



GREGORY DESIGNS, LLC

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27 February, 2024

Eric

I am pleased to offer this proposal of work to MBARI. Gregory Designs, LLC is a licensed engineering services company, specializing in the mechanical design of underwater vehicles, oceanographic instrumentation, and shipboard support systems.

A budgetary estimate and scope of work for this project is below. The work will commence immediately upon receipt of a Purchase Order.

Design and Engineering of pressure housings and electronics chassis based around an OAK-FFC 4P PoE boardset and camera modules:

- Two housing developments: 500 msw and 1500 msw.
- Housing to support at least three camera modules with suitable viewports spaced as specified.
- Electronics Chassis arrangement, with accommodation for heat management.
- 500 msw design must be near neutral buoyancy and fit into pre-defined, small space on a Boxfish six degree-of-freedom ROV.
- 1500 msw design to be mounted on MBARI "Mini-ROV" in a pre-defined space. Weight is important, but neutral buoyancy requirement is not critical.
- External I/O as prescribed: 500 msw housing to have one MCBH sized bulkhead or similarly sized penetrator. 1500 msw housing to have two MCBH-sized bulkheads.
- 500 msw design to include a 48 VDC to 5 VDC converter, as specified.
- Scope of work to include conceptual design, interaction/review with MBARI engineers, calculations and FEA iterations, and 2D drawing package preparation.
- Additional services as Machine Shop liaison are optional.

Estimate of Labor: \$8,400.00

Our standard rate schedule and terms of service follows:

- Rate, Todd Gregory's time, 2024 calendar year: USD \$105.00 per hour.
- Terms of payment: Net 30 days, invoiced monthly for the duration of the project.

I look forward to working with you.

Sincerely

Todd Gregory, PE