

# **City of Cleveland**

## **Request for Design/Build Qualifications for Fuel System**

The City of Cleveland intends to engage qualified firms to provide design-build services for the construction of a 10,000 gallon tank for Avgas fueling system at the Cleveland Municipal Airport. This solicitation is being offered under the provisions of the Texas Local Government Code, Title 8, Subtitle C, Chapter 271, Subchapter H, (a copy of which is attached hereto as Appendix A.) All provisions of which must be complied with by both the City and the selected vendor.

### **1. GENERAL TERMS AND CONDITIONS OF THE REQUEST FOR QUALIFICATIONS AND INTEREST**

- 1.1. Submittals, in four (4) copies, of the Form AVN-552 must be received no later than 4:00 PM, CDST, on August 5, 2009 at:

The City of Cleveland  
Attn: Kelly McDonald, City Secretary  
907 E. Houston Street  
Cleveland, TX 77327

- 1.2. Mark outside of envelope with “Airport Fueling System Qualifications – 0920CLVND.”
- 1.3. It is the sole responsibility of the offeror to ensure that their qualifications are received by the City’s Financial Director’s Office before the deadline indicated in Section 1.1. Qualifications received after the announced time and date of receipt, by mail or otherwise, will be rejected and returned. However, nothing in this RFQ precludes the City from requesting additional information at any time during the procurement process.
- 1.4. Nothing herein is intended to exclude any responsible firm or in any way restrain or restrict competition. On the contrary, all responsible firms are encouraged to submit qualifications. The City of Cleveland reserves the right to award in part or in whole or to reject any or all submissions.
- 1.5. Any submission **MUST** include the Signature Sheet which has been signed by an individual authorized to bind the offeror. All qualifications submitted without such signature may be deemed non-responsive.
- 1.6. In accordance with Texas Local Government Code, Section 271.119 (d), this will be a 2-phase process for the selection of a design-build firm. Offerors shall utilize the latest version of Form AVN-552, titled “Request for Qualifications Design Build Services”. The form may be requested from TxDOT, Aviation

Division, 125 E. 11th Street, Austin, Texas 78701-2483, phone number, 1-800-68-PILOT (74568). The form may be emailed by request or downloaded from the TxDOT web site at <http://www.txdot.gov/business/projects/aviation.htm>. The form may not be altered in any way. All printing must be in black on white paper, except for the optional illustration pages. Offerors must carefully follow the instructions provided on each page of the form. Proposals may not exceed the number of pages in the proposal format. The proposal format consists of ten pages of data plus three optional illustration pages. Proposals shall be stapled but not bound in any other fashion. PROPOSALS WILL NOT BE ACCEPTED IN ANY OTHER FORMAT.

1. Phase 1 – Written qualifications to be reviewed and offerors ranked based on the selection procedure noted in 5.2.
2. Phase 2 – Negotiations, beginning with the highest ranked offeror.

1.7. In accordance with the Texas Local Government Code, Phase 1 of this process is a qualification based selection process and no costing or other financial information is to be submitted in response to this RFQ during Phase 1.

## **2. PROJECT DESCRIPTION AND BACKGROUND**

- 2.1. The City of Cleveland seeks qualifications from qualified firms to provide design-build services for the design and construction of a new fueling system to be located at the Cleveland Municipal Airport. Specifications are included in Appendix B.
- 2.2. The scope of services for the Fueling System is intended to provide a complete and useable facility for The City of Cleveland which can be put into operation immediately after acceptance by the City.
- 2.3. The scope of services includes all aspects of design and construction, including but not limited to the following:

### **Project Orientation & Program**

1. Meet with TxDOT, City, and Airport officials to gain a detailed understanding of the project requirements and general parameters under which the project will be designed and constructed.
2. Based on discussions in the initial meeting(s), formulate schematic designs for review and approval.
3. Prepare project budget.
4. Develop project schedule.

5. Provide containment for fuel delivery transport
6. Provide apron parking if needed

#### Design Development and Construction Documents

1. Generate construction documents.
2. Coordinate construction plans with the City, following final approval from TxDOT.
3. Obtain required construction permits.

#### Construction/Construction Administration

1. Complete construction.
2. Administer weekly progress meetings and prepare and distribute minutes of the meetings, as needed.
3. Prepare and submit pay applications on a monthly basis.
4. Schedule any special inspections as required by City ordinances.
5. Arrange for required City code inspections.
6. Perform testing of all fueling systems and associated paving as needed.
7. Compile, review and submit project closeout documentation.

### **3. FEE STRUCTURE AND BUDGET**

- 3.1. It is anticipated that the final contract will be based on a Lump Sum price. The budget for this project is \$120,000.00.

### **4. CITY RESPONSIBILITIES**

- 4.1. Provide to the successful offeror all information in possession of the City which relates to the City's requirements for the project or which is relevant to the project.

### **5. SPECIFIC TERMS AND CONDITIONS OF THE REQUEST FOR QUALIFICATIONS AND INTEREST**

#### **5.1. EVALUATION CRITERIA**

- 5.1.1. The following criteria will be used in the evaluation of qualifications for development of the shortlist of those offerors to be considered for interviews and potential negotiations. Offerors are required to address each evaluation criteria in the order listed and to be specific in presenting in their qualifications.

**The qualification information must include manufacturer and model information for Fuel Storage Systems and Credit Card Terminal**

- 1. Composition of design-build team members (20 points).** This section should clearly state the key participants comprising the design-build team, indicate any contractual arrangements between-among the members, and provide their roles within the design-build team. Experience with similar airport projects, especially pervious design/build experience, and availability of team members should be provided. Additionally provided educational backgrounds, work experience, areas of expertise, and specific experience with design/build and/or construction of similar kinds of fueling systems and prior experience of the team working together.
- 2. Recent experience of the project team with comparable projects within the last five years (20 points).** Prior experience must include contact reference information for a minimum of three (3) previously completed fueling system projects, and the year in which each was constructed. Firms without previous experience installing at least three systems will not meet qualifications and cannot be considered.
- 3. Firm's technical approach to the project. (40 points).** Provide evidence of the firm's/team's understanding of the project and any unique engineering aspects associated with this proposed project. Describe specific problems and considerations to be addressed. Detail how the process of design/build would be managed and would be handled. This section, including the illustration pages, may include conceptual drawings of the proposed site plan and proposed fuel system, but they are not required. Address project oversight for the entire process, design through construction, and coordination with the airport sponsor. Information on suppliers and /or materials should be addressed in the proposal. Describe how changes, modifications and corrections would be addressed.
- 4. Project Schedule. (20 points).** Provide in weeks the proposed schedule from the notice to proceed through construction of the fuel system. This schedule should not include any review time from the airport sponsor. It should address the direct time that the design/build team needs to be able to design and install the fuel system, ready for use.

## **5.2 SELECTION PROCEDURE**

5.2.1 An evaluation team composed of City staff shall review and evaluate all responses to the RFQ and rank order them in accordance with the criteria established in Section 5.1.1, above.

The evaluation team may then engage in individual discussions with up to a maximum of three offerors based upon the selection criteria for Phase 1. Each of the offerors deemed to be best qualified will be requested to make a formal presentation to the evaluation team. Repetitive informal interviews shall be permissible. Such offerors shall be encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project, as well as alternative concepts. At the discussion stage, the evaluation team may discuss non-binding estimates of total project costs, including, but not limited to, life-cycle costing. At the conclusion of discussion, on the basis of evaluation factors published in the Request for Qualifications and all information developed in the selection process to this point, the evaluation team shall select in order of preference, two or more offerors whose professional qualifications and proposed services are deemed most meritorious. Negotiations shall then be conducted, beginning with the offeror ranked first. Every effort by the top ranked offeror must be made to complete negotiations within a reasonable amount of time. If the offeror ranked first does not show adequate effort to complete negotiations within 60 calendar days of notification by the City of Cleveland to begin negotiations, the City may decide to disqualify the offeror ranked first and begin negotiations with the offeror ranked second. If a contract satisfactory and advantageous to the City can be negotiated at a price considered fair and reasonable, a recommendation will be made to the Governing Body to award a design/build contract to that offeror. Otherwise, negotiations with the offeror ranked first shall be formally terminated and negotiations conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price. Should the evaluation team determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified and suitable than the others under consideration, a contract may be negotiated and awarded to that offeror.

## **5.3 REFERENCES**

5.3.1 The Qualifications must include references and contact information for a minimum of three (3) previously completed fueling system projects, and the year in which each was constructed. References should be included on page six of the Form AVN 552. References of the top ranked shortlisted offerors will be contacted. The Owner reserves the right to

contact references other than, and/or in addition to, those furnished by an offeror.

#### **5.4 BASIS FOR AWARD**

5.4.1 Information and/or factors gathered during RFQ review, interviews, negotiations and any reference checks, in addition to the evaluation criteria stated in the RFQ, and any other information or factors deemed relevant by the City, shall be utilized in the final award.

#### **5.5 FURTHER INFORMATION**

5.5.1 Questions which may arise as a result of this Request for Qualification should be directed to Alf Vien, City of Cleveland, Texas, at 281-592-1282.

## SIGNATURE SHEET

My signature certifies that the qualifications as submitted complies with all Terms and Conditions as set forth in The City of Cleveland, request for qualifications for fuel system.

My signature also certifies that the accompanying qualifications are not the result of, or affected by, any unlawful act of collusion with another person or company engaged in the same line of business or commerce, or any act of fraud punishable under Texas statutes.

My signature also certifies that this firm has no business or personal relationships with any other companies or persons that could be considered as a conflict of interest or potential conflict of interest to The City of Cleveland, and that there are no principals, officers, agents, employees, or representatives of this firm that have any business or personal relationships with any other companies or persons that could be considered as a conflict of interest or a potential conflict of interest to The City of Cleveland, pertaining to any and all work or services to be performed as a result of this request and any resulting contract with The City of Cleveland.

My signature also certifies that architects and engineers on the team were selected based on demonstrated competence and qualifications in the manner provide by Section 2254.004 of the Texas Government Code. (See section 271.1199d)(1).

I hereby certify that I am authorized to sign as a Representative for the Firm:

Complete legal name of firm: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Fed ID No.: \_\_\_\_\_

Signature: \_\_\_\_\_

Name (Type/Print): \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax No.: \_\_\_\_\_

Date: \_\_\_\_\_

**To receive consideration for this award, this signature sheet must be returned to the City Secretary as a part of your response to the RFQ**

## APPENDIX A – EXTRACTS FROM THE TEXAS LOCAL GOVERNMENT CODE

§ 271.111. DEFINITIONS. In this subchapter:

(1) "Architect" means an individual registered as an architect under Chapter 1051, Occupations Code.

(2) "Contractor" in the context of a contract for the construction, rehabilitation, alteration, or repair of a facility means a sole proprietorship, partnership, corporation, or other legal entity that assumes the risk for constructing, rehabilitating, altering, or repairing all or part of the facility at the contracted price.

(3) "Design-build contract" means a single contract with a design-build firm for the design and construction of a facility.

(4) "Design-build firm" means a partnership, corporation, or other legal entity or team that includes an engineer or architect and builder qualified to engage in building construction in Texas.

(5) "Design criteria package" means a set of documents that provides sufficient information to permit a design-build firm to prepare a response to a governmental entity's request for qualifications and any additional information requested, including criteria for selection. The design criteria package must specify criteria the governmental entity considers necessary to describe the project and may include, as appropriate, the legal description of the site, survey information concerning the site, interior space requirements, special material requirements, material quality standards, conceptual criteria for the project, special equipment requirements, cost or budget estimates, time schedules, quality assurance and quality control requirements, site development requirements, applicable codes and ordinances, provisions for utilities, parking requirements, or any other requirement, as applicable.

(6) "Engineer" means an individual licensed as an engineer under Chapter 1001, Occupations Code.

(7) "Facility" means buildings the design and construction of which are governed by accepted building codes. The term does not include:

(A) highways, roads, streets, bridges, utilities, water supply projects, water plants, wastewater plants, water and wastewater distribution or conveyance facilities, wharves, docks, airport runways and taxiways, drainage projects, or related types of projects associated with civil engineering construction; or

(B) buildings or structures that are incidental to projects that are primarily civil engineering construction projects.

(8) "Fee" in the context of a contract for the construction, rehabilitation, alteration, or repair of a facility means the payment a construction manager receives for its overhead and profit in performing its services.

(9) "General conditions" in the context of a contract for the construction, rehabilitation, alteration, or repair of a facility means on-site management, administrative personnel, insurance, bonds, equipment, utilities, and incidental work,

including minor field labor and materials.

(10) "Governmental entity" means a municipality, county, river authority, or defense base development authority established under Chapter 378 as added by Chapter 1221, Acts of the 76th Legislature, Regular Session, 1999.

Added by Acts 2001, 77th Leg., ch. 1409, § 5, eff. Sept. 1, 2001. Amended by Acts 2003, 78th Leg., ch. 877, § 1, eff. Sept. 1, 2003; Acts 2003, 78th Leg., ch. 1276, § 14A.791, eff. Sept. 1, 2003.

§ 271.112. APPLICABILITY; OTHER LAW. (a) Any provision in the charter of a home-rule municipality or regulation, if any, of a county, river authority, or defense base development authority that requires the use of competitive bidding or competitive sealed proposals or that prescribes procurement procedures and that is in conflict with this subchapter controls over this subchapter unless the governing body of the governmental entity elects to have this subchapter supersede the charter or regulation.

(b) The purchasing requirements of Section 361.426, Health and Safety Code, apply to purchases by a governmental entity made under this subchapter.

(c) Except as provided by this section, to the extent of any conflict, this subchapter prevails over any other law relating to the purchasing of goods and services except a law relating to contracting with historically underutilized businesses.

(d) For a contract entered into by a municipality, river authority, or defense base development authority under any of the methods provided by this subchapter, the municipality, river authority, or defense base development authority shall publish notice of the time and place the bids or proposals, or the responses to a request for qualifications, will be received and opened. The notice must be published in a newspaper of general circulation in the county in which the defense base development authority's or municipality's central administrative office is located or the county in which the greatest amount of the river authority's territory is located once each week for at least two weeks before the deadline for receiving bids, proposals, or responses. If there is not a newspaper of general circulation in that county, the notice shall be published in a newspaper of general circulation in the county nearest the county seat of the county in which the defense base development authority's or municipality's central administrative office is located or the county in which the greatest amount of the river authority's territory is located. In a two-step procurement process, the time and place the second step bids, proposals, or responses will be received are not required to be published separately.

(e) For a contract entered into by a county under any of the methods provided by this subchapter, the county shall publish notice of the time and place the bids or proposals, or the responses to a request for qualifications, will be received and opened. The notice must be published in a newspaper of general circulation in the county once each week for at least two weeks before the deadline for receiving bids, proposals, or responses. If there is not a newspaper of general circulation in the county, the notice shall be:

- (1) posted at the courthouse door of the county; and
- (2) published in a newspaper of general circulation in the nearest county.

(f) A contract entered into or an arrangement made in violation of this subchapter is contrary to public policy and is void. A court may enjoin performance of a contract made in violation of this subchapter. A county attorney, a district attorney, a criminal district attorney, a resident of a county that enters into a contract under this subchapter or of a county in which a municipality or a river authority that enters into a contract under this subchapter is located, or any interested party may bring an action for an injunction. A party who prevails in an action brought under this subsection is entitled to reasonable attorney's fees as approved by the court.

Added by Acts 2001, 77th Leg., ch. 1409, § 5, eff. Sept. 1, 2001.  
Amended by Acts 2003, 78th Leg., ch. 877, § 2, eff. Sept. 1, 2003.

§ 271.113. PROCUREMENT PROCEDURES. (a) In entering into a contract for the construction of a facility, a governmental entity may use any of the following methods that provides the best value for the governmental entity:

- (1) competitive bidding;
- (2) competitive sealed proposals for construction services;

(3) a design-build contract;

- (4) a contract to construct, rehabilitate, alter, or repair facilities that involves using a construction manager; or
- (5) a job order contract for the minor repair, rehabilitation, or alteration of a facility.

(b) Except as provided by this subchapter, in determining to whom to award a contract, the governmental entity may consider:

- (1) the purchase price;
- (2) the reputation of the vendor and of the vendor's goods or services;
- (3) the quality of the vendor's goods or services;
- (4) the extent to which the goods or services meet the governmental entity's needs;
- (5) the vendor's past relationship with the governmental entity;
- (6) the impact on the ability of the governmental entity to comply with rules relating to historically underutilized businesses;
- (7) the total long-term cost to the governmental entity to acquire the vendor's goods or services; and
- (8) any other relevant factor specifically listed in the request for bids or proposals.

Added by Acts 2001, 77th Leg., ch. 1409, § 5, eff. Sept. 1, 2001.

§ 271.114. EVALUATION OF BIDS AND PROPOSALS FOR CONSTRUCTION SERVICES. (a) The governing body of a governmental entity that is considering a construction contract using a method specified by Section 271.113(a) other than competitive bidding must, before advertising, determine which method provides the best value for the governmental entity. The governing body may, as appropriate, delegate its authority under this section to a designated representative.

(b) The governmental entity shall base its selection among offerors on criteria authorized to be used under Section

271.113(b). The governmental entity shall publish in the request for bids, proposals, or qualifications all the criteria that will be used to evaluate the offerors and the relative weights given to the criteria.

(c) The governmental entity shall document the basis of its selection and shall make the evaluations public not later than the seventh day after the date the contract is awarded.

Added by Acts 2001, 77th Leg., ch. 1409, § 5, eff. Sept. 1, 2001.

§ 271.119. DESIGN-BUILD CONTRACTS FOR FACILITIES. (a) A governmental entity may use the design-build method for the construction, rehabilitation, alteration, or repair of a facility. In using that method and in entering into a contract for the services of a design-build firm, the contracting governmental entity and the design-build firm shall follow the procedures provided by this section.

(b) The governmental entity shall select or designate an engineer or architect independent of the design-build firm to act as its representative for the duration of the work on the facility. If the governmental entity's engineer or architect is not a full-time employee of the governmental entity, the governmental entity shall select the engineer or architect on the basis of demonstrated competence and qualifications as provided by Section 2254.004, Government Code.

(c) The governmental entity shall prepare a request for qualifications that includes general information on the project site, project scope, budget, special systems, selection criteria, and other information that may assist potential design-build firms in submitting proposals for the project. The governmental entity shall also prepare a design criteria package that includes more detailed information on the project. If the preparation of the design criteria package requires engineering or architectural services that constitute the practice of engineering within the meaning of Chapter 1001, Occupations Code, or the practice of architecture within the meaning of Chapter 1051, Occupations Code, those services shall be provided in accordance with the applicable law.

(d) The governmental entity shall evaluate statements of qualifications and select a design-build firm in two phases:

(1) In phase one, the governmental entity shall prepare a request for qualifications and evaluate each offeror's experience, technical competence, and capability to perform, the past performance of the offeror's team and members of the team, and other appropriate factors submitted by the team or firm in response to the request for qualifications, except that cost-related or price-related evaluation factors are not permitted. Each offeror must certify to the governmental entity that each engineer or architect that is a member of its team was selected based on demonstrated competence and qualifications in the manner provided by Section 2254.004, Government Code. The governmental entity shall qualify a maximum of five offerors to submit additional information and, if the governmental entity chooses, to interview for final selection.

(2) In phase two, the governmental entity shall evaluate the information submitted by the offerors on the basis of the selection criteria stated in the request for qualifications and the results of an interview. The governmental entity may request additional information regarding demonstrated competence and

qualifications, considerations of the safety and long-term durability of the project, the feasibility of implementing the project as proposed, the ability of the offeror to meet schedules, costing methodology, or other factors as appropriate. The governmental entity may not require offerors to submit detailed engineering or architectural designs as part of the proposal. The governmental entity shall rank each proposal submitted on the basis of the criteria set forth in the request for qualifications. The governmental entity shall select the design-build firm that submits the proposal offering the best value for the governmental entity on the basis of the published selection criteria and on its ranking evaluations. The governmental entity shall first attempt to negotiate a contract with the selected offeror. If the governmental entity is unable to negotiate a satisfactory contract with the selected offeror, the governmental entity shall, formally and in writing, end negotiations with that offeror and proceed to negotiate with the next offeror in the order of the selection ranking until a contract is reached or negotiations with all ranked offerors end.

(e) Following selection of a design-build firm under Subsection (d), that firm's engineers or architects shall complete the design, submitting all design elements for review and determination of scope compliance to the governmental entity or the governmental entity's engineer or architect before or concurrently with construction.

(f) An engineer shall have responsibility for compliance with the engineering design requirements and all other applicable requirements of Chapter 1001, Occupations Code. An architect shall have responsibility for compliance with the requirements of Chapter 1051, Occupations Code.

(g) The governmental entity shall provide or contract for, independently of the design-build firm, the inspection services, the testing of construction materials engineering, and the verification testing services necessary for acceptance of the facility by the governmental entity. The governmental entity shall select those services for which it contracts in accordance with Section 2254.004, Government Code.

(h) The design-build firm shall supply a signed and sealed set of construction documents for the project to the governmental entity at the conclusion of construction.

(i) A payment or performance bond is not required for, and may not provide coverage for, the portion of a design-build contract under this section that includes design services only. If a fixed contract amount or guaranteed maximum price has not been determined at the time a design-build contract is awarded, the penal sums of the performance and payment bonds delivered to the governmental entity must each be in an amount equal to the project budget, as specified in the design criteria package. The design-build firm shall deliver the bonds not later than the 10th day after the date the design-build firm executes the contract unless the design-build firm furnishes a bid bond or other financial security acceptable to the governmental entity to ensure that the design-build firm will furnish the required performance and payment bonds when a guaranteed maximum price is established.

**APPENDIX B**  
**Item F-200**

AVGAS FUELING SYSTEMS

**A. General**

The AVGAS fuel storage system shall be pre-engineered double wall 10,000 gallon tank system consisting of an above ground primary tank fully enclosed within a containment vessel and mounted on steel saddles or boxed runner supports, all bearing an inclusive UL-142 label. The storage tank system will be installed above ground on a poured concrete slab designed to support the weight and structure of the tank and constructed by others. The system shall include an integral canopy or pump house, enclosing all dispensing equipment and accessories required for a complete system.

This specification is for new, first quality, factory built and assembled equipment designed to applicable industry standards only. All site specific requirements will be determined and engineered based on the installation criteria of the fuel storage dispensing system selected.

**B. Industry Standards**

The following industry standards are listed for reference and shall govern all applicable aspects of this project component. **Should conflicts between standards arise, Bidders shall apply that which is the most stringent or restrictive.**

a. American Society for Testing and Materials (ASTM):

- (1) A182 – *Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings and Valves and Parts for High Temperature Service*
- (2) A312/A312M – *Seamless and Welded Austenitic Stainless Steel Pipe*
- (3) A403/A403M - *Wrought Austenitic Stainless Steel Piping Fittings*
- (4) A193 - *Alloy Steel and Stainless Steel Bolting Materials for High Temperature Service*
- (5) A194 - *Carbon and Alloy Steel Nuts for Bolts for High Temperature Service*
- (6) D4176 - *Standard Test Method for Free Water and Particulate Contamination in Distillate Fuels (Visual Inspection Procedures)*

b. American National Standards Institute (ANSI):

- (1) A13.1 - *Scheme for the Identification of Piping Systems*
- (2) B16.9 - *Factory Made Wrought Steel Butt Welding Fittings*
- (3) B16.11 - *Forged Steel Fittings, Socket Welding and Threaded*
- (4) B16.25 – *Butt-welding Ends*
- (5) B16.5 - *Pipe Flanges and Flanged Fittings*
- (6) B31.3 - *Chemical Plant and Petroleum Refinery Piping*

c. American Petroleum Institute (API):

- (1) 5L - *Line Pipe*
- (2) 601.21 - *Metallic Gaskets for Piping, Double-Jacketed Corrugated and Spiral Wound*
- (3) 1529 - *Aviation Fueling Hose*

- (4) 1542 - *Airport Equipment Marking for Fuel Identification*
- d. Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5230-4 - Aircraft Fuel Storage, Handling and Dispensing on Airports
- e. Military Specification, MIL-C-4556 - Coating, Kit, Epoxy for Interior of Steel Fuel Tanks
- f. National Fire Protection Association (NFPA):
  - (1) 30 - *Flammable and Combustible Liquids Code*
  - (2) 30A - *Automobile and Marine Service Station Code*
  - (3) 70 - *National Electrical Code*
  - (4) 407 - *Standard for Aircraft Fuel Servicing*
- g. International Fire Code, Latest Edition, with amendments, additions and deletions.
- h. Steel Structures Painting Council (SSPC):
  - (1) SP-5 - *White Metal Blast Cleaning*
  - (2) SP-6 - *Commercial Blast Cleaning*
  - (3) SP-10 - *Near-White Metal Blast Cleaning*

### **C. Submittals:**

After bid award, and contract execution, the following submittals will be required:

- a. Provide Manufacturers information for all equipment
- b. Structural Design – after award of bid, provide drawings of reinforced concrete tank foundation slabs certified to be adequate for tank and accessories. Include conduit stub up locations and bollard spacing.
- c. Provide copies of all permit applications as required by any federal, state, or local codes.

### **D. Products**

#### **I. Tank**

1. The primary tank shall be designed and constructed meeting standards and specifications of appropriate section of UL 142 with interior epoxy coating.
2. Shell and head joints shall be butt joints with full penetration welds. Welds located on tank interior floor for one foot either side of the bottom center line shall be ground smooth to accommodate internal drainage.
3. All tank pipe or fitting penetrations shall be above the liquid level or through the top center line of the vessel. Fill piping inside the tank shall be installed with the outlet no higher than four inches from the tank floor and fitted with a flow diffuser.
4. There shall be no below liquid level penetrations within the shell or heads of the vessel.
5. The tank shall be mounted horizontally on steel saddles or runners, and tank pitch will be accommodated by these supports and/or concrete containment. Tank pitch shall be a minimum of one foot for every fifty feet of tank length or maximum of one foot for every thirty feet of tank length.
6. Shall show date of manufacturer's test and manufacturer's name and be labeled for stationary use only.

7. Shall include lifting eyes (for use when empty only) to lift entire unit.

## **II. Primary Tank Components**

1. 2" manual gauging access port with weather-tight and lockable cap.
2. Ground readable, float type, volume gauge (Clock Gauge) to read in gallons, with high level alarm system set at 90 percent of tank capacity.
3. Positive tank sump per ATA-103 with ¾" welded Sch#40 sumping pipe penetrating above the liquid level equipped with an anti-siphon valve.
4. Weather tight and lockable minimum 24" ingress manway.
5. OPW Aluminum floating suction with swivel at bottom of flanged drop tube and equipped with a stainless steel test cable attached to tank weather tight and lockable inspection port.
6. 3" Normal Pressure / Vacuum Vent, weather tight.
7. Shall have a UL required emergency vent to meet or exceed NFPA-30 Fire Code.

## **III. Containment Vessel**

1. The containment vessel shall completely enclose the primary tank and all connected welded fittings, pipe penetrations, and pressure relief vent. It shall be of steel construction designed and labeled per UL142 specifications.
2. All tank pipe or fitting penetrations shall be above the liquid level or through the top center line of the vessel. There shall be no below liquid level penetrations within the shell or heads of the vessel.
3. The vessel shall meet seismic standard 4, and DOT collision standards. All containment vessel penetrations shall be welded through the shell or head, and be flanged connected downstream if greater than 1½" diameter.
4. The exterior of the containment vessels surface shall be coated with Valspar Marine V75W9 or approved equal.
5. The interstitial space shall be vented per NFPA-30 with a gas and weather tight relief vent.
6. The containment vessel volumetric capacity shall be minimum 110% of the enclosed primary tank.
7. An OSHA compliant access ladder and maintenance platform shall be provided.
8. The interstitial space in the cylindrical shall be monitored for liquids with an intrinsically powered, liquid discriminating, fail-safe sensor.
9. Shall have a locking, low point drain valve.

## **IV. Pumping System Enclosure**

1. Canopy Style shall be constructed of minimum 7 gauge steel designed to cover the complete pumping system and stop water from accumulating in the maintenance spill pan:
  - i. The enclosure should be a minimum of 8'-0" wide, 6'-0" long, 3" deep.
  - ii. The steel floor shall be designed a secondary containment pan to catch maintenance spills and be fabricated of ¼" steel.
  - iii. A locking drain shall be provided to run off collected liquids as necessary.
  - iv. The floor shall be welded on 4" channel to create both a raised pedestal and provide a reinforced platform to mount the pumping equipment.
  - v. The assembly is seal welded to the head of the containment vessel.
  - vi. The unit is to be prepared and painted with epoxy paint to match tank

2. Cabinet enclosure shall be manufactured with minimum 14 gauge stainless steel with powder coated sub structural 2' square tube base, or approved equal.

#### **V. 200/30 GPM Avgas Pump System**

1. Pump assemblies shall be a single pump system to provide transport unloading, product recirculation, and direct to plane refueling.
2. All dispensed fuel shall be filtered and metered for direct to plane refueling.
3. Pump to be Positive Displacement in design, meet all pertinent regulatory standards and be complete with pump gear reducer, drive motor, base plate and couplings. Pumps shall have mechanical seals and liquid filled suction and pressure gauges.
4. Pump assemblies to be 3 phase explosion-proof for location within a hazardous area as defined by the NEC.

#### **VI. Filtration**

1. Filtration shall be monitor type (Go-No-Go) approved for aviation and rated for the pumping system installed.
2. Provide a manual, spring-return sump drain ball valve with a cam-lock end and cover attached by a lanyard or chain.
3. Provide an inlet strainer with stainless steel basket installed so that it can be easily removed and inspected.

#### **VII. Receiving System**

1. Tank to be top filled with drop tube within 6'' of tank bottom.
2. Pump shall off-load transports at 200 g.p.m. and be deadman controlled.
3. High level shut off system, set to close at 95% of tank capacity
4. Shall have a provision to add Stage 1 vapor recovery in the future.
5. Shall have 200 g.p.m. aviation filter with slug valve to prevent water contamination of fuel.
6. Shall have stainless steel piping throughout.

#### **VIII. Recirculation System**

1. Shall operate without deadman control.
2. Shall re-circulate at 200 g.p.m. (two hundred gallons per minute).
3. Shall filter all fuel.
4. Shall have stainless steel piping throughout.

#### **IX. Direct to Plane Fueling System:**

1. Pump shall deliver fuel at 30 g.p.m.
2. Shall filter all fuel
3. Shall have sampling connections.
4. Shall have 60 GPM meter, aluminum and stainless steel construction with 100:1 pulser
5. 1'' x min. 75' Aviation fueling hose meeting current API -1529, NFPA-407.
6. Electric wind hose reel with explosion-proof motor, momentary rewind switch, non-jamming reel with four-way hose guides.
7. OPW295SA0135 or approved equal over-wing nozzle with inlet swivel, strainer, and dust cap.

8. 100' plastic coated stainless steel cord bonding/grounding system with a two-point spring loaded clamp with spring motored rewind reels with cord guides.
9. Manual System on/off switch.
10. Shall have 165 degree F. fusible link that allows emergency valve to close in case of fire.

#### **X. Credit Card Terminal :**

1. Shall be Fuel Master or QT Technologies, or approved equal to include:
  - i. Multi-serve system for all forms of credit cards
  - ii. Multiple product capability to serve both AVGAS and Jet A products.
  - iii. Modem
  - iv. surge protection
  - v. program support
  - vi. 5 year warranty
  - vii safety protection through card reader to allow airport to lock out Jet A purchase to unauthorized users

#### **XI. Electrical System**

1. All electrical components shall meet all applicable NEMA and UL Standards for class.
2. All wiring shall conform to all applicable NEC Standards for Class 1, Group D equipment.
3. Control circuits shall be 120 volt.
4. Area and alarm lights shall be explosion-proof
5. Power requirements are 220/230 volt three-phase, 50 amp at load connection.
6. Float switch in containment shall be intrinsically safe.
7. All operational modes (fill, dispense, and re-circulate) must be done from ground level outside of containment.

#### **XII. Power Requirements**

1. Pump motor shall be 230v three-phase.
2. Shall be explosion-proof.
3. Deadman shall be intrinsically safe.

#### **XIII. Control Panel**

1. All electrical control panel components shall be installed inside a U.L. listed, NEMA- 7 box mounted on exterior containment walls operating in conformance with Class 1 Group D areas.
2. Control panel shall have the following:
  - i. Emergency shut-off button;
  - ii. Reset Control Button;
  - iii. On/Off switch;
  - iv. Keyed manual override switch;
  - v. Mode indicator light;
  - vi. Drain vent system and heater strip to control condensation.

**XIV. Piping**

1. Shall have pressure relief to prevent pressure build-up from thermal expansion.
2. Shall be minimum schedule 10 stainless steel.
3. Shall have flanged connections where possible.

**XV. Factory Assembled**

1. All units shall be commercially sandblasted before painting.
2. All units shall be completely assembled, operationally and functionally tested with approved testing fluid prior to delivery.

**XVI. Delivery**

1. Copies of the 'Manufacturers Installation and Startup Guide' and 'Operations and Maintenance Manuals' shall be provided.
2. Certificate of operational tests available prior to shipment.
3. The completed assembly shall be delivered completely assembled, pre-wired pre-tested, and ready for installation.

**XVII. Warranty:**

Shall be a standard manufacturers' one year warranty covering material defects and workmanship.