

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE 12	PAGE OF PAGES 1 5
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2. AMENDMENT/MODIFICATION NO 0060	3. EFFECTIVE DATE 12/17/11	4. REQUISITION/PURCHASE REQ. NO N/A	5. PROJECT NO. (if applicable) MSFOC
6. ISSUED BY Procurement Office	CODE PS43	7. ADMINISTERED BY (if other than Item 6)	CODE MKG

Procurement Office
George C. Marshall Space Flight Center
National Aeronautics and Space Administration
Marshall Space Flight Center, AL 35812

PS43/Mark A. York (256) 544-4028

8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State, and Zip Code) JACOBS TECHNOLOGY INC. MSFOC GROUP 13800 OLD GENTILLY ROAD, BLDG 320 NEW ORLEANS, LA 70129-2218 ATTN: MIKE DAWSON (931) 455-6400	(X)	9A. AMENDMENT OF SOLICITATION NO
		9B. DATED (SEE ITEM 11)
	X	10A. MODIFICATION OF CONTRACT/ORDER NO NNM09AA20C
		10B. DATED (SEE ITEM 12) 05/01/2009
CODE 07486 - CAGE	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers is extended, is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

- (a) By completing Items 8 and 15, and returning ... copies of the amendment;
- (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or
- (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required) N/A

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

<input type="checkbox"/>	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b)
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) 41.103(a)(3) Bilateral Modifications

E. IMPORTANT: Contractor is not is required to sign and return three (3) original copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organize by UCF section headings, including solicitation/contract subject matter when feasible.)

	Contract Amount	Alloted Funding
Previous Contract Amount	\$ 216,936,964	\$ 209,731,173.08
Increase this Modification	\$ 11,685,900	\$ 3,354,730.62
New Contract Amount	\$ 228,622,864	\$ 213,085,903.70

(Except as provided herein, all terms and conditions of the document referenced in Item 5A or 10A, as hereinafter changed, remains unchanged and in full force and effect.)

15A. NAME AND TITLE OF SIGNER (Type or print) Michael C. Dawson, Vice President & General Manager MAF Group, Jacobs Technology, Inc.	15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED 12/5/11	15D. UNITED STATES OF AMERICA	15E. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Joseph L. Eversole Contracting Officer	15F. DATE SIGNED 12/17/11
16A. SIGNATURE OF SIGNER (Type or print) <i>Michael C. Dawson</i>		16B. SIGNATURE OF CONTRACTING OFFICER (Type or print) <i>Joseph L. Eversole</i>			

14. DESCRIPTION OF AMENDMENT/MODIFICATION (continued):

(A) Clause B.2, **ESTIMATED COST AND AWARD FEE (1852.216-85) (SEP 1993)**, as set forth in Table B-1 of the contract, is hereby increased by (b)(4) to incorporate task order values in Attachment J-16. The following recapitulation sets forth current contract values.

Section B-2 Estimated Cost and Award Fee is changed from:

The total estimated cost of this contract is (b)(4) for CLIN 1 - 9. The total award fee for this contract is (b)(4) for CLIN 1,2,4,5,7,and 8. The total estimated cost for Option Years 1 and 2 is (b)(4) for CLIN 10 - 15. The total award fee for the Option Years 1 and 2 is (b)(4) for CLIN 10, 11, 13, and 14. The total estimated cost of this contract is (b)(4) with total award fee of (b)(4) for a total contract value of **\$292,178,957.**

to:

The total estimated cost of this contract is (b)(4) for CLIN 1 - 9. The total award fee for this contract is (b)(4) for CLIN 1,2,4,5,7,and 8. The total estimated cost for Option Years 1 and 2 is (b)(4) for CLIN 10 - 15. The total award fee for the Option Years 1 and 2 is (b)(4) for CLIN 10, 11, 13, and 14. The total estimated cost of this contract is (b)(4) with total award fee of (b)(4) for a total contract value of **\$310,179,329.**

Table B-1 is changed from:

TABLE B-1, ESTIMATED COST AND AWARD FEE (AF)					
CLIN	Description	TOTAL ESTIMATED COST	TOTAL MAXIMUM POTENTIAL AWARD FEE	TOTAL EARNED AWARD FEE	TOTAL VALUE
1	Mission Services for Yr 1	(b)(4)	(b)(4)	\$2,447,216	\$33,476,993
2	J-1 PWS IDIQ Task Orders for Year 1			\$775,236	\$10,669,375
3	J-2 PWS IDIQ Task Orders for Year 1			N/A	\$30,400,756
Total CLIN 1, 2 and 3					\$74,547,124
4	Mission Services for Yr 2	(b)(4)	(b)(4)	\$2,613,298	\$35,446,755
5	J-1 PWS IDIQ Task Orders for Yr 2			\$1,261,581	\$17,153,385
6	J-2 PWS IDIQ Task Orders for Yr 2			N/A	\$34,257,227
Total CLIN 4, 5 and 6					\$86,857,367
7	Mission Services for Yr 3	(b)(4)	(b)(4)		\$36,140,894
8	J-1 PWS IDIQ Task Orders for Yr 3				\$8,521,506
9	J-2 PWS IDIQ Task Orders for Yr 3			N/A	\$10,870,074
Total CLIN 7, 8, and 9					\$55,532,474

to:

TABLE B-1, ESTIMATED COST AND AWARD FEE (AF)					
CLIN	Description	TOTAL ESTIMATED COST	TOTAL MAXIMUM POTENTIAL AWARD FEE	TOTAL EARNED AWARD FEE	TOTAL VALUE
1	Mission Services for Yr 1	(b)(4)		\$2,447,216	\$33,476,993
2	J-1 PWS IDIQ Task Orders for Year 1	(b)(4)		\$775,236	\$10,669,375
3	J-2 PWS IDIQ Task Orders for Year 1	(b)(4)		N/A	\$30,400,756
Total CLIN 1, 2 and 3					\$74,547,124
4	Mission Services for Yr 2	(b)(4)		\$2,613,298	\$35,446,755
5	J-1 PWS IDIQ Task Orders for Yr 2	(b)(4)		\$1,261,581	\$17,153,385
6	J-2 PWS IDIQ Task Orders for Yr 2	(b)(4)		N/A	\$34,257,227
Total CLIN 4, 5 and 6					\$86,857,367
7	Mission Services for Yr 3	(b)(4)			\$36,140,894
8	J-1 PWS IDIQ Task Orders for Yr 3	(b)(4)			\$13,430,924
9	J-2 PWS IDIQ Task Orders for Yr 3	(b)(4)		N/A	\$17,646,556
Total CLIN 7, 8, and 9					\$67,218,373

Table B-2 is changed from:

TABLE B-2, MISSION SERVICES - OPTION VALUES					
CLIN	DESCRIPTION	TOTAL ESTIMATED	TOTAL MAXIMUM	TOTAL EARNED	TOTAL VALUE
10	Mission Services for Yr 4 (Option 1)	(b)(4)			\$37,286,494
11	J-1 PWS IDIQ Task Orders for Yr 4 (Option 1)	(b)(4)			TBD
12	J-2 PWS IDIQ Task Orders for Yr 4 (Option 1)	(b)(4)		N/A	TBD
CLIN 10, 11, and 12					\$37,286,494
13	Mission Services for Yr 5 (Option 2)	(b)(4)			\$37,955,497
14	J-1 PWS IDIQ Task Orders for Yr 5 (Option 2)	(b)(4)			TBD
15	J-2 PWS IDIQ Task Orders for Yr 5 (Option 2)	(b)(4)		N/A	TBD
CLIN 13, 14, and 15					\$37,955,497

to:

TABLE B-2, MISSION SERVICES - OPTION VALUES					
CLIN	DESCRIPTION	TOTAL ESTIMATED	TOTAL MAXIMUM	TOTAL EARNED	TOTAL VALUE
10	Mission Services for Yr 4 (Option 1)	(b)(4)			\$37,286,494
11	J-1 PWS IDIQ Task Orders for Yr 4 (Option 1)	(b)(4)			\$1,796,178
12	J-2 PWS IDIQ Task Orders for Yr 4 (Option 1)	(b)(4)		N/A	\$4,448,837
CLIN 10, 11, and 12					\$43,531,509
13	Mission Services for Yr 5 (Option 2)	(b)(4)			\$37,955,497
14	J-1 PWS IDIQ Task Orders for Yr 5 (Option 2)	(b)(4)			\$69,459
15	J-2 PWS IDIQ Task Orders for Yr 5 (Option 2)	(b)(4)		N/A	TBD
CLIN 13, 14, and 15					\$38,024,956

(B) Clause B.5, **AWARD FEE SCORES**, as set forth on page B-5 of the contract, is hereby revised to reflect revised Award Fee pools as result of this modification.

(C) Clause B.6, **CONTRACT FUNDING (1852.233-81) (JUN 1990)**, as set forth on page B-5 of the contract, is hereby increased by **\$3,364,730.62** as result of this modification.

Financial and Accounting Data to be revised:

PR # 4200415090/4200415908
 Internal Order FC000000
 Cost Center 62SF02/62XP03/62XP01/62SF01
 Fund Center 62

WBS Element	Fund	Amount
735200.01.01.08.02	EXCX22011D	\$9,541.72
804911.02.08.4C.SF36.12	CASX12012R	\$1,780.00
804911.02.08.45.SF36.12	CASX12012R	\$25,008.00
804911.02.08.4A.SF27.12	CASX12012R	\$7,030.00
804911.02.08.45.SF27.12	CASX12012R	\$275.00
804911.02.08.4A.SF3M.12	CASX12012R	\$3,455.00
804911.02.08.35.SF6A.12	CASX12012R	\$74,359.00
804911.02.08.35.SF6B.12	CASX12012R	\$85,198.00
804911.02.08.35.SF6C.12	CASX12012R	\$38,383.00
804911.02.08.36.SF6C.12	CASX12012R	\$535.00
804911.02.08.4A.SF6D.12	CASX12012R	\$10,801.00
804911.02.08.45.SF3L.12	CASX12012R	\$336,062.00
804911.02.08.45.SF3L.12	CASX12012R	\$181,583.00
921179.01.08.R1.AS73.12	CASX12012R	\$0.50
921179.01.08.11.AS73.12	CASX12012R	\$6,560.00
804911.02.08.45.SF43.12	CASX12012R	\$317,643.00
804911.02.08.3A.SF60.12	CASX12012R	\$98,039.00
804911.02.08.35.SF6E.12	CASX12012R	\$7,220.00
585777.08.30.30.01	EXPX22012D	\$2,080,000.00
585777.01.01.03	EXPX22012D	\$15,000.00
804911.02.08.4D.SF36.12	CASX12012R	\$33,333.00
804911.02.08.45.SF44.12	CASX12012R	\$226.00
573754.09.02.08.01.02	EXPX22012D	\$16,000.00
573754.09.02.08.01.02	EXPX22012D	\$10,367.00
585777.08.30.01.62.01	EXPX22012D	\$6,331.40

The following recapitulation sets forth current funded amounts.

(D) **Attachment J-1 Performance Work Statement, Section 10.0 “Construction Management”** is revised to **“Project Management”**. Additional references to Construction Management are revised throughout Section 10.0. The changes are incorporated to more adequately reflect current contract requirements than those stated in the contract solicitation.

(E) **Attachment J-2 Facilities Performance Work Statement,** is revised to increase the threshold for Construction of Facilities from \$500,000 to \$1,000,000.

(F) **Attachment J-13 Glossary,** is revised to reflect changes in definitions of Construction of Facility Project, Local Project, and Maintenance Project.

(G) **Attachment J-16 IDIQ List of Task Orders** is hereby revised to update Task Order Values, Period of Performance and incorporate Task Orders 133J-1 through 181J-1 and 149J-2 through 168J-2.

(H) As a result of this modification, the following pages of the contract are hereby deleted and replaced with a new page as indicated below.

<u>Attachments</u>		<u>Replacement Added Page(s)</u>
<u>Page(s) Deleted</u>		
B-1 and B-2 (Mod 0059)		B-1 and B-2 (Mod 0060)
B-5 (Mod 0059)		B-5 (Mod 0060)
J-1 –105 through J-1-111(Basic)		J-1 –105 through J-1-111 (Mod 0060)
J-2-2 (Basic)		J-2-2 (Mod 0060)
J-13-13 (Basic)		J-13-13 (Mod 0060)
J-13-19 (Basic)		J-13-19 (Mod 0060)
J-13-30 (Basic)		J-13-30 (Mod 0060)
J-16 (Mod 0050)		J-16 (Mod 0060)

B-1 SERVICES TO BE FURNISHED AND TYPE OF CONTRACT

A. Consistent with NASA's most important core value of safety - safety of the public, safety of the astronauts and pilots, safety of our workforce, and safety of our equipment and property: The Contractor shall provide all resources (except as expressly stated in the contract as furnished by the Government) necessary to furnish the services delineated in the Performance Work Statement (PWS) in Attachment J-1, entitled: "Michoud Assembly Facility Manufacturing Support and Facilities Operations Contract (MSFOC)" and Attachment J-2, entitled: "MSFOC Facilities PWS."

B. The services will be procured under two separate portions, Mission Services (MS) and Indefinite Delivery/Indefinite Quantity (IDIQ). The requirement is being procured on a cost-plus-award-fee basis. The contract and supporting data are organized as shown below:

[1] The Mission Services portion covers work identified in Section 1.0 – 10.0 of the Attachment J-1, MSFOC PWS. Project management and administrative resources necessary to manage both the Mission and the IDIQ contract portions are covered in the Mission Services.

[2] IDIQ task orders will be used to procure those services identified in Section 11.0 of Attachment J-1, MSFOC PWS and Section 1.0 - 8.0 of Attachment J-2, MSFOC Facilities PWS that cannot be predetermined or quantified in advance.

(End of Clause)

B-2 1852.216-85 ESTIMATED COST AND AWARD FEE (SEP 1993)

A. The total estimated cost of this contract is (b)(4) for CLIN 1 - 9. The total award fee for this contract is (b)(4) for CLIN 1,2,4,5,7,and 8. The total estimated cost for Option Years 1 and 2 is (b)(4) for CLIN 10 - 15. The total award fee for the Option Years 1 and 2 is (b)(4) for CLIN 10, 11, 13, and 14. The total estimated cost of this contract is (b)(4) with total award fee of (b)(4) for a total contract value of \$310,179,329.

B. Table B-1 reflects the contract values of individual contract line items (CLINs) and is set forth below:

TABLE B-1, ESTIMATED COST AND AWARD FEE (AF)

CLIN	Description	TOTAL ESTIMATED COST	TOTAL MAXIMUM POTENTIAL AWARD FEE	TOTAL EARNED AWARD FEE	TOTAL VALUE
1	Mission Services for Yr 1	(b)(4)		\$2,447,216	\$33,476,993
2	J-1 PWS IDIQ Task Orders for Year 1			\$775,236	\$10,669,375
3	J-2 PWS IDIQ Task Orders for Year 1			N/A	\$30,400,756
Total CLIN 1, 2 and 3					\$74,547,124
4	Mission Services for Yr 2	(b)(4)		\$1,321,554	\$35,446,755
5	J-1 PWS IDIQ Task Orders for Yr 2			\$834,523	\$17,153,385
6	J-2 PWS IDIQ Task Orders for Yr 2			N/A	\$34,257,227
Total CLIN 4, 5 and 6					\$86,857,367
7	Mission Services for Yr 3	(b)(4)			\$35,939,926
8	J-1 PWS IDIQ Task Orders for Yr 3				\$13,430,924
9	J-2 PWS IDIQ Task Orders for Yr 3			N/A	\$17,646,556
Total CLIN 7, 8 and 9					\$67,218,373

If the Government exercises any of its Options pursuant to the terms of the contract, the estimated costs and fees for each Mission Services CLIN shall be as set forth in Table B-2 below.

TABLE B-2, MISSION SERVICES - OPTION VALUES

CLIN	DESCRIPTION	TOTAL ESTIMATED COST	TOTAL MAXIMUM POTENTIAL AWARD FEE	TOTAL EARNED AWARD FEE	TOTAL VALUE
10	Mission Services for Yr 4 (Option 1)	(b)(4)			\$37,286,494
11	J-1 PWS IDIQ Task Orders for Yr 4 (Option 1)				\$1,796,178
12	J-2 PWS IDIQ Task Orders for Yr 4 (Option 1)			N/A	\$4,448,837
CLIN 10, 11, and 12					\$43,531,509
13	Mission Services for Yr 5 (Option 2)	(b)(4)			\$37,955,497
14	J-1 PWS IDIQ Task Orders for Yr 5 (Option 2)				\$69,459
15	J-2 PWS IDIQ Task Orders for Yr 5 (Option 2)			N/A	TBD
CLIN 13, 14, and 15					\$38,024,956

B-5 AWARD FEE SCORES

The amount of award fee earned shall be determined in accordance with Section J, Attachment J-5, *Performance Evaluation Plan*, and B.4, "1852.216-76 Award Fee for Service Contracts." The following tables specify the award fee available and award fee earned. NASA will make provisional and final earned award fee payments in accordance with B.4, "1852.216-76 Award Fee for Service Contracts."

AWARD FEE PERIOD		AWARD FEE		
FROM	TO	AVAILABLE	EARNED	
BASE PERIOD				
1-May-09	31-Oct-09	(b)(4)	\$1,537,924	
1-Nov-09	30-Apr-10		\$1,684,528	
1-May-10	31-Oct-10		\$2,156,077	
1-Nov-10	30-Apr-11		\$1,718,802	
1-May-11	31-Oct-11			
1-Nov-11	30-Apr-12			
OPTION YEAR 1				
1-May-12	31-Oct-12			
1-Nov-12	30-Apr-13			
OPTION YEAR 2				
1-May-13	31-Oct-13			
1-Nov-13	30-Apr-14			

B-6 1852.232-81 CONTRACT FUNDING (JUN 1990)

- A. For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is (b)(4). This allotment is for the MAF Manufacturing Support and Facility Operations Contract and covers the following estimated period of performance: May 1, 2009 through December 30, 2011.
- B. An additional amount of (b)(4) is obligated under this contract for payment of fee.

	Previous	This Action	Total
Estimated Cost:			
Operations	(b)(4)		
Construction of Facilities	(b)(4)		
Provisional Award Fee:			
Earned Award Fee:	\$ 7,097,331	\$ -	\$ 7,097,331
Total Sum Allotted:	\$ 209,731,172	\$ 3,364,731	\$ 213,095,902

(End of Clause)

G. Resource Conservation and Recovery Act (RCRA) Corrective Action

Scope:

The Contractor shall be responsible for providing the environmental oversight and interface functions as it relates to the RCRA Corrective Action at MAF. This includes, but is not limited to management and operations of the Air Stripper (Pump & Treat) facilities, Dense Non-Aqueous Phased Liquid (DNAPL) trench, and monitoring and recovery wells. The MSFC Environmental Office will be responsible for Management of the MAF Corrective Action Program.

10.0 Project Management

NOTE: Effort in this PWS section is not part of Mission Services, and if determined appropriate, will be authorized by an IDIQ task.

Scope:

The Contractor shall provide overall project management (including scope, cost and schedule) and execution of local projects and CoF projects. Design and inspection effort for construction projects at MAF will be performed by other NASA contractor(s).

Work Requirements:

The Contractor shall:

1. Manage and implement facility projects in accordance with NPR 8820.2, *Facility Project Implementation Guide*.
2. Prepare and submit NASA Form 1509 (project approval document) to NASA and maintaining a copy of the approved NASA Form 1509 authorizing the project (required for projects greater than \$50K).
3. Develop project requirements documents
4. Prepare bid packages, conducting job walks/site visits with potential **subcontractors**, and awarding of subcontracts
5. Coordinate **all** activities with user(s)/tenant(s) to minimize any potential impact to user(s)/tenant(s) activities.
6. The Contractor shall verify progress by conducting weekly meetings with the **subcontractor** and the A&E service provider.

10.1 Local Projects

Scope:

The Contractor shall provide management of local projects with an estimated value of less than **\$1,000,000**.

10.1.1 Project Management

Scope:

The Contractor shall execute local projects utilizing either contractor in-house or subcontract personnel. The Contractor shall utilize subcontract personnel for 100% of local projects except for COTR approved deviations.

Work Requirements:

The Contractor shall:

1. Coordinate and conduct design reviews (minimum of one review for local projects).
2. Utilize latest MAF Facility Design Master Specifications.
3. Perform critical path planning and scheduling to ensure successful implementation with minimal impact to MAF site occupants.
4. Perform pre-solicitation and post award activities for subcontracted work.
5. Resolve Change Items and claims with subcontractor.
6. Review and approve subcontractor proposed schedule and evaluate and track progress.
7. Perform the necessary quality assurance/quality control on each project.
8. Collect and distribute all documentation related to completed **project** effort.
9. Coordinate with the **design lead** any deviations from the design drawings prior to moving forward with construction. Provide a copy of final redline drawings to the design lead in order to prepare final as-built drawings for distribution and perform any required modifications to configuration control drawings.
10. Implement facility activation plans to ensure new or modified facilities or equipment are coordinated, reviewed, and accepted by the Government.

10.1.2 Authorization

Scope:

The Contractor shall solicit inputs via FWR from Programs, tenants, and NASA before submitting a local projects plan for the Fiscal Year (FY). The FY Plan shall be submitted to NASA for approval prior to implementation. Subsequent modifications

require NASA approval prior to implementation. The Contractor shall integrate this plan with the 5-Year plan.

10.1.3 Change Items (CI), Request for Information (RFI) and Claims

Scope:

The Contractor shall manage and close all CI's and RFI's to include obtaining assistance from A&E service provider for resolution. The Contractor shall manage and close all subcontractor claims for additional compensation.

Work Requirements:

The Contractor shall:

1. Prepare cost estimates for all CIs and claims.
2. **For all A&E generated designs, the A&E service provider construction cost estimate input will be utilized for change items and claims valued at \$100,000 or greater. Provide the A&E service provider all necessary documents and drawings for preparing a change item and/or claim construction cost estimate.**
3. Evaluate and negotiate CI and claims with and provide RFI responses to the subcontractor.

10.1.4 Project Execution

Scope:

The Contractor shall execute approved local projects consistent with approved budgets and schedules. When a project that required a design package is complete, the Contractor will notify the Government and the **engineering lead** to schedule the final inspection. The Contractor in conjunction with NASA, the construction subcontractor, **the engineering lead** and the cognizant user(s)/tenant(s) will conduct the final inspection and correct any discrepancies noted during the final inspection. When all discrepancies have been corrected and accepted by NASA, a completion statement will be submitted to NASA and filed by the Contractor to document project closure certificate of completion.

A) Administration:

Scope:

The Contractor shall be responsible for maintaining contract plans, specifications, field engineering change documents, test data, drawing files, submittals, vendor data, correspondence, status reports, progress schedules and contract reports as specified.

Work Requirements:

The Contractor shall:

1. Regularly review the subcontractor's progress schedules for sufficiency of detail, proper logic, time duration, milestone inclusion, and cost data, and provide comments/recommendations to affected MAF organizations.
2. Resolve comments and document the results of these resolutions.
3. Assure that revisions to the schedules are made by the **subcontractor** and that all affected MAF organizations are apprised of these changes.
4. Review **subcontractor** work plans to assure that all contract requirements are satisfied, and resolve discrepancies identified during reviews.
 - a. As a minimum, the Contractor shall review quality, safety, and verification testing plans.
 - b. The reviews shall include an analysis of the project control systems to assure documentation is complete and compatible with contract goals.
5. Maintain on-site contract drawings (including shop drawings), plans, procedures, submittals, specifications, test requirements, and project correspondence files to assure adequate documentation of all contractual agreements.
6. Be responsible, when required, for the following tasks in conjunction with GFE materials and equipment required by the construction contractor:
 - a. Document receipt of GFE.
 - b. Contact appropriate individual (design lead, systems engineer, NASA, etc.) for problems associated with GFE.
 - c. Expedite delivery of GFE to construction subcontractor.
 - d. Identify GFE shortages.
 - e. Track documentation to support GFE.
 - f. Inspection of GFE upon delivery.
7. Ensure all O&M documentation including vendor O&M manuals, vendor as-built drawings, software programs, and equipment parts list has been properly processed and distributed to Contractor assigned O&M organizations.

B) Field Surveillance, Inspection and Documentation:

Scope:

The Contractor shall be responsible for conducting on-site surveillance and inspection, expediting and monitoring of all operations associated with assigned projects, and preparing / maintaining files, logs etc. to document project execution activities.

Work Requirements:

The Contractor shall:

1. Perform surveillance and inspections of all assigned projects utilizing inspection plans, current drawings, specifications, field change data, and all applicable documentation approved for incorporation into the subcontract.
 - a. Daily activity records, covering all disciplines and crafts, shall be prepared in order to provide a chronological history of task accomplishment.
 - b. Records and forms shall be prepared and maintained to record/reflect anomalies, unsatisfactory conditions, corrective actions, and final dispositions.
2. Maintain a set of contract drawings in a current condition, reflecting changes, deviations, and other pertinent information.
3. Verify all tests are performed by the subcontractor as required by the construction subcontract drawings and specifications.
4. Witness all testing required to be witnessed in the subcontract and specifications.
 - a. Tests performed by the subcontractor off-site need not be witnessed unless directed by NASA, but test results shall be reviewed as required.
 - b. Testing which is required for receiving inspection purposes (GFE, Contractor-procured items) shall be performed by the construction subcontractor, witnessed by his Quality Control representative, and surveyed by the Contractor.
 - c. Assure that tests and test results are properly documented by the subcontractor, as required by the subcontract.
5. Inspect and evaluate the subcontractor's on-site plant and equipment for compliance with safety, compatibility, and serviceability requirements.
6. Prepare and maintain logs, files, etc. as required to document and track on-site project work, inspections, and corrective actions. As a minimum, this record system will record all technical support requests (on-site source), engineering Requests for Information (RFIs) and Change Items (CIs), engineering responses to RFIs and Claims.
7. Receive shop drawings/data submittals from the **subcontractor**, transmit the drawings for review, **review by engineering lead**, receive the drawings/data submittals after review, and return to the **subcontractor** (shop drawing log

indicating progress of each step shall be kept used to track and expedite the shop drawings/data submittals to assure a timely response.

8. Ensure that all requests for support such as engineering identifications, requests for information, requests for special equipment support, etc., are logged and tracked to preclude impacts to planned schedules and provide for complete and accurate documentation.

C) Site Coordination:

Scope:

The Contractor shall interface/coordinate with NASA and appropriate NASA contractors to ensure daily and long term schedules, changes, problems, impacts, documentation, and other program/project matters are resolved. The Contractor shall schedule and chair weekly status meetings with **subcontractors, engineering lead**, and all pertinent personnel throughout **all project phases** for all on-going **facilities** projects.

D) Special Requirements:

Scope:

Contractor shall be responsible for performing approved **projects** in various conditions, with qualified personnel, and in accordance with national/local codes and standards.

Work Requirements:

The Contractor shall:

1. Require some work to be performed under restrictive conditions (enclosures, pits, tunnels,) heights in excess of 200 feet, and severe weather conditions.
2. Perform all work in accordance with national/local building codes and standards, and NASA safety standards. High pressure system work will be performed in accordance with ASME Boiler Code and ANSI Standards.
3. Ensure welders are certified in accordance with ASME/ANSI/AWS. High pressure systems and other critical weld will be inspected by the appropriate Non-destructive Examination method and approved by a certified weld inspector.
4. Provide asbestos certified craft which are capable of performing "on-sheet" and "glove-bag" abatement of asbestos in support of **facilities** projects.

5. Provide in-house craftsman that are fully qualified by technical craft/trade training and/or progressive experience within assigned work classification. Qualifications and position records for all craftsmen must be documented.

10.2 CoF Projects

Scope:

The Contractor shall provide management of construction of facilities projects which are those with an estimated value greater than **\$1,000,000**.

10.2.1 Construction Project Management

Scope:

The Contractor is responsible for furnishing the necessary management, labor, materials, subcontractors, equipment and supplies, except as specified to be furnished in accordance with Attachment J-7, to implement CoF projects at MAF. All CoF **implementation** will be subcontracted.

Work Requirements:

In addition to the Local Project requirements in 10.1, the Contractor shall:

1. Coordinate design reviews (30%/60%/90% required for CoF). CoF funds are typically released by NASA Headquarters based on 60% design review. Long lead procurement items will be identified during the 30% or 60% design reviews as required supporting the construction schedule.
2. Perform **subcontract** award activities which include management and documentation of proposal opening process, development of cost worksheet/bid report, details bids, apparent low bidder, cost estimate and available funds, proposal summary, and technical evaluation.

10.2.2 Schedules

Scope:

The Contractor shall prepare a CoF master schedule for authorized projects and obtain Government approval. The master schedule is a one line schedule for each project. For each individual project, the Contractor is responsible for preparing a more detailed/multi-bar schedule which identifies all aspects of the project, from solicitation through project completion. If any revisions to the completion date of any project schedule are required, a revised schedule shall be prepared by the Contractor and NASA approval obtained.

2.0 REHABILITATION OF CAP:

Scope:

The Contractor shall rehabilitate CAP. Contractor Acquired Property rehabilitation projects shall be approved by the Contracting Officer prior to the start of each project.

3.0 PAYMENT OF UTILITIES:

Scope:

The Contractor shall provide for the direct payment of all utility expenses incurred at the MAF beginning upon completion of contract phase-in and with the assumption of full contract responsibilities. For those expenses in which MAF tenants are required to pay a portion of the expense (electricity, water, natural gas, and fuel) the Contractor will maintain accounting records that reflect the level of consumption for each tenant.

4.0 IMPLEMENTATION OF LOCAL PROJECTS:

Scope:

The Contractor shall provide the services and supplies for the installation, modification, and additions to existing real property and installed property provided to the contractor at MAF needed to carry out the PWS as identified in Section 10, Attachment J-1, Performance Work Statement. These projects will be subcontracted and does not fit the CoF Construction criteria defined as a project with a value greater than **\$1,000,000**. Items so furnished shall be listed and reported as Modification and Construction of Real and Installed Property, pursuant to Section 7.1, Attachment J-1, Performance Work Statement.

5.0 ENVIRONMENTAL COMPLIANCE AND RESTORATION:

Scope:

The Contractor shall provide the services and supplies for the installation, modification and additions to existing environmental related real property needed to carry out the PWS as identified in Section 9.0, Attachment J-1 Performance Work Statement. These projects will be funded through the MSFC Environmental Office and does comply with the CoF funding criteria and limitations. Items so furnished shall be listed and reported as Modification and Construction of Real and Installed Property, pursuant to Section 8.0, Attachment J-1 Performance Work Statement.

6.0 CONSTRUCTION OF FACILITIES:

Scope:

The Contractor shall provide the services and supplies for the installation, modification and additions to existing real property and installed property provided to the Contractor needed to carry out the PWS as identified in Section 10.0, Attachment J-1 Performance Work Statement. These projects will be subcontracted and fits the CoF Construction criteria defined as a project with a value greater than **\$1,000,000**. Items so furnished shall be listed and reported as Modification and Construction of Real and Installed Property, pursuant to Section 7.1, Attachment J-1 Performance Work Statement.

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skin protection as Level B, with a lower level of respiratory protection. Level C PPE is used when the type of airborne exposure is known to be guarded against adequately by an APR.

Life-Cycle Costs (LCC) - A form of economic analysis that considers the total cost of owning, operating, and maintaining collateral and non-collateral property over its useful life. Life-cycle costs are the sum of the present value of: a. Investment costs, less salvage values, at the end of the study period, b. Non-fuel operation and maintenance costs, c. Replacement costs, less salvage costs, of replaced building systems, and d. Energy costs.

Local Projects – Maintenance projects including, **but not limited to**, system upgrades, re-configuration, replacement of obsolete items, **alterations, modification, service requests and** demolition projects with an estimated value of no less than \$2,000 and no more than **\$1,000,000**. These construction activities include all construction as defined under the Davis Bacon Act.

Kit or Kitting - An assembly, or act of assembling, of hardware, equipment, or consumables placed in suitable containers for control and issue.

Lockout/Tagout - The placement of a device and/or tag in accordance with an established procedure to ensure the equipment being controlled cannot be operated until the device and/or tag is removed.

MAF Energy Conservation and Management Council – The MAF Energy Conservation and Management Council (ECC) is the forum that brings all organizations, project representatives and tenants together with one primary mission—energy conservation and awareness. The council includes representatives from the Michoud Assembly Facility population that are tasked with raising awareness of the importance of energy conservation, improving communications on MAF's campus, recommending a campaign for conservation and identifying cost reduction ideas/projects.

Maintainability – see Maintenance Definitions.

Maintenance – see Maintenance Definitions.

Maintenance Project – N/A

Management Information System (MIS) – System that enables the effective and efficient preparation, management, control, and dissemination of information and data required to successfully accomplish the Contract requirements. The integrated architecture of the MIS links all Information Technology (IT) applications and enable sharing and integration of data from multiple functional areas.

Master Facility Drawings – Drawings, hard copy or electronic, that act as the official record of the site's facilities.

Material - Property that may be consumed or expended during the performance of a contract, component parts of a higher assembly, or items that lose their individual identity through incorporation into an end-item. Material does not include equipment, special tooling, and special test equipment.

Maintenance Project – N/A

Planned Repair - Repair performed prior to failure. Machinery condition degradation, usually identified through Preventive Maintenance (PM), Predictive Testing and Inspection (PT&I), or other inspection, is repaired to prevent catastrophic failure. Also see Repair.

Predictive Maintenance (PdM) - Condition-based tasks which measure equipment performance or material condition against a pre-determined standard to assess whether conditions are satisfactory or corrective maintenance is required. Task results can be used to develop data to predict future unsatisfactory conditions or failures.

Preventive Maintenance (PM) - Also called time-based maintenance or interval-based maintenance. PM is the planned, scheduled periodic inspection (including safety), adjustment, cleaning, lubrication, parts replacement, and minor (no larger than Trouble Call scope) repair of equipment and systems for which a specific operator is not assigned. PM consists of many checkpoint activities on items that, if disabled, would interfere with an essential operation, endanger life or property, or involve high cost or long lead time for replacement. In a shift away from reactive maintenance, PM schedules periodic inspection and maintenance at predefined time or usage intervals in an attempt to reduce equipment failures.

Proactive Maintenance - The collection of efforts to identify, monitor and control future failure with an emphasis on the understanding and elimination of the cause of failure. Proactive maintenance activities include the development of design specifications to incorporate maintenance lessons learned and to ensure future maintainability and supportability, the development of repair specifications to eliminate underlying causes of failure, and performing Root Cause Failure Analysis (RCFA) to understand why in-service systems failed.

Programmed Maintenance (PGM) - Those maintenance tasks whose cycle exceeds one year, such as painting a building every fifth year. (This category is different from PM in that if a planned cycle is missed the original planned work still remains to be accomplished, whereas in PM only the next planned cycle is accomplished instead of doing the work twice, such as two lubrications, two adjustments, or two inspections.)

Recurring Maintenance - Maintenance performed on an item of equipment that is planned and performed on a set work schedule. The work and work schedules are based upon established standards.

Reliability Centered Maintenance (RCM) - The process used to determine the most effective approach to maintenance. A maintenance philosophy utilizing the most effective mix of corrective, preventive, predictive, and alternative maintenance tasks for a given system or equipment item based on intended function, failure analysis, and consequences of failures. The underlying principle of RCM is that maintenance tasks should result in real benefits of improved safety, improved operational availability, or reduced life-cycle costs. It involves identifying actions that, when taken, will reduce the probability of failure and which are the most cost

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Concept Drawings – Drawings developed initially for conveying basic project ideas.

Condition Monitoring - Also known as Predictive Maintenance it is the continuous or periodic monitoring and diagnosis of systems and equipment in order to forecast failure. Also see Predictive Testing and Inspection (PT&I).

Configuration Control - The discipline of processing changes to the configuration baseline to ensure that the changes are adequately described, assessed, approved by a proper authority, and closed upon verification of implementation.

Constraint: - Any technical or operational limiting factor (except parts, material, equipment, or tools) that would prohibit performance of an activity, or cause personal injury or equipment damage equipment if not resolved satisfactorily before the start of the work sequence or step.

Construction - Per the Davis-Bacon Act, the erection, installation, or assembly of: (1) a new or replacement facility, or (2) an addition in area, volume, or both to an existing facility.

Construction Of Facility (CoF) Project - A facility project relating to the erection, installation, or assembly of a new facility, replacement of facility, or an addition in area, volume, or both to an existing facility. CoF projects can be Institutional or Program funded and include new facility construction and facility revitalization (repair, restoration, rehabilitation, and modification of existing facilities) with an estimated value of **\$1,000,000** or greater. These activities include all construction as defined under the Davis Bacon Act. CoF projects are approved by NASA Headquarters and require Congressional approval.

Contracting Officer (CO) – The Contracting Officer is a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer (in accordance with procedures prescribed by the Acquisition Regulation (see Appendix B, resource 4, Part 1, Subpart 4).

Contracting Officer's Technical Representative (COTR) – The person who is an authorized Government representative of the Contracting Officer acting within the limits of their authority as specified by the COTR delegation letter. This term does not include any inspector or other person not named as COTR in the delegation letter or designated representatives.

Contractor - The supplier of the end item or service and associated support items to the Government under the terms of a specific contract.

Contractor Performance Metrics – Critical measurements that relate to performance of the contractor. Examples: meeting cost, schedule, and performance requirements.

Corrective Maintenance (CM) – See Maintenance Definitions

ATTACHMENT J-16
IDIQ LIST OF TASK ORDERS J-1

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Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
001	Phase In Support	05/01/2009 - 06/30/2009	(b)(4)		\$78,173
002	CMMS System	05/01/2009 - 06/30/2009			\$1,199,936
003	ET PSLE Support	05/01/2009 - 10/01/2010			\$1,738,204
004	PSLE Support for Orion	05/01/2009 - 10/01/2010			\$408,127
005	PSLE Support for ARES Upper Stage	05/01/2009 - 10/01/2010			\$348,439
006	GIS - Engineering Assessment- Cancelled				\$0
007	PSLE Support for NCAM	06/10/2009 - 07/02/2009			\$749,473
010	MAF Bldg 103 Vertical Assembly Building CoF	06/22/2009 - 09/30/2010			\$25,656
011	Site Promotion and Development Support	06/22/2009 - 09/30/2010			\$527,760
012	Provide Maint/Site Svcs to USDA	07/01/2009 - 09/30/2009			\$66,813
013	Provide Maint/Site Svcs to USCG	07/01/2009 - 09/30/2009			\$55,383
015	Substation30 S Low Volt Breaker Maintenance	06/24/2009 - 12/24/2009			\$154,546
016	Phase II Activities J1 PWS 1.1.5 10.2.1 and 10.2.2	06/30/2009 - 09/20/2009			\$23,178
017	Upper Stage Robotic Weld Tool 1 2 3	07/31/2009 - 12/31/2011			\$293,075
018	Upper Stage Mfg Machining Center Modifications	07/31/2009 - 05/16/2011			\$237,894
019	Maintenance Project - Integrate Gas Meters at MAF	08/10/2009 - 12/31/2011			\$302,073
020	Maintenance Project - Update Substation Meters at MAF	08/10/2009 - 2/28/2011			\$746,561
021	Implement FY09 Upper Stage MAF Minor CoF Project: Replace Substation 46 and MCCs (131)	11/16/2009 - 04/30/2012			\$206,546
022	Implement FY09 ORION MAF Minor CoF Project: Replace Plant Air	10/16/2009 - 08/31/2011			\$87,983

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IDIQ LIST OF TASK ORDERS J-1

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Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
023	Implement FY09 ORION MAF Minor CoF Project: Rehab Process Tanks IWTF	10/16/2009 - 09/30/2011	(b)(4)		\$95,133
024	GE1200 Aronson Weld Positioner	08/21/2009 - 09/30/2009			\$2,621
025	Replace Substation 16 Transformers	08/31/2009 - 02/28/2010			\$343,428
026	MAF 103 Highbay Addition Phase 3 of J-1 Activities	09/15/2009 - 4/30/2012			\$1,945,135
027	Provide Maintenance and Site Services to US Department of Agriculture and national Finance Center	10/01/2009 - 09/30/2010			\$487,393
028	Provide Maintenance and Site Services to US Coast Guard	10/03/2009 - 10/01/2010			\$224,777
029	MAF-114 Replace AHUs 14 & 26 for Cells G and K (J-1 activities)	10/01/2009 - 09/30/2011			\$101,946
030	Installation of 208V receptacles for SAIC equipment	10/01/2009 - 10/01/2009			\$43,807
031	Preservation Maintenance of ET Tooling and Equipment	10/01/2009 - 04/30/2010			\$1,159,269
032	Restore Process Areas Building 318	11/02/2009 - 11/30/2010			\$484,249
033	Perform Levee analysis	11/02/2009 - 10/30/2009			\$10,628
034	Restore HVAC System to South Manufacturing Areas Building 318 - Engineering Assessment	11/02/2009 - 12/12/2009			\$21,027
035	Replace sewer force line of Lift Station 22 @ Building 485	11/02/2009 - 12/30/2009			\$9,936
037	MAF Engineering Support	11/16/2009 - 09/30/2010			\$255,167
038	MAF 103 Modifications to Support Upper Stage Mfg. - Machining Center Enclosure and Vacuum System (J-1)	11/16/2009 - 04/30/2012			\$139,895

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IDIQ LIST OF TASK ORDERS J-1

Modification 0060

Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
039	Repair Fan House 43 air duct	12/11/2009 - 02/28/2010	(b)(4)		\$59,717
040	Metrology Site Preparation Building 318 -	02/26/2010 - 09/30/2010			\$497,216
041	Provide Material Handling/ Installation Support for Machining Center Installation in Area 37.	02/15/2010 - 12/12/2010			\$95,619
042	Re-insulation of Building 404A	02/22/2010 - 06/30/2010			\$113,395
043	Cryoflex Testing - Ablator Phase 3	04/05/2010 - 04/30/2010			\$1,277
044	Procure mobile operator consoles & enhanced cameras for RWT2 and RWT 3	04/01/2010 - 01/30/2011			\$202,978
045	Replace/Relocate AHUs 1-4 9Lab Ops) Design and Bid	02/26/2010 - 9/30/2011			\$200,000
046	MAF Redundant Pumpstation Support	04/01/2010 - 04/01/2012			\$700,000
047	Metrology Relocation: Relocate Lab Equipment from Building 103 to Building 318	10/01/2009 - 04/29/2011			\$496,692
048	Design for Modification of ET transporters - Cancelled	N/A			\$0
049	Roof Panel/Purlin Repairs in Building 103	03/08/2010 - 07/30/2010			\$200,530
050	Demolish MAF Buildings 175 (partial) 108 205 352 (partial) 406 and 483	04/01/2010 - 02/24/2011			\$46,524
052	Operations Support of MAF Laboratories	04/01/2010 - 09/30/2010			\$121,343
053	Preservation of ET Tools for Ares V Utilization (36 month preservation)	05/31/2010 - 06/30/2012			\$2,300,000
054	Provide IT Power Outlets for Orion Manufacturing Area	05/01/2010 - 07/30/2010			\$6,499
055	Lab Stand-up	10/01/2009 - 09/30/2010		\$1,837,978	

ATTACHMENT J-16
IDIQ LIST OF TASK ORDERS J-1

Modification 0060

Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
056	Provide Electrical Outlets and Crib Fencing Bldg. 420	05/01/2010 - 07/30/2010	(b)(4)		\$10,238
057	Replace Fire Alarm System Phase 3 and Rehabilitate Storm Drainage (304): Design and bid Package Preparation.	02/26/2010 - 9/30/2011			\$199,143
059	ARES (Upper Stage)Planning Services for MAF 420 - Modifications to Cells 3 and 4	05/30/2010 - 12/30/2011			\$1,631,674
060	Area 26 Thermal Protection System Application (Planning)	05/31/2010 - 03/27/2011			\$264
061	MAF Area 30 Upper Stage Assembly Proof Test (Planning)	06/15/2010 - 04/11/2011			\$737
062	Area 25 Common Bulkhead Seal Weld (Planning)	05/31/2010 - 02/25/2011			\$2,614
063	Area 19 Reaction Control system Assembly (Planning)	05/31/2010 - 01/26/2011			\$5,103
064	MAF Area 18 Aft Skirt Assembly and Integration (Planning)	05/31/2010 - 01/26/2011			\$3,506
065	Area 15 IU Integration and Test Cell (Planning)	05/31/2010 - 01/26/2011			\$5,034
066	Planning for Transporter Test Load Fixture Building	06/08/2010 - 12/05/2010			\$30,000
067	Planning for Area 16 Thrust Cone Integration / Common Test Cell	06/08/2010 - 02/03/2011			\$841
068	Planning for Area 40 External Clean and Prime Cell P Bldg. 131	04/09/2010 - 12/05/2010			\$6,892
069	Planning for Area 20 Slosh Baffle	06/08/2010 - 11/05/2010			\$7,625
070	Planning for Area 31 External MPS Integration	06/08/2010 - 11/05/2010			\$11,971
071	Planning for Area 21 Internal MPS Integration	06/08/2010 - 01/04/2011			\$3,171

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Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
072	Upgrade Energy Management Control System (EMCS)	06/01/2010 - 09/20/2011	(b)(4)		\$289,784
073	Remove Building 303 Storage Racks	06/17/2010 - 11/17/2010	(b)(4)		\$143,496
074	Installation of LM Capital Equip - Composite Material Freezer	06/22/2010 - 12/31/2010	(b)(4)		\$13,565
075	Repair Fanhouses (B103) Doors (B103 B201 B303 and B351) and Stacks (B103) (Katrina)	07/15/2010 - 08/29/2011	(b)(4)		\$631,803
076	Building 103 roof Repairs (Katrina)	07/15/2010 - 05/31/2011	(b)(4)		\$163,641
077	202 Cooling Tower Repairs (Katrina)	07/15/2010 - 08/09/2011	(b)(4)		\$167,954
078	Building 304 Storm Drainage Piping Repair (Katrina)	10/08/2010 - 08/29/2011	(b)(4)		\$975,000
079	Restore S-1C Saturn Booster Display B307 (Katrina)	07/15/2010 - 08/29/2011	(b)(4)		\$650,000
080	Site Roads and Bridge Repair (Katrina)	07/15/2010 - 08/29/2011	(b)(4)		\$750,000
081	Support for Gray vs. LM - Cancelled	07/15/2010 - 07/10/2011	(b)(4)		\$0
082	Demolish MAF Buildings 105 and 301 and MAF Structure 317 (J-1)	07/15/2010 - 02/29/12	(b)(4)		\$176,253
083	Security Modifications for Building 101 (Eng. & Mgt. services)	06/30/2010 - 01/29/2011	(b)(4)		\$16,778
084	Security Modifications for Building 303 (Eng. & Mgt. services)	06/30/2010 - 01/29/2011	(b)(4)		\$23,824
085	Site Preparation Package for PDS Tool Installation for NCAM	08/6/2010 - 09/30/2011	(b)(4)		\$29,912
086	Troubleshoot & Calibrate Machining Equipment In Support Of Orion Production Operations	02/08/2010 - 09/30/2010	(b)(4)		\$83,024

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Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
087	"Repair Fire Alarm System Phase 3" (Eng. & Mgt. services) FY 2010 COF	8/01/2010 - 06/30/2012	(b)(4)		\$208,000
088	MAF Replace/Relocate AHUs 1-4 and 1A Lab Op (Eng. & Mgt. services) FY10 Ares CoF)	08/01/2010 - 3/07/2012			\$200,000
089	In-Situ Thermal Desorption Pilot Project	08/01/2010 - 10/03/2011			\$316,075
090	Manufacturing Support For Blade Dynamics	07/01/2010 - 11/30/2010			\$189,764
091	Relocate Security Post 15 and Reroute Fencing (220)	08/27/2010 - 03/28/2011			\$71,121
092	Monostrain and Immersion Cryoflex Testing Ares Upper Stage	09/01/2010 - 11/30/2010			\$5,996
093	Provide Maintenance and Site Services to US Coast Guard for FY11	10/01/2010 - 9/30/2011			\$439,846
094	Program Planning and Control Support for FY10	04/01/2010 - 09/30/2010			\$82,236
096	Program Planning and Control Support for FY11	10/01/2010 - 9/30/2011			\$190,627
097	Renewable Energy Credits for FY10	9/16/2010 - 9/30/2010			\$3,720
098	Provide Cameras and Card Readers for USDA Building 350	10/15/2010 - 09/30/2011			\$22,614
099	MAF Engineering Support for FY11	10/01/2010 - 09/30/2011			\$170,465
100	Orion Project Laboratory Services	10/01/2010 - 09/30/2011			\$212,366
101	Provide Maintenance and Site Services to USDA for FY11	10/01/2010 - 9/30/2011			\$483,198
102	Repair Vertical Drainage Pump at Bldg.450	09/15/2010 - 12/15/2010			\$132,154
103	MAF Lab Sustainment	10/01/2010 - 09/30/2011			\$1,629,842

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Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
104	Provide Lab Support and Special Event Services for ET Extension for Flight Support in FY-11 (6-months)	10/01/2010 - 08/31/2011	(b)(4)		\$435,828
105	Tenant/ User Engineering Support for FY11	10/01/2010 - 09/30/2011			\$566,687
107	Modify Restrooms in Building 350 for ADA Compliance	10/15/2010 - 09/30/2011			\$129,134
108	FY11 Thermal Protection Products (TPP) Lab Services	10/01/2010 - 09/30/2011			\$47,792
109	Rehab Substation 30 Switchgear and Breaker	12/01/2010 - 03/30/2012			\$800,000
110	Provide 50,000 Gallon Diesel Storage Capability	12/01/2010 - 10/30/2011			\$400,000
111	Rehabilitate & Harden Pump Houses 304 and 143	12/01/2010 - 05/31/2012			\$400,000
112	Upgrade Building 450 Pump Station	12/01/2010 - 05/31/2012			\$667,846
113	Site Promotion & Development Support for FY11	10/01/2010 - 09/30/2011			\$500,000
115	Maintenance & Site Services for NCAM for FY11	10/01/2010 - 09/30/2011			\$450,001
116	Operations Support for Labs for FY11	10/01/2010 - 09/30/2011			\$169,890
117	Support for Orion GTA Ceremony	12/09/2010 - 12/14/2010			\$1,088
118	PM for LM Capital Equipment for FY11	10/01/2010 - 12/31/2011			\$8,001
119	CM for LM Capital Equipment for FY11	01/15/2011 - 12/31/2011			\$2,218
120	Perform Economic Impact Study 2011	02/28/2011 - 06/28/2011			\$27,545
121	Electrical Modifications for Bldg. 303 (Blade)	12/20/2010 - 02/28/2011			\$3,848

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Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
122	Remove Building 303 Bay 4 Storage Racks	03/01/2011 - 07/01/2011	(b)(4)		\$188,851
123	Provide Electrical Tie-in for LM Orion LAS Cone NDE tool	03/21/2011 - 04/29/2011			\$305
124	Installation of LM Capital Equipment - Friction Plug Welder	03/30/2011 - 12/31/2011			\$42,543
125	Planning/Eng. To Replace Substation 21 Bldg. 420	04/15/2011 - 08/07/2012			\$120,001
126	Planning/Eng. To Replace Forced Main Sanitary Piping Bldg. 303	04/15/2011 - 08/07/2012			\$140,000
127	Lab Support to perform Primer Shelf Life Extension for US	04/15/2011 - 05/31/2011			\$5,701
128	USDA Ceiling Tile Replacement and Move Crew Support	03/15/2011 - 05/31/2011			\$11,495
129	Replace Transformer Phase 3 (West Master Substation)	08/16/2010 - 07/12/2011			\$140,000
130	USCG Blow Out Preventer Support	08/09/2010 - 09/30/2011			\$1,477,002
131	Lab Support and T&H Services for LM FAST Program	05/01/2011 - 07/31/2011			\$3,471
132	Medical Services for USDA	03/01/2011 - 09/30/2011			\$70,812
133	USCG BOP Video Surveillance Back-up	12/23/2010 - 09/30/2011			\$13,438
134	Minor Mods in Support of Facility Ops for FY11	05/11/2011 - 09/30/2011			\$99,999
135	Logistic, Engineering and Other Support Services for BOEMRE	09/02/2010 - 09/30/2011			\$491,716
136	Natural Gas Meters	03/29/2011 - 07/03/2011			\$32,884
137	Repair Chiller #2 Bldg. 307	03/30/2011 - 07/03/2011			\$98,354
138	Demand Services for Blade Dynamics	05/16/2011 - 09/30/2011			\$16,385

ATTACHMENT J-16
IDIQ LIST OF TASK ORDERS J-1

Modification 0060

Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
139	Stand-up of MAF Machine Shop	10/1/2010 - 9/30/2011	(b)(4)		\$450,003
140	USCG Gun Mount	05/09/2011 - 07/31/2011			\$15,072
141	Demand Services for Boeing Upper Stage	06/01/2011 - 09/30/2011			\$1,018
142	Site prep for LM Orion Project	06/03/11 - 09/30/11			\$10,009
143	Prepare & ship hydraulic power supplies to MSFC	06/01/2011 - 08/31/2011			\$17,418
144	Demand Services for BP/DNV Forensic Investigation of BOP	04/18/2011 - 09/30/2011			\$262,985
145	Bldg. 320 Office Renovation	06/01/2011 - 03/01/2012			\$50,000
146	Bldg. 303 Site Prep for Blade Dynamics	04/18/2011 - 09/30/2011			\$535,965
147	Demand Services for Long Branch Productions	06/06/2011 - 12/31/2011			\$184,996
148	Cryogenic Monostrain Testing for MSFC Engineering (Upper Stage)	06/27/2011 - 08/31/2011			\$5,190
149	Modify Highbay AHUs 1A and 1B	06/30/2011 - 12/31/2011			\$13,274
150	Demand Services For B-K Manufacturing	05/16/2011 - 09/30/2011			\$1,009
151	JSC CEV Parachute Assembly System(CPAS) Mid-Altitude Deployment System(MDS)Sled Fabrication and Test	05/02/2011 - 07/08/2011			\$35,084
152	Gradient Cryoflex Testing for Upper Stage	06/27/2011 - 09/30/2011			\$12,323
153	US Coast Guard Horizontal Support Member Machine Shop Support	07/06/2011 - 07/31/2011			\$6,167
154	JSC CPAS Forebody Fabrication	08/01/2011 - 01/31/2012			\$197,510
156	Demo Buildings 301 and 317	08/01/2011 - 05/01/2012	\$45,366		

ATTACHMENT J-16
IDIQ LIST OF TASK ORDERS J-1

Modification 0060

Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
157	Support and Procurement Activities for Environmental Projects funded by recycling sales	07/14/2011 - 09/30/2011	(b)(4)		\$19,991
158	Support Re-Start of ET Tools 7398 and 5019 for Functional Checkout	08/19/2011 - 09/30/2011			\$44,923
159	Demand Services for LM Orion	08/12/2011 - 09/30/2012			\$10,000
160	ET94 Desiccant Monitoring	08/29/2011 - 09/30/2012			\$22,715
161	Renewable Energy Credits for FY11	08/04/2011 - 09/30/2011			\$3,431
162	Site Promotion and Development for FY12	10/01/2011 - 09/30/2012			\$500,000
163	Additional Cryogenic Monstrain Testing for Upper Stage	08/18/2011 - 09/30/2011			\$5,230
164	Additional Gradient Cryoflex Testing for Upper Stage	08/18/2011 - 09/30/2011			\$7,619
165	Logistics Engineering and Other Demand Services for BP/ DNV Preservation of BOP	07/18/2011 - 07/31/2012			\$127,127
168	Connect LM Capital Composite Freezer to Emergency Power Supply	08/09/2011 - 12/15/2011			\$12,522
169	Medical Services for USDA in FY12	10/01/2011 - 09/30/2012			\$162,733
170	SLS Modifications to Horizontal Major Weld 5019 5068 and 5069- Study and Tooling Project Package	09/21/2011 - 9/30/2012			\$366,000

ATTACHMENT J-16
IDIQ LIST OF TASK ORDERS J-1

Modification 0060

Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
171	SLS Modifications to Universal Weld System #1- Study and Tooling Project Package	09/21/2011 - 09/30/2012	(b)(4)		\$80,000
172	SLS Modifications to Cell P for External Clean and Prime-Study/PCD	09/21/2011 - 09/30/2012			\$226,000
173	SLS Modifications Cell A for Vertical Stack Building 110-	09/21/2011 - 09/30/2012			\$433,000
174	SLS Modifications to Cell N for TPS Application- Study/PCD	09/21/2011 - 09/30/2012			\$137,000
175	SLS Miscellaneous Updates for Dome Assembly Facility	09/21/2011 - 09/30/2012			\$40,000
176	SLS Modifications to Building 451 for - Study/PCD	09/21/2011 - 09/30/2012			\$133,000
177	Tenant/User Engineering Support for FY12	10/01/2011 - 09/30/2012			\$549,996
178	Provide Maintenance and Site Services to US Coast Guard for FY12	10/01/2011 - 09/30/2012			\$403,076
179	MAF Engineering Support for FY12	10/01/2011 - 09/30/2012			\$140,406
180	Heat Treatment of Clamshell for Stennis	09/28/2011 - 10/31/2011			\$1,615
181	Provide Maintenance and Site Services to USDA for FY12	10/01/2011 - 09/30/2012			\$440,842
SECTION J-1 TOTAL TASK ORDER VALUE					\$43,119,316

ATTACHMENT J-16

IDIQ LIST OF TASK ORDERS J-2

Modification 0060

Task Order No.	Initiating User/Org	Description	Period of Performance	Ceiling Burden Applied	Total Value
008	SF01	Bldg 351 Cafeteria Equipment	06/10/2009 - 07/07/2009	(b)(4)	\$144,779
009	SF01	Repair and Improve 351 Cafeteria	06/10/2009 - 07/10/2009		\$50,068
014	SF01	Payment of Utilities	06/01/2009 - 10/01/2010		\$17,117,537
017	SF01	Upper Stage Robotic Weld Tool 1 2 3	07/31/2009 - 12/31/2011		\$3,087,900
018	SF01	Upper Stage Mfg Machining Center Modifications	07/31/2009 - 09/28/2010		\$2,001,135
021	SF01	MAF- REPLACE SUBSTATION 46 and MCCs (131)	11/16/2009 - 04/30/2012		\$2,311,500
022	SF01	MAF - Replace Plant Air Phase 1	10/16/2009 - 8/31/2011		\$1,090,000
023	SF01	MAF - Rehab Process Tanks IWTF Phase 1	10/16/2009 - 09/30/2011		\$1,184,000
026	SF01	MAF 103 - Addition of Vertical Assembly and Welding Highbay	09/15/2009 - 04/30/2012		\$27,584,154
029	SF01	MAF-114 Replace AHUs 14 & 26 for Cells G and K	10/01/2009 - 09/30/2011		\$548,047
036	SF01	Contractor Acquired Property (CAP) for FY10	11/09/2009 - 12/30/2010		\$550,804
038	SF01	MAF 103 Modifications to Support Upper Stage Mfg. - Machining Center Enclosure and Vacuum System	11/16/2009 - 10/30/2011		\$1,998,498
051	SF01	Demolish MAF Buildings 175 (partial) 205 352 (partial) 406 and 483	04/01/2010 - 02/24/2011		\$169,771
054	SF01	Provide IT Power Outlets for Orion Manufacturing Area	05/01/2010 - 07/30/2010		\$12,157
058	SF01	Provide Electrical Outlets and Crib Fencing Bldg. 420	05/01/2010 - 10/31/2010		\$17,198
074	SF01	Installation of LM Capital Equipment - Composite Material Freezer	06/22/2010 - 12/31/2010		\$20,982
082	SF01	Demolish MAF Buildings 105 and 301 and MAF Structure 317	07/15/2010 - 02/29/2012		\$573,746
083	SF01	Security Modifications for Bldg. 101 (Construction services)	06/30/2010 - 12/29/2010		\$88,282

ATTACHMENT J-16

IDIQ LIST OF TASK ORDERS J-2

Modification 0060

Task Order No.	Initiating User/Org	Description	Period of Performance	Ceiling Burden Applied	Total Value
084	SF01	Security Modifications for Building 303 (Construction Services)	06/30/2010 - 01/29/2011	(b)(4)	\$196,730
087	SF01	Repair Fire Alarm System Phase 3 (FY 2010 ARES CoF)	08/01/2010 - 06/30/2012		\$2,943,000
088	SF01	MAF Replace/Relocate AHUs 1-4 and 1A Lab Op (FY 2010 ARES CoF)	08/01/2010 - 06/30/2012		\$1,749,000
091	SF01	Relocate Security Post 15 and Reroute Fencing (220)	08/27/2010 - 03/28/2011		\$285,159
095	SF01	Contractor Acquired Property (CAP) for FY11	10/01/2010 - 09/30/2011		\$836,689
098	SF01	Provide Cameras and Card Readers for USDA Building 350	10/15/2010 - 06/12/2011		\$173,872
106	SF01	Payment of Utilities for FY11	10/01/2010 - 09/30/2011		\$10,599,973
114	SF01	Utilities associated with In-Situ Thermo Desorption Project	08/1/10 - 10/03/11		\$101,348
124	SF01	Installation of LM Capital Equipment - Friction Plug Welder	03/30/2011 - 12/31/2011		\$245,629
149	SF01	Modify Highbay AHUs 1A and 1B	6/30/11 - 12/31/11		\$100,000
155	SF01	Procure and Install a Can Crusher (CAP) funded by Recycling Sales	5/1/11 - 9/30/11		\$45,611
156	SF01	Demo Buildings 301 and 317	8/1/11 - 5/1/12		\$401,994
166	SF01	Contractor Acquired Property (CAP) for FY12	10/01/2011 - 09/30/2012		\$500,000
167	SF01	Payment of Utilities for FY12	10/01/2011 - 09/30/2012		\$10,000,000
168	SF01	Connect LM Capital Composite Freezer to Emergency Power Supply	08/09/2011 - 12/15/2011		\$23,815
SECTION J-2 TOTAL TASK ORDER VALUE					\$86,753,379

ATTACHMENT J-16

IDIQ LIST OF TASK ORDERS J-1

Modification 0060

Task Order No.	Description	Period of Performance	Estimated Cost	Maximum Potential Award Fee	Total Value
001	Phase In Support	05/01/2009 - 06/30/2009	(b)(4)		\$78,173
002	CMMS System	05/01/2009 - 06/30/2009			\$1,199,936
003	ET PSLE Support	05/01/2009 - 10/01/2010			\$1,738,204
004	PSLE Support for Orion	05/01/2009 - 10/01/2010			\$408,127
005	PSLE Support for ARES Upper Stage	05/01/2009 - 10/01/2010			\$348,439
006	GIS - Engineering Assessment- Cancelled				\$0
007	PSLE Support for NCAM	06/10/2009 - 07/02/2009			\$749,473
010	MAF Bldg 103 Vertical Assembly Building CoF	06/22/2009 - 09/30/2010			\$25,656
011	Site Promotion and Development Support	06/22/2009 - 09/30/2010			\$527,760
012	Provide Maint/Site Svcs to USDA	07/01/2009 - 09/30/2009			\$66,813
013	Provide Maint/Site Svcs to USCG	07/01/2009 - 09/30/2009			\$55,383
015	Substation30 S Low Volt Breaker Maintenance	06/24/2009 - 12/24/2009			\$154,546
016	Phase II Activities J1 PWS 1.1.5 10.2.1 and 10.2.2	06/30/2009 - 09/20/2009			\$23,178
017	Upper Stage Robotic Weld Tool 1 2 3	07/31/2009 - 12/31/2011			\$293,075
018	Upper Stage Mfg Machining Center Modifications	07/31/2009 - 05/16/2011			\$237,894
019	Maintenance Project - Integrate Gas Meters at MAF	08/10/2009 - 12/31/2011			\$302,073
020	Maintenance Project - Update Substation Meters at MAF	08/10/2009 - 2/28/2011			\$746,561
021	Implement FY09 Upper Stage MAF Minor CoF Project: Replace Substation 46 and MCCs (131)	11/16/2009 - 04/30/2012			\$206,546
022	Implement FY09 ORION MAF Minor CoF Project: Replace Plant Air	10/16/2009 - 08/31/2011			\$87,983