



FIXED PRICE CONTRACT

Contract No. Specimen Contract

BETWEEN

CALIFORNIA INSTITUTE OF TECHNOLOGY
JET PROPULSION LABORATORY
(The "Institute" or "JPL")
4800 OAK GROVE DRIVE
PASADENA, CALIFORNIA 91109-8099

AND

CONTRACTOR

THIS CONTRACT FOR
FACILITIES MAINTENANCE AND OPERATIONS SERVICES
IS A
SUBCONTRACT UNDER JPL's NASA PRIME CONTRACT

TASK ORDER NO. N/A

A DO - C9 Rating is assigned to this Contract under DMS Regulation 1

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JPL GENERAL PROVISIONS and Additional General Provisions (AGP):

GENERAL PROVISIONS: Fixed-Price Non-Research and Development Contract, R 8/01

GENERAL PROVISIONS: Fixed-Price Construction, R 8/01, only as enumerated in
ARTICLE 5, ALTERATIONS TO THIS CONTRACT

ADDITIONAL GENERAL PROVISIONS

Audit-Negotiation - Access to Computers, R 4/99

Drug and Alcohol-Free Workplace, R 4/99

Frequency Authorization, R 4/99

Government Property, R 4/99

Inspection of Services, R 4/99

Prime Contract Expiration - Fixed Price, R 7/02

Recovered Material Certification, R 6/01

Safety and Health, R 4/00

Security Requirements for Unclassified Automated Information Resources and Access to
JPL's Controlled Facilities, R 12/01

Service Contract Act of 1965, as Amended - Long Form, R 4/99

SIGNATURE PAGE	32
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PREAMBLE

This Contract, entered into on (Date) by and between the CALIFORNIA INSTITUTE OF TECHNOLOGY (hereinafter called the “Institute” or “JPL”), a corporation organized and existing under the laws of the State of California, and (Contractor Name) (hereinafter called the “Contractor”), a (type of entity) organized and existing under the laws of the State of (State of Incorporation) and constituting a subcontract under Prime Contract NAS7-1407 between the Institute and the Government;

WITNESSETH THAT:

The Contractor agrees to furnish and deliver the supplies and perform the services set forth in this Contract for the consideration stated herein.

ARTICLE 1. STATEMENT OF WORK.

The intent of this Contract is to obtain maintenance, operations, repair of facilities and equipment, grounds maintenance, janitorial services and disaster response at the Jet Propulsion Laboratory (JPL) main facility located at 4800 Oak Grove Drive, Pasadena, California.

1.0 ACRONYMS AND DEFINITIONS

- 1.1 Acronyms. Acronyms pertaining to this Contract are identified in Exhibit 1, "Acronym List for JPL Facilities M&O Contract" dated 7/31/02.
- 1.2 Definitions. Definitions pertaining to this Contract are identified in Exhibit 2, "Definitions List for JPL Facilities M&O Contract" dated 7/30/02.

2.0 GENERAL REQUIREMENTS

- 2.1 Total Program: Except as described in Section 3.0, LIMITATIONS, of Article 1 of this Contract, the Contractor shall maintain the physical appearance and functionality of the main JPL Facility located at 4800 Oak Grove Drive, Pasadena, California. The Facility, for purposes of this Contract, consists of the following elements:
 - 2.1.1 All buildings and structures as listed and/or described in "Buildings and Structures Inventory," dated 8/7/02 and incorporated into this Contract as Attachment 1.
 - 2.1.2 All equipment as listed and/or described in "Equipment List," dated 8/7/02 and incorporated into this Contract as Attachment 2.
 - 2.1.3 All roads, paved areas and parking lots as shown in "Jet Propulsion Laboratory Asphalt Paving Plan", dated 8/7/02 and incorporated into this Contract as Attachment 3 (Drawing JPL-SP-0107-C00).
 - 2.1.4 All grounds and landscaped areas as shown in "Jet Propulsion Laboratory Improved Grounds Plan", dated 8/7/02 and incorporated into this Contract as Attachment 3A (Drawing JPL-SP-0117-B00).
- 2.2 General Performance Requirements: The Contractor shall perform all work required by this Contract in accordance with the specific requirements of this Contract, including all Schedules, General Provisions, Additional General Provisions, Attachments, Appendices, and Exhibits, and the general principles of NASA Document NPG 8831.2D, Facilities Maintenance Management Handbook, incorporated by reference into this Contract; provided, however, that in the event of discrepancy or conflict between any of the other requirements of this Contract and NPG 8831.2D, the other requirements shall prevail.

In the performance of work under this Contract, the Contractor shall:

 - 2.2.1 Program Management Establish and maintain a program management team, including a Project Manager with sufficient authority and access to the Contractor's upper management to secure and deploy all the resources necessary to implement the requirements of this Contract.

2.2.2 Work Control. Implement all work control procedures necessary to ensure timely processing of work requirements, to permit tracking of work in progress, and to ensure that all work is logged and entered into the JPL Computerized Maintenance Management System (CMMS).

2.2.2.1 Work Reception

2.2.2.1.1 Establish and maintain a call desk for receiving work requests on a local telephone number during Regular Working Hours. The Contractor shall:

- provide JPL with the telephone number of the call desk
- receive work requests via telephone from occupants of the facility;
- provide a prompt and courteous "first contact" response to callers;
- initiate, track, and record the work using the JPL-provided CMMS;
- classify all work requests in the appropriate category of NASA work elements (see paragraph 2.2.2.3.5.1);
- assign each work request a priority code based on JPL CMMS Configuration Control;
- enter duplicate calls as a single work request;
- route calls for work not pertaining to this Contract to the JPL Facilities Engineering and Construction Services Request Help Desk.
- Provide the JPL end user with confirmation that the work request has been completed.

2.2.2.1.2 Establish and maintain a system for receiving and responding to work requests after Regular Working Hours. Provide to JPL a list, updated as necessary, of Contractor personnel available for Trouble Call (TC) response after hours, including weekends and holidays. Initiate, track, and record all work using the JPL CMMS.

2.2.2.2 Processing and Scheduling. Plan, estimate, and schedule work to assure material, labor, and equipment are available to complete work requirements within the specified time limits and in conformance with the quality standards established herein. Schedule and arrange work so as to cause the least interference with the normal occurrence of JPL business and mission which may require after-hours, weekend, or holiday work.

2.2.2.2.1 Interface With JPL Employees and Other Contractors

2.2.2.2.1.1 Notice of Equipment and Building Systems Shutdowns: With the exception of emergencies; the Contractor shall obtain prior approval from the CTM for

all scheduled work requiring shut-down of equipment during regular work hours. The Contractor shall coordinate this work in advance with the affected building occupants by verbal notifications, telephonic notifications, and shutdown postings. The Contractor shall submit scheduled shutdowns for publication in *This Week* at least two weeks prior to the scheduled shutdown. Work notifications shall include the location of the work, type of work to be done, and the estimated completion date. The Contractor shall make all reasonable attempts to avoid shutting down locations that house flight hardware.

2.2.2.2.1.2 Utility Outages Submit to the CTM a Request for approval for utility outages and/or facility closures including the date, times, facilities, Shut-down/Start-up Plan, and equipment/ systems that will be affected by utility outages in sufficient time to allow for publication in *This Week* two (2) weeks in advance of the closure. When emergency conditions preclude the two week-advance notification, the Contractor shall immediately notify the CTM. The Contractor shall take necessary precautions and schedule work so as to minimize the number and duration of interruptions to utility and safety systems. The Contractor shall not disable fire protection systems without prior approval from the CTM.

2.2.2.2.1.3 Facility Closures: The Contractor shall not obstruct Streets, walks, corridors, stairwells, elevators, and other facilities occupied and used by JPL without prior approval from the CTM. The Contractor shall inform all JPL personnel impacted by the facility closure. The Contractor shall not close or block emergency egress routes without prior approval from the CTM.

2.2.2.2.1.4 Cooperation with Other Contractors: cooperate with all other contractors and avoid conflicts with other contractor's performance and work schedules. Under no circumstances shall additional work be performed at the request of another contractor without approval of the CTM. In the event of conflicts with other contractors that cannot be satisfactorily resolved, the matter shall be referred to the CTM for decision.

2.2.2.3 Tracking, Data Entry, Reports, and Records

2.2.2.3.1 Computerized Maintenance Management System (CMMS) JPL's CMMS is Maximo. JPL CMMS software systems are under configuration control. The CMMS software includes equipment records and JPL's Preventive Maintenance Program, including task descriptions and maintenance frequency information. The Contractor shall follow all requirements stated

in "CMMS Configuration Control Document" dated 8/7/02 and incorporated into this Contract as Attachment 7.

The Contractor shall keep all CMMS databases complete and current by inputting all data generated as a result of work undertaken as part of this Contract and by updating CMMS for acquisitions, disposals, and alterations. All new work shall be entered into the CMMS daily. All completed work shall be recorded in the CMMS database within 7 calendar days of work completion unless otherwise specified in this Contract. Changes to the applicable acquisition, disposal, and alterations databases shall be made on a real-time basis.

2.2.2.3.2 Facility History Files. Maintain and update as appropriate JPL's Facility History Files for each building, structure, system or piece of equipment (identified by facility number and equipment number) in the Computerized Maintenance Management System (CMMS) and, as appropriate, in the Documentation Library located at JPL for each facility or structure listed in Attachment 1. Each file shall contain, as available:

- a listing of all equipment in the building, structure, or system by nomenclature, property number, and manufacturer's model number;
- all manufacturer's literature, brochures, and pamphlets; maintenance, operator's manuals, and parts lists, service manuals, and warranty information;
- a copy of all completed trouble calls, Facility Service Requests forms, other non-recurring maintenance work documentation, PT&I reports data and analyses; and
- any other information pertaining to the facility and/or installed equipment and systems.

All documents shall be filed within 30 working days of the completed transaction. JPL shall have access to these files on request. Where possible, the Contractor is encouraged to provide data by electronic means, by appropriately populating the CMMS.

2.2.2.3.3 As-Built Drawings Ensure that all modifications to JPL Facilities done under this contract are documented and accurately represented for inclusion in JPL's Master As-Built Drawings. Submit all as-built drawings/red-lined drawings generated under this Contract through work requests and other maintenance-related projects to JPL. Printed copies shall be made on vellum reproducible paper and shall be of quality to provide blueprinting capability.

The contractor shall use existing drawings to document facilities buildings, structures, improvements, space usage, occupancy classification, collateral equipment, location on property, floor area, number of stories, dimensions, elevations, and type of material.

2.2.2.3.4 Reporting Equipment Deficiencies Any equipment deficiencies noted by the Contractor during operational checks, preventive maintenance inspections, trouble call/service work, or at any other time shall be entered in the CMMS. The Contractor shall treat deficiencies discovered as trouble calls in accordance with the requirements of Attachment 11.

2.2.2.3.5 Documentation and Reports Submit the following Documents and Reports in Accordance with Attachment 8, "Contract Data Requirements List" dated 8/7/02 and the following specific requirements:

2.2.2.3.5.1 An Initial Annual Work Plan per the requirements of CDRL Item 1.

The Initial Plan shall be a compilation of maintenance, operations, and repair work to be accomplished during the following FY. The Plan shall identify workforce, materials, and equipment that will be utilized in the performance of this contract. The Plan shall include energy and water conservation efforts. The Plan shall contain the following work analyses:

- An analysis of all work categorized by the NASA nine elements
 1. Preventive Maintenance
 2. Predictive Testing & Inspection
 3. Programmed Maintenance
 4. Repairs
 5. Trouble Calls
 6. Replacement of Obsolete Items
 7. Service Request
 8. Grounds Maintenance and Repair
 9. Central Plant Operations/Space Flight Operations Facility
- Within each of the nine elements, separately break out the following work categories:
 10. Janitorial Services
 11. Pest Control
 12. Energy and Water Conservation

13. Roads, Surfaced Areas, and Signage
14. Elevators, Dumbwaiters, and Chair Lifts
15. Cranes and Hoists

Information contained in the Initial Annual Work Plan shall be stored in digital format as one of the contributing databases of the JPL CMMS.

- 2.2.2.3.5.2. Annual Work Plan Updates per the requirements of CDRL Item 1.1.

The Updated Annual Work Plan shall be entered into the JPL CMMS and shall include all the elements of the Initial Annual Work Plan plus revisions based on JPL comments, Reliability-Centered Maintenance (RCM) Progress, information based on experience gained in any prior year, and allowances for any changes to the Facility.

- 2.2.2.3.5.3. Annual Work Schedule per the requirements of CDRL Item 2

The initial work schedule shall be submitted as one hard copy and one electronic copy in Microsoft Excel format and shall also be made available for review in the PM Module of the CMMS. Any proposed changes to the approved schedule shall also require JPL approval.

The schedule shall include recurring services, which shall be identified by building or area location, equipment number, PM number, etc., as applicable, with the scheduled completion date of performance indicated. The schedule shall be divided into categories such that all work specified in the separate technical sections of the contract is separately covered. The schedule shall indicate, by month, all services to be accomplished, the frequency of the services, and the locations where services are to be accomplished.

- 2.2.2.3.5.4 Monthly Work Schedule per the requirements of CDRL Item 3.

Provide one hard copy and one electronic copy of the MWS in Microsoft Excel format each month. Each MWS shall also be entered in JPL CMMS. If JPL observes conflicts with other JPL activities, JPL will notify the Contractor. The Contractor shall then modify the schedule as appropriate.

Changes or additions to any job that could prevent the Contractor from completing work on time, or which change the scope of the work, shall be reported to the Cognizant Negotiator in writing

within 24 hours of discovery. Deviation from the MWS will require approval from the CTM. Work postponed due to deviations shall be rescheduled as soon as practical, but in any event not later than the following MWS.

The Contractor shall inform the affected building occupants when a building-wide outage is anticipated in completing work identified in the MWS.

2.2.2.3.5.5 Operational Procedures Plan per the requirements of CDRL Item 4.

The Contractor shall review the Plan at least quarterly, make updates as appropriate, and resubmit the updated OPP or a written memorandum validating that the existing OPP is still accurate in all respects to JPL by the third work day of the start of each quarter.

- 2.2.2.3.5.6. Facility Conditional Assessments per the requirements of CDRL Item 5.
- 2.2.2.3.5.7. Facilities Maintenance Self-Assessments per the requirements of CDRL Item 6.
- 2.2.2.3.5.8. NASA Agency-Wide Metrics per the requirements of CDRL Item 7.
- 2.2.2.3.5.9. NASA Work Elements Report per the requirements of CDRL Item 8.
- 2.2.2.3.5.10. Initial Annual Energy and Water Conservation Plan and updates per the requirements of CDRL Items 9 and 9.1.
- 2.2.2.3.5.11. Energy and Water Conservation Self-Assessment per the requirements of CDRL Item 10.
- 2.2.2.3.5.12. Annual Energy Audit per the requirements of CDRL Item 11.
- 2.2.2.3.5.13. Electricity Consumption from Utility Report per the requirements of CDRL Item 12.
- 2.2.2.3.5.14. Electricity Consumption by Building and JPL Sub-Station Report per the requirements of CDRL Item 13.
- 2.2.2.3.5.15. Energy Consumption by Energy-Intensive Facility Report per the requirements of CDRL Item 14.
- 2.2.2.3.5.16. Natural Gas Consumption from Utility Report per the requirements of CDRL Item 15.
- 2.2.2.3.5.17. Natural Gas Consumption by Building Report per the requirements of CDRL Item 16.
- 2.2.2.3.5.18. Natural Gas Consumption by Energy Intensive Facility Report per the requirements of CDRL Item 17.

- 2.2.2.3.5.19. Natural Gas Consumption by Boiler Report per the requirements of CDRL Item 18.
- 2.2.2.3.5.20. Water Consumption from Utility Report per the requirements of CDRL Item 19.
- 2.2.2.3.5.21. Water Consumption by Building Report per the requirements of CDRL Item 20.
- 2.2.2.3.5.22. Water Consumption by Cooling Tower Report per the requirements of CDRL Item 21.
- 2.2.2.3.5.23. Water Consumption by Irrigation System Report per the requirements of CDRL Item 22.
- 2.2.2.3.5.24. Diesel Fuel Consumption by Engine Generator Report per the requirements of CDRL Item 23.
- 2.2.2.3.5.25. Diesel Fuel Consumption by Energy Intensive Facility Report per the requirements of CDRL Item 24.
- 2.2.2.3.5.26. Sewage Meter Readings Report per the requirements of CDRL Item 25.
- 2.2.2.3.5.27. Sewage Analysis Report per the requirements of CDRL Item 26.
- 2.2.2.3.5.28. Sewage Meter Calibration Report per the requirements of CDRL Item 27.
- 2.2.2.3.5.29. Mishap Report per the requirements of CDRL Item 28.
- 2.2.2.3.5.30. Coating Operation Report per the requirements of CDRL Item 29.
- 2.2.2.3.5.31. Solvent Cleaning Operation Report per the requirements of CDRL Item 30.
- 2.2.2.3.5.32. Quality Control Plan per the requirements of CDRL Item 31.
- 2.2.2.3.5.33. Warranty Control Plan and updates per the requirements of CDRL Item 32 and 32.1.
- 2.2.2.3.5.34. Safety and Health Plan per the requirements of CDRL Item 33.
- 2.2.2.3.5.35. As-built drawings and specifications per the requirements of CDRL Item 34.
- 2.2.2.3.5.36. Deleted.
- 2.2.2.3.5.37. Subcontracting Report for Individual Contracts per the requirements of CDRL Item 36.
- 2.2.2.3.5.38. Chemical Usage Records per the requirements of CDRL Item 37.
- 2.2.2.3.5.39. SCAQMD Regulatory Data per the requirements of CDRL Item 38.
- 2.2.2.3.5.40. Reliability-Centered Maintenance Report per the requirements of CDRL Item 39.
- 2.2.2.3.5.41. EMS History File Data per the Requirements of CDRL Item 40.
- 2.2.2.3.5.42. Energy and Water Contingency Plan per the requirements of CDRL Item 41.
- 2.2.2.3.5.43. Ozone Depleting Substances Report per the requirements of CDRL Item 42.

2.2.3 Standards In addition to any other specific work standards included in this Contract, accomplish all work in conformance with approved and accepted standards of the industry; equipment manufacturers; all applicable JPL, Local, State, and Federal standards; and all applicable facilities and safety codes. The following general standards shall apply to all work performed under this Contract:

2.2.3.1 Work Completion The Contractor's completed work shall be free of defects that would prevent the facility or equipment being worked on from functioning as originally intended or designed. The Contractor shall be held responsible for the cost of any repairs caused by negligence or abuse on the Contractor's or on the Contractor's employees' part.

2.2.3.2 Shutdown and Restart The Contractor shall shut down, restart, and perform operational checks on all equipment affected by either scheduled or unscheduled utility outages.

2.2.3.3 Debris Clean Up The Contractor shall not allow debris to spread into adjacent areas or accumulate in the work area itself. All such debris, excess material, and parts shall be cleaned up and removed at the completion of the job and/or at the end of each day work is in progress.

2.2.3.4 Replacements Except where otherwise noted, replacements shall match existing items in dimensions, finish, color, and design.

2.2.3.5 Piping Coding and Identification The Contractor shall utilize the JPL standard color coding and identification system for piping, as described in the JPL Facilities Design Standard.

2.2.3.6 Equipment Under Manufacturer's or Installer's Warranty Equipment, components, and parts, other than those installed under this contract, shall not be removed or replaced or deficiencies corrected while still under warranty of the manufacturer or the installer without prior approval of the Cognizant Negotiator. The Contractor shall be responsible for tracking equipment, component and part warranties on those items that are installed during the term of this contract and for which the Contractor is or shall become responsible after construction/installation is completed. All defects in material or workmanship, defective parts, or improper installation and adjustments found by the Contractor shall be reported to the CTM within three (3) working days from discovery so that necessary action may be taken.

2.2.3.7 Refrigerant Recycling/Recovery The Contractor shall not knowingly vent or otherwise dispose of any refrigerant in a manner that would permit its release into the environment. Record keeping required by the Clean Air Act and SCAQMD Rule 1415 must be performed by the Contractor, including but not limited to: equipment number, amount of refrigerant added; amount of refrigerant leaked; date of corrective action for leak. Furthermore, all recycling/recovery equipment and technicians must be certified per SCAQMD and US Environmental Protection Agency criteria.

2.2.3.8 Equipment Procurement and Servicing. Attachment 33 provides in-service and acceptance criteria for equipment being procured or serviced under the terms of this contract. The Contractor shall use these criteria in procuring and accepting new, replacement, and/or reworked equipment and for PM and PT&I work where applicable in this contract.

2.2.3.9 High-Level Activities. The Contractor shall provide special equipment to access high-level lighting and other work required in high bays. The Contractor shall ensure that this equipment is of a standard suitable for work within a Clean Room environment.

2.2.4 Quality Control Implement and maintain a proactive quality control program that incorporates the quality elements of ISO 9001, Quality Systems Standards.

Each phase of the services rendered under this contract is subject to JPL inspection, during the Contractor's operations and after completion of each task. JPL's Quality Assurance Surveillance Program is not a substitute for Quality Control performed by the Contractor. All findings of unsatisfactory or non-performed work will be administered in accordance with Attachment 9, "Performance Requirements Summary." All costs associated with rework are the responsibility of the Contractor.

2.2.5 Status Reports and Reviews

2.2.5.1 Work Status: Provide verbal status reports of any item of work upon request of the CTM or Cognizant Negotiator, and of any unusual event, whether or not requested by JPL, within one hour during regular working hours, and within four hours after regular working hours.

2.2.5.2 Weekly Review: Conduct a weekly status review meeting with JPL. The status meetings shall be attended by the Program Manager, CTM, and the Cognizant Negotiator, or their alternates. The subjects of the meetings shall encompass maintenance, significant events, and any other topics deemed important by JPL or the Contractor. The Program Manager, the CTM, and/or the Cognizant Negotiator may invite any JPL personnel or contractor employees they deem necessary for the meetings. Results, action items lists, and notes of status meetings shall be written by the Contractor and a copy submitted to the Cognizant Negotiator within one (1) working day after the meeting.

2.2.5.3 Monthly Review: Conduct a Monthly Review, which shall substitute for the Weekly Review once each month. The subjects of the Monthly Reviews shall be the same as subjects covered in the Weekly Reviews except that the Monthly Review will include JPL's assessment of Contractor performance for the previous month. Results, action items lists, and notes of status meetings shall be written by the Contractor and a copy submitted to the Cognizant Negotiator within one (1) working day after the meeting.

2.2.5.4. Ad Hoc Meetings: Meetings not normally scheduled shall be scheduled at the convenience of both JPL and the Contractor, as circumstances dictate. The purpose of such meetings shall be to discuss and record details and make decisions on individual subjects. Results, action items lists, and notes of status meetings shall be written by the Contractor and a copy submitted to the Cognizant Negotiator within one (1) working day.

2.2.6 Customer Liaison Establish and maintain a customer liaison program which sustains feedback and direct contacts with the appropriate Facility/Building Manager and all customers.

2.2.7 Staffing. Maintain a work force sufficient to complete all work in accordance with the quality and timeliness standards specified in this Contract. In addition to any other requirements enumerated in this Contract, the Contractor shall maintain a work force which includes personnel with training and certification in the following specialties:

2.2.7.1. Level 2 Thermography Certification An individual certified in Level 2 Thermography, who shall understand the basic theory of qualitative thermography and its application, and have had hands-on use of thermal imaging equipment. The individual must understand infrared imaging that applies to predictive maintenance applications, be able to perform proper imaging acquisition using Inframetrics 740 Long Wave Camera, Flir Prism DS Focal Plane Array Short Wave Camera, Software-Inframetrics TherMonitor version 1.3b, Flir AnalyzIR Plus version 1.1, CSI Infranalysis version V1.10C, document and evaluate findings, and write effective reports of the findings. The individual shall have received a Level 2 training certificate.

2.2.7.2 Level 2 Vibration Certification An individual certified as a Vibration Specialist, who shall have knowledge of machine vibration, be capable of routine data collection and periodic monitoring, and be able to perform fault diagnosis and condition evaluation. The individual shall also have at least three years of experience in the vibration field and a formal four-day short course or equivalent self-study and must have a proficiency in math that includes arithmetic and basic algebra. The individual shall have received a Vibration Institute Level 2 training certificate. The individual should be familiar with CSI 2120 Data Analyzer, CSI 2115 Data Analyzer, CSI 444A Strobe Light, Monarch Nova Strobe Light, and CSI Master Trend version 3.1.

2.2.7.3 Electricians Electrical technicians shall be at a journeyman level with a minimum of 5 years of experience.

2.2.7.4. HVAC Technicians HVAC technicians shall be certified through the Environmental Protection Agency (EPA) and shall be at Journeyman level with at least five (5) years experience.

2.2.7.5 EMS System Administrator:

2.2.7.5.1 The EMS-SA shall have a minimum of three (3) years experience with Staefa/Siemens control systems and be certified as having taken the Staefa SMART2/MS2000/Staefa Vision Graphics Engineering courses.

2.2.7.5.2 The EMS-SA shall be certified in a minimum of two courses in UNIX or SCOUNIX and the Staefa Server Training and be competent to monitor and maintain the Staefa Server.

2.2.8 Programs Execute the following programs in accordance with the requirements of this Contract:

2.2.8.1 A transition program which shall insure continuity of services from the previous Maintenance and Operations Contract. The transition period will commence at contract award and be not less than three (3), nor more than six (6) months in duration. The Contractor shall be prepared to accept, and work through completion, approximately 400 backlogged Trouble Calls (TC's) as defined in "General Requirements and Procedures for Trouble Calls" dated 8/7/02 and incorporated as Attachment 11 to this Contract, at the start of full M&O Service under this Contract. Work on accepted TCs shall be completed within 30 days after the start of full M&O Service.

2.2.8.2 A TC response program in accordance with the requirements of Attachment 11.

2.2.8.3 A scheduled maintenance and repair program in accordance with the requirements of Attachment 12. The scheduled maintenance and repair program shall include a Reliability-Centered Maintenance Program (RCM) for facilities maintenance. JPL may, at its discretion, direct the Contractor to continue repair work on a specific item up to a maximum of \$50,000, including profit, per instance; subject, however, to equitable adjustment as provided in ARTICLE 3, PRICE AND PAYMENT, of this Contract.

2.2.8.4 Reserved.

2.2.8.5 Emergency/Disaster Preparedness support as required by the JPL Emergency Preparedness Center. If facilities damage is sustained because of a disaster, the Contractor shall take immediate action to prevent and limit further damage.

3.0 LIMITATIONS.

The following work is not part of this contract:

3.1 Repair and maintenance of :

3.1.1 JPL/NASA-owned automotive vehicles

- 3.1.2 Communication cables
- 3.1.3 Fire protection systems except that the Contractor shall be responsible for plumbing up to and including sprinkler heads.
- 3.1.4 Telephone systems/intercom systems
- 3.1.5 Surveillance systems
- 3.1.6 JPL Employee-owned or Contractor-owned equipment
- 3.1.7 Vending machines
- 3.1.8 Non-collateral equipment.
- 3.2 Installing and reconfiguring of Westinghouse and other modular partitions with the exception of electrical repair on existing partitions, including lamp maintenance and repair
- 3.3 Locksmithing
- 3.4 Construction services.

4.0 APPLICABLE DOCUMENTATION

The following documents are incorporated into and made a material part of this Contract:

- 4.1 Exhibits:
 - 4.1.1 Exhibit 1, "Acronym List for JPL Facilities M&O Contract" dated 7/31/02.
 - 4.1.2 Exhibit 2, "Definitions List for JPL Facilities M&O Contract" dated 7/30/02.
 - 4.1.3 Exhibit 3, Service Contract Act Wage Determinations as follows:
 - Exhibit 3A, Wage Determination No. 1986-0431, Rev. 25 (Elevators).
 - Exhibit 3B, Wage Determination No. 1986-0879, Rev. 10 (HVAC).
 - Exhibit 3C, Collective Bargaining Agreement (CBA) between Laborer's International Union of North America Local #882 and Servicon Systems, Inc., constituting the wage determination for Janitorial Services at JPL.
 - Exhibit 3D, Wage Determination No. 1994-2047, Rev. 18 (All Other).
 - 4.1.4 Exhibit 4, "General Wage Determinations Issued under the Davis-Bacon and Related Acts" dated 3/1/2002, including "General Decision CA020033" dated 8/9/02.
 - 4.1.5 Exhibit 5, Site-Specific Safety Plan for Maintenance and Operations Services at JPL" dated --/--/02 (CONTRACTOR-SUBMITTED DOCUMENT).
 - 4.1.6 Exhibit 6, "Site-Specific Injury and Illness Prevention Plan for Maintenance and Operations Services at JPL dated --/--/02 (CONTRACTOR-SUBMITTED DOCUMENT).
 - 4.1.7 Exhibit 7, "Small Business/Small Disadvantaged Business Subcontracting Plan for Maintenance and Operations Services at JPL" dated --/--/02 (CONTRACTOR- SUBMITTED DOCUMENT).
 - 4.1.8 Exhibit 8 , "Parking and Traffic Regulations, Rev. 0," "Rules!" Doc. ID 56883

effective 4/27/02 (printed 8/14/02).

4.2 Attachments and Appendices:

- 4.2.1 Attachment 1, "Buildings and Structures Inventory," dated 8/7/02.
- 4.2.2 Attachment 2, "Equipment List," dated 8/7/02.
- 4.2.3 Attachment 3, "Jet Propulsion Laboratory Lab. Asphalt Paving Plan", dated 8/7/02 and Attachment 3A, "Jet Propulsion Laboratory Improved Grounds Plan", dated 8/7/02
- 4.2.4 Attachment 4, "Transition Plan for Maintenance and Operations Services at JPL" dated --/--/02 (CONTRACTOR SUBMITTED DOCUMENT).
- 4.2.5 Attachment 5, "Operations and Procedures Plans for Maintenance and Operations Services at JPL" dated --/--/02 (CONTRACTOR SUBMITTED DOCUMENT(s)).
- 4.2.6 Attachment 6, "Energy Conservation and Management Plan for Maintenance and Operations Services at JPL" dated --/--/02 (CONTRACTOR SUBMITTED DOCUMENT).
- 4.2.7 Attachment 7, "CMMS Configuration Control Document," dated 8/7/02, including Appendix 7.1.
- 4.2.8 Attachment 8, "Contract Data Requirements List (CDRL) and Data Requirements Descriptions (DRD) " dated 8/7/02.
- 4.2.9 Attachment 9, "Performance Requirements Summary" dated 8/7/02, including Appendix 9.1.
- 4.2.10 Attachment 10, "Initial Annual Work Plan" dated --/--/02 (CONTRACTOR SUBMITTED DOCUMENT).
- 4.2.11 Attachment 11, "General Requirements and Procedures for Trouble Calls" dated 8/7/02, including Appendix 11.1.
- 4.2.12 Attachment 12, "General Requirements and Procedures for Recurring Work and Repairs" dated 8/7/02, including Appendix 12.1.
- 4.2.13 Attachment 13. Construction of Facilities Program (Proposed).
- 4.2.14 Attachment 14, "BUILDINGS AND STRUCTURES MAINTENANCE AND REPAIR" dated 8/7/02, including Appendices 14.1, 14.2, 14.3, 14.4, and 14.5.
- 4.2.15 Attachment 15, "HEATING, VENTILATION, AIR CONDITIONING, REFRIGERATION, AIR COMPRESSORS, AND PRESSURE VESSELS SYSTEMS MAINTENANCE AND REPAIR" dated 8/7/02, including Appendices 15.1, through 15.6, 15.7, 15.7.1, 15.8 through 15.12, 15.13, 15.13.1 through 15.13.6, and 15.14.
- 4.2.16 Attachment 16, "HIGH AND LOW VOLTAGE ELECTRICAL POWER GENERATION AND DISTRIBUTION SYSTEMS MAINTENANCE AND REPAIR " dated 8/7/02, including Appendices 16.1 through 16.11.
- 4.2.17 Attachment 17, "OPERATIONS IN BUILDING 230 (SPACE FLIGHT OPERATIONS FACILITY [SFOF]) AND BUILDING 264" dated 8/7/02.
- 4.2.18 Attachment 18. . Deleted.

- 4.2.19 Attachment 19, "ELEVATOR MAINTENANCE AND REPAIR" dated 8/7/02
- 4.2.20 Attachment 20. Deleted.
- 4.2.21 Attachment 21. Deleted.
- 4.2.22 Attachment 22, "BUILT-IN CRANES, HOISTS, MONORAILS, AND JIBS MAINTENANCE AND REPAIR" dated 8/7/02, including Appendix 22.1.
- 4.2.23 Attachment 23, "POTABLE WATER DISTRIBUTION SYSTEM MAINTENANCE AND REPAIR" dated 8/7/02, including Appendix 23.1.
- 4.2.24 Attachment 24, "WASTEWATER COLLECTION AND DISPOSAL SYSTEM OPERATION, MAINTENANCE, AND REPAIR" dated 8/7/02
- 4.2.25 Attachment 25, "GROUNDS MAINTENANCE AND REPAIR" dated 8/7/02, including Appendix 25.1.
- 4.2.26 Attachment 26. Deleted.
- 4.2.27 Attachment 27, "JANITORIAL SERVICES," dated 8/7/02, including Appendices 27.1 and 27.2.
- 4.2.28 Attachment 28, "PEST CONTROL," dated 8/7/02.
- 4.2.29 Attachment 29, "ENERGY AND WATER CONSERVATION," dated 8/7/02, including Appendix 29.1.
- 4.2.30 Attachment 30, "DISASTER AND POTENTIAL DISASTER RESPONSE," dated 8/7/02.
- 4.2.31 Attachment 31. Deleted.
- 4.2.32 Attachment 32, "ENVIRONMENTAL MANAGEMENT SUPPORT," dated 8/7/02
- 4.2.33 Attachment 33, "NASA Reliability Centered Building and Equipment Acceptance Guide," to be found at <http://www.hq.nasa.gov/office/codej/codejx/jxdocuments.htm#mtdocs>.
- 4.2.34 Attachment 34. Deleted.
- 4.2.35 Attachment 35. "EMS Hardware and Software Configuration Control Document," dated 8/7/02, including Appendix 35.1.
- 4.2.36 Attachment 36. "JPL-Furnished Facilities," dated 8/7/02, including Appendix 36.1.
- 4.2.37 Attachment 37. Deleted.
- 4.2.38 Attachment 38. "JPL-Furnished Equipment and Software," dated 8/7/02, including Appendices 38.1 and 38.2.
- 4.2.39 Attachment 39. "PT&I System Hardware/Software Configuration Control," dated 8/7/02.
- 4.2.40 Attachment 40, "Power Control Console System Configuration Control," dated 8/7/02.
- 4.2.41 Attachment 41, "Power Measurement System Configuration Control," dated 8/7/02, including Appendix 41.1.

5.0 JPL RESPONSIBILITIES

5.1 Quality Assurance Feedback JPL will inspect services rendered under this Contract, both during the Contractor's operations and after completion of tasks.

5.2 Facilities and Equipment JPL will provide the Contractor the use of certain JPL owned facilities and materials, in "as-is" condition, for use only in connection with this contract. The use of JPL furnished property and services for other purposes is prohibited. Except for items specifically listed in this Section of the Contract, the Contractor shall provide all facilities, equipment, materials/supplies, and services to perform the requirements of this Contract.

5.2.1 JPL-Furnished Facilities JPL will furnish or make available to the Contractor the facilities described in Attachment 36 (Drawing JPL-200/00). These facilities may be configured by the Contractor in a manner most conducive to efficiency as determined by the Contractor; provided, however, that permanent office accommodations shall be limited to housing a maximum of ten (10) at-site employees.

Should the Contractor choose to use JPL-furnished facilities, adequate precautions shall be taken by the Contractor to prevent fire hazards, odors, and vermin. Janitorial services for JPL furnished facilities shall be provided by the Contractor. The Contractor shall obtain written approval from the Cognizant Negotiator prior to making any modifications or alterations to the facilities. Any such modifications or alterations approved by JPL will be made at the expense of the Contractor. At the completion of the contract, all facilities shall be returned to JPL in the same condition as received, except for reasonable wear and tear and approved modifications and alterations. The Contractor shall be held responsible for the cost of any repairs caused by negligence or abuse on the Contractor's or on the Contractor's employees' part.

5.2.2 JPL-Furnished Equipment (GFE). JPL will provide the Contractor with the equipment and software listed in Attachment 38, JPL-Furnished Equipment and Software including Appendixes 38.1 and 38.2.

5.2.3 JPL-Furnished Maximo CMMS:

5.2.3.1 JPL will provide access up to 12 seats of the maintenance management software (Maximo®) and up to 12 network connections to the host server located at JPL. JPL will maintain ownership of the maintenance management server hardware, support software, and databases. The Contractor will be responsible for providing for internet services for off-site access.

5.2.3.2 JPL will populate the Job Plans associated with PM's, PT&I's, and PGM's described in Appendices 15.1 through 15.13.

5.2.4 Availability of Utilities. JPL will furnish at no cost to the Contractor the following utility services to existing outlets for the Contractor's use in those facilities for the work performed under this contract: electricity, natural gas, fresh water, and refuse collection (from existing collection points). Information concerning the location of existing outlets may be obtained from the Cognizant Negotiator.

5.2.5 Mail Service. JPL will provide internal (within the Center) mail service. Mail service outside the Center shall be arranged and paid for by the Contractor.

5.2.6 References and Technical Documents. JPL will provide to the Contractor a library containing building history files that shall be managed, coordinated, and updated by the Contractor to include all relevant Facilities information generated during the period of performance.

References in the library include available drawings, warranties, records, manufacturer's equipment manuals, history files, and other available pertinent data shall be turned over to the Contractor. On completion of the contract, the Contractor shall return all items (including updates) in the same condition as received less normal wear and tear.

5.2.7 Warranty Information. JPL will furnish available equipment warranty information in the JPL Documentation Library or the CMMS.

5.2.8 Services JPL will provide the following on-site services. Off-site services shall be the responsibility of the Contractor:

5.2.8.1 Hazardous waste disposal services at Building 305, Hazardous Waste Disposal Area, for Contractor-generated hazardous wastes, such as, pesticides, oil, refrigerants, ballasts, polychlorinated biphenyls, paint, solvents, fluorescent tubes.

5.2.8.2 Emergency Medical Services/First Aid: Contractor personnel who sustain injury or become ill on-site may be examined and/or given first aid treatment at the JPL Dispensary at Building 310 (telephone 43319) between the normal first shift hours of 7:00 a.m. to 3:45 p.m. During other than normal first shift hours, the contractor may utilize the JPL 911 system to access Emergency Medical Response. All injuries sustained on-site must be reported by the submittal of a JPL Mishap Report to the Cognizant Negotiator immediately whether treated at the JPL facility or elsewhere.

5.2.8.3 The hardware server and the software and upgrades for the Energy Management System (EMS)(STAEFA/Siemens). The contractor shall maintain the server (hardware and software) as necessary to support this contract including Contractor equipment to access the EMS. The Contractor shall follow the EMS Hardware and Software Configuration Control Document, Attachment 35.

5.2.8.4 The hardware server and the software and upgrades for Predictive Testing and Inspection (PT&I). The Contractor shall maintain the server (hardware and software) as necessary to support this contract including Contractor equipment to access the PT&I data. The Contractor shall follow the requirements of Attachment 39, "PT&I System Hardware/ Software Configuration Control," dated 8/7/02.

5.2.8.5 The hardware server and the software and upgrades for the Pegasus software (from Power Measurement Ltd.) for monitoring electrical transformer banks. The contractor shall maintain the server as necessary to support this contract including equipment to access the Pegasus software. The Contractor shall follow the requirements of

Attachment 41, "Power Measurement System Configuration Control,"
dated 8/7/02.

5.2.8.6 The hardware server and the software and upgrades for the Power
Control Center in the Space Flight Operations Center in Building 230.
The Contractor shall follow the requirements of Attachment 40, "Power
Control Console System Configuration Control" dated 8/7/02.

ARTICLE 2. DELIVERY OR PERFORMANCE SCHEDULE

- 1.0 The point of delivery of all services and supplies deliverable under this Contract shall be the Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, California 91109. All supplies shall be packaged, shipped, boxed, or crated in such a manner as to ensure safe delivery and shall be shipped prepaid and at the Contractor's expense to the point of delivery.
- 2.0 Time is of the essence in the performance of this Contract.
- 3.0 The period of performance of this contract shall commence as of the date of this Contract and shall continue through September 26th, 2004.
- 4.0 The Contractor shall furnish and deliver the supplies and perform the services required in accordance with the following schedule:

	<u>Item:</u>	<u>Schedule/On-or-before Due Date</u>
4.1	Call Desk and After-hours work reception system per ARTICLE 1, 2.2.2.1	Sept. 17, 2003, 12:01 a.m. through end of Contract
4.2	CMMS Tracking and Data Entry per ARTICLE 1, 2.2.2.3.1	Per Attachment 7, JPL CMMS Configuration Control Document
4.3	Documentation and Plans per ARTICLE 1, Paragraphs 2.2.2.3.5.1 through 2.2.2.3.5.40	Per Attachment 8, Contract Data Requirements List
4.4	Quality Control Program per ARTICLE 1, 2.2.4	30 Days ADOC through end of Contract
4.5	Informal Work Status reports per ARTICLE 1, 2.2.5.1	Upon request: within one (1) hour during regular working hours, or within four (4) hours after regular working hours.
4.6	Weekly Status Review per ARTICLE 1, 2.2.5.2	Close of Business Tuesday following the week in which service was performed, unless a Monthly Review is scheduled

<u>Item:</u>	<u>Schedule/On-or-before Due Date</u>
4.7 Monthly Status Review per ARTICLE 1, 2.2.5.3	15 th of the Month following the month in which service was performed.
4.8 <u>Ad Hoc</u> Meetings per ARTICLE 1, 2.2.5.4	Upon request
4.9 Transition Program per ARTICLE 1, 2.2.8.1	Start of Contract through September 16, 2003
4.10 Trouble Call Response Program per ARTICLE 1, 2.2.8.2	September 17, 2003 through end of Contract
4.11 Scheduled Maintenance and Repair Program including RCM Program per ARTICLE 1, 2.2.8.3	September 17, 2003 through end of Contract.
4.12 Disaster Preparedness Support per ARTICLE 1, 2.2.8.5	As required, September 17, 2003 through end of Contract

ARTICLE 3. PRICE AND PAYMENT

- 1.0 The total fixed price of this Contract is \$ _____, consisting of the following elements:
- 1.1 Transition Period: \$ _____.
- 1.2 Maintenance and Operations Service: September 17, 2003 through September 26, 2004: \$ _____.
- 2.0 Partial payments shall be provided in accordance with the following schedule, subject to any decrements levied in accordance with Attachment 9, "Performance Requirements Summary."
- 2.1 Transition Period: \$ _____ per month.
- 2.2 Maintenance and Operations Service: \$ _____ per month.
- 3.0 It is understood and agreed that in the event any single instance of repair (including a combination of trouble call and repair activity), should exceed a total direct cost of \$7,000, excluding overhead and profit, the parties will negotiate an equitable adjustment to the Contract to account for the amount in excess of \$7,000, including overhead and profit, for that instance.
- 4.0 Replacement, Modernization, and Renovation During the term of the contract, JPL may replace, renovate, or improve equipment, systems, facilities, components, and fixtures at JPL's expense and by means not associated with this contract. All replaced, improved, updated, modernized, or renovated equipment, fixtures, facilities, components, and systems shall be maintained, operated, and/or repaired by the Contractor at no additional cost to JPL.
- 5.0 An original and two copies of invoices must be sent to:
- JPL Subcontract Payment Group
4800 Oak Grove Drive
Pasadena, California 91109

ARTICLE 4. SPECIAL PROVISIONS

- 1.0 Condition of Facilities. JPL makes no representation or guarantee as to the condition of facilities on the start date of the contract. Pre-existing conditions shall not relieve the Contractor from any of the performance requirements.
- 2.0 Badges. All Contractor and subcontractor employees shall wear JPL identification badges. Security badging for Contractor visitors and subcontractors shall be coordinated by the Contractor through the JPL Plant Protection Section following established JPL policies and procedures.
- 3.0 Drivers License. All Contractor and subcontractor personnel operating vehicles shall hold a current State of California driver's license and any other licenses and/or certifications that may be required to operate vehicles or other mobile equipment on or off the facility.
- 5.0 Uniforms. All Contractor trade personnel shall wear Contractor-furnished uniforms.
- 6.0 Damages Caused by Weather Conditions or Vandalism. Work required to repair facilities or equipment damaged by inclement weather conditions and/or acts of vandalism shall be treated as Trouble Call Work in accordance with the requirements of Attachment 11, "General Requirements and Procedures for Trouble Call Work."
- 7.0 Key Personnel.
- 7.1 The personnel and/or facilities, if any, specified below in paragraph 7.2 are considered essential to the work being performed hereunder. Prior to removing, replacing, or diverting any of the specified individuals or facilities, the Contractor shall notify JPL reasonably in advance and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on this Contract. No diversion shall be made by the Contractor without the written consent of JPL; provided, that JPL may ratify in writing the change, and such ratification shall constitute the consent of JPL required by this Article. Paragraph (b) below may, with the consent of the Contracting parties, be amended from time to time during the course of the Contract to either add or delete personnel and/or facilities, as appropriate.
- 7.2 The following Contractor personnel shall be considered to be key personnel under this contract:

<u>Name</u>	<u>Area of Responsibility</u>
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8.0 Equitable Adjustments Due to Changes in Wage Determinations

The parties agree that this Contract shall be amended, at the discretion of JPL, to incorporate any applicable adjustments to the price due to changes in Wage Determinations issued by the U.S. Department of Labor pursuant to the Service Contract Act and the Davis-Bacon Act and that said cost adjustments shall not bear profit.

The Contractor warrants that the prices set forth in the Contract do not include any allowance for anticipated increases due to anticipated Service Contract Act or Davis-Bacon Act Wage Determination revisions or additions.

9.0 Cooperation with Other Contractors

Other Contractors may, from time to time, be engaged in similar and/or supporting work. The Contractor shall cooperate with other contractors and avoid, to the maximum extent practicable, conflicts with other Contractors' performance and work schedules. Under no circumstances shall additional work be performed at the request of another Contractor without the written approval of the Cognizant Negotiator. Conflicts with other Contractors that cannot be satisfactorily resolved shall be referred to the Cognizant Negotiator for resolution.

10.0 Environmental and Safety Permits and Licenses

The Contractor shall assist the JPL cognizant organization in acquiring all necessary environmental and safety permits and licenses required by federal, state, and local agencies or subdivision(s) thereof, or of any other duly designated public authority in performance of the work. The Contractor shall obey and abide by all applicable laws, regulations, ordinances, and JPL practices.

No permits shall be issued in the Contractor's name. Nevertheless, the Contractor shall be required to assist the JPL cognizant organization in obtaining permits or licenses as an integral part of any assigned task which requires licenses or permits. Said task shall not be considered complete until a valid permit or license is issued to, and received by, JPL. The cost of permits and licenses will be borne by JPL.

This requirement does not grant authority to the Contractor to contact any regulatory agency on behalf of JPL or NASA or to present themselves as a JPL or NASA representative. All agency contacts and representations, including permit or license application submissions, remain the responsibility of the cognizant JPL organization.

11.0 JPL Security and Traffic Parking Regulations

All Contractor personnel shall observe JPL Security and Traffic Regulations as set forth in Exhibit 8, "Parking and Traffic Regulations," Rev 0 dated April 27, 2002, attached hereto and made a material part of this Contract. The Contractor shall inform their personnel of the JPL Security and Traffic Parking Regulations. The Contractor shall take appropriate action in response to any infractions of these regulations by Contractor employees.

12.0 Observance of Holidays

12.1 The Contractor shall observe holidays in accordance with JPL's published schedule. JPL normally observes the following holidays:

New Year's Day

Martin Luther King's Birthday

President's Day

Memorial Day

Independence Day

Labor Day

Thanksgiving Day

Christmas Day

Three "floater" holidays to be designated at the beginning of each calendar year.

12.2 Holidays observed by Contractor personnel shall not affect operations, schedules, or performance.

13.0 Conduct and Separation

All Contractor personnel working in-residence at a JPL facility will be expected to conduct themselves in accordance with JPL standards of conduct, as described in "Standards of Conduct and Procedures for Handling Contractor Personnel Problems, Discipline, and Separation," form JPL 4412, which is incorporated into this Contract as Exhibit 9. The Contractor shall be responsible for ensuring that its personnel perform their JPL work assignments and conduct themselves in a manner acceptable to JPL. JPL may require the Contractor to separate any Contractor personnel from a JPL work assignment at any time for any lawful reason. In the event of such separation, the Contractor shall have the responsibility for reassigning or terminating such Contractor personnel.

14.0 Personnel Processing.

Contractor personnel shall report to the JPL Security Group Office for (i) check-in processing before commencing work and (ii) check-out processing when terminating. Separation check-out will include the return of all Government property and badges, documents, and tools which may have been provided by JPL during each individual's performance under this Contract.

15.0 JPL Contractor Safety and Health Notification

Contractor has signed and acknowledged receipt of a copy of "JPL Contractor Safety and Health Notification," form JPL 2885 (identifying applicable required documentation, safety requirements, emergency handling procedures, etc.), which is hereby made a material part of this Contract. The costs associated with compliance with all applicable requirements as identified on form JPL 2885 are included in the Contract pricing, and therefore, Contractor compliance with such requirements shall not entitle the Contractor to an equitable adjustment under the General Provisions of the Contract entitled "Safety and Health," and "Changes," or under any other provision of this Contract.

16.0 Security or Privacy Safeguards

The Contractor shall not publish or disclose in any manner, without the Negotiator's written consent, the details of any safeguards either designed or developed by the Contractor under this Contract or otherwise provided by JPL.

To the extent required to carry out a program of inspection to safeguard against threats and hazards to the security, integrity, and confidentiality of JPL data, the Contractor shall afford JPL access to the Contractor's facilities, installations, technical capabilities, operations, documentation, records and databases.

If new or unanticipated threats or hazards are discovered by either JPL or the Contractor, or if existing safeguards have ceased to function, the discoverer shall immediately bring the situation to the attention of the other party.

17.0 Acts of Officers, Employees, or Agents

"The Contractor agrees that it will indemnify and hold harmless the Institute against any loss, cost, or damage, sustained by any act of fraud, dishonesty, forgery, embezzlement, misapplication of money, securities, negotiable instruments, and other personal property, and/or any other unlawful act committed by an officer, employee or agent of the Contractor while assigned to perform duties in furtherance of work under this Contract."

ARTICLE 5. ALTERATIONS TO THIS CONTRACT

- 1.0 The following General Provisions from "California Institute of Technology/Jet Propulsion Laboratory General Provisions: Fixed-Price Construction Contract," R 8/01 are incorporated in their entirety into this Contract:
- 1.1 Affirmative Action Compliance Requirements for Construction.
 - 1.2 Apprentices and Trainees.
 - 1.3 Certification of Eligibility.
 - 1.4 Compliance with the Copeland Act Requirements.
 - 1.5 Compliance with Davis-Bacon and Related Act Requirements.
 - 1.6 Contract Termination - Debarment.
 - 1.7 Davis-Bacon Act.
 - 1.8 Disputes Concerning Labor Standards.
 - 1.9 Payrolls and Basic Records.
 - 1.10 Subcontracts (Labor Standards).
 - 1.11 Withholding of Funds.
- 2.0 The General Provision of this Contract entitled "Inspection - Long Form" is deleted and replaced by the Additional General Provision entitled "Inspection of Services."

ARTICLE 6. AWARD TERM EXTENSIONS

- 1.0 This contract includes a series of award term options, hereinafter referred to as "Extension Units" and an Award Term Extension. The Extension Units, and the Award Term Extension, may be unilaterally awarded to the Contractor by JPL, or withheld, based on the Contractor's performance record. If the Award Term Extension, and all Extension Units, are awarded, it is anticipated that the contract will have a period of performance, over and above the base period of performance, of one hundred and eight (108) months, as described below:
- 1.1 Extension units - end of base period through September 29, 2008:
- 1.1.1 Extension Units will be awarded in increments of six months per unit. The Contractor will be eligible for award of up to eight (8) Extension Units during this period.
 - 1.1.2 Each Extension Unit is priced as enumerated in paragraphs 2.1 through 2.18 of this article.
 - 1.1.3 JPL reserves the right to award one, two, or three Extension Units at a time.
 - 1.1.4 JPL will notify the Contractor in writing of Extension Unit award, or lack of award, not more than one hundred eighty (180) or less than one hundred twenty (120) days before the then-current expiration date of the Contract. JPL will confirm the awarding of Extension Units via Unilateral Modification to the Contract not less than sixty (60) days before the then-current expiration date of the Contract.
- 1.2 Award Term Extension and Additional Extension Units: September 30, 2008 through September 24, 2013.
- 1.2.1 JPL will, not less than 36 months nor more than 48 months after the start of full scale Maintenance and Operations, determine the Contractor's eligibility for ten (10) additional Extension Units. JPL's determination will be made on an "all or nothing" basis.
 - 1.2.2 JPL's determination to award or withhold the Award Term Extension will be made on the basis of superior contractor performance as determined by JPL, subject to the limitations of JPL's Prime Contract.
 - 1.2.3 JPL will notify the Contractor that the Award Term Extension is awarded or withheld not less than nine (9) months prior to the end of the Contract Period of Performance then in effect.
 - 1.2.4 Should JPL exercise the Award Term Extension, the additional Extension Units will be awarded in accordance with Section 1.1 of this Article.

2.0 Extension Units are priced as follows:

	Unit Number:	Period of Performance:	Price:
2.1	One	9/27/2004 - 3/26/2005	_____
2.2	Two	3/27/2004 - 9/25/2005	_____
2.3	Three	9/26/2005 - 3/25/2006	_____
2.4	Four	3/26/2006 - 9/24/2006	_____
2.5	Five	9/25/2006 - 3/24/2007	_____
2.6	Six	3/25/2007 - 9/30/2007	_____
2.7	Seven	10/1/2007 - 3/31/2008	_____
2.8	Eight	4/1/2008 - 9/29/2008	_____
2.9	Nine	9/30/2008 - 3/30/2009	_____
2.10	Ten	3/31/2009 - 9/28/2009	_____
2.11	Eleven	9/29/2009 - 3/29/2010	_____
2.12	Twelve	3/30/2010 - 9/27/2010	_____
2.13	Thirteen	9/28/2010 - 3/28/2011	_____
2.14	Fourteen	3/29/2011 - 9/26/2011	_____
2.15	Fifteen	9/27/2011 - 3/27/2012	_____
2.16	Sixteen	3/28/2012 - 9/25/2012	_____
2.17	Seventeen	9/26/2012 - 3/26/2013	_____
2.18	Eighteen	3/27/2013 - 9/24/2013	_____

ARTICLE 7. LIMITATION OF JPL'S OBLIGATION

- 1.0 The Firm Fixed Price of this Contract is the amount set forth in paragraph 1.0 of ARTICLE 3, PRICE AND PAYMENT, subject to the limitations set forth in this Article.
- 2.0 Subject to Paragraph 6.0 below, the amount set forth in period 1 of the following Incremental Liability Schedule reflects the maximum limitation of the Institute's liability for all purposes, including incurred costs, termination costs (including amounts payable with respect to subcontracts and settlement costs) and allowance for profit or fee:

INCREMENTAL LIABILITY SCHEDULE

- | <u>Period No.</u> | <u>Cumulative Maximum Liability</u> | <u>Terminal Date</u> |
|-------------------|---|----------------------|
| 3.0 | It is anticipated that JPL shall, prior to the terminal date, if any, of the Period specified in the first line of paragraph 2.0 above, issue a Unilateral Modification to revise the maximum limitation to the amount set forth in the next successive period. The determination as to whether or not to issue such a modification shall be at JPL's sole discretion. In the event that JPL does not issue such a modification prior to the terminal date, this Contract shall, unless the Contractor requests a terminal date extension in writing prior to the terminal date, be deemed terminated for convenience and the Contractor shall proceed as if the Contractor has received a Notice of Termination pursuant to the GP Article entitled "Termination for Convenience." JPL shall, upon receipt of a written request from the Contractor for Terminal Date extension, immediately issue a unilateral modification extending the Terminal Date in accordance with Contractor's request. If the Contractor or JPL have reason to believe that any other change in the Incremental Liability Schedule would be in the best interest of the contract effort, the Contractor or JPL may notify the other party in writing to that effect, together with the requested change. If the Contractor and JPL agree with the requested change, the Incremental Liability Schedule will be revised by Supplemental Agreement to the Contract. | |
| 4.0 | In the event that JPL issues such a UM to increase the liability after the terminal date, the Contract shall no longer be deemed terminated, and such UM shall have the same effect as if it had been issued prior to the terminal date; provided however, that if JPL's failure to issue the UM by the terminal date caused an increase of the cost of, or the time required for, performing this Contract, because the Contractor proceeded as if a Notice of Termination had been issued, an equitable adjustment shall be made in (i) the Contract Price, the time of performance, or both; and (ii) other affected terms of the Contract. The Contractor must assert its right to such equitable adjustment within 30 days of receipt of the UM. However, if JPL decides that the facts justify it, JPL may receive and act upon a proposal submitted before final payment of the Contract. Subject to paragraph (f) below, in the event that this Contract is terminated pursuant to this Article, or otherwise | |

- terminated by JPL pursuant to the GP Article entitled "Termination for Convenience," the cumulative liability amount set forth in the Incremental Liability Schedule for the Period referenced in the first sentence of paragraph (b) of this Article, reflects JPL's maximum liability notwithstanding anything to the contrary in the GP Article entitled "Termination for Convenience," or the value of supplies and services delivered to and retained by JPL.
- 5.0 The Contractor has used the Incremental Liability Schedule to plan its progress payments, partial payments, obligations and termination liability. It is a management prerogative of the Contractor to determine if any part of these elements are to be under funded or at risk (relative to the Incremental Liability Schedule) for any period of time. This is a firm fixed price type Contract. The Contractor assumes all risk for any variance between planned and actual costs, including planned and actual termination liability. The Contractor is strictly liable for all cost variances, including cost variances attributable to indirect rate changes and shall in no event be excused from the obligation to complete performance in accordance with the price, delivery schedule, and technical requirements of this Contract.
- 6.0 If the Contract is modified, the provisions of this Article shall not limit the Contractor's obligation pursuant to GP Article entitled "Changes," to diligently pursue the performance of the Contract as modified. In the event that a unilateral modification contains a liability limit for work performed under such modification, the Contractor's obligation to pursue performance of such modification and the Institute's liability for such modification, shall, until the UM(s) is bilaterally settled, be limited by the amount of the liability limit included in the UM. Until such a UM is settled, the liability limit on the UM does not increase the baseline liability in paragraph (b). In the event that this Contract is deemed terminated pursuant to paragraph (c) of this Article or the GP Article entitled "Termination for Convenience," prior to the settlement of an outstanding UM(s), the Institute's maximum liability for all purposes, including incurred costs, termination costs (including amounts payable with respect to subcontracts and settlement costs and consideration for delivered supplies and services) and allowance for profit or fee, shall be no more than the sum of the cumulative liability amount set forth in the Incremental Liability Schedule for the Period referenced in the first sentence of paragraph (b) of this Article, plus the liability limit(s) set forth in the UM(s).
- 7.0 Unilateral Modification Liability Limits.
- 7.1 Reserved.
- 7.2 Reserved.
- 8.0 In the event that this Contract contains a provision providing for progress payments, such provision shall be subject to the limitations set forth in this Article and the "contract amount" referred to in any such provision for progress payments is the Firm Fixed Price of this Contract set forth in paragraph (a) of ARTICLE 3, PRICE AND PAYMENT.
- 9.0 The provisions of the Article shall in no way limit the Institute's rights under the GP Article entitled Default.

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the day and year first above written.

CALIFORNIA INSTITUTE OF TECHNOLOGY

By _____

(Title)

By _____
(Signature)

(Typed Name)

(Title)

Instructions to Contractor: Do not insert date on Preamble page.