

## **STATEMENT OF WORK**

### **USE OF INFORMATION TECHNOLOGY TO SIMPLIFY THE ENVIRONMENTAL IMPACT ANALYSIS PROCESS**

#### **1.0 Requirements and Objectives**

1.1 All Federal government agencies and organizations are required to comply with the National Environmental Policy Act (NEPA). Military organizations have policies and instructions describing procedures and policies to achieve and maintain compliance with NEPA. These policies and procedures integrate environmental considerations into planning and decision-making for assessing environmental effects of the respective organizations' actions. For example, NEPA requires that all Davis Bacon act compliant construction projects be screened against a checklist of environmental considerations and evaluations. The Environmental Impact Analysis Process (EIAP) is the method for ensuring that compliance with the requirements of NEPA are achieved.

1.2 This Statement of Work (SOW) describes required information technology (IT) solutions that will support the work necessary to enhance and expedite the EIAP in support of NEPA requirements.

1.3 Robins Air Force Base (AFB) and the Patuxent River Naval Air Station (PAX) have already taken steps to automate EIAP, utilizing various IT solutions such as geographic information systems (GIS) and web-based applications. The purpose of this delivery order is to review and build upon/re-engineer the current IT tools developed at Robins AFB and PAX and provide a generic web-based decision tree tool which can be used by all Federal and Department of Defense (DOD) organizations to facilitate and lower costs associated with compliance with NEPA.

1.4 The NEPA data collection and legal reporting requirements identified under this effort are to be incorporated into a future release of the Spatial Data Standards for facilities, infrastructure, & environment (SDSFIE) and Facility Management Standards for facilities, infrastructure, & environment (FMSFIE). The recommendations for revision/expansion will be based upon the SDSFIE/FMSFIE Release 2.00.

#### **2.0 Scope**

2.1 This Scope of Work consists of support activities as described in Task Statement of section 3.0

#### **3.0 Task Statement**

3.1 The approximate performance period shall be April 2001 through December 2001. The contractor shall prepare a brief workplan with milestones (i.e., target completion dates) for approval by the Robins AFB, PAX, & CADD/GIS Technology Center POCs

1/24/2001

prior to beginning work on the tasks outlined in this SOW. The workplan shall provide a listing, with target delivery dates and completion periods, for all deliverables & Government review periods.

3.2 This Statement of Work includes the following taskings:

### **3.2.1 Task 1 – Compare Robins AFB and PAX EIAP Decision Tree Models**

3.2.1.1 The contractor shall review and compare the existing EIAP checklist/decision tree approaches and process models developed by Robins AFB and PAX. The review shall include the Robins AFB web-based EIAP decision tree and the PAX GIS-based EIAP decision tree.

3.2.1.2 The contractor shall document the Robins AFB & PAX EIAP decision tree process model comparison and provide a brief paper containing (1) a brief discussion of the PAX and Robins AFB EIAP checklist/decision tree approaches, (2) supporting spreadsheet(s) and/or diagrams/illustrations which depict both process models, (3) recommendations concerning development of a generic EIAP web-based decision tree model for use by the DoD and Federal Government, and (4) a draft conceptual entity relationship diagram NEPA data model for eventual incorporation into the SDSFIE/FMSFIE.

### **3.2.2 Task 2 - Evaluate Regulatory and Legal Reporting Requirements**

3.2.2.1 The contractor shall review the NEPA laws and regulatory/legal reporting requirements, as well as available DoD and Service directives/instructions concerning NEPA compliance. This review shall be based upon available information on the "Federal Real Property Management" web site hosted on the CADD/GIS Technology Center's Internet web site as well as additional available information (e.g., Code of Federal Regulations (CFR), other Federal Government & DoD web sites). Issues such as: (1) Definition of project areas of potential effect (APE's) within GIS at the time of the Description of Proposed Action and Alternatives (DOPAA), and (2) Automated spatial analysis of potential environmental impacts without need to display the location of sensitive resources shall also be researched and evaluated.

3.2.2.2 Based upon the findings from Task 1 (section 3.2.1) and the (section 3.2.2.1), the contractor shall identify any gaps and limitations of the generic EIAP Decision Tree developed under Task 1, and what steps/activities must be added to ensure full compliance with the NEPA laws/regulations and DoD directives.

3.2.2.3 The contractor shall produce a brief paper identifying any gaps and limitations of the generic EIAP Decision Tree developed under Task 1, and what steps/activities must be added to ensure full compliance with the NEPA laws/regulations and DoD directives. The generic web-based EIAP Decision Tree model and draft conceptual NEPA data model developed under Task 1 shall also be updated.

### **3.2.3 Task 3 - Develop Draft Web-Based EIAP Decision Tree and NEPA Data Model**

3.2.3.1 Based upon the findings from Tasks 1 and 2, the contractor shall develop the draft web-based EIAP Decision Tree web site template which, when complete, will be hosted on the CADD/GIS Technology Center's Internet web site. The decision tree should make it clear that each service (Air Force, Navy, Army, USACE, & Marines) will have their own requirements for determining what qualifies for a categorical exclusion. Determining what qualifies for a categorical exclusion is not within the purview of this project. Determining what qualifies, or even completing the requirements for documenting a categorical exclusion, will be a service-specific addition to the system in the future.

3.2.3.2 In addition, based upon the findings from Tasks 1 and 2, the contractor shall develop a draft modified SDSFIE/FMSFIE data model that includes the proposed new tables, attributes, and domain values needed to support the legal reporting requirements under the NEPA laws/regulations and DoD directives. The contractor shall determine the relationships between tables and create an entity relationship diagram. The goal for development of the new data model will be for the geospatial features (i.e., Entity Types) to remain within the current SDSFIE data model structure, with the remainder of the NEPA legal reporting requirements being developed within a new "transactional" (relational) FMSFIE Environmental Entity Set with new Entity Classes & Subclasses. The contractor shall use a consistent naming convention similar to the current SDSFIE/FMSFIE data model.

### **3.2.4 Task 4 – Develop Proposed Final Web-Based EIAP Decision Tree and NEPA Data Model**

3.2.4.1 The contractor shall incorporate the comments received on the draft web-based EIAP Decision Tree web site template into the proposed final web site which will ultimately be delivered to and posted on the CADD/GIS Technology Center's Internet web site.

3.2.4.2 The contractor shall incorporate the comments received on the draft NEPA data model (i.e., entity relationship diagram) into the proposed final data model. The contractor shall define all new tables, attributes, and domain values to be included in the NEPA data model. The contractor shall provide a technical memorandum and Access database containing the final NEPA data model structure, including tables, attributes, and domain values, and linkages (i.e., Primary/Foreign Key relationships).

### **3.2.5 Task 5 - Develop Final Web-Based EIAP Decision Tree and NEPA Data Model**

3.2.5.1 The contractor shall incorporate the comments received concerning Task 4 deliverables to develop a final EIAP Decision Tree web site and NEPA data model (with memorandum and Access database tables) for use by all military installations.

### **3.2.6 Task 6 - Publish Web-Based EIAP Decision Tree and NEPA Data Model**

3.2.6.1 The contractor shall incorporate the comments received concerning Task 5 deliverables to update and deliver the final web-based EIAP Decision Tree web site to the CADD/GIS Technology Center POC for ultimate posting on the CADD/GIS Technology Center's Internet web site.

3.2.6.2 The contractor shall incorporate the comments received concerning Task 5 deliverables to update and deliver the final NEPA data model, memorandum, and Access database tables to the CADD/GIS Technology Center POC for incorporation into a future SDSFIE/FMSFIE release.

### **4.0 Deliverables**

4.1 Under this Statement of Work, the contractor shall provide the following deliverables. One copy of all deliverables shall be provided to the Robins AFB, PAX, and CADD/GIS Technology Center POCs.

4.1.1 Workplan.

4.1.2 Task 1 -

- a. Paper.
- b. Draft web-based NEPA Decision Tree Diagram.
- c. Draft conceptual NEPA Decision Tree Results Data Model.

4.1.3 Task 2 -

- a. Paper
- b. Updated Draft web-based NEPA Decision Tree Diagram.
- c. Updated Draft conceptual NEPA Decision Tree Results Data Model.

4.1.4 Task 3 -

- a. Draft web-based NEPA Decision Tree Template.
- b. Draft NEPA Data Model incorporating NEPA Decision Tree legal reporting requirements.

4.1.5 Task 4 -

- a. Proposed Final web-based NEPA Decision Tree web site.
- b. Proposed Final NEPA data model.
- c. Technical memorandum concerning Final NEPA data model
- d. Access database tables containing new NEPA FMSFIE tables, attributes, & domain values.

4.1.6 Task 5 -

- a. Final web-based NEPA Decision Tree web site.
- b. Final NEPA data model.

1/24/2001

- c. Technical memorandum concerning Final NEPA data model.
- d. Access database tables containing new NEPA FMSFIE tables, attributes, & domain values.

4.1.7 Task 6 -

- a. CD-ROM containing final web-based NEPA Decision Tree web site
- b. CD-ROM containing final NEPA data model, technical memorandum, and Access database tables.

Text documents, memos, papers, etc. shall be provided in Microsoft Word 2000 or 97 digital format. Spreadsheets shall be provided in Microsoft Excel 2000 or 97 digital format. Database tables, etc. shall be provided in Microsoft Access 2000 or 97 digital format. Conceptual models/diagrams may be illustrations provided in either Word 2000/97, Powerpoint 2000/97, or Acrobat Reader (.pdf) digital formats. Final data models shall be provided in ERWIN 3.5 and Acrobat Reader (.pdf) digital formats. Deliverables shall be provided via E-mail or mail (floppy disk or CD-ROM). Government review will begin upon successful delivery of each deliverable to each POC. Internet web pages shall be provided in HTML digital format.

**5.0 Points of Contact (POCs):**

5.1 Robins AFB POC: Parrish Swearingen – 912-926-1197 ext 114

[parrish.swearingen@robins.af.mil](mailto:parrish.swearingen@robins.af.mil)

Address:

WR-ALC/EMX (ATTN: Parrish Swearingen)  
455 Byron Street, Suite 465  
Robins AFB, GA 31098

5.2 PAX POC: Bobby Bean - 301-757-1700

[beanra@navair.navy.mil](mailto:beanra@navair.navy.mil)

Address:

Naval Air Station Patuxent River  
Code 8132 (ATTN: Bobby Bean)  
22473 Millstone Road, Building 505  
Patuxent River, MD 20670-5304

5.3 CADD/GIS Technology Center POC: Bobby Carpenter – 601-634-4572

[carpenb@wes.army.mil](mailto:carpenb@wes.army.mil)

Address:

Army Engineer R&D Center (Waterways Experiment Station)  
CEERD-ID-C (Attn: Bobby Carpenter)  
Building 8000, Room 1216  
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Vicksburg, MS 39180-6199