gozzard Yachts will make every effort to complete this project in a timely fashion. However, considering the complexity of the project, we are only prepared to estimate the delivery date. We will, via email, be able to send photographs of the weekly progress and through full disclosure keep the owner in the loop as to the timing. Our past experience indicates we are never more than three weeks behind (or ahead) of schedule.

11.2 Testing and Sea Trails.

The boat will be launched, rigged and tested fully in Goderich. The owner is encouraged to make thorough inspection the vessel, either by surveyor or personally, at this time as this will represent

the end of construction and related work. The final payment will be due on your acceptance of the boat.

All electronic systems will be tested and calibrated.

11.3 Delivery.

The boat will be launched and commissioned in Goderich. The cost of the transportation of the boat from Goderich will be the responsibility of the owner.

11.4 Systems Inspection.

- A Cummins service technician will spend one day performing sea trails before Cummins will sign off on the warranty.
- All major systems will be inspected and have the installation approved (signed off for warranty) by their manufacturers or authorized representatives either during construction or at time of sea trials.

11.5 Pre-scheduled Factory Maintenance.

Upon final commissioning 2 visits by factory or dealer personnel will be scheduled at approximately 3 and 6 months intervals to fine tune the systems and make any final adjustments.

12 NOTES