

1. Between AE and MBARI

- a. This Statement of Work ("SOW") is effective (24 April 2023) ("SOW Effective Date"), entered into by and between MBARI, with offices at 7700 Sandholdt Road, Moss Landing, Moss Landing, CA 95039 and Applied Engineering, with a principal place of business at 6341 San Ignacio Ave Ste 10, San Jose, CA. 95119 for (the "Purchase Order ##") on (enter date). This SOW is subject to the terms in the Purchase Order, which are incorporated into this SOW as if fully set forth herein. In the event of conflict between the terms of this SOW or any attachment and the terms of the Purchase Order, the terms of the Purchase Order shall prevail.

2. Project Objectivity and Scope

- a. MBARI to contract AE to provide complete 20 Gasketed DuraFET (GDF) assemblies as defined in the GDF drawings attached to the Purchase Order..
- b. This is a follow on to PO# 2210279. Under that PO, AE developed the POR for the GDF. Changes to that POR are listed here. MBARI will work in good faith with AE as required.
 - i. As discussed during the previous build, we'd like to include a helium leak test in the current POR (see section 3).

3. Helium leak test

- a. Modify prior POR to include He leak testing at AE
 - i. He leak test step should be done before the installation of the final back coverplate.
 1. Install the MBARI supplied He leak detection test back cover plate.
 2. Perform He leak test. Acceptance criteria: leak rate < 1×10^{-8} standard $\text{cm}^3/\text{second}$.
 3. Remove test back cover plate.
 4. Remove and inspect back cover plate o-ring. Replace if necessary, and install final back coverplate.

4. Applied Engineering Responsibilities/Deliverables/Non-Deliverables

- a. Applied Engineering will build to MBARI specifications and drawings, as described in the BOM and according to those revisions or updates to those revisions. Including approved vendor list for OEM parts.
 - i. AE to adhere to source directed suppliers as defined in the MBARI BOM. Machined parts with MBARI drawing numbers shall be obtained only from the following qualified vendor list:

1. Fluke Metal Products
425 485 9666
10223 Woodinville Drive
Bothell, WA 98011
2. MBARI
831 775 1740
7700 Sandholdt Road
Moss Landing, CA 95039

- ii. Any deviations must be per-approved by MBARI prior to use.
 - b. AE to work in unison with MBARI to sort out any deviations in manufacturing and test processes
 - c. AE does not own this design nor is AE responsible for design conflicts.
 - d. AE to Provide Purchase Order to MBARI for customer supplied material (CSM).
 - e. Change Management (out of scope charges): Changes made after acceptance of MBARI PO will be considered out of scope and invoiced accordingly. ECO's will be tracked and communicated by Applied Engineering to MBARI.
 - a. Dispositions with associated costs and schedule impacts will be communicated prior to executing unless explicitly pre-approved by MBARI. All costs (labor, materials, and services) will have standard AE mark-ups applied and invoiced at net30 payment terms.
5. MBARI Responsibilities/Deliverables
- a. MBARI shall supply models and drawings, and manufacturing specs for OTS parts as outlined in BOM document.
 - i. All changes must be documented. No verbal changes are allowed.
 - ii. Final versions of these drawings will be attached to the Purchase Order and will supersede any and all other drawing, models or documents.
 - iii. MBARI provided drawings and documents will be entered into the AE configuration control system and those documents will be the reference documents for the POR
 - b. MBARI will provide the material listed below as customer supplied material (CSM) for this purchase order
 - i. CSM provided by MBARI will be new parts provided to AE in the state they were received at MBARI.
 - ii. CSM by MBARI to AE shall go through the normal AE receiving, and QA/QC process as if ordered by AE from the approved vendor.
 - iii. MBARI does not warranty MBARI CSM provided to AE in any way.
 - iv. MBARI will work with AE to resolve any QA/QC issues with MBARI CSM. In general, we expect resolution to be reverting to

AE ordering parts from the vendor directly with the understanding this may affect the delivery schedule.

- v. MBARI to deliver only CSM listed on AE PO's.
- vi. All CSM shall be marked, labeled or bagged and marked for easy identification.

c. Customer supplied material - From BOM

CSM	ITEM NO.	Revision		SW-File Name(File Name)
X	1	S		Housing
X	2	F		DuraFETchip6
X	3	F		duraFETFaceGasket_Viton_D75A
X	4	G		FrontCoverPlateTailShoulder
X	5	I		backCoverPlate
X	6	H		portAdapter
X	7	G		VLRefPelletAlteredItem
X	8	H		VLRefElectrodeCap
	9			GDF_Wiring_Harness
X	9.1	F		VLPelletContact
X	9.1.1	I		VLPelletContactAlteredItem
X	9.1.2	I		Wire
X	9.1.3	I		VLPelletWireSolder
X	9.2	F		VLPelletFuzzButton
X	9.3			ISFETInterfaceAssy
X	9.3.1	E		ISFETInterfaceAssy
X	9.3.2	D		100221480rb2_isfetinterfacepcb
X	9.4	F		PaveTechPenetrator
X	9.4.1	G		PaveTechPenetrator
X	9.4.2	F		ORingViton-10
X	10	F		Fuzzbutton

6. Product Deliverables

- a. Expected ship dates, destinations, quantities
- b. Acceptance criteria
 - i. Inspection dimensions on machined parts are called out on the drawings.
 - 1. All surfaces with surface roughness callouts shall be inspected.
 - ii. An inspection report in AE's preferred format shall be provided.
 - iii. Resistance measurements are called on the schematic and the values shall be included in the inspection report.
- c. Inspection reports for critical parts (appendix B) for tracking ranges of compression.

- d. Completed, GDFs shall be packaged in ESD bubble wrap with maximum 10 to a box.
 - e. Ex-works, Applied Engineering to MBARI (Moss Landing)
- 7. Key Assumptions, Risks, and Issues
 - a. MBARI support the AE POR development
 - b. MBARI will support AE in the development of the modification to the POR. AE owns and is entirely responsible for the GDF POR.
 - c. The GDF POR will be a configuration controlled document with the standard AE configuration control procedures. Initial release and change orders to the POR shall require approval by one of the MBARI staff identified in section 9 below.
 - d. Example: Any change involving the Services provided under this SOW or an increase in the fees to be paid for the Services or the time necessary to complete the Services may be accomplished only by a written Change Order, submitted by the Applied Engineering to MBARI and subject to MBARI's approval, which approval must be obtained prior to any such change(s) can be implemented. No Change Order will be effective unless agreed to in advance and bearing the signature of Applied Engineering and an authorized representative of MBARI. If the Change Order is not approved pursuant to the foregoing, then the changes shall not be implemented, and the Services will be completed as set forth in this SOW. Applied Engineering shall not charge MBARI for any work performed by Applied Engineering without first obtaining a fully executed Change Order and any such work performed shall be at no cost to MBARI.
- 8. Term of SOW: Schedule
 - a. Example: The term of this SOW shall commence on the SOW Effective Date and shall continue for the lesser of the completion of the Services or one (1) year from the SOW Effective Date.
- 9. MBARI Key Contacts
 - a. Manufacturing manager (MBARI point of contact) :

Peter Walz; wape@mbari.org 831 775 1740
 - b. Principal Investigator: Ken Johnson
 - c. Project Engineer: Gene Massion:

magene@mbari.org; 831 775 1922
- 10. Applied Engineering Key Contacts (Name, email, phone, title)
 - a. Liana Marrero, LMarrero@appliedengineering.com
 - b. Steve Hockemeyer 408-482-9721, shockemeyer@appliedengineering.com
 - c. Rick Borges rborges@appliedengineering.com