

Facilities Operations, Repair & Maintenance II (FORM-II)



Industry Day Presentation
April 10, 2013

Industry Day Agenda

- *Glenn Research Center (GRC) Basic Information, History & Core Competencies*
- *GRC Master Plan Overview*
- *GRC Real Property Details*
- *GRC Maintenance Contract Structure*
- *GRC Operations & Maintenance Organizational Structure*
- *FORM-II RFP Overview*
- *FORM-II Statement of Work Overview*
- *FORM-II Section J “Attachments” Overview*
- *Questions*

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GRC Basic Information, History & Core Competencies

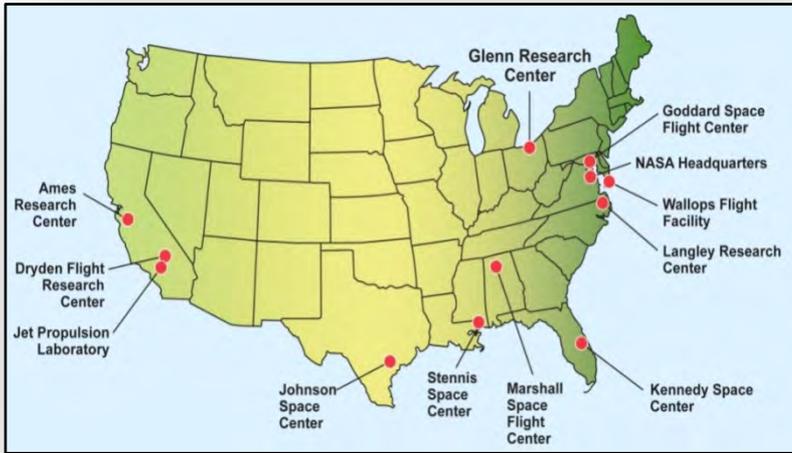


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Glenn Research Center (GRC)



Ten Major NASA Centers



GRC Consists of Two Sites



6,400 acres



**Plum Brook Station
Sandusky, Ohio**

342 acres



**Lewis Field
Cleveland, Ohio**

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GRC Lewis Field Campus



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GRC Lewis Field History



- ***Established in 1942 as part of the National Advisory Committee for Aeronautics***
- ***Focus on research & technology for aero propulsion***
- ***Named after George W. Lewis, Head of NACA***



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GRC Lewis Field History



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GRC's Current Core Competencies

**Communications
Technology &
Development**



**Power, Energy
Storage &
Conversion**



**Materials and
Structures for
Extreme
Environments**



**Air-Breathing
Propulsion**



**In-Space
Propulsion &
Cryogenic Fluids
Management**



**Physical
Sciences &
Biomedical
Technologies in
Space**



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GRC Master Plan Overview



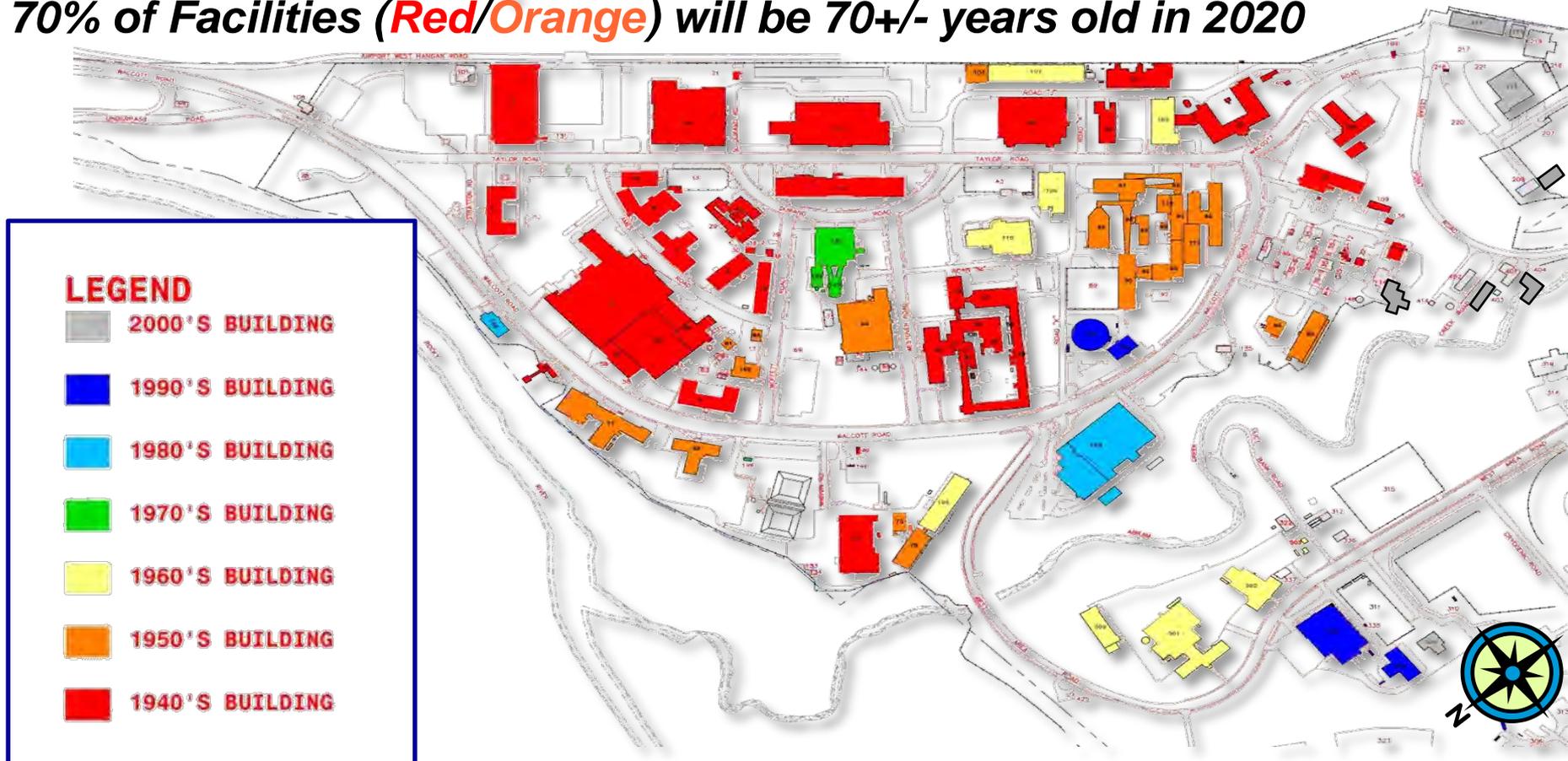
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GRC Lewis Field Is An Aging Campus

70% of Facilities (**Red/Orange**) will be 70+/- years old in 2020



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Aspects of GRC Master Plan

- *Establishes strategies for the next 20 years*
- *Gauges mission requirements for ground test and research facilities*
- *Considers mandates for conservation of energy and water, environmental, security, and historical significance*
- *Considers infrastructure age and condition and deferred maintenance history*

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Aspects of GRC Master Plan

- **Emphasizes consolidation and down-sizing**
 - *Concerted effort to drive down the Center's overall Current Replacement Value (CRV)*
- **Plan is based upon realistic projections of resources**
 - *Cannot buy more than we can afford*
- **Utility master plans completed (steam, chilled water, and storm water)**
 - *Need to consider new strategies to meet stringent energy savings mandates (ground-source heat pump, satellite plants vs. large central plants, etc.)*

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Aspects of GRC Master Plan

- **Strategies available to GRC**
 - *Demolish real property (Agency fund)*
 - *Excess property through the General Services Administration (GSA)*
 - *Place properties in an “Inactive” state (Standby, Mothball, Abandon)*
 - *Advocate for large capital project funding (Agency fund)*
 - *Advocate for “Repair by Replacement” projects*
 - » *Demolish 100 square feet of existing property in exchange for building 80 square feet of new property*

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Evidence of Master Plan Success

- ***Demolition of \$6M of Book Value at Lewis Field and \$23M of Book Value at Plum Brook Station since 2007***
- ***North Campus Buildings 500 & 501 exceeded through GSA***
- ***New facilities:***
 - *Main Gatehouse, Building 154*
 - *Warehouse Building 351*
 - *Shipping & Receiving Building 152*
 - *Centralized Office Building 162*
- ***Facilities being designed***
 - *Research Support Building and Warehouse Addition*

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Evidence of Master Plan Success

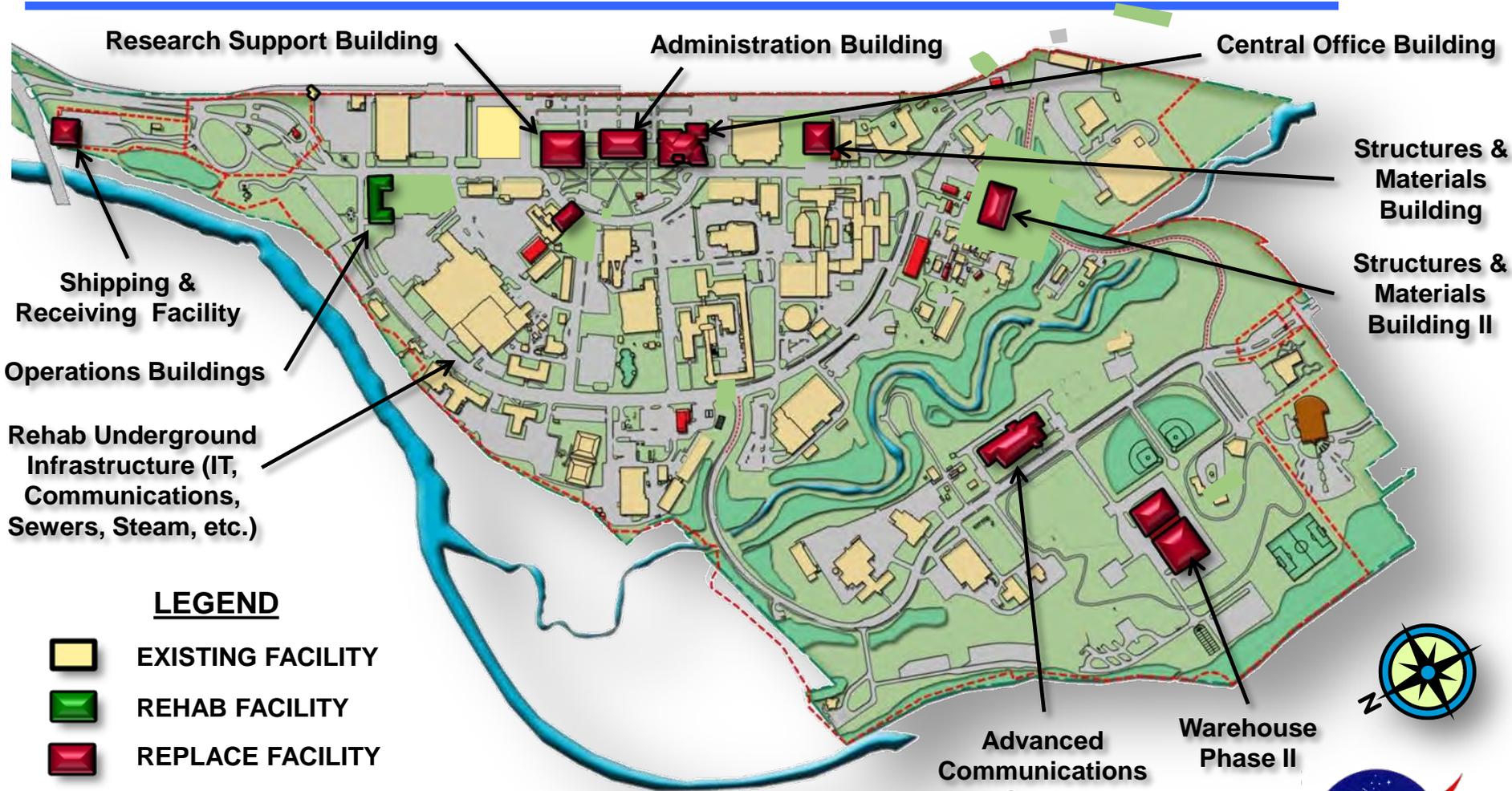
- **Large projects that will reduce maintenance and unforeseen repairs (next 5 years)**
 - Repair Steam Distribution System (3-Phases) *Two Phases Ongoing*
 - Repair City Water Mains (2-Phases) *Phase 1 Starting this Spring*
 - Repair Electrical Distribution System (2-Phases) *Phase 1 Starting this Spring*
 - Repair Building Exteriors (2-Phases)
 - Repair Storm Sewer Systems
- **Over \$70M planned for above projects**

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Lewis Field 20 Year Master Plan



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Master Plan Graphic: Downtown Glenn



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GRC Real Property Details



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GRC Lewis Field Real Property Details (As of 4/10/13)

- ***“Active” Buildings: 75***
 - *Approximately 2,100,000 square feet*
- ***“Inactive” Buildings: 6 (minimal maintenance)***
 - *Approximately 235,000 square feet*
- ***Electrical Substations: 12***
- ***Major Cooling Towers: 5***
 - *Only fire protection and water treatment a part of this contract*
 - *Does not include several small packaged cooling towers*

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GRC Lewis Field Real Property Details (As of 4/10/13)

- ***Miscellaneous Structures & Facilities: 57***
 - *Other than buildings (includes wind tunnels, test stands, trailer pads, sewage lift stations, etc.)*
- ***Utility & Pavement Systems: 24***
 - *Includes underground water systems, electrical power distribution (duct banks), sanitary & storm sewer systems, roads, drives, parking lots, etc.)*
- ***Details are found in Section J, Attachment J-6 “GRC Lewis Field Real Property List”***
 - *Note the multiple tabs for the EXCEL spreadsheet*

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GRC Maintenance Contract Structure



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NASA Maintenance Contracts

- ***There is not a consistent model for Operations & Maintenance (O&M) contracting amongst NASA's ten major field centers***
 - *Large consolidated contracts (O&M, construction, construction management, design, environmental, etc.)*
 - *Multiple small contracts*
 - *Fixed-Price contracts*
 - *Cost-Plus contracts*
 - *Many types of incentive fees and deduction schedules*
 - *Prescriptive, performance-based, and combination of both*
- ***Contracting decisions made based on Center infrastructure***

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GRC Maintenance Contracts

- ***GRC currently has four (4) Operations & Maintenance contracts:***
 - ***Facilities Operations, Repair & Maintenance (FORM) Contract***
 - » *Scope defined in this RFP*
 - ***Implementation, Maintenance, Operations & CPS (IMOC) Contract***
 - » *Operations & Maintenance of the GRC Central Process Systems (CPS) including Combustion Air, Altitude Exhaust, Centralized Cooling Towers, & Variable Frequency Electric Systems*
 - » *Most services provided at Lewis Field, but some work at Plum Brook Station*

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GRC Maintenance Contracts

- ***GRC Operations & Maintenance contracts (continued):***
 - ***Glenn Process Systems Certification (GPSC) Contract***
 - » *Recertification of both institutional & research pressurized vessels and systems*
 - » *Services provided at Lewis Field and Plum Brook Station*
 - ***Test Facilities Operations & Maintenance (TFOME) Contract***
 - » *Operations & Maintenance of test facilities such as wind tunnels, engine test rigs, and propulsion stands at both Lewis Field and Plum Brook Station*
 - » *Institutional Operations & Maintenance at Plum Brook Station*

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GRC Operations & Maintenance Organizational Structure



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GRC's O&M Organization

- ***GRC's Facilities Division civil servant workforce size has reduced by over 50% since 1990***
 - *Fewer civil servants available for O&M contract management and surveillance*
 - *In the future, there will be fewer civil servants dedicated to O&M with the background training to match the job requirements*
- ***GRC transitioning to a "Smart Buyer" model***
 - *Transitioning more of the technical knowledge base to the Contractor*
 - *Need to transition to more performance-based contracting*

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GRC's O&M Organization

- ***Maintenance Program Manager***
 - *GRC Point of Contact with NASA Headquarters*
- ***Institutional Systems Management (SM) Branch***
 - *Senior level engineers that are responsible for all aspects of assigned institutional systems (equipment and system requirements, operating policies & procedures, configuration control, systems maintenance, RCM, etc.)*
 - » *High Voltage Electrical System Manager*
 - » *Low Voltage Electrical System Manager*
 - » *Life Safety & Security Systems Manager*
 - » *Architectural & Structural Systems Manager*
 - » *Building HVAC & Plumbing Systems Manager*
 - » *Steam Plants & Underground Utility Systems Manager*
 - » *Chilled Water Plants & Cryogenic Systems Manager*

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GRC's O&M Organization

- **Facilities Operations Specialists (FOS)**
 - *Responsible for quality assurance and oversight of the Facilities Operations, Repair & Maintenance Contract*
 - *Aligned with the Systems Managers (“boots in the field”)*
 - *Responsibilities include task definition, tracking, and evaluation*
 - *CMMS responsibilities*
- **Building Managers**
 - *Fosters communications of building related issues with building occupants and stakeholders*
 - *Captures and tracks building related issues and facilitates a resolution with the SMs, FOSs, and the Facilities Operations, Repair & Maintenance Contractor*

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GRC's O&M Organization

- **FORM-II Contractor's primary Points of Contact (POC)**
 - *Contracting Officer (CO)*
 - » *Only Government individual with the authority to enter into, administer, and/or terminate this contract and make related determinations and findings*
 - *Contracting Officer's Representative (COR = COTR)*
 - » *Advisor to the CO regarding technical, schedule, financial, and quality matters associated with the contract.*
 - » *Contractor's primary POC regarding the status of on-going work and the financial aspects of the contract*
 - *Alternate Contracting Officer's Representative (ACOR = ACOTR)*
 - » *Acts as the COR in his/her absence*
 - » *Designated as the Lead FOS*
 - » *Will facilitate many of the meetings specified in the RFP*

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FORM-II RFP Overview



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FORM-II Contract Summary

| | |
|------------------------------|---|
| Title: | Facilities Operations, Repair & Maintenance II (FORM-II) |
| Place of Performance: | NASA Glenn Research Center, Lewis Field (Small amount of work at Plum Brook Station) |
| Contract Type: | Firm Fixed-Price Base and Fixed-Price IDIQ, Deduction Schedule |
| Procurement: | Total Small Business Set-Aside |
| NAICS Code: | 561210 (Facilities Support Services) |
| Contract Period: | Five (5) years (Including options) |
| Phase-in: | Sixty (60) days |

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Performance Period

- **Five (5) Year Performance Period:**

- *Phase-In Period* 10/01/2013 – 11/30/2013
- *Base Period* 12/01/2013 – 09/30/2015
- *Option Period 1* 10/01/2015 – 09/30/2016
- *Option Period 2* 10/01/2016 – 09/30/2017
- *Option Period 3* 10/01/2017 – 09/30/2018
- *Option Period 4* 10/01/2018 – 03/30/2019
(6-Month Option to Extend)

- **Phase-In Period (maximum of 60 days)**

- *If cost proposed, it shall be on a Firm Fixed-Price basis*

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Government Request For Proposal (RFP) Format

| <u>Section</u> | <u>Title</u> | <u>Comments</u> |
|----------------|---|---|
| A | Solicitation/Contract Form | <i>Issued upon release of the final RFP</i> |
| B | Supplies or Services & Prices/Cost | |
| C | Descriptions/Specs/Work Statement | <i>Section J, Attachment J-1</i> |
| D | Packaging & Marking | |
| E | Inspection & Acceptance | |
| F | Deliveries or Performance | |
| G | Contract Administration Data | |
| H | Special Contract Requirements | |
| I | Contract Clauses | |
| J | List of Attachments | <i>Currently sixty (60) Attachments</i> |
| K | Representations, Certs & Other | |
| L | Instructions, Conditions to Offerors | <i>What Proposals must contain</i> |
| M | Evaluation Factors for Awards | <i>How Proposals will be evaluated</i> |

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Acquisition History

- **Sources Sought Notice was issued on February 13, 2012**
 - *Solicitation Number: NNC12ZFD010R*
- **Draft Statement of Work (Section C) issued on January 16, 2013**
 - *Comments solicited from Industry, four companies responded on February 4, 2013*
- **Industry Day/Tour Invitation issued on March 27, 2013**
- **Draft RFP Documents issued on April 1, 2013**
 - *RFP Solicitation Number: NNC13ZFD017J*
 - *Draft RFP & fifty-three (53) Section J Attachments uploaded*
 - *General Library uploaded (zipped file of documents referenced in the RFP)*

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Acquisition History

- **Draft RFP Documents issued on April 4, 2013**
 - Updated Draft RFP document uploaded
 - Seven (7) additional Section J Attachments uploaded (Pricing Templates)
- **Important Upcoming Dates (Tentative)**
 - Issue Final RFP 05/06/2013
 - Proposal Due Date 06/18/2013
 - Evaluations Complete 07/29/2013



FORM-II Statement of Work Overview



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FORM-II Statement of Work Overview

- ***Section C – Statement of Work (SOW) is located in Section J, Attachment J-1***
- ***The SOW has twenty-eight (28) chapters***
 - *Chapters C.1 through C.13 provide the general requirements for the Contract*
 - *Chapters C.14 through C.28 contain the operations & maintenance requirements for all of the institutional systems at the Center*
- ***SOW, uploaded on 04/01/2013, was modified (as applicable) based on the Industry Comments received on 02/04/2013***

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FORM-II Statement of Work Overview

- ***Contract divided into two (2) sections:***
 - *Base Work, Fixed-Price*
 - *Indefinite Delivery, Indefinite Quantity (IDIQ), Fixed-Price*
- ***Base Work includes (C.2.2):***
 - *Technician staffing for Base Work activities*
 - *Contract Management staffing*
 - *Trouble Calls & Minor Service Requests (defined quantity per year)*
 - *Base Operations & Maintenance Work*
 - » *General Operations & Maintenance (GOM)*
 - » *Utilities Operations & Maintenance (UOM)*
 - » *Preventative Maintenance (PM) & Program Maintenance (PGM)*
 - » *Predictive Testing & Inspections (PT&I)*

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FORM-II Statement of Work Overview

- ***IDIQ Work includes (C.2.3):***
 - *Technician staffing for IDIQ Work*
 - *Repairs*
 - *Repair of Obsolete Items (ROI)*
 - *Service Requests (SR)*
 - *Pre-Priced Maintenance Tasks*

- ***Significant amount of Government-Furnished Property & Services (C.5)***
 - *Government-Furnished Facilities (GFF)*
 - *Government-Furnished Equipment (GFE)*
 - *Government-Furnished Material (GFM)*
 - *Government-Furnished Utilities (GFU)*
 - *Government-Furnished IT Equipment & Services*

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FORM-II Statement of Work Overview

- ***Definition of interfaces with Government Personnel and other Government Contractors (C.7.12)***
- ***Comprehensive requirements provided in C.9 for the Computerized Maintenance Management System (CMMS)***
 - *Offerors required to use GRC's Maximo Asset Management 7.1.1.7, a product of IBM, Incorporated*
- ***Reliability-Centered Maintenance (RCM) requirements provided in C.13***
 - *Identifies roles & responsibilities of NASA personnel*
 - *Identifies roles & responsibilities of Contractor personnel*
 - *Identifies RCM Program goals*

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FORM-II Statement of Work Overview

- ***O&M Requirements for Institutional Systems and Equipment (C.14 through C.28)***
 - *Systems and requirements are organized differently from the current FORM contract*
 - *O&M of some systems are more performance-based and less prescriptive (i.e., “maintain in accordance with industry standards”)*
 - *Many work instructions for preventative maintenance activities have been revised from those performed in the current FORM contract*
 - *Grounds maintenance has been divided into categories (Type 1, Type 2, and Type 3)*

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FORM-II Section J “Attachments” Overview



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FORM-II Section J “Attachments” Overview

- ***Sixty (60) Section J “Attachments” have been uploaded to date***
 - *EXCEL Spreadsheets (make sure to look at all tabs)*
 - *List of Acronyms*
 - *Maps*
 - *Operating Instructions*
 - *Collective Bargaining Agreements*
 - *Standard NASA Forms*
 - *History Data*
 - *Asset Information*
 - *List of Contract Deliverables*
 - *Pricing Templates*

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FORM-II Section J “Attachments” Overview

- ***Section J Attachment numbering format:***
 - *Attachments J-1 through J-12 contain general information*
 - *Other Attachments are numbered according to the RFP Section Letter, the Chapter, and the Paragraph in which they are referenced*

Example: *Attachment J-C15.1 Catch Basin Inspection Form is referenced in Section C, Chapter 15, Paragraph 1*

- ***Several Attachments have not been included in the Draft RFP, but will be included when the Final RFP is issued***

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FORM-II Section J “Attachments” Overview

- ***Note that some Attachments contain Government-provided information, and some Attachments are templates for Offerors to fill out and include in their proposal***
 - *Attachments J-L.1 and J-L.2 Past Performance Cover Letter & Past Performance Questionnaire (sent by the Offerors to companies for which they provided similar services to in the past)*
 - *Attachment J-L.3 Summary of Past Performance Worksheets (see two tabs) filled out by Offerors*
 - *Attachments J-B.1, J-B.2, J-B.3, J-B.4, J-B.5 & J-B.6 are Pricing Templates that must be completed by the Offeror*

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FORM-II Section J “Attachments” Overview

- **Some Attachments were identified as “Sensitive But Unclassified” (SBU) information and were not included in the Draft RFP**
 - *Attachment J-7 GRC Lewis Field Maps included in the Draft RFP*
 - » *Map of Lewis Field Buildings & Structures*
 - » *Map of Perimeter Security Fencing & Remotely-Operated Security Gates*
 - » *Map of Lewis Field Paved Surface Maintenance and Snow Plowing Requirements*
 - » *Map of Lewis Field Grounds Maintenance Requirements, Lawn Mowing, and Landscape Maintenance*
 - » *Map of Lewis Field Ground Maintenance Requirements, Tree Trimming and Treatment*
 - » *Map of Lewis Field Surface Storm Water Control Features*
 - » *Map of Lewis Field Oil/Water Separators, Underground Holding Tanks, and Water Quality Units*

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FORM-II Section J “Attachments” Overview

- **Some Attachments were identified as “Sensitive But Unclassified” (SBU) information and were not included in the Draft RFP (Continued)**
 - **Attachment J-7 GRC Lewis Field Maps *not included in the Draft RFP***
 - » Map of Steam Distribution System, Trenches, Conduit & Manholes
 - » Map of Domestic Water Distribution System, Active Fire Hydrants, Piping & Valves
 - » Map of Chilled Water Distribution System Underground Piping & Valves
 - » Map of Natural Gas Distribution System Underground Mains, Laterals & Valves
 - » Map of Storm Sewer System Catch Basins, Manholes, Mains & Laterals
 - » Map of Sanitary Sewer System Force Mains, Manholes, Mains & Laterals
 - » Map of Industrial Waste Sewer System, Pipe, Manholes, and Waste Basins
 - » Map of Underground Electric Power Distribution, Substations, Manholes & Duct Banks
 - » Map of Communications Underground System, Manholes & Duct Banks

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Questions?



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