

Exhibit A - NEW YORK STATE LAW ENFORCEMENT VESSELS SPECIFICATIONS			
Amendment 1			
GENERAL DESCRIPTION			
New York State Office of Parks, Recreation and Historic Preservation (OPRHP) is seeking to procure two (2) full cabin marine law enforcement vessels to be utilized by OPRHP Parks Police State of New York. These vessels are to replace aging vessels which have passed their serviceable life. These vessels will be utilized to allow NYSPP personnel to carry out their duties on large bodies of water, including the Atlantic Ocean, in inclement weather throughout the year and during State of emergency and disaster deployments. •Marine patrol duties including the protection of people and property. •Inspections of recreational boats for proper safety equipment and compliance with boating regulations and licenses. •Investigations of complaints, observations of potential violations of law, and other events which aid in furthering marine resource conservation, protection of property, and public relations. •Investigation of boating accidents or incidents. •Marine patrols of wharves and boat landings. •Issuance of warnings, arrests, and evidence-gathering of potential violations of laws, rules, or regulations. •Coordination of patrol plans as part of a joint inter-agency effort in ensuring the safety of people and property. •Marine patrols which aim to mitigate the presence of illegal fishing, harvest, catches and/or unlicensed operations. •Providing assistance and first aid to people and property. The vessel specified is not primarily designed for Search, Rescue, Diving, Bow Facing Shoreline Landings, or Firefighting. However, vessel usage may vary throughout the state based on environmental factors and local conditions. Vessel drawings must accompany bid. Drawings submitted (per Appendix B, Section 20) must show location, material, and dimensions to show compliance with the specification. Attestations of compliance are insufficient. In accordance with Appendix B, Section 10, the words "or equal" are understood to apply where a copyrighted, brand name, trade name, catalog reference, or patented product is referenced. References to such specific products are intended as descriptive, not restrictive, unless otherwise stated. Comparable product will be considered if proof of compatibility is provided, including catalog excerpts, descriptive literature, specifications and test data, etc. OPRHP's decision as to acceptance of the product as equal shall be final. In the event of a discrepancy between the model number referenced in the Solicitation or Bid Specifications and the written description of the products that cannot be reconciled, then the written description shall prevail.			
#	SPECIFICATIONS	Quoted Item Meets Spec (Offeror select YES or NO)	If Quoted item is an Equivalent, specify brand
1	Length Overall: 29' minimum, 31' maximum. Overall length shall be measured from the bow to the transom, excluding the collar.		N/A
2	Beam Overall (including collar): 10' minimum		N/A
3	Draft: 36" maximum with engines trimmed down		N/A
4	Fuel Tank Capacity: Minimum of 200 gallons (baffled). Fuel tank shall be accessible via removable center deck plate.		N/A
5	Fuel Type: Gasoline		N/A
6	Capacity: minimum of 10 persons/1850 lbs.		N/A
7	Propulsion Machinery: Vessel shall be rated to accept a minimum of twin outboard motors with the performance capability of achieving 55 MPH minimum with a full tank of fuel and three (3) law enforcement officers onboard at 215 lbs each.		N/A
HULL FEATURES			
8	Rigid aluminum deep-v monohull with polyurethane membrane and closed-cell foam-backed air collar with a drop-down bow door (15" – 24") with handrails and telescopic dive ladder that shall reach the ground when beached. Front bow door shall not be a "loading ramp" style. A flat bow is unacceptable.		N/A
9	Hull shall be constructed of corrosion resistant marine-grade aluminum alloy 5086.		N/A
10	Deck plates shall be constructed of corrosion resistant marine-grade aluminum alloy 5086.		N/A
11	Hull plate shall be constructed out of corrosion resistant marine-grade aluminum alloy 5086 and shall be at least 1/4" thick.		N/A
12	Deck plates shall be constructed out of corrosion resistant marine-grade aluminum alloy 5086 and shall be at least 3/16" thick.		N/A
13	Hull, deck and cabin structures shall have a continuous weld along the entire length of the metal joints.		N/A
14	Fuel tank shall be aluminum, fully sealed with a continuous weld, and be placed to balance vessel weight.		N/A
15	Hull shall have closed-cell high density, non-absorbent foam placed within the structure.		N/A
16	Hydraulic trim tabs shall be attached on the port and starboard side of the transom below the water line.		N/A
17	Hull shall be equipped with a reinforced keel guard/beaching plate.		N/A
18	Hull shall have sufficient stability to allow two (2) fully geared officers, with a total weight of 430 lbs. to work over the same side of the vessel.		N/A
19	Vessel shall be equipped with a drop-down bow door, handrails and telescopic dive ladder. Drop-down door shall measure 20" (+/- 4").		N/A
20	Hull shall be fitted with welded bow and stern eyes for towing and/or trailering.		N/A
21	Hull fore and aft shall be self-bailing, designed in such a manner all compartments will self-drain within 90 seconds.		N/A
22	Deck fore and aft shall be self-bailing, designed in such a manner that any awash deck of the vessel will self drain within 90 seconds.		N/A
23	Performance wings/fins, or equivalent, shall be welded to the hull below the collar.		
24	Welded anode mounts with sacrificial anodes for salt/fresh water.		N/A
25	Hull shall include strakes, spray rails and shall have a continuous weld along the hull.		N/A
COLLAR			
26	Enclosed D-shaped collar shall be constructed of a closed-cell, foam-backed air bladder.		N/A
27	Outer layer shall be polyurethane coated.		N/A
28	All seams shall be thermo-welded/bonded and stitched with UV-resistant PTFE thread for additional strength, durability, and UV protection.		N/A
29	Collar system shall include a rub strake.		N/A
30	Collar system shall incorporate personnel recovery cutouts on the port and starboard side of the aft deck.		N/A
31	Collar system shall have independent compartments for the bow, port and starboard side.		N/A
32	Port and starboard collar system compartments shall run from the transom to the bow compartment.		N/A
33	Collar shall be gray in color w/dark color rub strake.		N/A
CABIN			
34	Full cabin shall be built out of aluminum, fully enclosed walk-thru design, center isle way with step down into front cuddy cabin. Grab rails shall be installed around the cabin.		N/A
35	Full cabin shall be the full width of the beam.		N/A
36	Front cuddy cabin shall be walk thru to open bow area.		N/A
37	Front cuddy cabin shall include storage under cushioned bench seat areas.		N/A
38	Full cabin shall have a bench style seating with storage underneath.		
39	Full cabin shall be outfitted with side slider doors (full glass) at both the port and starboard helm positions. Front cuddy cabin shall have cabin access door and front access hatch/door to bow. Sliding windows shall be installed where appropriate throughout the cabin for additional ventilation and air flow.		N/A
40	Full cabin shall have window skylights for added visibility and light admittance.		N/A
41	Full cabin and front cuddy cabin interior shall be insulated.		N/A
42	Full cabin and front cuddy cabin walls and ceiling shall be carpeted.		N/A
43	Full cabin roof shall be coated with heat reducing paint.		N/A
44	A vertical long gun lockable storage locker shall be incorporated into the design of the full cabin. Locker shall hold 2 long guns with a length of 40".		N/A
45	A rooftop mounted air conditioner unit with heat strips shall be installed. The unit shall be at least 15K BTU.		N/A
46	A CO monitor and automatic generator shutdown shall be installed if required by USCG regulations.		N/A
47	Minimum of (2) 3-speed 12v fans shall be installed in the full cabin.		N/A
48	Full cabin shall be equipped with hand/grab rails near the aft door and on the sides of the cabin.		N/A
49	Roof-mounted equipment not limited to the Marine radio, AIS, loudhailer, FLIR, spotlight and radome shall utilize a hinged pedestal to allow for a lower clearance height when trailering. All equipment shall be mounted at lowest available height and utilize folding tower when possible to maintain lowest trailer height.		N/A
50	Cuddy cabin shall be equipped with a flushing head (no overboard discharge) installed in the cuddy w/ removable privacy screen/divider between the full cabin and the front cuddy cabin.		N/A

51	A microwave and refrigerator shall be incorporated into full cabin or front cuddy cabin layout.		N/A
ADDITIONAL REQUIREMENTS			
52	Vessel shall be equipped with a gas generator with a rating of not less than 3.5KW, raw-water cooled. Features shall include priming/flushing connection, muffled exhaust thru transom and raw water strainer. A high-speed sea chest shall be installed if raw water intake will be affected by high-speed operations and maneuvers.		N/A
53	Vessel shall have a fresh-water/raw-water wash down.		N/A
54	A Category I EPIRB shall be mounted in the cabin or transom area.		N/A
55	Vessel shall have Zipwake Gyro Stabilized 300 series Trim Kit, or equivalent, installed and tested.		
WALKING SURFACES			
56	Shall be marine-grade non-skid mold-resistant material.		N/A
57	Shall be grey or black in finish.		N/A
TOW PACKAGE			
58	Shall be fitted with a tow bollard at the stern. Shall include tow cage to guard the engines and guide the tow line.		N/A
59	Tow cage shall be attached to the port and starboard transom of the vessel.		N/A
60	Tow cage shall include two (2) vertical metal posts; one on each the port and starboard side as to prevent the tow line from shifting over the beam.		N/A
61	Hull shall be fitted with a Sampson post that is fully welded to the stern and located forward of the engines.		N/A
62	Sampson post shall be a minimum of 4" in diameter.		N/A
COMPARTMENTS			
ANCHOR COMPARTMENT			
63	Anchor shall be integrated into the hull, below the drop-down bow door. Anchor shall be "thru-hull" integrated into the hull, below the drop-down bow door, and compatible with windlass operation.		N/A
64	Anchor compartment shall be accessible via deck hatch and include an anchor tie down and have self-draining capabilities.		N/A
65	Anchor shall have a windlass system with operating controls both in the anchor compartment and at the helm.		N/A
66	Shall be sufficient in size to hold at a minimum a 14lb. Delta or plow style anchor, 8' anti-chafing chain and 150' anchor line.		N/A
SEATING			
67	Full cabin shall have Two (2) Shockwave S2, or equivalent, bulkhead mount dropdown seats (footrests available when in the seated position) for operation while seated and standing.		
68	Helm seats shall have foldable arm rests on both sides.		N/A
69	Helm seats shall be drop-down capable.		N/A
70	Bench seat(s) with storage shall be installed in the full cabin's aft section.		N/A
71	Drop down table or hide away table for preparing reports/paperwork and laptop use.		N/A
DECK LOCKER			
72	Deck locker shall be welded to hull structure.		N/A
73	Located astern on the aft deck.		N/A
74	Include three (3) to five (5) compartments which extend the width of the beam.		N/A
75	All compartment doors shall latch and lock and be keyed alike.		N/A
FITTINGS AND DECK EQUIPMENT			
STANDARD CLEATS			
76	Minimum count of eight (8) -10" aluminum standard cleats located on port and starboard, forward, aft, and amidships.		N/A
77	Cleats shall be fully welded to the gunwale.		N/A
RAILINGS			
78	Hand rails shall be fully welded above the gunwale.		N/A
79	Hand rails shall extend forward and aft of the personnel recovery cutouts.		N/A
80	Hand rails shall extend aft to the transom from the recovery cutouts.		N/A
81	Grab rails shall be placed on the full cabin exterior to allow gunwale walking access.		N/A
DECK LIGHTING			
82	The vessel shall be equipped with dimmable light emitting diode (LED) deck lights.		N/A
83	Deck lighting shall be mounted on the port and starboard sides below the gunwale and angled to illuminate the deck.		N/A
84	LED deck lighting shall have the capability to toggle between white, red, and off.		N/A
NAVIGATION LIGHTS			
85	Navigation lights shall be hard wired and built in accordance with the latest revision of the United States Coast Guard (USCG) Navigation Rules and Regulations Handbook at the time of vessel build.		N/A
86	Navigation lights shall be exterior mounted on the cabin.		N/A
87	An all-around white LED light shall be mounted to the cabin and include a solid aluminum socket with removable post and quick disconnect electrical plug.		N/A
88	The all-around white light shall be detachable via through-pin.		N/A
89	The all-around light mount shall include welded D-rings for flag attachment.		N/A
BOARDING LADDER			
90	Shall include transom telescoping boarding ladder.		N/A
PROPULSION SYSTEM			
ENGINE TYPE			
91	Two (2) matching Mercury Seapro, or equivalent, commercial grade engines (performance capability of minimum 55MPH).		
92	Engines shall be gas-powered, 4-stroke.		N/A
93	Mercury Vessel View Mobile Module, or equivalent compatible. (Engine diagnostics shall also relay through Garmin MFD).		
94	Mercury Smartcraft Connect including fuel level sensor, or equivalent compatible.		
95	Engines shall be properly "run in" according to manufacturer specifications.		N/A
ENGINE CONTROLS			
96	Push button start.		N/A
97	Shall be electronic shift and throttle.		N/A
98	Vessels shall be equipped with an Engine Cut-Off Switch (ECOS) system compatible with the selected engine.		N/A
99	Vessel shall be equipped with Mercury Joystick Piloting with Skyhook, or equivalent.		
PROPELLERS			
100	Propellers shall be made from stainless steel.		N/A
101	Port engine propeller shall be counter rotating.		N/A
102	Propellers shall be sized so revolutions per minute (RPM) fall in the middle of the manufacturer's guidelines at wide open throttle (WOT).		N/A
KEYS			
103	Twin engines on the same boat shall be keyed the same.		N/A
104	All cabinets and compartments within the vessel shall be keyed the same.		N/A
PROPULSION FUEL SYSTEM			
FUEL FILTER/WATER SEPARATORS			
105	The fuel hoses shall be of a type specified by the engine manufacturer.		N/A
106	The fuel supply hose for each outboard shall have, per engine manufacturer's specification, an inline fuel filter/water separator with clear water bowl and drain mounted aft.		N/A
107	Each unit shall be minimally rated to 30 Gallons Per Hour (GPH) & 10-micron filter.		N/A
108	Filters shall be placed between the fuel tank and each engine.		N/A
109	The filter shall be mounted with a minimum of 4" clearance under the bowl for draining.		N/A
110	1/4 turn shut off valves shall be installed before and after the filters.		N/A
STEERING SYSTEM			
HYDRAULIC STEERING			
111	Shall be power hydraulic steering.		N/A
112	Steering shall be set to 2-3 full turns "lock to lock."		N/A
113	Shall include a stainless-steel wheel including a speed knob.		N/A
114	Steering wheel shall have tilting capability.		N/A
115	Remote hydraulic fluid reservoir mounted in dry helm space.		N/A

116	Shall include hydraulic control hoses.		N/A
117	Twin engine steering rack sized for engines.		N/A
118	Hydraulic system shall be delivered with hydraulic fluid and purged of air.		N/A
COMMUNICATION/NAVIGATION SYSTEM			
RADIO			
119	Loudhailer and law enforcement lighting control - Whelen WPA3BM, or equivalent.		
120	One (1) Marine Radio – Garmin 315 VHF radio w/AIS		N/A
121	One (1) Garmin AIS 800 Blackbox transceiver		N/A
122	OPRHP provided police radio shall be installed.		N/A
GPS/RADAR SYSTEM			
123	Two (2) 16" Garmin GPSMAP 8616xsv with Sonar displays (helm / co-pilot station) with thru-hull mounted CHIRP transducer(s) capable of downscan and sidescan, or equivalent.		
124	Radar antenna - Garmin GMR 24xHD, or compatible equivalent.		
125	Vessel shall be equipped with FLIR M364 with active gyro stabilization low light and thermal camera with pan/tilt and minimum 4x electronic zoom, or equivalent. Device shall be fixed mounted on a riser and be compatible with installed multifunctional displays.		
126	Vessel shall be equipped with a Fusion RA70 Marine Stereo, or equivalent, and minimum of 4 speakers within the cabin.		
MAGNETIC COMPASS			
127	Shall have a 5" dome style magnetic compass mounted at the helm.		N/A
128	Compass shall be flush mounted, backlit and dimmable.		N/A
ANTENNA			
129	The communications and navigation antennas shall be mounted on the cabin.		N/A
130	All radio antennas above the radar antenna shall have a ratchet mount so they can be lowered to reduce overhead clearance.		N/A
ELECTRICAL SYSTEMS			
COMPONENTS			
131	Electrical components to be Blue Sea Systems, or equivalent.		
WIRING			
132	All wiring shall be compliant with American Boat and Yacht Council (ABYC) guidelines.		N/A
133	Wiring shall be color-coded for use as per ABYC guidelines; using ABYC standard: "E-11, AC & DC Electrical Systems, Table 12".		N/A
BATTERIES			
134	Shall include one (1) port starting battery.		N/A
135	Shall include one (1) starboard starting battery.		N/A
136	Shall include minimum one (1) house battery.		N/A
137	Batteries shall be installed.		N/A
138	Batteries shall be absorbed glass mat (AGM) batteries, 12 volts, type 31, CCA 925-1100.		N/A
139	Batteries shall not be lithium.		N/A
BATTERY SWITCHES			
140	Individual battery switches shall be installed.		N/A
141	Each battery switch shall be rated for a minimum of 1200 CCA.		N/A
142	Battery switches shall allow dual circuit and battery combine - Blue Sea Systems 5511e, or equivalent.		
BATTERY CHARGER			
143	Capable of charging at least three (3) or more isolated batteries.		N/A
BATTERY ISOLATORS			
144	The electronics (House) battery shall be charged by one of the two engines and battery charger.		N/A
145	The House battery shall be protected by a battery isolator to prevent it from drawing power from the engine starting batteries.		N/A
146	Engine starting batteries shall be isolated form each other to prevent them from drawing power from each other, or the House battery.		N/A
12 VOLT DISTRIBUTION PANEL			
147	All circuits shall go through resettable push-button breakers. Inline fuses are not acceptable.		N/A
148	The 12V main power panel shall incorporate overload protection.		N/A
PLUGS			
149	At least four 12V DC marine grade power receptacles throughout the helm and cabin.		N/A
150	At least four USB-C receptacles shall be installed throughout the helm and cabin.		N/A
151	At least four USB receptacles shall be installed throughout the helm and cabin.		N/A
VESSEL EXTERIOR LIGHTING/SIREN			
LIGHTING			
152	All vessel lighting shall be LED including the vessel shall be fitted with US Coast Guard (USCG) approved running lights (port, starboard, anchor) in conformance with all Federal and State laws.		N/A
HELM DASH			
153	Horn		N/A
154	Navigation Light and Anchor Light		N/A
155	Windshield Wipers		N/A
156	Bilge pump toggle switch which will allow the user to toggle between automatic, off, and manual.		N/A
157	Instrument / Dash Lights		N/A
158	Deck Courtesy Lighting		N/A
159	Instrument / Dash Lights shall be dimmable and able to toggle between white LED lights, red LED lights, and off.		N/A
160	Port Spreader Lights		N/A
161	Forward Spreader Lights		N/A
162	Aft Spreader Lights		N/A
163	Electronic controls for the hydraulic trim tabs		N/A
164	Starboard Spreader Lights		N/A
EMERGENCY LIGHTING			
165	Law enforcement lighting package shall include a flashing blue LED light bar with 360-degree visibility with no blind spots to the public.		N/A
166	Blue LED light bar shall be a minimum of 40".		N/A
167	Emergency loudhailer switch shall be a 3-way rocker toggle between off, aft only, and all.		N/A
ACCESSORY SWITCHES			
168	All dash mounted switches shall be individual rocker toggle switches.		N/A
169	All switches shall be Contura Marine Switches, or equivalent, with dimmable backlit option.		
COMPARTMENT LIGHTS			
170	All compartment lights shall include automatic white lighting when compartment is opened.		N/A
ADDITIONAL LIGHTING			
171	Vessel shall contain one (1) remote control spotlight.		N/A
172	Remote control spotlight shall be mounted on the roof of the cabin.		N/A
173	Remote control spotlight shall be a white light with 450,000 candela minimum.		N/A
174	Remote control spotlight shall allow for a minimum of 180-degree rotation illuminating from port and starboard beams forward.		N/A
175	Remote control spotlight shall allow for 135-degree tilt.		N/A
176	Auto-home return when off.		N/A
177	In-dash wired remote control shall be directional pad or buttons.		N/A
178	White Spreader Lights shall face outward from port, starboard, forward, and aft above the full cabin.		N/A
179	White Spreader Lights shall be 925 lumens minimum.		N/A
180	White Spreader Lights shall be water resistant.		N/A
181	White Spreader Lights shall be able to be manipulated to different angles with the control located on the dashboard.		N/A
182	Deck courtesy lights shall be placed throughout the vessel.		N/A
183	Shall run off of 12 volts.		N/A
184	Final configuration shall be determined post award at no additional cost to NYSPP.		N/A

SIREN		
185	Include police siren producing 120 decibels minimum.	N/A
186	Include a toggle switch controlling the siren will be located on the dashboard, allowing the user to toggle between off, chirp, and wail.	N/A
ANCILLARY SYSTEMS AND FURNISHINGS		
WINDSHIELD WIPER		
187	The vessel shall be equipped with windshield wipers.	N/A
188	The wiper shall be dual speed, and self-parking.	N/A
189	Wiper controls on the operator's console.	N/A
190	Shall run off of 12 volts.	N/A
191	Shall include windshield washer fluid nozzle kit with electronic pump.	N/A
192	Shall have a reservoir capable of holding one (1) gallon minimum washer fluid.	N/A
193	Reservoir shall include fill cap, and be housed in and accessible area.	N/A
194	Final configuration shall be determined post award at no additional cost to NYSPP.	N/A
HORN		
195	Shall be mounted on the roof of the cabin.	N/A
196	Shall produce a minimum of 120 decibels at range of one meter.	N/A
197	Shall run off of 12 volts.	N/A
198	The control for the horn shall be located on the dashboard.	N/A
FIRE EXTINGUISHER		
199	The vessel shall be equipped with at least two (2) fire extinguishers.	N/A
200	Each fire extinguisher shall have a minimum 5 lb. capacity.	N/A
201	Shall be UL Rated Marine Grade.	N/A
202	Shall be mounted using United States Coast Guard (USCG) approved bracket.	N/A
AUTOMATIC BILGE PUMP		
203	At least one (1) bilge pump with associated automatic float switch.	N/A
204	Bilge pump shall be rated at a minimum 1500 Gallons Per Hour (GPH).	N/A
205	The automatic connection is unswitched from house battery.	N/A
ANCHOR		
206	One (1) appropriate sized Delta/plow style anchor.	N/A
207	8' anti-chafing chain rode.	N/A
208	Minimum 150' of 3/8" braided anchor line.	N/A
TYPE IV THROWABLE MOUNT		
209	Type IV throwable and mount.	
BOAT HOOK		
210	Vessel shall have a mounted collapsible boat hook which extends to 8' minimum when fully expanded.	N/A
TRAILER		
211	Shall be made of aluminum.	N/A
212	Shall be rated for the appropriate Gross Vehicle Weight Rating for the vessel proposed.	N/A
213	Bunk style	N/A
214	Minimum of two (2) axles.	N/A
215	Shall have a mounted spare tire.	N/A
216	Shall include surge brakes on both axles.	N/A
217	Contain a 2-speed winch with strap.	N/A
218	Include LED lights; including white LED reverse lights.	N/A
219	Include a tongue boarding ladder.	N/A
220	Have two (2) transom tie down straps attached to the trailer and retractable when not in use.	N/A