CITY OF CHICAGO DEPARTMENT OF PROCUREMENT SERVICES ROOM 403, CITY HALL, 121 N. LA SALLE ST.

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JUSTIFICATION FOR NON-COMPETITIVE PROCUREMENT

| For contract(s) in this request, answere Preparation of Non-Competitive P | ver applicable questions in ea | ch of the 4 major subject are | as below in accordance with the | Instructions for |
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| Request that negotiations be condu | • | 4 | e product and/or services describ | ed haroin |
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| (CHOOK ONE) | . In Delegate Agency, this ic | quest is for blanker approva | I' of all contracts within the | |
| (Program Name) | (Attach List) | Pre-Assigned Specification | No | |
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| for the change. Indicate both the or supporting documents. Request ap | riginal and the admisted confra | of amount and/or evniration | date with this change as applies | ble. Attach copy of all |
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O'Hare Modernization Program – WA #18 North Air Traffic Control Tower Sole Source Utilization of DMJM H+N March 11, 2005

ATTACHMENT 1: PROCUREMENT HISTORY

Phase 1 of the O'Hare Modernization Program (OMP) includes the construction of new Runway 9L-27R at the northern edge of airport property. The new runway will reduce schedule delays currently experienced by air carriers at ORD. The existing air traffic control tower at O'Hare does not provide unobstructed sight lines to both ends of the proposed runway. Therefore, design and construction of a new North Air Traffic Control Tower (NATCT) project is required as an enabling project for new Runway 9L-27R.

The OMP is looking to enter into contract with DMJM H+N, d/b/a DMJM Illinois, Inc. an Illinois corporation, for the completion of the NATCT design. Completion of design at this point in time will enable the new tower to be constructed and commissioned for FAA use when the new Runway 9L-27R commences operations. DMJM H+N is the preferred design firm based on an FAA recommendation to OMP as a result of an FAA sponsored concept design competition. The construction contract for this project will be competitively bid.

The FAA maintains and updates a "Qualified Vendor's List" to support their ongoing planning, design and construction projects. To become a qualified vendor for the FAA, interested firms must submit two standard federal forms, SF 254 and SF 255, which request detailed information on the firm, number of employees and relevant qualifications, relevant project experience, and a listing of direct work with the federal government, and all other domestic and international work. Once the forms are submitted to the FAA, the evaluation process commences. This process entails a review of the forms and completion of a scoring sheet, against which the forms are measured. Based on the scoring sheet, if a firm meets the minimum requirements, that firm is added to the Qualified Vendors List for a specific design function. The forms are due to the FAA on an annual basis.

There are six A/E firms on the Qualified Vendors List for Air Traffic Control Tower design, two of the qualified firms do not currently have ATCT design experience, two of the qualified firms have experience with the design of small ATCT at small airports, and two of the qualified firms have experience with large, complex ATCT projects at major airports. The FAA selected the only two A/E firms on the Qualified Vendors list with large, complex ATCT experience to participate in a concept design competition. The competition resulted in an FAA preferred tower design concept and A/E team, both of which were communicated to OMP in a letter of recommendation from the FAA. The concept design competition process is described in more detail below.

O'Hare Modernization Program – WA #18 North Air Traffic Control Tower Sole Source Utilization of DMJM H+N March 11, 2005

ATTACHMENT 1: PROCUREMENT HISTORY (continued)

In 2003, as the conceptual design phase of OMP was started, the FAA worked to define the requirements for the NATCT project itself and the best way to procure design services for the project. In the past, the FAA's process was to contact one of the A/E firms on the qualified list and contract for concept design services. If the concept met with FAA approval, the A/E was then contracted for final design services. Due to the high profile nature of O'Hare International Airport and the new Air Traffic Control Tower project, the FAA decided to sponsor a concept design competition between A/E firms qualified to design a new ATCT at O'Hare. Also, new to the FAA process for this project, the concept design competition was to include a mock-up of the cab portion of the tower, which was to be modeled at the FAA Technical Center and evaluated by FAA Air Traffic controllers who would eventually use the facility.

On September 16, 2003, the FAA sent a request for concept design services, "Directions to Architectural/Engineering Firms" attached as Exhibit 1, to the two A/E firms with major airport ATCT design experience, DMJM H+N of Orange, CA and Teng and Associates of Chicago, IL. The FAA awarded two separate contracts for the competition, one to Teng & Associates and one to DMJM H+N.

The concept design stage included a kick-off meeting between the FAA, each of the A/E Firms, separately, and City of Chicago Department of Aviation and their representative, Ricondo and Associates, to determine the functional and aesthetic requirements for the project through several meetings. A visit to the FAA Technical Center in Atlantic City, NJ to mock-up and confirm control cab concepts and a final concept design presentation to the FAA was given.

Each team's final concept design presentation included an overall design narrative outlining the structural system, exterior cladding materials and finishes, mechanical system, electrical requirements, conceptual space planning, square footage and a cost estimate. Presentations were limited to three hours and took place on November 19, 2003.

The FAA assembled a committee to evaluate the concepts. The FAA NATCT Selection team was comprised of FAA representatives from the following groups within the FAA:

- Air Traffic Division's Requirements Branch (AGL-510),
- Chicago NAS Implementation Center (AGL-420 & ANI-440),
- O'Hare ATCT Air Traffic personnel, management, and NATCA bargaining unit,
- FAA Great Lakes Logistics Division.

O'Hare Modernization Program – WA #18 North Air Traffic Control Tower Sole Source Utilization of DMJM H+N March 11, 2005

ATTACHMENT 1: PROCUREMENT HISTORY (continued)

The four NATCT design concepts (two from each A/E) were evaluated on the following items:

- Functionality,
- Design Concept characteristics,
- Firm characteristics.
- Innovations, and
- Strength of Presentation.

The FAA recognized the strength of both firms and all concepts presented, however came to the ultimate conclusion that DMJM H+N's conceptual design offered the most functional tower cab while providing a significant design. The FAA went on to recommend that the OMP contract with the FAA selected design firm and associated concept for final design of the project. This recommendation was transmitted to the OMP in a November 28, 2003 letter, which is attached as Exhibit 2.

The FAA will be the primary owner/operator of the NATCT upon completion of construction, and as such, it is in the OMP's interest to follow the FAA recommendation of the A/E Firm and the concept to be designed. The construction contract for this project will be competitively bid.

This request is a first time request for a design services contract with DMJM H+N for the NATCT, an OMP Phase 1 project.

OMP Phase 2 includes the design and construction of a South ATCT to support the southernmost runway to be developed as part of Phase 2. It is possible that the FAA would follow a similar concept design competition process for the South ATCT project, when the time comes. Should the FAA follow a similar process for Phase 2, a separate request for the design of the South ATCT will be made during the contracting process for that work.

O'Hare Modernization Program – WA #18 North Air Traffic Control Tower
Sole Source Utilization of DMJM H+N
March 11, 2005

ATTACHMENT 2: ESTIMATED COST

The estimated cost for design and construction phase services to be performed under this contract is approximately \$3,700,000.

A portion of this total has been negotiated between DMJM H+N and the OMP for design services from the conceptual phase to 100 percent design documents. This total is \$2,400,000. The remaining \$1,300,000 has not yet been negotiated with DMJM H+N, however, it is intended to cover support of FAA equipment specific design requests and designer services during the bid and construction phases of the project.

ATTACHMENT 3: SCHEDULE REQUIREMENTS

OMP's schedule for contracting with DMJM H+N to perform design services is based on two key drivers. First is the overarching OMP schedule for enabling projects leading up to the operation of new Runway 9L-27R. Second is the time needed upon completion of tower construction for FAA commissioning. Additionally, the FAA requires a period of time for FAA Air Traffic controllers to be trained on operations with the new facility. The anticipated timeframe for commissioning and training is 8 to 10 months. The new runway cannot be placed into operation until the FAA commissions the NATCT facility and the FAA training is complete.

O'Hare Modernization Program – WA #18 North Air Traffic Control Tower Sole Source Utilization of DMJM H+N March 11, 2005

ATTACHMENT 4: EXCLUSIVE OR UNIQUE CAPABILITY

As mentioned previously, there are six A/E firms on the FAA's Qualified Vendors List for the design of Air Traffic Control Towers. Two of these firms do not currently have ATCT design experience, but were selected by the FAA due to high-rise tower design experience. It is the FAA's practice to work with A/E firms without tower design experience on small tower projects at small airports. Two of the qualified firms have experience with the design of small ATCT projects at small airports. Only two of the qualified firms have experience with large, complex ATCT projects at major airports, and these two firms were participants in the FAA's concept design competition. The tower and cab concept developed by DMJM H+N was preferred by the FAA and recommended to the City of Chicago and the OMP for final design.

DMJM H+N's experience on Air Traffic Control Towers is of key importance to FAA, OMP and the City of Chicago. DMJM H+N has been one of the national design contractors for the FAA Airport Traffic Control Tower and Terminal Radar Approach Control Facility program throughout the United States. DMJM H+N's depth of experience on ATCT projects for the FAA will provide this project with a large library of experiences that will benefit the OMP project by incorporating recent design and construction experience, resulting in a cost effective final design with improved constructability that meets FAA's operation requirements.

DMJM H+N has project experience with new tower installations around the country including the main tower at Chicago O'Hare, and the control towers at many other large and small airports around the country. The following list includes new towers designed by DMJM H+N:

| Representative DMJM H+N ATCT Projects |
|---|
| Chicago O'Hare, IL |
| Minneapolis/St. Paul, MN |
| Los Angeles, CA |
| Lambert-St. Louis International Airport, MO |
| Richmond, VA |
| Billings, MT |
| Miramar, CA |
| Dayton, OH |
| Columbus, OH |

O'Hare Modernization Program – WA #18 North Air Traffic Control Tower Sole Source Utilization of DMJM H+N March 11, 2005

ATTACHMENT 5: OTHER

While DMJM H+N is based in Orange, CA, they perform work in the state of Illinois doing business as DMJM, Illinois, Inc. DMJM H+N proposes teaming arrangements with a number of Chicago based MBE/WBE/DBE firms to assist with the design of the project. Based on the negotiated design contract amount between OMP and DMJM H+N, the DBE participation of the design phase of this contract is approximately 25 percent. The following is a list of MBE/WBE/DBE firms that DMJM H+N has contracted with:

| Firm Name | Services Provided | MBE/WBE Certified | DBE Certified |
|-------------------------------|---|----------------------|------------------|
| Delta Engineering, Inc | Civil and Electrical design services | MBE | DBE |
| Vistara Construction Services | Estimating and Scheduling | MBE | DBE |
| Gonzales Hasbrouck, Inc | Architectural design services | MBE | pending |
| Soodan & Associates, Inc. | Structural Review, QA/QC, Coordination with City of Chicago | MBE | pending |
| Cushing and Co. | Plan Reproduction | WBE | pending |
| Bauer-Latoza Studio | Landscape Architectural design | WBE | pending |

DMJM H+N is in the process of assisting their proposed sub consultants in obtaining the DBE certification required for a city contract containing federal funds. Initial discussions concerning the contract form had indicated use of a non-federal format hence the MBE/WBE certification.

O'Hare Modernization Program – WA #18 North Air Traffic Control Tower Sole Source Utilization of DMJM H+N March 11, 2005

EXHIBIT 1: DIRECTIONS TO ARCHITECTURAL/ENGINEERING FIRMS

Conceptual Design of a New Airport Traffic Control Tower and Base Building
O'Hare International Airport, Chicago, Illinois
September 16, 2003

<u>Directions to</u> <u>Architectural/Engineering Firms</u>

CONCEPTUAL DESIGN OF A NEW AIRPORT TRAFFIC CONTROL TOWER AND BASE BUILDING O'Hare International Airport, Chicago, Illinois

Dated September 16, 2003

INTRODUCTION

The Federal Aviation Administration (FAA), Great Lakes Region, seeks development of conceptual design from pre-qualified Architectural/Engineering (A/E) firms for a new Airport Traffic Control Tower (ATCT) and Base Building at O'Hare International Airport, Chicago, Illinois.

SCOPE

The A/E shall prepare two conceptual designs of new Control Tower and one Base Building, at the above stated Airport, with the following minimum characteristics:

The A/E will develop one scheme for the ATCT with the following requirements:

Overall height not to exceed 910 MSL Accommodate an ASDE-X radar system on the cab roof An ASDE-X equipment room penthouse Cab floor elevation of 225 ft. AGL or 880 MSL Cab size approximately 350-400 SF 30-degree glass from 18" above cab floor to ceiling 6 equally segmented sides Three exterior columns located at the following headings:0, 120 and 240 three mullions to be sized by the A/E Single elevator Single stairway Full height cable access/equipt. room Rest Rooms Break Room Mechanical Room Electrical Room Debrief Office (if possible)

The A/E shall prepare at least one different cab design that clearly indicates one or more different cab mullion configurations and cab geometry at the kick-off workshop meeting. It is the desire of the local Air Traffic controllers to have as little obstruction as possible from the cab mullions and structure of the tower shaft. The A/E may also develop one or more cab shapes, provided that the optimum look down angle line of sight is maintained.

Page 1

It has been determined that an equally segmented 16 sided cab had too many obstructions because of the tower structure for look down angle.

The conceptual Base Building shall be a 9000-10,000 S.F. design by the A/E. The conceptual design work on the Base Building is for programming purposes only. The Base Building shall include the following functions:

| Link | 120 sf | |
|--|----------------------|------|
| Small Administrative Area (copier, fax, files, mailboxes, etc) | 180 sf | |
| Administrative Office | -600 sf | |
| Air Traffic Administrative Office | 600 sf | |
| Tape Room | 120 sf | • |
| Training/CBI Room | 120 st 180 sf | |
| Small Conference Room | 300 sf | |
| Break Room | 240 sf | |
| Smoking Room | | |
| Quiet Room | 120 sf 160 sf | |
| Stress Reduction Room | · · · · - | |
| Locker Room (100 - 6" lockers) and Unisex Shower | 240 sf | n |
| Rest Rooms | | t se |
| Electronics Equipment Room | 280 sf | |
| TELCO Room | 950 sf | • |
| AF Office with adjoining library/plan room | 150 sf | |
| Shipping Receiving Area | | 750 |
| AT storage area | 200 sf | |
| AF storage area | 200 sf | • |
| Mechanical Room | 300 sf | |
| Electrical Room | 950 sf | |
| Pump Room | 950 sf | |
| ESU Workshop | 160 sf | |
| Misc (janitor closet, lan room, storage, etc) | 240 sf | |
| Net square footage | 150 sf | |
| Circulation space | 8200 | |
| A.T. OFFICE | 1200 sf | |
| Total | <u> 150</u> | |
| A | 9400 SF | |
| AF OFFICE | 150 | |

The A/E shall develop one generic Site Plan that at a minimum will have 100' clearance from the face of the tower structure to the perimeter of the site, and will accommodate the following requirements:

20 parking spaces, 4 shall be for Gov't. vehicles and handicapped as required. EG Shelter and Fuel Tank
Semi-trailer access with loading dock
Mechanical Equipment
Garbage / dumpster area
Patio Area

For the purposes of the conceptual design, the target construction cost in Fy '04 dollars shall be \$9.75 mil - \$10.75 mil.

BACKGROUND

The City of Chicago, Department of Aviation is seeking approval for the O'Hare Modernization Program (OMP) to reconfigure the runways to mitigate delays at O'Hare International Airport. The new 9L/27R runway is scheduled to be opened the spring of 2007, and is the driving factor to have a new north Airport Traffic Control Tower commissioned in time to support operations on the new runway. Findings from this study will be used in the OMD Environmental Impact Study (EIS).

This study will also define Air Traffic requirements to expedite the final design after the approval of the EIS process.

The A/E's selected to perform the work on this conceptual design shall incorporate the City of Chicago, Department of Aviation's Architectural standards and criteria in the concept designs.

The FAA will provide a copy of the Final Siting Report for the North ATCT and enlarged ALP indicating the ATCT site for the A/E's use. The FAA will also provide information from a preliminary cab mock-up on CD.

PRELIMINARY WORK

The A/E will be given the freedom to generate schemes on their own before the kick-off workshop meeting at the A/E's office. The tower must have a cab floor height of 225' AGL with a cab large enough to support three positions in the cab.

KICK-OFF MEETING

The A/E, FAA, and other stakeholders from the City of Chicago shall attend a two day brainstorming/kick-off meeting at the A/E's office to discuss / actively develop new ATCT schemes with the design staff of the A/E. The Project Manager, Architect, and Structural Engineer shall represent the A/E. The FAA personnel will be represented by Plants Engineering, regional Air Traffic and local Air Traffic. The main emphasis of this meeting should be for the A/E to understand the operational requirements of the Air Traffic Controllers, and offer possible solutions. During this meeting, the A/E shall discuss his concerns and needs in order to finalize the conceptual design of the project.

PROGRESS MEETING (25%)

The A/E and the FAA could participate in an all day review meeting at the A/E's office. The primary reason for this meeting is to monitor the progress and discuss possible modifications. This meeting will be called at the A/E's discretion. The week of 10/19/03 has been set aside if this meeting is requested by the A/E.

FAA TECHNICAL CENTER VISIT (75%)

The A/E and the FAA shall participate in a cab size, cab geometry, stair type and stair and mullion orientation mock up at the FAA Technical Center in Atlantic City, New Jersey. The A/E shall provide fully dimensioned drawings to the Tech Center to accurately construct the cab consoles, locate the stairs and locate the cab columns. The Tech Center has requested a 2-3 week lead-time to build the mock-up. The purpose of this meeting is to validate requirements and optimize the locations of the stairs and mullions to minimize the impact to the Air Traffic Controllers. The A/E shall also send drawings of the cab to the AFTIL to verify the look down line of sight to movement areas below and surrounding the

Page 3

Ex.1

tower. The A/E shall bring drawings and working level renderings for all schemes to this meeting. All cost associated with this trip will be handled in a separate reimbursable agreement.

FINAL CONCEPTUAL DESIGN PRESENTATION

The A/E will incorporate the information from the FAA Tech Center trip into one final design scheme. The presentation for the final conceptual design scheme will include an overall design narrative outlining the structural system, exterior cladding materials and finishes, mechanical systems, electrical requirements, conceptual space planning, square footage, and cost estimate. Presentation of the final design scheme shall be made by the A/E at either the FAA Regional office in Des Plaines, IL or at another location near the regional office. The A/E will be given no more than three hours for the presentation.

STRUCTURAL DESIGN

The A/E shall provide a narrative of the structural systems that will be provided to the FAA, describing constructability and cost relative standard designs for a facility of this size. The structural system will have a big impact on the construction period and the aesthetics of the facility.

COST ESTIMATING

The A/E shall provide a rough construction cost estimate for the conceptual design. There shall only be one estimate for the entire project, but the estimate shall be formatted to distinguish between the site development costs, ATCT costs and Base Building costs. The A/E shall also assume that all utilities and ductbank will be brought to the lease line of the site. The cost estimate shall include separate line items for estimated costs for the final design fees and construction services.

It is of utmost importance that the project cost be as accurate as possible at this phase of the project. The project cost estimates developed by the A/E will be used to formulate a re-imbursable agreement between the FAA and the City of Chicago, Department of Aviation.

DRAWINGS AND RENDERINGS

The A/E shall provide the FAA with a combination of drawings and working level renderings for each concept. At a minimum, the A/E shall provide floors plans of: a typical tower shaft level, the subjunction level, junction level, cable access level and cab floor, critical tower sections, elevations of the ATCT, floor plans of the base building and elevations of the base building. The FAA will require sets of full size drawings and sets of bound ½ size of drawings. Working level type renderings shall be submitted for review for the 75% meeting at the FAA Tech Center. For the final proposal, the FAA will require a more detailed rendering in 16x20 and 11x17 of the selected scheme mounted on ¼" foam board. All renders shall be colored and produced with in-house personnel.

DELIVERABLES

25% Meeting

Two sets of drawings and renderings

75% Drawings to FAA Tech Center
One set of full size drawings (via Fedex)
Two sets of ½ size drawings (via Fedex)
The drawing also needs to be sent via email to:
geniel.ctr.deleneyafaa.gov

Phone (609) 485-8086

75% Meeting at the FAA Tech Center
Three sets of full size drawings
Eight sets of ½ size drawings
Six sets of 11 x 17 renderings

Final Presentation

Six sets of full size drawings 12 sets of ½ size drawings Six 16 x 20 renderings 12-11 x 17 renderings

FAA CONTACTS

Scott Iwamoto Lead Engineer Phone #: (847) 294-7668 Fax #: (847) 294-7194

Michael Hannigan Air Traffic Requirements Specialist Phone # (847)294-7204 Fax # (847)294-8101 Melody McGovern
Contracting Officer
Phone #. (847) 294-7347
Fax #: (847) 294-7801

SCHEDULE

Time is of the essence for this concept design project. The development of the design concepts, evaluation and validation of the design concepts and presentation of the final design schemes shall be completed in accordance with the following schedule:

| | , | | No later than |
|--|------|--------------|---------------|
| Notice to Proceed | // | | 09/19/03 |
| Kick-off Workshop at A/E's office | :• | • • | 10/01/03 |
| Drawings to FAA Tech Center | | | 10/17/03 |
| Evaluation at FAA Tech Center | | | 11/04/03 |
| Final Presentation by A/E | | | 11/18/03 |
| Recommendation by FAA to City of Chicago | 7/30 | 207 (8mm H. | 11/28/03 |

CONCLUSION

The Conceptual design will be used as the starting point for determing the final design that may be used as the basis for the final design of the new ATCT. The conceptual design and cost estimates will be used

to get approval of the City of Chicago, Department of Aviation and FAA unions. The FAA will award two separate contracts for conceptual design. The FAA will assemble a committee that will evaluate the final conceptual design scheme at the conclusion of the presentation

A/E RESPONSE

An acceptance letter shall be submitted no later than 4:00 p.m. CST on Friday, September 19, 2003 to Melody McGovern. Notification will be provided of specific dates upon the FAA's receipt of the A/E's acceptance letter.

O'Hare Modernization Program – WA #18 North Air Traffic Control Tower Sole Source Utilization of DMJM H+N March 11, 2005

EXHIBIT 2: DESIGN RECOMMENDATION LETTER

Recommendation Letter for Design of Future North O'Hare Air Traffic Control Tower and Base Building November 26, 2003



U.S. Department of Transportation Federal Aviation Administration Great Lakes Region Illinois, Indiana, Michigan, Minnesota, North Dakota, Chio, South Dakota, Wicconsin 2300 Easi Devon Avenue Des Plaines, Illinois 60018

November 26, 2003

Ms. Rosemarie Andolino
Executive Director
O'Hare Modernization Program
Office
8755 West Higgins Road, Suite 610
Chicago, IL 60631

Dear Ms. Andolino:

Recommendation Letter for Design of Future North O'Hare Air Traffic Control Tower and Base Building

The Federal Aviation Administration, Great Lakes Regional Office, in cooperation with the City of Chicago's Department of Aviation and their representative, Ricondo and Associates, and two Architect and Engineering (A/E) firms, DMJMH&N of Orange, California and Teng & Associates of Chicago, Illinois, have worked at developing and determining the functional and aesthetic requirements for the future North Air Traffic Control Tower and Base Building at O'Hare International Airport.

The A/E firms presented their final designs to the selection team and other interested parties on November 19, 2003. The selection team was comprised of representatives from the Air Traffic Division's Requirements Branch (AGL-510), the Chicago NAS Implementation Center (ANI-420 & ANI-440), O'Hare ATCT Air Traffic personnel (management and NATCA bargaining unit), and Great Lakes Logistics Division. This team assisted both A/E firms in determining requirements by in-office design workshops, simulation and cab mock-ups at the Airway Facilities Tower Integration Lab (AFTIL) and telecommunication meetings.

The selection team evaluated each A/E firm based on functionality, design concept characteristics, firm characteristics, innovations and strength of presentation. The team met after final design presentations to determine a preferred firm.

2

Both firms offered very strong concepts and innovations that exceeded the expected requirements of the competition and the team. The functionality of the cab was a critical factor for Air Traffic and as such, the selection was narrowed to the A/E firm that designed a cab with the most operational functionality. This functionality allowed for expansion of equipment without expansion of the tower cab or restriction of console widths.

The consensus of the FAA selection team was the design concept presented by DMJMH&N. This firm's conceptual design offered the most functional tower cab while providing a significant design.

We recommend that this preferred design firm and associated concept be utilized.

Sincerely,

Melddy McGovern

Contracting Officer

cc:

Mr. Christopher P. Arman, Deputy Commissioner, O'Hare Modernization Program Office Mr. Shawn M. Kinder, Director, Ricondo & Assoc.

EXHIBIT 1

SCOPE OF SERVICES AND SCHEDULE FOR PERFORMANCE

I. PROGRAM OVERVIEW

The City, through the Department's O'Hare Modernization Program office, is undertaking a proposed \$6.6 billion O'Hare Modernization Program ("OMP"), the phased reconfiguration of the airfield at the Airport as well as corresponding expansions and reconfigurations of passenger terminals, access/circulation systems and necessary support facilities. The OMP will be implemented over a multi-year period.

The City has established a general management structure for overseeing the design of the OMP and the Project that involves a Program Management Office ("PMO"), a Master Civil Engineer ("MCE") and a Construction Manager ("CM"). The PMO and MCE will provide general management of the Consultant, lead engineers ("Lead Engineer") designing major projects, and task order engineers ("Task Order Engineers") designing Enabling Projects ("Enabling Projects").

The OMP includes, as one of its elements, the Runway 9L-27R complex, which in turn includes the North Air Traffic Control Tower ("Project").

Attachment A, North Airfield Project Map, of this Exhibit 1 depicts various components of the Runway 9L-27R complex.

II. DESCRIPTION OF PROJECT

The Project includes the North Air Traffic Control Tower ("NATCT") and associated base building in the northern section of O'Hare International Airport. The tower will be approximately 225 feet tall to the cab floor with a 400 square foot cab and a 7,000 square foot base building. Also included is site development including, utilities, drainage, parking for the Project, and replacement parking for existing airline parking displaced by the Project. See Attachment C for project site boundaries.

III. GENERAL SCOPE OF SERVICES

The subject of this Scope of Services is the design of the Project, including preparation of drawings and specifications ("Construction Documents") that establish in detail the scope, materials, systems and workmanship required to construct the Project.

The Consultant must coordinate with other related projects being designed by others as specified in this agreement.

Consultant will have no responsibility for construction means, methods, or techniques, including site safety. Further, Consultant will not be responsible for the presence, discovery, identification, abatement, removal or any other effort relating to hazardous materials.

The following is a reasonably complete description of Services. In addition, this Scope of Services incorporates by reference the conceptual design documents prepared by the MCE and described in **Attachment D** to this Exhibit 1. In the case of conflict between Scope of Services and **Attachment D**, Scope of Services will take precedence.

A. Design standards and conformance.

The MCE has established the Program's design standards and criteria. Consultant must prepare its design in conformance with those standards ("OMP Design Standards") or prepare detailed technical justifications for any proposed variances for the City's review and approval. Consultant must comply with the City of Chicago, Sustainable Design Standards as required under, "Scope of Services", IV. Detailed Scope of Services, C. Elements of Service, # 19. Sustainable Design. (Page 27) Attachment C is the Table of Contents for the OMP Design Standards that are incorporated by reference into the Agreement.

B. Project Schedule.

Milestone Deliverables must be prepared in accordance with the following Project schedule ("Schedule"):

| Milestone Deliverables | Start Date | Submittal Date | Finish Date (Including review time) |
|---------------------------|------------|----------------|-------------------------------------|
| Detailed Design | 03/01/04 | | 4/08/05 |
| 30% Design Submittal | 11/29/04 | 12/17/04 | 12/24/04 |
| 60% Design Submittal | 12/27/04 | 01/21/05 | 01/28/05 |
| 90% Design Submittal | 01/31/05 | 03/11/05 | 03/18/05 |
| 100% Design Submittal | 03/21/05 | 04/08/05 | 04/08/05 |

C. Quality Assurance Plan and Quality Control ("QA/QC") Procedures.

Consultant must comply with QA/QC procedures currently in place for the Consultant's own in-house design process, which must address (at a minimum) the following:

- ➤ Management responsibility
- > Design standards and documents
- Document control (based upon the established document control systems)
- > Process control

Consultant's internal QA/QC plan must be submitted to the City for review and approval by August 20, 2004.

D. Performance of Services.

Consultant must perform the Services in accordance with the terms and conditions of this Agreement and certify the accuracy of the Construction Documents. Without limiting any of the other provisions of this Agreement, permit documents and Construction Documents must be signed and sealed by an architect/engineer licensed in the State of Illinois.

All Services must occur at the appropriate times required for the timely execution and completion of the specified Deliverables in accordance with the Schedule. Prior to Consultant's commencement of Services, and at periodic times thereafter, the City may identify certain tasks or sub-tasks as having greater or lesser priority at that time, and Consultant must act in accordance with such changed priorities. If priorities for design development or bid packaging, sequencing or bidding are changed by the City, Consultant must evaluate the impact on the Schedule and review those impacts with the City.

E. Performance Evaluation.

1. The City and PMO will review Consultant's performance, including performance of all Key Personnel from time to time. Consultant will be required to attend meetings, at its own expense, without charge to the City, to discuss any performance issues, and to rectify any deficiencies in a timely manner.

F. Organization and Direction.

Consultant will perform Services under the general management of the PMO, it being understood, however, that Consultant has sole responsibility for completing the Services pursuant to the terms of this Agreement.

G. Coordination.

Consultant must provide technical and production-related coordination with respect to the services provided by the Lead Engineer and Task Order Engineers. Consultant must perform coordination Services as described in this Agreement with respect other projects and Enabling Projects. The MCE and the PMO will provide general management of the Consultant, other consultants and Task Order Engineers as necessary to accomplish the required coordination.

Coordination includes, but is not limited to:

- Technical coordination such as coordination of horizontal and vertical interface points between Consultant's work and the work of other consultants and the Task Order Engineers;
- Leading coordination efforts related to the Project Services, including conducting coordination meetings to monitor compatibility of design;
- Leading coordination efforts in assembling submittal and bid packages.

For details regarding coordination see Section IV.A.

H. Engineering Design Documents.

Consultant must provide 30 percent, 60 percent, 90 percent and 100 percent Design Documents ("Design Documents"). The Design Documents must illustrate and describe the refinement of the design of the Project and define the scope, relationships, forms, size and appearance of the Project by means of plans, sections and elevations, typical sectional details, diagrams, and equipment layouts. The Design Documents must include specifications that identify major materials and systems, and establish, in general, their quality levels. Design Documents must also include all calculations, studies, technical evaluations and other tasks as required to provide complete Design Documents.

30% Design Submittal

The Consultant must provide 30 percent Design Documents, based on all applicable FAA and OMP Design Standards. The 30% Design Documents must illustrate and describe the refinement of the design of the Project and refine the scope of work, relationships, form, size, and appearance of the Project by means of drawings of plans, sections and elevations, typical section details, diagrams, and equipment layouts. The 30% Design Documents must identify major materials, consistent with established design standards, where applicable, and establish in general their quality level, and assess the applicability of Sustainable Design for the project. The Sustainable Design check-list will be reviewed by the Consultant early in the design process so that applicable elements can be incorporated into the 60% design drawings. The 30% Design Documents must include the development of a construction schedule. In addition, the 30% Design also includes all calculations, studies, technical evaluations and other tasks as required to support design.

The 30% Design Documents must be adequate for and will include development of an opinion of probable construction cost based on the 30% Design Documents. The Consultant will submit this to the City for review.

60% Design Submittal

The 60 percent Design Documents must include all required sheets of the final Construction Documents, completed to at least a 60 percent level. This includes all information required to complete a detailed cost estimate. Additionally, the 60 percent submittal must include a draft of the project specifications in their final format containing adequate technical information to supplement the drawings and to quantify materials, sizes, shapes and capacities. Additionally, Consultant's 60 percent submittal is required to include an identification of all long lead procurement items. Consultant must provide all calculations necessary to determine the final

requirements and configuration of all parts of all systems required for the execution of all construction work. The 60 percent Design Documents must include an updated construction schedule.

Subject to the Design to Budget provision, at the 60 percent design level, Consultant must provide an updated opinion of probable cost for the construction of the Project based on the 60% Design Documents

The City will review and provide comments on the entire 60 percent submittal. A single consolidated set of review comments will be provided to the Consultant by the PMO at the end of the review period. This review will be accomplished in two weeks. The OMP staff, the PMO, the CM, the FAA and the MCE will conduct the review. Upon receipt of the comments the Consultant will schedule and conduct a meeting to review responses to review comments.

90% Design (and Permit) Submittal

The 90 percent submittal of Design Documents must address all comments and information received from the 60 percent Design Documents and provide comprehensive and essentially complete pre-final Construction Documents of a format and completeness sufficient for public solicitation by the City and construction. The documents must be complete with the exception of minor corrections/adjustments required to respond to final design review. At the 90 percent submittal all specifications must be complete and coordinated with all drawings. Calculations must be finalized with all necessary corrections from the 60 percent submittal. The 90 percent Design Documents must include an updated construction schedule.

Subject to the Design to Budget provision, Consultant must provide an updated engineer's opinion of probable construction cost based on the 90% Design Documents. The updated opinion of probable cost will be reviewed by the City.

The City will review and provide comments on the Consultant's 90 percent submittal. A single consolidated set of review comments will be provided to the Consultant by the PMO at the end of the review period. This review will be accomplished in two weeks. The OMP staff, the PMO, the CM, the FAA and the MCE will conduct the review. Upon receipt of the comments the Consultant will schedule and conduct a meeting to review responses to City review comments.

In addition to the City's review, the Consultants 90% Design Documents will be submitted by the City to appropriate jurisdictional agencies for review, comment and approval. The Consultant will assist in obtaining agency approvals of plans and specifications, including updates and resubmittal of appropriate documentation.

→ 6

I. Construction Documents.

Consultant must provide 100 percent Construction Documents based on the approved Design Documents and subject to the Design to Budget provision. The Construction Documents must set forth in detail the requirements for construction of the Project. The Construction Documents must include drawings and specifications that establish in detail the quality levels of materials and systems and workmanship required for the Project.

J. Deliverables.

The Deliverables required from Consultant include the following:

- 1. Composite drawings and/or diagrams of existing conditions;
- 2. Any supplemental surveys provided by the Consultant including subsurface conditions;
- 3. 60 percent and 90 percent Construction Documents including drawings and specifications;
- 4. Matrix outlining all design review comments received with disposition of each comment;
- 5. 100 percent Construction Documents, including drawings and specifications;
- 6. Bidding documents;
- 7. Reference data;
- 8. Design calculations;
- 9. Material schedules and quantity takeoffs;
- 10. Engineers opinion of probable construction cost;
- 11. Detailed design schedule for performing the engineering design;
- 12. Construction packages, phasing plan and temporary facility requirements;
- 13. Written reports;
- 14. Design presentations;
- 15. Support for permit applications and supporting documentation; and
- Other documents and information necessary for performance of Services.

Consultant must prepare design documents in accordance with the OMP CADD standards (Volume IV of the OMP Design Standards). All Services must follow and be tied to the O'Hare Horizontal and Vertical Control System, including the current O'Hare Vertical Datum and the Coordinate System.

Each drawing must indicate Consultant's name, address, phone number, Consultant and OMP project number, date or revision date, and scale, consistent with the title block specifications detailed in the OMP CADD Standards Manual.

Upon completion of the 30%, 60% and 90% Design Documents, Consultant must provide:

- Two (2) sets of full-size blackline prints;
- Two (2) set of half-size drawings;
- Two (2) Engineer's reports, including opinion of probable construction cost;
- Two (2) sets of Project Specifications-Volume I and Volume II (provided by the City and reviewed and coordinated with the design documents by Consultant); and
- Two (2) sets of Project Specifications-Volume III (technical specifications-prepared by Consultant).

Drawings and specifications must also be placed on the MCE ProjectWise Document Management System.

Upon completion of Construction Documents, Consultant must deliver 2 sets of CD-ROM's (including the project drawings in read-only pdf format), 3 blackline print sets, and 2 reproducible Mylar sets and 2 bound and 1 unbound sets of specifications to: O'Hare Modernization Program Office, 8755 W. Higgins, Suite 610, Chicago, IL 60631.

The Deliverables will be subject to periodic review and approval by the City, PMO, CM and MCE.

K. Project Controls

1. Project Scheduling

Consultant will submit on a bi-monthly basis an updated schedule reflecting the actual status of the Services. The update is to be in an electronic and printed format utilizing a Gantt chart method and the scheduling software PrimaVision (PV). A PV license will be obtained by the City and provided for the Consultant's use through the duration of the Project. The Consultant will be responsible for using PV to access and update the Program schedule on a Primavera (P3 e/c) server designated by the City and PMO. The scheduling process includes monthly schedule updating. Schedule updates are due on the 1st of the month with an updated status through the end of the prior month.

In addition the Consultant will be responsible for development and maintenance of a master design schedule for the Project and Enabling Projects.

2. Change Management

This section outlines the basic requirements for identifying, evaluating, approving and processing scope changes to the Project during the design phase and construction phase. Change management is a team effort by the Consultant, the City, the PMO and, if appropriate, other entities to execute necessary program and contract modifications that may be required to fulfill the overall Project objectives and to complete the Project within budget and on schedule. Control of changes is dependent upon accurate change documentation including scopes of work, cost estimates, schedule analyses, and technical analyses.

If the City identifies any changes that it wishes to make to the Project scope, it will notify the Consultant (or, if Consultant believes that any recommendations made by the City will result in a change of Project scope, it will notify the City). The Consultant will then quantify the cost impacts of such changes (i.e., construction, engineering, management, project insurance and contingency) and calculate the impact on the Schedule. In addition, the Consultant must identify the decisions needed to evaluate the change and the responsible parties for such decisions. Consultant must submit such information within 30 days of notice of change to the City for its direction.

Any modification to this Agreement resulting from such changes, including changes to the Scope of Services or the compensation, will require a written amendment in accordance with Section 10.3 of this Agreement.

Any dispute must be resolved in accordance with the Disputes provisions of this Agreement.

Subject to the Design to Budget Provision, Consultant must prepare an opinion of probable construction cost at the 30 percent, 60 percent, 90 percent and 100 percent completion levels reflecting the current design. For each estimate submittal, Consultant will participate in a review meeting to discuss and address discrepancies.

Requirements for all construction estimate submittals are:

- All estimates will be developed in the Construction Specification Institute ("CSI") format or as directed by the City. All line items in the detailed estimate must be assigned the proper coding. The City will provide a standard cost estimate format to Consultant.
- ➤ Consultant's quantity estimate submittal will be reviewed against their prior submittal. Variances between the two quantity estimates are to be documented by Consultant. Each line item that has a quantity variance of greater than or lesser than 25 percent must be addressed with a written explanation that will identify the variance's root cause(s).
- ➤ Quantities must be clearly delineated on the estimate detail sheet. Take-off quantities must be "neat" quantities, i.e. no allowances for quantity growth or additional contingencies may be included.
- All information related to the quantity estimate submittals are to be provided electronically as well as in written form (one reproducible hard copy) for use by the PMO and CM.

M. Progress Reporting.

Once each calendar month, Consultant must submit to the City and the PMO a progress report on Services performed during the preceding one-month period. The report is due the 15th of the month following the reporting month.

The progress report format will be as directed by the City and PMO and must at a minimum contain the following sections:

- ➤ Project Summary Narrative Report. This report must identify the Services completed in the prior month, Services to be completed in the current month, and areas of design concern.
- > Summary of percent completion of major tasks and objectives defined in the detailed Scope of Services, including any necessary back-up information.
- Cost Status/Earned Value Summary Report. The City will provide an electronic version of this report to Consultant.

- Milestone Status Matrix.
- > Bar chart schedule at a level of detail as directed by the City and PMO.
- > The Consultant must confirm the status of the estimate or opinion of probable cost-in each Monthly progress report and as required by the City.

N. Construction packages, bidding documents, phasing plan and temporary construction requirements.

In order to maintain continuous, uninterrupted, safe and secure Airport operations, Consultant must prepare various distinct construction packages and a detailed construction phasing plan with temporary construction requirements for inclusion in the Construction Documents for construction bid proposals. Consultant must develop the construction packages, detailed phasing plan and procurement requirements for bidding in coordination with the MCE, PMO, the CM and the City. Consultant must document logical construction/sequencing and location of construction ingress/egress routes. Consultant must develop the construction packages and phasing plan concurrent with the Design Documents, which will be evidenced in the documents submitted for review at 60 percent, 90 percent, and other milestones.

Consultant will participate with the City, the PMO, the MCE, and the CM in the development of a construction logistics bid package. Consultant will prepare Construction Documents for the Project that is consistent with the construction logistics planning and requirements.

O. Permitting and Agreement Support.

The MCE has been tasked with coordinating and obtaining select permits, regulatory approvals, and other required authorizations in support of the OMP projects. Additionally, the City will be obtaining a number of negotiated agreements with other agencies and outside parties. Consultant must provide support for permitting and negotiating agreements including the following:

- ➤ Technical documentation support for permit applications that the City and MCE have already initiated and will be preparing in the future. Consultant must provide supporting documentation and technical assistance to the MCE as necessary to ensure that permit applications reflect the continued design development of the Project. The MCE has also initiated and will continue to perform basic hydrology and hydraulics for major drainage permits and documentation for 401/404 permitting.
- > The technical documentation provided by Consultant involves the permit and approval applications, including but not limited to, construction

permits, building permits, utility permits, demolition permits, IDOT permits, ICC permits etc. See the Permitting and Approvals section of the Work Authorizations referenced in Attachment D.

> Technical support for negotiated agreements required for the Project.

P. Progress meetings and design presentations.

Consultant must attend weekly status meetings and must from time to time prepare and deliver both formal and informal design presentations, for internal and external audiences, focused on a variety of levels including overall design, design details and critical decision points.

Q. Technical coordination support.

Consultant must participate in meetings, discussions and/or other coordinating roles with any of the following organizations as directed by the PMO, MCE or CM:

- Airline representatives;
- Department of Aviation;
- City planning and aviation consultants;
- Federal Aviation Administration;
- Transportation Security Administration;
- Emergency response agencies;
- Task Order Engineer;
- Other engineering design consultants;
- Regulatory agencies;
- Public utilities.

R. Document Management.

All documents produced as part of Consultant's Services under this Agreement must be produced and recorded in accordance with the OMP's document preparation and management requirements, which will be provided to Consultant separately.

S. Bidding Phase Support.

After acceptance by the City of the 100% Construction Documents, and as directed in writing by the Commissioner, Consultant must provide support during the bidding phase, including:

- Assisting the PMO, CM, and City in strategizing bid procedures and alternatives as appropriate to assure competitive construction bidding;
- > Participating in pre-bid conferences;
- > Assisting the PMO, CM and City in responding to requests for information ("RFIs"), preparing responses to questions from prospective bidders and providing clarifications and interpretations of

- the Construction Documents to all prospective bidders in the form of addenda to the bidding documents; and
- ➤ Providing information and assisting the PMO, CM, and City, if requested, in construction bid validation with prospective contractors.

The bidding phase will be considered complete upon award of contracts for the work.

T. Construction Support Services

Construction Support Services will include the following tasks, undertaken in order to determine compliance with the construction contract documents to:

- > Participating in pre-construction conferences prior to commencement of work on site;
- ➤ Performing site visits and full-time construction observation at intervals appropriate to the stage of construction of the progress and quality of contractor's executed work;
- > Preparing clarifications and interpretations of the Contract Documents and assisting in the preparation of field orders as necessary;
- > Responding to RFIs from the contractor, Construction Manager or other entities;
- > Reviewing change orders or work change directives;
- > Reviewing and approving shop drawings and samples and other data which the contractors are required to submit;
- > Evaluating making recommendations concerning the acceptability of contractor-proposed substitute or "or-equal" materials and equipment;
- > Conducting an inspection to determine if the work is substantially complete, following receipt of notice from the contractor;
- Conducting final inspection to determine if completed work of the contractor is acceptable and prepare "Final Notice of Acceptability of Work", so that final payment to the contractor may be recommended to the City;
- > Preparing record/as-built drawings and documentation of the final inplace construction based on "red-lined" documents provided to the Consultant by the CM.

The construction phase will commence with the execution of the first construction contract for the Project and continue until project closeout of the last construction contract for the Project.

IV. Detailed Scope of Services

This section describes in detail aspects of the final design and construction packaging Services required for the various elements of the Project.

The Consultant will complete the design of the Project initiated by Ricondo and Associates and developed by the Consultant.

In order for the Project to be commissioned for use, Enabling Projects must also be completed to accommodate the safety area and airspace requirements of the FAA for runways and taxiways. The design and construction of each of these Enabling Projects is dependent upon the horizontal and vertical geometry of Runway 9L-27R and its associated safety/object free areas to establish individual alignments and profiles. As provided in the Agreement, Consultant must maintain technical and production-related coordination with the Task Order Engineers through the City, the MCE and the PMO.

A. Coordination of Projects/Interface Requirements

The design of the Project may impact several aspects of adjacent or nearby facilities. This will require coordination, with the Lead Engineer and Task Order Engineers designing the following major project and Enabling Projects:

| Runway 9L-27R – Major Project |
|--|
| 14L Threshold Relocation – Enabling Project |
| North Airfield Lighting Control Vault – Enabling Project |

See Attachment A for a graphic representation of the design package locations for the Runway 9L-27R complex. The MCE will facilitate technical design coordination among and between the Consultant and the Task Order Engineers, under the general management of the PMO.

B. Project Limits - General

See Attachment B for a graphic depiction of the work limits specifically related to the Project.

The proposed NATCT is located at the far northern section of O'Hare International Airport, in the northern portion of the existing American Airlines Hangar 1 Employee Parking Lot. The Coordinates (x, y, and z) establishing the general limits of the project site and the exact limits of the Tower cab have been established by the MCE in accordance with the "North Airport Traffic Control Tower Site Selection Study" – September 2003, prepared by Ricondo and Associates. Consultant is to design the NATCT, Base Building and FAA parking within the site limits identified. The proposed tower site is currently located within the existing American Airlines Employee Parking Lot. Consultant will design an in-kind replacement of employee parking area, contiguous with existing American Airlines Parking Lot as identified by the City of Chicago Department of Aviation and the OMP.

C. Elements of the Services

Consultant must complete the design and prepare Construction Documents for the following elements:

- 1. The Consultant must provide Architectural, Security, Structural, Mechanical and Electrical designs for the Project.
- 2. The Consultant must review existing conditions, including the preliminary data and analyses prepared by others (which include topographic survey, subsurface conditions, geotechnical and utility data). The Consultant must identify and conduct (as necessary) any further detailed surveying, geotechnical and subsurface evaluations as mutually agreed by the City and the Consultant.
- 3. Site Survey: The consultant must perform a topographical and utility survey to support design of the project site, conforming to City and OMP requirements
- 4. Applicable Codes, Orders and Standards: The Consultant shall be ultimately responsible, (for the design and construction documents, of this Project to meet the provisions and requirements of the City of Chicago- Building Code, and FAA Design Orders. The Consultant shall further be responsible to ensure that the design of the NATCT and Base Building incorporates and compensates for all existing site conditions such as type of soils, wind/seismic forces, environmental, site security, roads, driveways, drainage, utilities, etc.

The design must comply, at a minimum, with the requirements of the latest edition of the following codes, regulations, and FAA Orders:

- City of Chicago-Building Code
- FAA-C-1217f, Electrical Work, Interior.
- FAA-STD-019D, Lightning Protection, Grounding, Bonding, and Shielding Requirements for Facilities.
- FAA Order 6480.7C, Airport Traffic Control Tower and Terminal Radar Approach Control Facility Design Guidelines
- FAA Order 6950.27, Short Circuit Analysis and Protective Coordination Study
- NFPA 70, National Electric Code.
- NFPA 72, National Fire Alarm Code.
- NFPA 72E, Automatic Fire Detectors.
- NFPA 101, Life Safety Code.
- NFPA 1221, Installation, Maintenance, and Use of Emergency Services Communications Systems.
- OSHA 29 CFR 1960.20 Standards for Fire Safety in Airport Traffic Control Towers.
- Federal and State ADA (except to the extent inapplicable)
- Others as required and as stated under specific paragraphs in the body of this Scope of Work.

In general, when conflicting requirements are confronted, the City must be notified, and the more stringent -requirement will govern, except to the extent agreed to by the City and the FAA with respect to industry codes not having the effect of law..

5. Demolition: Develop detailed demolition plans for the Project site. This is primarily expected to include pavement demolition. Design of the demolition shall include any phasing requirements to allow the areas around the work site to remain in continuous operation and not be impacted by the demolition or site construction operations.

- 6. Utilities: Develop detailed plans showing the utility work required to serve the new facility. This must include determining the existing utilities to be removed and or abandoned to prepare the site, and identification of any temporary utility relocation in the site area as required to maintain overall airport service without disruption. The following is a preliminary list of the utility work anticipated. It is not inclusive, and Consultant acknowledges that all utility work determined to be necessary to service the site, whether included in this list or not, is to be performed as part of their design.
 - Utility removal and abandonment.
 - Water and fire protection In accordance with the "North Air Traffic Control Tower Site Selection Study", prepared by Ricondo & Associates, September 2003, Consultant must design three water lines to the facility: one 8-inch water main, one 2 ½ -inch domestic service line and one 6-inch fire pump line. Consultant will review the available water mains in the site vicinity and determine the optimum point of connection and routing for these new lines. Information included in Sheet C-201 of the WA#31 Airfield Wide FAA Facilities Conceptual Engineering Drawings is to be used as a starting point for this analysis. Consultant is to make the final determination of water line locations.
 - Water booster pumping system Normal water delivery pressures in the domestic water mains in the vicinity of the site are 25 to 30 psi. Water pressure booster pumps will be required to elevate the pressure for domestic and fire flow use. Consultant is responsible for the designs of these booster pumping systems to provide the pressures required by the FAA within the facility for domestic potable water and fire protection use.
 - Sanitary sewer Design sanitary service line between the facility and main line sanitary sewer. Consultant will determine the service line size based on facility requirements and research the optimal routing for the line based on location and depth of nearby main line sewers. Information included in Sheet C-201 of the WA#31 Airfield Wide FAA Facilities Conceptual Engineering Drawings is to be used as a starting point for this analysis. Consultant is to make the final determination of service line location. The assumption is that the sanitary service line will be a gravity flow line.
 - Natural gas The public utility, Peoples Energy, will design the gas service line from the existing main line to the Project, including the meter and pressure regulator for the facility.

The Consultant will define the location for the meter and provide space on the exterior of the building for the meter/regulator. Coordination with Peoples Energy is required to accomplish this.

- Electrical power The public utility, ComEd, will design and size the primary cables, transformers and switch gears required to serve the facility. Consultant is to prepare the design for the duct bank from the main line system in Hangar Road to the NATCT facility, including the utility pads for transformers and switch gear. Design of all of those elements must be coordinated with and sized to accommodate the ComEd design. Consultant will also design the secondary cables from the transformer and switch gear equipment to the facility. Information included in Sheet C-201 of the WA#31 Airfield Wide FAA Facilities Conceptual Engineering Drawings is to be used as a starting point for the location of the primary duct bank, however Consultant is responsible for final design location of this duct bank based on its analysis of the situation. Preliminary indications, according to the Ricondo study, are that the facility will require a 600 kW feed. Consultant will determine the facility loads and provide them to ComEd to assist them with their design.
- Airfield Lighting Control and FAA/NAVAIDS Consultant will design the service drop duct bank between a manhole located at the site perimeter fence and the facility. Design of the main trunk line duct bank and the duct bank between the trunk line and the manhole at the site perimeter will be by others. Design of the FAA/NAVAIDS and lighting control cables that will inhabit the duct bank will be designed by the other Lead Engineers and North Airfield Lighting Control Vault (NALCV) consultants. This design will also include the termination panel inside of the new NATCT. Consultant is responsible for coordinating with the other Lead Engineers and NALCV consultants to determine the size of the termination panel. Consultant will be required to allocate adequate space for installation and maintenance of the termination panel inside of the NATCT, based on requirements dictated by the Lead Engineer and NALCV consultant.
- Communications Communications functions included are SBC (public carrier for telephone and some data services), DOA LAN, and Security and SCADA systems. Consultant will design the service drop duct bank for these systems between a manhole located at the site perimeter fence and the facility. Design of the main trunk line duct bank and the duct bank between the trunk line and the manhole at the site

perimeter will be by others. Design of the cable that will inhabit the entire duct bank will be done by others. This design by others will also include the necessary communications systems termination panels inside of the new NATCT. Consultant is responsible for coordinating with the other consultant(s) to determine the size of the termination panels. Consultant to allocate adequate space for installation and maintenance of the termination panels inside of the NATCT, including any backup power requirements, based on requirements dictated by the other consultant(s).

- Other A lift station is shown in the general site location on the Composite Utility Plans. Consultant shall determine if this is a sanitary or storm sewer lift station, and analyze if it must remain in service, and if so, if it can remain in its current location or must be relocated. Consultant must design for the required removal, abandonment, or replacement of the lift station and associated piping, as required.
- 7. Site Elements: Develop detailed plans for site development as required for the facility. This includes, but is not limited to the following elements:
 - Site clearing Determine requirements for removal of all grass and other vegetation.
 - Site access Determine access drive width, horizontal and vertical geometry and pavement section. Information included in Sheet C-201 of the WA#31 Airfield Wide FAA Facilities Conceptual Engineering Drawings is to be used as a starting point for this effort. Consultant shall consider alternative locations/alignments and determine a preferred alignment to be recommended to the OMP.
 - Site drainage Coordinate with the MCE and OMP to determine the final facility Finish Floor Elevation. Design all site drainage to adequately drain the site in accordance with FAA and O'Hare requirements. This will include design of storm sewers and manholes, catch basins and inlets to provide positive site drainage. A 42-inch storm sewer and several smaller diameter storm sewers cross or are immediately adjacent to the site. Consultant must determine if any of these will need to be relocated and perform the necessary design for such relocations.
 - Pavements, fences, slabs, parking and miscellaneous items Develop site geometry, pavement sections, curb and gutter locations, fence locations, slab designs, site lighting design

and any other designs required for the proper functioning of the facility to meet FAA and DOA requirements.

8. Architectural Design: The site for the new NATCT and Base Building has been selected. The maximum overall height, of the new NATCT (to the top of air terminals) shall not exceed 915 feet mean sea level (MSL). The City will supply information concerning the site with respect to the North Air Traffic Control Tower Site Selection Study Report. The City will provide the highest MSL elevation of existing and proposed new buildings.

The Consultant must redesign the Base Building from the Concept Design based on new programming requirements from the FAA. The total square footage will be reduced from approximately 10,000SF to approximately 7,000 SF.

The Consultant must present, for review by the City and FAA, three different interior finish color schemes for the NATCT and Base Building on sample boards at the time of 60 percent document review. The FAA will provide 2 of the 3 colors schemes and the third will be at the Architect's discretion. The 3 color schemes and boards are to be presented by the Consultant's architect or interior designer at the 60 percent review meeting. The Consultant must incorporate the selected finishes into the final drawings and specifications. The Consultant's design is to include furniture, fixtures and office equipment (FF&E) design.

Consultant's responsibility extends to defining requirements for the cab consoles to be furnished by the construction contractor. As part of the 30 percent conceptual design the Consultant, in conjunction with the FAA, will explore options to the traditional cab consoles, such as modular options. A final decision on the design of the console for the Tower Cab will be made by the OMP in conjunction with the FAA at the 30 percent conceptual design level, based on cost, schedule, and other criteria. If the modular concept for cab consoles is not pursued, the Consultant shall be responsible for showing the requirements for traditional cab consoles to be furnished by the construction contractor-Consultant must provide AutoCAD files of the cab consoles to incorporate into the construction documents. Consoles will be similar as those provided at the new Port Columbus ATCT facility.

9. Security Design: In cooperation with Johnson Controls Inc. (JCI), the FAA Security Contractor, the Consultant must design and incorporate into the documents any required site security fencing and gate(s). Access road(s) to the new facility, drive(s) necessary

for trucks to access the loading dock, the type, size and location of the new road(s) must be coordinated with the City and FAA.

The design and istallation of the building security system is the responsibility of the FAA security consultant. Consultant must consult with the FAA security consultant. The design must include the physical site security requirements around the Tower and the Base Building in the construction documents- including but not limited to interior/exterior door controls, CCTV system, access gate controls, wiring, etc., and include any rough-in work as part of the construction documents.

Where electric strikes or electronic keypads are required, the appropriate door hardware and the necessary power rough-ins are to be specified under the construction documents by the Consultant to allow for the installation of the security hardware.

The overall security requirements for the facility will be determined by FAA Security staff in accordance with Order 1600.69A. The FAA will provide specific direction to the Consultant prior to the 30% design review meeting.

- 10. Mechanical/HVAC and Plumbing Design: The Consultant must design and prepare Construction Documents for the HVAC, Plumbing, and Fire Protection systems that will provide for the following items:
 - Equipment types, equipment location, ductwork routing, and pipe routing. Chases shall be identified in the Base Building and the Tower. Indoor air quality standards shall be implemented into the HVAC design using ASHRAE Standard 62-1989. A redundant modular centralized Hot Water Heating Boiler system (dual fuel ready) and redundant packaged air-cooled water chillers (In top 10% with respect to energy efficiency for that type of system) in the Base Building are presumed to be the basis of design. Alternative refrigerants (R134a or R123) shall be considered for chillers.
 - The Consultant may suggest alternative HVAC systems for consideration. The design of the HVAC systems must provide redundant systems for all critical areas reducing the potential of major system problems due to single point failure. In addition, HVAC systems are to have an emphasis on energy conservation including the use of VAV systems in non-perimeter areas, High Efficiency Motors, Economizers in non-critical areas, and High Efficiency HVAC equipment. The Schematic Design must include the selected system for FAA approval.

- The Consultant must provide the final performance specifications for a localized Direct Digital Control (DDC) system. The Consultant is to investigate the possibility of integrating the Direct Digital Controls system with the system at the existing control tower to allow for control and monitoring of the NATCT HVAC system from the existing ATCT.
- The Consultant must provide a final design for a complete plumbing system for the NATCT and Base Building. Final design must include, but is not limited to, all facility domestic piping and plumbing systems, including domestic hot and cold water piping, sanitary sewer, and storm sewer. The design will emphasize water conservation and automation for all facility plumbing fixtures.
- Provide final design for a complete fire suppression system for the NATCT and Base Building, utilizing a wet pipe system for administrative areas and a double interlocked dry pipe precaution system for the critical areas such as the electronics equipment and Telco Rooms in the Base Building and the access level and cab of the control tower. -Life safety design must be in strict accordance with all applicable NFPA codes and local Fire Marshall recommendations. The Consultant must provide a stairway pressurization system for the Tower shaft stairway according to NFPA recommended practices. The Consultant must work with the local Fire Marshall for the automatic sprinkler system requirements for the Base Building and NATCT.
- The Consultant must coordinate the Mechanical and Fire Suppression systems with the Fire Detection System under the Electrical Design.
- The Consultant must incorporate training requirements for the facility (i.e. HVAC, DDC, Boilers, Chillers, Pumps, Fire Detection, and Fire Suppression systems) in the Mechanical Specifications. This training is to be directly applicable to the specific components installed at the FAA's facility and shall include:
- The Consultant must incorporate a minimum of 8 hours training for the FAA Field Technicians on each type of major mechanical equipment, including the operation and maintenance of each equipment.
- The Consultant must incorporate a minimum of 40 hours of on-site training on two separate occasions for the DDC system. This training is to be offered to a minimum of 10

FAA Technicians. The Consultant must provide all necessary equipment for direct interface with the existing DDC system for training purposes

- The Consultant must incorporate training for the DDC system shall include a minimum of 6 slots in a one-week course off-site for DDC operation and 6 slots in a one-week course on DDC programming.
- All costs for course registration, as well as travel, in accordance with the governmental travel rates shall be included in the project cost estimates.
- Further discussion on training will be outlined during design phase.
- 11. Electrical Design: The Consultant is to design and incorporate in the documents all electrical systems and power requirements, including, but not limited to, the following:
 - Power systems, including normal, essential, and critical.
 - Power and electronic grounding systems.
 - Lighting Systems, including interior, exterior, and emergency.
 - Fire detection and alarm system.
 - LAN/Paging/Telephone raceway systems, which will include remote speakers for paging in areas where no phone is available.
 - Required rough-ins for security system designed by JCI.
 - Raceways, cable trays and demark boxes for FAA control cabling
 - Installation of miscellaneous cabling from the Equipment Room to the ATCT roof.
 - Lightning protection.

Incorporation of the installation of raceways and conduits from the Telco room to accommodate phone and data outlets is required in the design. The FAA will design the phone system and provide the requirements for each room. Installation of the telephone system will be done by the FAA.

Provide complete fire detection system for the NATCT and Base Building using Addressable Fire Detection devices.

The Consultant must provide a complete load flow analysis, selective overcurrent protection and coordination analysis, and short circuit analysis for the entire facility. The software programs used for these studies are to be approved by the FAA. Three copies of each study are to be provided.

The Consultant's design must include a complete installation package for an Uninterruptible Power Supply (UPS) meeting FAA specifications (selected from a GSA catalog). The responsibility for furnishing the generator (construction contractor or FAA) will be determined prior to completion of 100 percent construction documents.

12. Engine/Generator: The Consultant must select the Engine Generator ("E/G") facility and its associated equipment from the list of equipment that the FAA will provide the Consultant. The Consultant shall list the selected E/G and associated equipment in the Electrical Specifications Section. The FAA will provide the following equipment as Government Furnished Material: Engine Generator, E/G Load Bank, Automatic Transfer Switch, Remote Monitoring System, Radiator, E/G Control Panal, UPS and UPS Load Bank.

The Consultant is to design a complete installation package for the Engine Generator (E/G), combination bypass isolation/transfer switch and load bank. The Consultant must recommend the engine generator size (kW) based on calculations using the Onan generator sizing program. The E/G must be capable of providing standby power per the requirements in the FAA Order 6480.7C.

The fuel oil tank, installed above ground, is to be sized to provide a minimum of 72 hours supply of fuel to the E/G.

The Consultant must identify the electrical training needs for the facility, such as UPS and E/G systems. This training is to be directly applicable to the specific components installed at the FAA facility. The electrical specifications must provide a minimum of 8 hours on-site training for each technician assigned to major electrical equipment. The funding for this training is to be part of the General Construction Contract. Further discussions pertaining to training will be outlined during the final design phase.

13. Miscellaneous Items: The Consultant must provide for the complete design of all enclosures required to conceal all exterior equipment such as the HVAC equipment, loading dock area, trash dumpsters, diesel fuel tank, and other equipment that would be aesthetically unpleasing are to be provided as necessary.

The Consultant is to develop in the final plans a safety/phasing plan that includes Airport Security requirements, construction of access/haul routes, staging area, construction trailer locations, crane positioning, barricade lighting requirements, personnel protection measures, and other necessary items for safe, well-organized construction. The safety/phasing plan must be thoroughly coordinated with the City and the FAA.

- 14. Building evacuation plans are to be developed and posted at each floor of the NATCT and Base Building.
- 15. Wind and Seismic Testing: The NATCT and Base Building must be analyzed for both wind and seismic forces and shall be designed for the most stringent conditions. It will be the Consultant's responsibility to complete the wind tunnel approved structural design within the overall design project's schedule requirement.
- 16. Soil Erosion and Sediment Control Plans: Develop detailed plans for temporary and permanent installations for controlling the quality of the stormwater runoff leaving the construction site.
- 17. Landscaping and Design: Provide construction plans for new landscaping as may be necessary to comply with OMP Design Standards and the City of Chicago Landscaping Ordinance.
- 18. Temporary Facilities: Provide plans for temporary facilities that may be necessary to accomplish the construction project, including but not limited to such items as haul roads, haul routes, staging areas, temporary utilities for the services of construction trailers or buildings, signage, barricades and traffic control devices, site lighting, etc. The MCE will coordinate these plans with the ongoing project designs by others and the C Ms' logistics plans.
- 19. Sustainable Design: The PROJECT must conform to the City of Chicago's standards as set forth in the document, "City of Chicago, O'Hare Modernization Program: Sustainable Design Manual," dated December 2003. The PROJECT will incorporate the sustainable design goals set forth in this document in the design, planning, and implementation of the facility as a whole, while maintaining critical FAA operations, as well as project budgets and schedules.
- 20. Models: Provide two (2) 1/16" = 1' scale models of the facility. One for the City and one for the FAA.
- 21. Cab Console Design: Coordinate with potential vendors and develop an alternate style cab console that maximizes the controllers view to the airfield. Arrange for physical mock-ups in the Chicago area for review by the FAA.

D. Conceptual Engineering Design Report

The Conceptual Engineering Design Report for the Project, contains issues that are to be resolved during the final design of the project:

- 1. Base Building Size the final size and configuration of the building elements located at ground level will be reviewed by the City and the FAA as the Consultant completes subsequent design phases.
- 2. American Airlines Maintenance Hangar #1 The Project site displaces parking at this facility and will affect access to the Hangar area in general. The Consultant must coordinate with the City, the PMO and the MCE to accommodate the replacement of parking and access.
- 3. Security Issues Airport security measures must be incorporated into the site, its access, and its relationship to adjacent facilities. This must be coordinated with the FAA, TSA, and DOA Security as applicable.
- 4. Geotechnical Report The Consultant will provide a project specific geotechnical engineering report complete with foundation recommendations for the Base Building and NATCT as well as grading/ earthwork requirements and pavement designs. Consultant has final responsibility for foundation design.
- 5. Construction Packaging The Consultant is responsible for preparing multiple bid packages for the construction of the Project. A final determination regarding the number and scope of packages has not been finalized. The construction package(s) may involve the inclusion of construction drawings and/or specifications as prepared by others into the construction package(s) in order to complete the bid package. The Consultant will be required to coordinate the development of the construction packages with the limits and work breakdown as directed by the City. At this time the following bid packages are anticipated
 - Replacement parking
 - Foundations
 - Remaining work (including NATCT, base building, site work, etc.)

E. Permit Requirements

The acquisition of permits and approvals for the Project will be the primary responsibility of others. The Consultant will have no responsibility for the permit acquisition. However, the Consultant will be required to assist with the preparation of material (calculations, reports, plans and/or exhibits) necessary to support the permit application.

In addition, the Consultant may be required to modify the design to comply with permitting agency comments or requirements for the permits.

Other work adjacent to the Project, including building relocations, will require that permits and approvals be obtained under other projects. Those permits and approvals may have an impact on the Project. The MCE will advise regarding what other adjacent work has recently obtained permits, is in the process of applying for permits or is likely to apply for permits during the period of design and construction of the work.

Attachment List

Attachment A - Key personnel

Attachment B - North Airfield Project Map

Attachment C- Insurance Requirements and Certificate

Attachment D - Conceptual Design Documents (based on Work Authorizations)

Attachment E - Applicable Design Standards and Criteria

Attachment A – Key Personnel

Attachment C – Insurance Requirements and Certification

Attachment D - Conceptual Design Documents

WA #8 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering WA #8 – North Airfield Lighting Vault Work Authorization #8 Date: November 2003 Prepared by BPC

WA #8 - Conceptual Engineering Design Report

North Airfield Lighting Vault Work Authorization #8 Date: November 2003 Prepared by BPC

WA #9 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering JAWA 90" Water Main Replacement Work Authorization #9 Date: October 2003 Prepared by BPC

WA #9 - Conceptual Engineering Design Report

JAWA 90" Water Main Replacement Work Authorization #9 Date: October 2003 Prepared by BPC

WA#10 - Conceptual Engineering Design Report

Willow-Higgins Creek Relocation Work Authorization #10 Date: November 2003 (REV0 11/19/03) Prepared by BPC

WA#10 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering WA # 10 – Willow-Higgins Creek Relocation Work Authorization #10 Date: November 2003 (11/18/03) Prepared by BPC

WA#11 - Conceptual Engineering Design Report

North Drainage Facilities (Includes Design Conditions and Design Criteria reports) Work Authorization #11 Date: November2003 Prepared by BPC

WA#11 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering WA # 11 – North Drainage Facilities

Work Authorization #11 Date: November 2003 Prepared by BPC

WA#12 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering WA # 12 - Relocate Mount Prospect Road and Guard Post 1

Work Authorization #12

Date: September 2003 (9/19/03)

Prepared by BPC

WA#12 - Conceptual Engineering Design Report

Relocation of Mount Prospect Road and Guard Post 1

Work Authorization #12

Date: September 2003 (REV2 9/19/03)

Prepared by: BPC

WA #14 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering WA # 14 – Proposed Perimeter Road and Security Fencing

Work Authorization #14

Date: October 2003 (10/08/03)

Prepared by BPC

WA #14 - Conceptual Engineering Design Report

Perimeter Road and Security Fencing

Work Authorization #14

Date: October 2003 (REV0 10/08/03)

Prepared by BPC

WA #15 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering

Runway 9L-27R and Associated Taxiways

Work Authorization #15

Date: September 2003

Prepared by BPC

WA #15 - Conceptual Engineering Design Report

Runway 9L-27R and Associated Taxiways

Work Authorization #15

Date: September 2003 (REV1 9/19/03)

Prepared by BPC

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WA #17 - Concept Design Drawings

O'Hare Modernization Program Conceptual Engineering WA # 17 – Facility Relocation Work Authorization #17 Date: November 2003 Prepared by BPC

WA #17 - Conceptual Engineering Design Report

Facility Relocation Work Authorization #17 Date: November 2003 Prepared by BPC

WA #21 - Concept Design Drawings

(DOA TO PROVIDE)

WA # 21 – Work Authorization #21 Date: Prepared by BPC

WA #21 - Conceptual Engineering Design Report (DOA TO PROVIDE)

WA # 21 – Work Authorization #21 Date: Prepared by BPC

Attachment E - Applicable Design Standards and Criteria

O'Hare Modernization Program Design Standards General Table of Contents

Volume I General Design Criteria (including "City of Chicago OMP Sustainable Design

Volume II OMP Design and Construction Standards

Part 1 – General

Part 2 – Architectural

Part 3 – Structural

Part 4 – Civil

Part 5 - Mechanical

Part 6 – Electrical

Volume IIIA OMP Master Specifications

Division 01 - General

Division 02 – Site Construction

Division 03 - Concrete

Division 04 – Masonry

Division 05 - Metals

Division 06 – Wood and Plastics

Division 07 - Thermal and Moisture Protection

Division 08 – Doors and Windows

Division 09 - Finishes

Division 10 – Specialties

Division 11 – Equipment

Division 12 – Furnishings

Division 13 – Special Construction

Division 14 – Conveying Systems

Division 15 - Mechanical

Volume III OMP Master Specifications

Division 16 – Electrical

Volume IIIC - OMP Master Specifications

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IMPORTANT: PLEASE READ AND FOLLOW THE INSTRUCTIONS FOR COMPLETING THE PROJECT CHECKLIST AND CONTACT THE APPROPRIATE TEAM LEADER IF YOU HAVE ANY FURTHER QUESTIONS. ALL INFORMATION SHOULD BE COMPLETED



INCLUDING THE SUPPLEMENTAL CHECKLIST REQUIRED BY THE SPECIFIC CPAC TEAM. ATTACH
ALL REQUIRED MATERIALS AND SUBMIT FOR HANDLING TO THE DEPARTMENT OF PROCUREMENT SERVICES, ROOM 403, CITY
HALL, 121 N. LASALLE STREET, CHICAGO, ILLINOIS 60602.

| Attached is a detailed scope of services and/or specification IMPORTANT: THIS IS A CRITICAL PORTION OF YOUR SUBMITTAL. IN SUBMITTALYOU MUST COMPLETE ALL TEAM SPECIFIC SCOPE REQUIREM CHECKLIST FOR THAT TEAM. The following is a general description of what would be included in a Scope A clear description of all anticipated services and products, including qualifications of prospective vendors, special requirements or need participating user departments, citation of any applicable City ording a service of the services and products. TYPE OF PROCUREMENT REQUESTED (check all that apply) Competitive Bid RFQ/RFP/RFS/RFI Sole Source** Mod/Amendment FORMS F-25* (add line item) F-26* (new term agreement) F-29* (change vendor limit) ** Sole source requests must include vendor quotes/proposal and FUNDING City: Corporate Bond Enterprise State: IDOT/Transit IDOT/Highway Federal: FHWA FTA FAA Funding Strip(s): ** Attach copy of any applicable grant agreement TIME FRAME | 1733 Fax: 557-4573 E-mail: aunti: famile of anager: Chris Aimme 1700 Fax: E-mail: C.aime e et Value \$ 3,700,000 |
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| · | ARCHITECTURAL/ENGINEERING SUPPLEMENTAL CHECKLIST Required Attachments: Scope of Services, including location, description of project, services required, deliverables, and other information as required Risk Management Will services be performed within 50 feet of CTA train or other railroad property? Will services be performed on or near a waterway? Pre-Qualification Category No. Category Description: For Pre-Qualification Program, attach list of suggested firms to be solicited Other Agency Concurrence Required: None State Federal Other (fill in) |
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| | AVIATION CONSTRUCTION SUPPLEMENTAL CHECKLIST DOA sign-off for final design documents:YesNo Required Attachments: Copy of Draft Contract Documents and Detailed Specifications. Risk Management: Current Insurance Requirements prepared/approved by Risk Management: Yes No Will work be performed within 50 feet of CTA or ATS structure or property? Yes No Will work be performed airside? Yes No |
| - | CAPITAL EQUIPMENT (VEHICLES) SUPPLEMENTAL CHECKLIST Required Attachments: Detailed Specifications including detailed description of the vehicle(s) or equipment, mounted equipment, if any; and options/accessories. Special Provisions (Delivery, Warranty, Manuals, Training, Additional Unit Purchase Options, Bid Submittal Information, etc.) Delivery Location(s) Technical Literature Drawings, if any Part Number List (Manufacturer; or Dealer; or Other Source:) Copy of current Price List(s)/Catalog(s) Form F-10 or other authorization document Any other exhibits and attachments |
| | COMMODITIES SUPPLEMENTAL CHECKLIST Required attachments: Copies of price lists, catalogs, drawings, variations of part numbers Any other exhibits or attachments |
| | CONSTRUCTION SUPPLEMENTAL CHECKLIST (LARGE & SMALL) Required attachments: Copy of Draft (80% Completion) Copy of Draft (80% Completion) Contract Documents and Detailed Specifications Risk Management Will services be performed within 50 feet of CTA train or other railroad property? |
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Required attachments:

Attach Scope of Services that includes the following information 1) Program background & objectives; 2) Type of services for which proposals are sought; 3) Location and time line for delivery of services; 4) Qualifications, skills, and/or experience necessary; 5) Special licenses or certifications required; 6) Evaluation process (if known). Other Attachments (please submit all that apply)

1. Copy of grant application and/or grant agreement

- 2. Evidence of award authority (DAAC agenda with agency name highlighted; City Council ordinance with agency name highlighted; or OBM letter)
- 3. Modification information (Copy of Form F-8A; screen print of EPS AWDS table)

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| The same | HARDWARE/SOFTWARE SUPPLEMENTAL CHECKLISTITSC (approved by BIS)OBM (approved by Budget form/memo) Attach any documentation indicating any previous purchase activity to assist in the procurement processGrant document attached |
| Special | PROFESSIONAL SERVICES SUPPLEMENTAL CHECKLIST Detailed scope of services as described on page 1. The Schedule of Compensation Deliverables Request for individual contract services (if applicable) The appropriate EPS form * If this is a Telecommunications/Utilities project, please also address the following: |
| | Has the project been reviewed by DGS? Attach copy of DGS Recommendation; Reservation(s); or participate under current contract. Does the project include software? If yes, is signed ITSC form attached? YesNo Does the location involve: A public way? Any concession in the City's facilities? YesNo Is it anticipated City Council approval of the project or contract will be required? YesNo |
| 10 E NO. 20 | Form Date: 01/16/2002 |

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| SMALL ORDERS SUPPLEMENTAL CHECKLIST | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|
| Yes No 1. Special Approval Form/Justification Letter. e.g. (Emergency Contract, Telecommunication Back-up documents, Proposals, EPS Form F-10, etc) 2. Suggested Vendor. | | | | | | | | | | | |
| 3. Commodity Code, Manufacturer, Catalog Informatic 4. Detailed Specification or Scope of Work. | | | | | | | | | | | |
| ATTACHMENT REQUIRED FOR EACH SMALL ORDERS | | | | | | | | | | | |
| (Check Appropriate Gr | oup) 3. EMERGENCY CONTRACT | | | | | | | | | | |
| 1. ONE SHOT (PN) | J. CHIERGENOI CONTRACT | | | | | | | | | | |
| YES () NO () Detailed Specifications YES () NO () Suggested Vendor YES () NO () Support Documentation | YES () NO () Justification Letter YES () NO () Vendor Proposal YES () NO () Pre-assigned Requisition (RX) | | | | | | | | | | |
| | 4. <u>TELEPHONE/FAX BIDS</u> | | | | | | | | | | |
| | YES () NO () Justification Letter | | | | | | | | | | |
| 2. SOLE SOURCE REQUIREMENTS | | | | | | | | | | | |
| YES() NO() Vendor Proposal YES() NO() Disclosure Affidavit YES() NO() Letter of Exclusive or Unique Capability YES() NO() Support Documentation from Vendor/Manufacturer. YES() NO() Signature(s) of Originator or Departmental Head/Designee. | | | | | | | | | | | |
| | | | | | | | | | | | |
| WORK SERVICES & FACILITY MAINTENANCE SUPPRequired Attachments: Detailed Specifications (Scope locations (with supporting detail), user department contacompensation and price escalation considerations, conticitation of any applicable City/State/Federal statutes or and price lists, catalogs, technical drawings and other exist Management Will services be performed within 50 feet of CTA train or Will services be performed on or near a waterway? Will services require the handling of hazardous/biowaste Will services require the blocking of streets or sidewalks Which may affect public safety? | e of Services) including detailed description of the work, acts, work hours/days, laborer/supervisor mix, ract term and extension options, contractor qualifications, regulations, citation of any applicable technical standards whibits and attachments as appropriate. Tother railroad property? YesNoYesNoYesNoYesNoYesNoYesNoYesNo | | | | | | | | | | |